

# Supplemental Tables to the Annual Energy Outlook 2006

Table 1. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Energy Consumption</b>															
<b>Residential</b>															
Distillate Fuel	0.313	0.330	0.337	0.301	0.294	0.294	0.293	0.293	0.292	0.291	0.288	0.286	0.284	0.282	0.278
Kerosene	0.012	0.014	0.014	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014
Liquefied Petroleum Gas	0.029	0.030	0.030	0.029	0.029	0.030	0.030	0.031	0.031	0.031	0.032	0.032	0.032	0.033	0.033
Petroleum Subtotal	0.354	0.375	0.381	0.346	0.338	0.339	0.338	0.338	0.337	0.337	0.334	0.332	0.330	0.328	0.325
Natural Gas	0.200	0.191	0.193	0.191	0.191	0.193	0.193	0.195	0.196	0.197	0.197	0.198	0.199	0.201	0.201
Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Renewable Energy 1/ Electricity	0.027	0.027	0.028	0.028	0.028	0.028	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.025
Delivered Energy	0.154	0.153	0.159	0.159	0.162	0.166	0.168	0.170	0.172	0.174	0.175	0.177	0.179	0.181	0.182
Electricity Related Losses	0.735	0.747	0.761	0.725	0.720	0.725	0.727	0.730	0.732	0.734	0.733	0.733	0.734	0.736	0.733
Total	0.281	0.292	0.304	0.294	0.282	0.288	0.294	0.299	0.304	0.308	0.312	0.316	0.317	0.319	0.321
Total	1.015	1.039	1.065	1.018	1.002	1.014	1.021	1.029	1.036	1.042	1.045	1.049	1.051	1.055	1.055
<b>Commercial</b>															
Distillate Fuel	0.075	0.075	0.075	0.071	0.070	0.070	0.071	0.071	0.072	0.072	0.072	0.072	0.072	0.072	0.072
Residual Fuel	0.011	0.011	0.010	0.016	0.018	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.016	0.016	0.016
Kerosene	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Liquefied Petroleum Gas	0.005	0.005	0.005	0.005	0.006	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Motor Gasoline 2/ Petroleum Subtotal	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Delivered Energy	0.097	0.098	0.097	0.098	0.100	0.097	0.098	0.098	0.099	0.099	0.099	0.099	0.099	0.099	0.099
Electricity Related Losses	0.145	0.136	0.137	0.130	0.130	0.133	0.135	0.137	0.139	0.141	0.143	0.145	0.148	0.150	0.152
Total	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Renewable Energy 3/ Electricity	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Delivered Energy	0.178	0.179	0.189	0.187	0.193	0.199	0.204	0.208	0.212	0.216	0.220	0.223	0.227	0.230	0.233
Electricity Related Losses	0.428	0.420	0.431	0.422	0.430	0.436	0.443	0.450	0.457	0.463	0.469	0.474	0.481	0.486	0.492
Total	0.327	0.342	0.362	0.345	0.336	0.346	0.357	0.365	0.375	0.382	0.392	0.398	0.401	0.405	0.412
Total	0.755	0.762	0.792	0.767	0.766	0.783	0.800	0.815	0.831	0.845	0.861	0.872	0.882	0.892	0.905
<b>Industrial 4/</b>															
Distillate Fuel	0.022	0.022	0.024	0.023	0.023	0.022	0.022	0.022	0.021	0.021	0.021	0.021	0.020	0.020	0.020
Liquefied Petroleum Gas	0.009	0.009	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Petrochemical Feedstocks	0.047	0.050	0.045	0.048	0.050	0.050	0.050	0.050	0.051	0.051	0.050	0.049	0.050	0.049	0.049
Residual Fuel	0.053	0.059	0.059	0.043	0.048	0.048	0.048	0.048	0.048	0.047	0.047	0.047	0.046	0.046	0.046
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012
Delivered Energy	0.043	0.039	0.036	0.036	0.038	0.038	0.038	0.038	0.037	0.037	0.036	0.036	0.035	0.035	0.035
Electricity Related Losses	0.186	0.192	0.186	0.171	0.180	0.180	0.180	0.179	0.178	0.177	0.175	0.173	0.172	0.171	0.170
Total	0.133	0.133	0.125	0.131	0.134	0.136	0.139	0.140	0.141	0.142	0.142	0.143	0.145	0.146	0.147
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Delivered Energy	0.133	0.133	0.125	0.131	0.134	0.136	0.139	0.140	0.141	0.142	0.142	0.143	0.145	0.146	0.147
Electricity Related Losses	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Industrial Coal	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Renewable Energy 7/ Electricity	0.128	0.136	0.133	0.136	0.138	0.139	0.141	0.142	0.143	0.144	0.145	0.145	0.146	0.147	0.148
Delivered Energy	0.081	0.080	0.079	0.080	0.080	0.081	0.080	0.081	0.081	0.081	0.081	0.081	0.081	0.081	0.081
Electricity Related Losses	0.533	0.546	0.528	0.522	0.536	0.540	0.544	0.546	0.548	0.548	0.547	0.547	0.548	0.549	0.550
Total	0.147	0.153	0.152	0.147	0.140	0.140	0.140	0.141	0.143	0.143	0.144	0.144	0.143	0.142	0.142
Total	0.680	0.698	0.679	0.668	0.676	0.680	0.684	0.687	0.691	0.691	0.691	0.691	0.691	0.691	0.692

Table 1. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Transportation</b>															
Distillate Fuel 8/	0.167	0.174	0.177	0.181	0.187	0.191	0.196	0.201	0.205	0.209	0.213	0.216	0.220	0.223	0.227
Jet Fuel 9/	0.067	0.069	0.069	0.071	0.073	0.075	0.077	0.079	0.081	0.083	0.084	0.085	0.086	0.087	0.088
Motor Gasoline 2/	0.789	0.804	0.806	0.811	0.825	0.837	0.850	0.863	0.874	0.884	0.892	0.901	0.910	0.917	0.925
Residual Fuel	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Liquefied Petroleum Gas	0.001	0.001	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004
Other Petroleum 10/	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Petroleum Subtotal	1.035	1.060	1.066	1.078	1.099	1.117	1.137	1.158	1.176	1.191	1.205	1.218	1.231	1.243	1.257
Pipeline Fuel Natural Gas	0.007	0.007	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009
Compressed Natural Gas	0.001	0.002	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.005	0.006	0.006	0.006	0.007
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Delivered Energy	1.047	1.073	1.081	1.093	1.114	1.133	1.153	1.174	1.193	1.209	1.223	1.237	1.250	1.263	1.277
Electricity Related Losses	0.007	0.008	0.008	0.008	0.007	0.007	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Total	1.055	1.081	1.089	1.100	1.121	1.140	1.161	1.181	1.201	1.216	1.230	1.244	1.258	1.271	1.285
<b>Delivered Energy Consumption, All Sectors</b>															
Distillate Fuel	0.576	0.602	0.613	0.576	0.573	0.578	0.582	0.587	0.590	0.593	0.593	0.595	0.596	0.597	0.597
Kerosene	0.015	0.018	0.019	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.018
Jet Fuel 9/	0.067	0.069	0.069	0.071	0.073	0.075	0.077	0.079	0.081	0.083	0.084	0.085	0.086	0.087	0.088
Liquefied Petroleum Gas	0.044	0.046	0.045	0.045	0.046	0.046	0.047	0.048	0.048	0.049	0.049	0.050	0.050	0.050	0.050
Motor Gasoline 2/	0.805	0.820	0.822	0.827	0.841	0.853	0.866	0.879	0.890	0.899	0.908	0.917	0.925	0.933	0.941
Petrochemical Feedstocks	0.047	0.050	0.045	0.048	0.050	0.050	0.050	0.051	0.051	0.051	0.050	0.049	0.050	0.049	0.049
Residual Fuel	0.070	0.076	0.075	0.065	0.072	0.069	0.069	0.069	0.068	0.069	0.069	0.068	0.067	0.067	0.067
Other Petroleum 12/	0.048	0.044	0.041	0.042	0.043	0.043	0.043	0.043	0.042	0.042	0.041	0.041	0.041	0.040	0.040
Petroleum Subtotal	1.673	1.725	1.730	1.693	1.717	1.733	1.753	1.773	1.790	1.804	1.813	1.823	1.833	1.842	1.851
Natural Gas	0.480	0.461	0.457	0.454	0.457	0.465	0.470	0.475	0.480	0.486	0.488	0.492	0.498	0.503	0.507
Lease and Plant Fuel 6/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pipeline Natural Gas	0.007	0.007	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009
Natural Gas Subtotal	0.487	0.468	0.466	0.462	0.466	0.473	0.478	0.483	0.488	0.494	0.496	0.500	0.507	0.512	0.516
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Renewable Energy 13/	0.161	0.170	0.168	0.171	0.173	0.174	0.175	0.175	0.176	0.177	0.177	0.178	0.179	0.179	0.180
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.417	0.417	0.432	0.430	0.440	0.450	0.457	0.463	0.470	0.476	0.480	0.485	0.490	0.496	0.501
Delivered Energy	2.743	2.786	2.800	2.761	2.800	2.835	2.867	2.900	2.929	2.955	2.972	2.991	3.014	3.034	3.052
Electricity Related Losses	0.762	0.794	0.825	0.793	0.765	0.782	0.799	0.812	0.829	0.840	0.856	0.866	0.869	0.874	0.884
Total	3.505	3.580	3.625	3.554	3.565	3.617	3.666	3.713	3.758	3.795	3.828	3.856	3.883	3.909	3.936
<b>Electric Power 14/</b>															
Distillate Fuel	0.042	0.008	0.010	0.008	0.008	0.009	0.009	0.009	0.009	0.010	0.011	0.011	0.011	0.012	0.011
Residual Fuel	0.092	0.109	0.100	0.098	0.099	0.099	0.099	0.105	0.102	0.101	0.104	0.107	0.103	0.106	0.104
Petroleum Subtotal	0.133	0.117	0.110	0.106	0.107	0.108	0.108	0.114	0.111	0.111	0.115	0.118	0.114	0.118	0.115
Natural Gas	0.353	0.381	0.381	0.355	0.338	0.344	0.353	0.358	0.372	0.387	0.407	0.417	0.426	0.436	0.432
Steam Coal	0.194	0.196	0.189	0.193	0.200	0.207	0.214	0.219	0.219	0.219	0.219	0.219	0.219	0.219	0.226
Nuclear Power	0.345	0.357	0.354	0.361	0.361	0.362	0.363	0.364	0.373	0.373	0.374	0.374	0.374	0.374	0.374
Renewable Energy/Other 15/	0.136	0.134	0.168	0.169	0.176	0.171	0.168	0.168	0.168	0.168	0.168	0.168	0.169	0.171	0.194
Electricity Imports	0.018	0.027	0.055	0.039	0.023	0.041	0.050	0.053	0.056	0.056	0.052	0.053	0.057	0.051	0.043
Total	1.179	1.211	1.257	1.223	1.205	1.232	1.256	1.276	1.298	1.315	1.336	1.350	1.360	1.370	1.385

Table 1. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

New England	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	0.618	0.610	0.623	0.585	0.581	0.586	0.591	0.596	0.599	0.603	0.604	0.606	0.607	0.608	0.609
Kerosene	0.015	0.018	0.019	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.018
Jet Fuel 9/	0.067	0.069	0.069	0.071	0.073	0.075	0.077	0.079	0.081	0.083	0.084	0.085	0.086	0.087	0.088
Liquefied Petroleum Gas	0.044	0.046	0.045	0.045	0.046	0.046	0.047	0.048	0.048	0.049	0.049	0.050	0.050	0.050	0.050
Motor Gasoline 2/	0.805	0.820	0.822	0.827	0.841	0.853	0.866	0.879	0.890	0.899	0.908	0.917	0.925	0.933	0.941
Petrochemical Feedstocks	0.047	0.050	0.045	0.048	0.050	0.050	0.050	0.050	0.051	0.051	0.050	0.049	0.050	0.049	0.049
Residual Fuel	0.162	0.184	0.175	0.163	0.171	0.168	0.168	0.174	0.170	0.170	0.173	0.175	0.170	0.174	0.171
Other Petroleum 12/	0.048	0.044	0.041	0.042	0.043	0.043	0.043	0.043	0.042	0.042	0.041	0.041	0.041	0.040	0.040
Petroleum Subtotal	1.806	1.842	1.840	1.799	1.824	1.841	1.860	1.887	1.901	1.915	1.928	1.940	1.947	1.960	1.966
Natural Gas	0.833	0.843	0.838	0.809	0.795	0.808	0.823	0.833	0.852	0.873	0.896	0.910	0.924	0.940	0.939
Lease and Plant Fuel 6/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Pipeline Natural Gas	0.007	0.007	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009
Natural Gas Subtotal	0.840	0.850	0.847	0.817	0.803	0.816	0.831	0.841	0.860	0.881	0.904	0.918	0.933	0.948	0.948
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	0.199	0.201	0.194	0.198	0.205	0.212	0.219	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.231
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.199	0.201	0.194	0.198	0.205	0.212	0.219	0.225	0.225	0.225	0.225	0.225	0.225	0.225	0.231
Nuclear Power	0.345	0.357	0.354	0.361	0.361	0.362	0.363	0.364	0.373	0.373	0.374	0.374	0.374	0.374	0.374
Renewable Energy 16/	0.297	0.303	0.336	0.340	0.348	0.344	0.343	0.343	0.344	0.345	0.345	0.346	0.347	0.351	0.374
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.018	0.027	0.055	0.039	0.023	0.041	0.050	0.053	0.056	0.056	0.052	0.053	0.057	0.051	0.043
<b>Total</b>	<b>3.505</b>	<b>3.580</b>	<b>3.625</b>	<b>3.554</b>	<b>3.565</b>	<b>3.617</b>	<b>3.666</b>	<b>3.713</b>	<b>3.758</b>	<b>3.795</b>	<b>3.828</b>	<b>3.856</b>	<b>3.883</b>	<b>3.909</b>	<b>3.936</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	2.743	2.786	2.800	2.761	2.800	2.835	2.867	2.900	2.929	2.955	2.972	2.991	3.014	3.034	3.052
Total Energy Use	3.505	3.580	3.625	3.554	3.565	3.617	3.666	3.713	3.758	3.795	3.828	3.856	3.883	3.909	3.936
Population (millions)	14.230	14.260	14.340	14.417	14.490	14.560	14.629	14.696	14.762	14.825	14.887	14.948	15.006	15.062	15.115
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869

Table 1. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

New England	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Consumption</b>														
<b>Residential</b>														
Distillate Fuel	0.275	0.272	0.270	0.266	0.263	0.259	0.257	0.253	0.250	0.247	0.245	0.242	0.239	-1.2%
Kerosene	0.013	0.013	0.013	0.012	0.012	0.012	0.011	0.011	0.010	0.010	0.010	0.009	0.009	-1.8%
Liquefied Petroleum Gas	0.033	0.033	0.033	0.033	0.034	0.034	0.034	0.034	0.034	0.035	0.035	0.035	0.035	0.6%
Petroleum Subtotal	0.321	0.318	0.316	0.312	0.308	0.305	0.302	0.298	0.295	0.292	0.290	0.286	0.283	-1.1%
Natural Gas	0.202	0.202	0.204	0.204	0.204	0.204	0.205	0.205	0.205	0.205	0.205	0.205	0.205	0.3%
Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-0.6%
Renewable Energy 1/ Electricity	0.025	0.025	0.025	0.025	0.025	0.025	0.024	0.024	0.024	0.024	0.024	0.024	0.023	-0.6%
Delivered Energy	0.184	0.185	0.187	0.188	0.189	0.191	0.192	0.193	0.194	0.196	0.197	0.198	0.200	1.0%
Electricity Related Losses	0.732	0.731	0.732	0.728	0.727	0.725	0.724	0.720	0.718	0.716	0.716	0.712	0.711	-0.2%
Total	0.326	0.325	0.319	0.321	0.325	0.327	0.326	0.328	0.329	0.329	0.330	0.330	0.332	0.5%
Total	1.058	1.056	1.051	1.050	1.051	1.051	1.051	1.049	1.047	1.045	1.047	1.042	1.043	0.0%
<b>Commercial</b>														
Distillate Fuel	0.072	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	0.071	-0.2%
Residual Fuel	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017	1.6%
Kerosene	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.0%
Liquefied Petroleum Gas	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.3%
Motor Gasoline 2/ Petroleum Subtotal	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.5%
Natural Gas	0.099	0.099	0.099	0.099	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.1%
Coal	0.154	0.156	0.158	0.160	0.162	0.164	0.166	0.168	0.169	0.172	0.174	0.176	0.179	1.1%
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	N/A
Renewable Energy 3/ Electricity	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.0%
Delivered Energy	0.237	0.241	0.245	0.249	0.253	0.257	0.262	0.266	0.270	0.274	0.279	0.283	0.289	1.8%
Electricity Related Losses	0.498	0.503	0.509	0.516	0.522	0.528	0.534	0.540	0.547	0.553	0.560	0.566	0.574	1.2%
Total	0.421	0.422	0.417	0.426	0.434	0.441	0.444	0.452	0.457	0.461	0.467	0.471	0.480	1.3%
Total	0.919	0.926	0.926	0.941	0.956	0.969	0.978	0.992	1.004	1.014	1.026	1.038	1.054	1.3%
<b>Industrial 4/</b>														
Distillate Fuel	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	-0.7%
Liquefied Petroleum Gas	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.007	-0.7%
Petrochemical Feedstocks	0.048	0.047	0.046	0.046	0.045	0.045	0.044	0.043	0.043	0.043	0.042	0.042	0.041	-0.8%
Residual Fuel	0.046	0.046	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.044	-1.1%
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	-0.3%
Natural Gas	0.034	0.034	0.033	0.033	0.033	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	-0.8%
Coal	0.169	0.167	0.165	0.163	0.162	0.161	0.160	0.159	0.158	0.158	0.157	0.156	0.155	-0.8%
Natural Gas	0.147	0.148	0.148	0.149	0.150	0.152	0.153	0.154	0.156	0.157	0.159	0.160	0.161	0.8%
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Metallurgical Coal	0.147	0.148	0.148	0.149	0.150	0.152	0.153	0.154	0.156	0.157	0.159	0.160	0.161	0.8%
Other Industrial Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal-to-Liquids Heat and Power	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.0%
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.0%
Renewable Energy 7/ Electricity	0.149	0.150	0.151	0.152	0.153	0.153	0.154	0.155	0.156	0.157	0.158	0.159	0.159	0.6%
Delivered Energy	0.081	0.080	0.080	0.080	0.079	0.079	0.079	0.079	0.079	0.078	0.078	0.078	0.078	-0.1%
Electricity Related Losses	0.550	0.549	0.548	0.548	0.549	0.549	0.550	0.551	0.553	0.555	0.556	0.557	0.558	0.1%
Total	0.143	0.141	0.136	0.136	0.136	0.135	0.134	0.134	0.133	0.132	0.131	0.130	0.130	-0.6%
Total	0.693	0.690	0.684	0.684	0.684	0.685	0.683	0.684	0.686	0.686	0.687	0.687	0.688	-0.1%

Table 1. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

New England	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Transportation</b>														
Distillate Fuel 8/	0.231	0.235	0.239	0.243	0.248	0.252	0.257	0.263	0.268	0.274	0.280	0.286	0.292	2.0%
Jet Fuel 9/	0.089	0.090	0.090	0.090	0.091	0.091	0.091	0.091	0.091	0.091	0.092	0.092	0.093	1.2%
Motor Gasoline 2/	0.934	0.941	0.948	0.954	0.959	0.965	0.970	0.975	0.981	0.987	0.993	0.998	1.004	0.9%
Residual Fuel	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.3%
Liquefied Petroleum Gas	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	4.9%
Other Petroleum 10/	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.0%
Petroleum Subtotal	1.271	1.282	1.293	1.304	1.314	1.325	1.335	1.346	1.357	1.369	1.381	1.393	1.406	1.1%
Pipeline Fuel Natural Gas	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.9%
Compressed Natural Gas	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	7.1%
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.1%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity	0.004	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.4%
Delivered Energy	1.291	1.303	1.315	1.326	1.336	1.347	1.357	1.368	1.380	1.392	1.404	1.416	1.429	1.1%
Electricity Related Losses	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	-0.1%
Total	1.299	1.311	1.322	1.333	1.344	1.355	1.365	1.376	1.387	1.400	1.412	1.424	1.437	1.1%
<b>Delivered Energy Consumption, All Sectors</b>														
Distillate Fuel	0.598	0.598	0.599	0.600	0.601	0.602	0.605	0.606	0.608	0.611	0.615	0.617	0.621	0.1%
Kerosene	0.018	0.017	0.017	0.017	0.016	0.016	0.016	0.015	0.015	0.014	0.014	0.013	0.013	-1.3%
Jet Fuel 9/	0.089	0.090	0.090	0.090	0.091	0.091	0.091	0.091	0.091	0.091	0.092	0.092	0.093	1.2%
Liquefied Petroleum Gas	0.051	0.051	0.051	0.051	0.051	0.052	0.052	0.052	0.052	0.053	0.053	0.053	0.053	0.6%
Motor Gasoline 2/	0.950	0.957	0.963	0.969	0.975	0.980	0.985	0.991	0.996	1.002	1.008	1.013	1.019	0.8%
Petrochemical Feedstocks	0.048	0.047	0.046	0.046	0.045	0.045	0.044	0.043	0.043	0.043	0.042	0.042	0.041	-0.8%
Residual Fuel	0.067	0.068	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	0.067	-0.5%
Other Petroleum 12/	0.039	0.039	0.039	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.037	-0.7%
Petroleum Subtotal	1.860	1.867	1.873	1.879	1.884	1.890	1.897	1.903	1.910	1.919	1.927	1.936	1.944	0.5%
Natural Gas	0.510	0.513	0.517	0.520	0.524	0.528	0.532	0.535	0.538	0.542	0.547	0.550	0.554	0.7%
Lease and Plant Fuel 6/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Pipeline Natural Gas	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.9%
Natural Gas Subtotal	0.519	0.522	0.526	0.529	0.533	0.537	0.541	0.544	0.547	0.551	0.555	0.558	0.563	0.7%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.0%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.0%
Renewable Energy 13/	0.181	0.182	0.183	0.183	0.184	0.185	0.185	0.186	0.187	0.188	0.188	0.189	0.190	0.4%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity	0.506	0.511	0.517	0.521	0.527	0.532	0.538	0.542	0.548	0.553	0.559	0.564	0.571	1.2%
Delivered Energy	3.071	3.087	3.104	3.118	3.133	3.149	3.166	3.180	3.197	3.216	3.236	3.253	3.273	0.6%
Electricity Related Losses	0.898	0.896	0.880	0.891	0.902	0.911	0.912	0.922	0.927	0.928	0.936	0.939	0.949	0.7%
Total	3.970	3.982	3.984	4.009	4.035	4.060	4.077	4.101	4.125	4.144	4.171	4.191	4.221	0.6%
<b>Electric Power 14/</b>														
Distillate Fuel	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.7%
Residual Fuel	0.106	0.105	0.100	0.100	0.100	0.098	0.098	0.098	0.098	0.098	0.100	0.100	0.099	-0.3%
Petroleum Subtotal	0.117	0.117	0.110	0.110	0.110	0.108	0.108	0.108	0.108	0.108	0.110	0.110	0.109	-0.3%
Natural Gas	0.447	0.461	0.454	0.470	0.467	0.457	0.447	0.440	0.434	0.426	0.420	0.406	0.404	0.2%
Steam Coal	0.226	0.226	0.226	0.227	0.246	0.267	0.290	0.310	0.327	0.344	0.361	0.383	0.402	2.8%
Nuclear Power	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.2%
Renewable Energy/Other 15/	0.196	0.196	0.196	0.196	0.196	0.196	0.196	0.196	0.196	0.196	0.196	0.197	0.197	1.5%
Electricity Imports	0.043	0.032	0.035	0.035	0.035	0.040	0.034	0.036	0.035	0.034	0.034	0.034	0.034	0.9%
Total	1.404	1.406	1.396	1.412	1.429	1.443	1.449	1.464	1.475	1.482	1.495	1.503	1.519	0.9%

Table 1. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

New England	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	0.609	0.609	0.610	0.610	0.611	0.612	0.614	0.616	0.618	0.621	0.624	0.627	0.630	0.1%
Kerosene	0.018	0.017	0.017	0.017	0.016	0.016	0.016	0.015	0.015	0.014	0.014	0.013	0.013	-1.3%
Jet Fuel 9/	0.089	0.090	0.090	0.090	0.091	0.091	0.091	0.091	0.091	0.091	0.092	0.092	0.093	1.2%
Liquefied Petroleum Gas	0.051	0.051	0.051	0.051	0.051	0.052	0.052	0.052	0.052	0.053	0.053	0.053	0.053	0.6%
Motor Gasoline 2/	0.950	0.957	0.963	0.969	0.975	0.980	0.985	0.991	0.996	1.002	1.008	1.013	1.019	0.8%
Petrochemical Feedstocks	0.048	0.047	0.046	0.046	0.045	0.045	0.044	0.043	0.043	0.043	0.042	0.042	0.041	-0.8%
Residual Fuel	0.173	0.173	0.167	0.167	0.167	0.165	0.165	0.165	0.165	0.165	0.167	0.168	0.166	-0.4%
Other Petroleum 12/	0.039	0.039	0.039	0.038	0.038	0.038	0.038	0.037	0.037	0.037	0.037	0.037	0.037	-0.7%
Petroleum Subtotal	1.977	1.983	1.983	1.989	1.994	1.998	2.005	2.011	2.018	2.027	2.037	2.045	2.053	0.4%
Natural Gas	0.958	0.974	0.972	0.991	0.992	0.985	0.979	0.975	0.973	0.968	0.967	0.955	0.958	0.5%
Lease and Plant Fuel 6/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Pipeline Natural Gas	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.9%
Natural Gas Subtotal	0.967	0.983	0.981	1.000	1.001	0.994	0.988	0.984	0.982	0.977	0.975	0.964	0.967	0.5%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	0.231	0.231	0.232	0.232	0.251	0.273	0.295	0.315	0.332	0.349	0.366	0.388	0.407	2.7%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.231	0.231	0.232	0.232	0.251	0.273	0.295	0.315	0.332	0.349	0.366	0.388	0.407	2.7%
Nuclear Power	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.374	0.2%
Renewable Energy 16/	0.377	0.378	0.378	0.379	0.380	0.380	0.381	0.382	0.383	0.384	0.385	0.386	0.386	0.9%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports	0.043	0.032	0.035	0.035	0.035	0.040	0.034	0.036	0.035	0.034	0.034	0.034	0.034	0.9%
<b>Total</b>	<b>3.970</b>	<b>3.982</b>	<b>3.984</b>	<b>4.009</b>	<b>4.035</b>	<b>4.060</b>	<b>4.077</b>	<b>4.101</b>	<b>4.125</b>	<b>4.144</b>	<b>4.171</b>	<b>4.191</b>	<b>4.221</b>	<b>0.6%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	3.071	3.087	3.104	3.118	3.133	3.149	3.166	3.180	3.197	3.216	3.236	3.253	3.273	0.6%
Total Energy Use	3.970	3.982	3.984	4.009	4.035	4.060	4.077	4.101	4.125	4.144	4.171	4.191	4.221	0.6%
Population (millions)	15.166	15.214	15.259	15.300	15.339	15.375	15.407	15.437	15.465	15.491	15.517	15.541	15.564	0.3%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 1. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
New England

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 2. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Energy Consumption</b>															
<b>Residential</b>															
Distillate Fuel	0.397	0.411	0.421	0.380	0.370	0.370	0.367	0.366	0.363	0.360	0.356	0.352	0.348	0.344	0.338
Kerosene	0.026	0.030	0.030	0.033	0.031	0.031	0.030	0.030	0.030	0.030	0.029	0.029	0.029	0.028	0.028
Liquefied Petroleum Gas	0.039	0.040	0.040	0.039	0.039	0.040	0.040	0.041	0.041	0.042	0.042	0.043	0.043	0.044	0.044
Petroleum Subtotal	0.461	0.481	0.490	0.452	0.440	0.440	0.438	0.437	0.435	0.432	0.427	0.424	0.420	0.416	0.410
Natural Gas	0.950	0.892	0.898	0.893	0.889	0.896	0.897	0.901	0.903	0.907	0.905	0.905	0.906	0.910	0.907
Coal	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Renewable Energy 1/ Electricity	0.082	0.081	0.085	0.087	0.086	0.084	0.082	0.080	0.079	0.078	0.077	0.076	0.075	0.075	0.074
Delivered Energy	0.417	0.419	0.435	0.428	0.433	0.441	0.445	0.449	0.452	0.455	0.456	0.458	0.461	0.465	0.466
Electricity Related Losses	1.913	1.876	1.910	1.862	1.851	1.864	1.865	1.870	1.871	1.875	1.868	1.865	1.865	1.868	1.859
Total	0.979	1.014	1.053	1.062	1.075	1.104	1.107	1.107	1.086	1.128	1.131	1.140	1.157	1.166	1.168
Total	2.893	2.890	2.964	2.924	2.925	2.968	2.972	2.977	2.957	3.003	2.999	3.005	3.023	3.034	3.028
<b>Commercial</b>															
Distillate Fuel	0.142	0.146	0.148	0.133	0.130	0.131	0.132	0.132	0.132	0.132	0.132	0.132	0.132	0.131	0.131
Residual Fuel	0.081	0.087	0.084	0.084	0.094	0.086	0.086	0.087	0.087	0.089	0.089	0.088	0.089	0.089	0.089
Kerosene	0.010	0.012	0.012	0.012	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011
Liquefied Petroleum Gas	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Motor Gasoline 2/ Petroleum Subtotal	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Natural Gas	0.242	0.254	0.253	0.237	0.246	0.238	0.239	0.241	0.240	0.242	0.242	0.241	0.241	0.241	0.241
Coal	0.693	0.641	0.645	0.593	0.595	0.603	0.611	0.618	0.626	0.633	0.639	0.644	0.651	0.657	0.662
Renewable Energy 3/ Electricity	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
Delivered Energy	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Electricity Related Losses	0.504	0.513	0.537	0.522	0.535	0.549	0.560	0.570	0.579	0.587	0.593	0.598	0.605	0.612	0.619
Total	1.477	1.446	1.473	1.390	1.413	1.427	1.447	1.466	1.483	1.500	1.511	1.521	1.536	1.548	1.560
Total	1.185	1.241	1.298	1.295	1.327	1.373	1.392	1.405	1.392	1.454	1.471	1.489	1.519	1.537	1.553
Total	2.661	2.687	2.771	2.685	2.739	2.800	2.839	2.870	2.875	2.953	2.982	3.010	3.054	3.085	3.113
<b>Industrial 4/</b>															
Distillate Fuel	0.059	0.060	0.065	0.061	0.058	0.057	0.057	0.056	0.055	0.054	0.054	0.054	0.053	0.053	0.052
Liquefied Petroleum Gas	0.031	0.032	0.030	0.030	0.031	0.031	0.031	0.031	0.031	0.031	0.030	0.030	0.030	0.030	0.030
Petrochemical Feedstocks	0.136	0.145	0.131	0.137	0.143	0.143	0.144	0.145	0.146	0.145	0.143	0.142	0.143	0.142	0.140
Residual Fuel	0.018	0.016	0.016	0.013	0.009	0.008	0.009	0.012	0.008	0.011	0.013	0.013	0.011	0.014	0.013
Motor Gasoline 2/ Petroleum Subtotal	0.023	0.023	0.024	0.024	0.024	0.023	0.023	0.023	0.023	0.023	0.023	0.022	0.022	0.022	0.022
Natural Gas	0.431	0.426	0.416	0.417	0.419	0.434	0.427	0.438	0.433	0.441	0.437	0.436	0.446	0.443	0.447
Coal	0.698	0.702	0.681	0.683	0.684	0.696	0.690	0.705	0.697	0.705	0.701	0.697	0.705	0.704	0.705
Renewable Energy 6/ Natural Gas Subtotal	0.357	0.358	0.339	0.355	0.398	0.398	0.406	0.397	0.400	0.401	0.400	0.401	0.400	0.402	0.402
Coal	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Natural Gas	0.363	0.364	0.345	0.361	0.404	0.404	0.412	0.404	0.407	0.407	0.407	0.408	0.407	0.409	0.409
Metallurgical Coal	0.209	0.204	0.202	0.195	0.199	0.198	0.197	0.198	0.198	0.197	0.195	0.194	0.194	0.193	0.192
Other Industrial Coal	0.111	0.114	0.113	0.115	0.116	0.116	0.116	0.116	0.116	0.116	0.116	0.115	0.115	0.115	0.115
Coal-to-Liquids Heat and Power	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	-0.279	-0.686	-0.407	-0.107	-0.110	-0.110	-0.110	-0.110	-0.111	-0.111	-0.110	-0.110	-0.110	-0.110	-0.110
Coal Subtotal	0.041	-0.367	-0.092	0.202	0.205	0.204	0.204	0.203	0.203	0.202	0.201	0.200	0.199	0.199	0.198
Renewable Energy 7/ Electricity	0.072	0.076	0.074	0.075	0.077	0.078	0.079	0.079	0.080	0.081	0.081	0.081	0.082	0.082	0.083
Delivered Energy	0.297	0.295	0.292	0.294	0.291	0.292	0.292	0.292	0.293	0.294	0.293	0.293	0.293	0.293	0.293
Electricity Related Losses	1.471	1.070	1.301	1.615	1.661	1.675	1.676	1.683	1.680	1.689	1.682	1.678	1.686	1.687	1.689
Total	0.697	0.714	0.708	0.728	0.721	0.730	0.725	0.720	0.705	0.728	0.728	0.728	0.736	0.736	0.736
Total	2.168	1.784	2.009	2.344	2.382	2.405	2.402	2.404	2.385	2.417	2.410	2.406	2.422	2.423	2.425

Table 2. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Transportation</b>															
Distillate Fuel 8/	0.505	0.527	0.534	0.546	0.559	0.569	0.580	0.591	0.602	0.611	0.619	0.626	0.632	0.640	0.648
Jet Fuel 9/	0.365	0.375	0.375	0.383	0.395	0.403	0.412	0.425	0.438	0.444	0.449	0.453	0.457	0.461	0.466
Motor Gasoline 2/	1.857	1.891	1.897	1.901	1.926	1.946	1.968	1.989	2.008	2.022	2.035	2.047	2.061	2.070	2.083
Residual Fuel	0.098	0.105	0.114	0.114	0.111	0.109	0.106	0.104	0.103	0.103	0.103	0.102	0.102	0.102	0.101
Liquefied Petroleum Gas	0.002	0.003	0.005	0.005	0.006	0.006	0.007	0.007	0.008	0.008	0.008	0.009	0.009	0.009	0.009
Other Petroleum 10/	0.015	0.018	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.017	0.017	0.017	0.017	0.017
Petroleum Subtotal	2.842	2.919	2.944	2.967	3.015	3.051	3.091	3.134	3.176	3.206	3.230	3.254	3.277	3.299	3.325
Pipeline Fuel Natural Gas	0.080	0.080	0.066	0.062	0.059	0.058	0.057	0.055	0.056	0.057	0.058	0.058	0.060	0.061	0.062
Compressed Natural Gas	0.003	0.004	0.004	0.005	0.005	0.006	0.006	0.007	0.008	0.008	0.009	0.009	0.009	0.010	0.010
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Delivered Energy	2.937	3.015	3.026	3.046	3.091	3.126	3.167	3.208	3.252	3.284	3.309	3.334	3.360	3.383	3.409
Electricity Related Losses	0.027	0.028	0.028	0.029	0.029	0.029	0.029	0.029	0.029	0.030	0.030	0.030	0.031	0.031	0.031
Total	2.964	3.043	3.054	3.075	3.120	3.156	3.196	3.238	3.281	3.314	3.339	3.364	3.390	3.413	3.440
<b>Delivered Energy Consumption, All Sectors</b>															
Distillate Fuel	1.102	1.143	1.167	1.120	1.118	1.127	1.136	1.145	1.152	1.158	1.160	1.163	1.165	1.168	1.170
Kerosene	0.039	0.046	0.046	0.049	0.047	0.047	0.046	0.046	0.046	0.046	0.045	0.045	0.045	0.044	0.044
Jet Fuel 9/	0.365	0.375	0.375	0.383	0.395	0.403	0.412	0.425	0.438	0.444	0.449	0.453	0.457	0.461	0.466
Liquefied Petroleum Gas	0.079	0.082	0.081	0.081	0.083	0.083	0.084	0.086	0.087	0.087	0.088	0.088	0.089	0.089	0.089
Motor Gasoline 2/	1.882	1.917	1.924	1.927	1.952	1.973	1.994	2.015	2.034	2.048	2.060	2.073	2.086	2.096	2.108
Petrochemical Feedstocks	0.136	0.145	0.131	0.137	0.143	0.143	0.144	0.145	0.146	0.145	0.143	0.142	0.143	0.142	0.140
Residual Fuel	0.198	0.209	0.215	0.211	0.215	0.203	0.201	0.203	0.199	0.203	0.205	0.204	0.202	0.204	0.203
Other Petroleum 12/	0.442	0.439	0.429	0.430	0.432	0.447	0.440	0.451	0.446	0.453	0.450	0.448	0.458	0.455	0.460
Petroleum Subtotal	4.243	4.355	4.368	4.339	4.384	4.425	4.458	4.516	4.548	4.585	4.601	4.616	4.644	4.659	4.680
Natural Gas	2.003	1.896	1.887	1.846	1.887	1.903	1.920	1.923	1.937	1.949	1.951	1.959	1.967	1.978	1.982
Lease and Plant Fuel 6/	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Pipeline Natural Gas	0.080	0.080	0.066	0.062	0.059	0.058	0.057	0.055	0.056	0.057	0.058	0.058	0.060	0.061	0.062
Natural Gas Subtotal	2.089	1.982	1.959	1.914	1.952	1.967	1.984	1.985	2.000	2.013	2.016	2.024	2.034	2.047	2.051
Metallurgical Coal	0.209	0.204	0.202	0.195	0.199	0.198	0.197	0.198	0.198	0.197	0.195	0.194	0.194	0.193	0.192
Other Coal	0.133	0.136	0.135	0.137	0.138	0.138	0.138	0.138	0.138	0.138	0.138	0.137	0.137	0.137	0.137
Coal-to-Liquids Heat and Power	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	-0.279	-0.686	-0.407	-0.107	-0.110	-0.110	-0.110	-0.111	-0.111	-0.111	-0.110	-0.110	-0.110	-0.110	-0.110
Coal Subtotal	0.063	-0.345	-0.070	0.224	0.227	0.226	0.226	0.225	0.225	0.224	0.222	0.222	0.221	0.220	0.220
Renewable Energy 13/	0.173	0.176	0.177	0.181	0.181	0.181	0.180	0.179	0.178	0.178	0.177	0.177	0.176	0.176	0.176
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	1.229	1.239	1.276	1.255	1.270	1.293	1.308	1.323	1.336	1.348	1.353	1.361	1.372	1.383	1.391
Delivered Energy	7.797	7.407	7.710	7.913	8.015	8.093	8.155	8.227	8.286	8.348	8.370	8.399	8.447	8.485	8.517
Electricity Related Losses	2.888	2.998	3.088	3.114	3.152	3.236	3.254	3.261	3.212	3.339	3.360	3.388	3.442	3.470	3.488
Total	10.685	10.404	10.798	11.027	11.166	11.329	11.410	11.489	11.498	11.687	11.730	11.786	11.889	11.955	12.006
<b>Electric Power 14/</b>															
Distillate Fuel	0.048	0.026	0.022	0.021	0.022	0.023	0.023	0.025	0.026	0.025	0.025	0.025	0.026	0.026	0.026
Residual Fuel	0.221	0.251	0.204	0.194	0.234	0.248	0.240	0.229	0.232	0.244	0.236	0.237	0.201	0.184	0.181
Petroleum Subtotal	0.269	0.277	0.227	0.215	0.257	0.271	0.263	0.253	0.258	0.269	0.261	0.262	0.227	0.209	0.207
Natural Gas	0.445	0.471	0.543	0.511	0.494	0.516	0.525	0.547	0.600	0.637	0.671	0.697	0.787	0.845	0.876
Steam Coal	1.519	1.555	1.645	1.667	1.693	1.748	1.765	1.775	1.681	1.771	1.774	1.770	1.779	1.779	1.784
Nuclear Power	1.482	1.534	1.497	1.522	1.522	1.529	1.536	1.537	1.537	1.537	1.537	1.544	1.544	1.544	1.544
Renewable Energy/Other 15/	0.385	0.382	0.417	0.428	0.441	0.440	0.442	0.439	0.437	0.437	0.438	0.442	0.441	0.442	0.442
Electricity Imports	0.018	0.017	0.034	0.025	0.014	0.026	0.032	0.034	0.035	0.035	0.033	0.034	0.036	0.032	0.027
Total	4.117	4.237	4.364	4.368	4.422	4.529	4.563	4.584	4.548	4.687	4.714	4.749	4.814	4.852	4.879

Table 2. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	1.150	1.169	1.189	1.141	1.140	1.150	1.159	1.169	1.178	1.183	1.185	1.188	1.191	1.194	1.196
Kerosene	0.039	0.046	0.046	0.049	0.047	0.047	0.046	0.046	0.046	0.046	0.045	0.045	0.045	0.044	0.044
Jet Fuel 9/	0.365	0.375	0.375	0.383	0.395	0.403	0.412	0.425	0.438	0.444	0.449	0.453	0.457	0.461	0.466
Liquefied Petroleum Gas	0.079	0.082	0.081	0.081	0.083	0.083	0.084	0.086	0.087	0.087	0.088	0.088	0.089	0.089	0.089
Motor Gasoline 2/	1.882	1.917	1.924	1.927	1.952	1.973	1.994	2.015	2.034	2.048	2.060	2.073	2.086	2.096	2.108
Petrochemical Feedstocks	0.136	0.145	0.131	0.137	0.143	0.143	0.144	0.145	0.146	0.145	0.143	0.142	0.143	0.142	0.140
Residual Fuel	0.418	0.460	0.419	0.405	0.449	0.451	0.441	0.432	0.431	0.447	0.441	0.440	0.403	0.388	0.384
Other Petroleum 12/	0.442	0.439	0.429	0.430	0.432	0.447	0.440	0.451	0.446	0.453	0.450	0.448	0.458	0.455	0.460
Petroleum Subtotal	4.512	4.633	4.595	4.554	4.641	4.696	4.721	4.769	4.805	4.854	4.862	4.878	4.871	4.869	4.887
Natural Gas	2.448	2.367	2.430	2.358	2.381	2.419	2.445	2.470	2.537	2.586	2.622	2.655	2.754	2.824	2.858
Lease and Plant Fuel 6/	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Pipeline Natural Gas	0.080	0.080	0.066	0.062	0.059	0.058	0.057	0.055	0.056	0.057	0.058	0.058	0.060	0.061	0.062
Natural Gas Subtotal	2.534	2.453	2.502	2.426	2.446	2.483	2.509	2.532	2.600	2.650	2.687	2.720	2.821	2.892	2.927
Metallurgical Coal	0.209	0.204	0.202	0.195	0.199	0.198	0.197	0.198	0.198	0.197	0.195	0.194	0.194	0.193	0.192
Other Coal	1.652	1.691	1.780	1.804	1.832	1.886	1.904	1.913	1.819	1.909	1.911	1.907	1.917	1.916	1.921
Coal-to-Liquids Heat and Power	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	-0.279	-0.686	-0.407	-0.107	-0.110	-0.110	-0.110	-0.111	-0.111	-0.111	-0.110	-0.110	-0.110	-0.110	-0.110
Coal Subtotal	1.582	1.210	1.575	1.891	1.920	1.974	1.991	2.000	1.906	1.995	1.996	1.992	2.001	2.000	2.004
Nuclear Power	1.482	1.534	1.497	1.522	1.522	1.529	1.536	1.536	1.537	1.537	1.537	1.544	1.544	1.544	1.544
Renewable Energy 16/	0.558	0.558	0.594	0.609	0.622	0.620	0.621	0.617	0.615	0.615	0.615	0.619	0.617	0.618	0.618
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.018	0.017	0.034	0.025	0.014	0.026	0.032	0.034	0.035	0.035	0.033	0.034	0.036	0.032	0.027
<b>Total</b>	<b>10.685</b>	<b>10.404</b>	<b>10.798</b>	<b>11.027</b>	<b>11.166</b>	<b>11.329</b>	<b>11.410</b>	<b>11.489</b>	<b>11.498</b>	<b>11.687</b>	<b>11.730</b>	<b>11.786</b>	<b>11.889</b>	<b>11.955</b>	<b>12.006</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	7.797	7.407	7.710	7.913	8.015	8.093	8.155	8.227	8.286	8.348	8.370	8.399	8.447	8.485	8.517
Total Energy Use	10.685	10.404	10.798	11.027	11.166	11.329	11.410	11.489	11.498	11.687	11.730	11.786	11.889	11.955	12.006
Population (millions)	40.308	40.393	40.537	40.672	40.797	40.912	41.024	41.130	41.231	41.328	41.420	41.507	41.589	41.664	41.732
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869

Table 2. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Middle Atlantic

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Consumption</b>														
<b>Residential</b>														
Distillate Fuel	0.333	0.328	0.323	0.318	0.312	0.307	0.303	0.297	0.292	0.288	0.284	0.278	0.273	-1.6%
Kerosene	0.028	0.027	0.027	0.026	0.026	0.026	0.025	0.025	0.024	0.024	0.024	0.023	0.023	-1.0%
Liquefied Petroleum Gas	0.044	0.044	0.045	0.045	0.045	0.045	0.045	0.045	0.045	0.046	0.046	0.046	0.046	0.5%
Petroleum Subtotal	0.405	0.399	0.395	0.388	0.383	0.378	0.373	0.367	0.362	0.357	0.353	0.348	0.343	-1.3%
Natural Gas	0.906	0.905	0.906	0.902	0.900	0.898	0.898	0.893	0.890	0.888	0.888	0.883	0.881	0.0%
Coal	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	-0.5%
Renewable Energy 1/ Electricity	0.073	0.072	0.072	0.071	0.070	0.069	0.069	0.068	0.067	0.066	0.065	0.064	0.064	-0.9%
Delivered Energy	0.468	0.470	0.473	0.473	0.475	0.476	0.479	0.480	0.481	0.483	0.487	0.487	0.489	0.6%
Electricity Related Losses	1.854	1.848	1.848	1.837	1.830	1.823	1.821	1.809	1.803	1.797	1.796	1.785	1.779	-0.2%
Total	1.170	1.179	1.190	1.192	1.195	1.203	1.217	1.217	1.227	1.238	1.250	1.258	1.274	0.9%
<b>Total</b>	<b>3.024</b>	<b>3.027</b>	<b>3.039</b>	<b>3.029</b>	<b>3.026</b>	<b>3.027</b>	<b>3.039</b>	<b>3.026</b>	<b>3.030</b>	<b>3.035</b>	<b>3.046</b>	<b>3.043</b>	<b>3.053</b>	<b>0.2%</b>
<b>Commercial</b>														
Distillate Fuel	0.131	0.130	0.130	0.130	0.130	0.129	0.129	0.128	0.128	0.128	0.128	0.127	0.127	-0.5%
Residual Fuel	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.089	0.1%
Kerosene	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.0%
Liquefied Petroleum Gas	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.2%
Motor Gasoline 2/ Petroleum Subtotal	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	-0.1%
Natural Gas	0.241	0.240	0.240	0.240	0.240	0.239	0.239	0.238	0.238	0.238	0.238	0.238	0.238	-0.3%
Coal	0.665	0.668	0.671	0.675	0.678	0.681	0.684	0.686	0.689	0.692	0.696	0.699	0.704	0.4%
Renewable Energy 3/ Electricity	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	N/A
Delivered Energy	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.0%
Electricity Related Losses	0.626	0.631	0.638	0.644	0.650	0.657	0.664	0.671	0.679	0.686	0.695	0.703	0.712	1.3%
Total	1.569	1.577	1.587	1.596	1.605	1.615	1.624	1.633	1.644	1.654	1.666	1.678	1.691	0.6%
Electricity Related Losses	1.565	1.584	1.604	1.622	1.638	1.661	1.687	1.703	1.730	1.757	1.784	1.815	1.854	1.6%
<b>Total</b>	<b>3.134</b>	<b>3.161</b>	<b>3.191</b>	<b>3.218</b>	<b>3.243</b>	<b>3.275</b>	<b>3.311</b>	<b>3.336</b>	<b>3.373</b>	<b>3.411</b>	<b>3.449</b>	<b>3.493</b>	<b>3.545</b>	<b>1.1%</b>
<b>Industrial 4/</b>														
Distillate Fuel	0.052	0.052	0.051	0.051	0.050	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.048	-0.8%
Liquefied Petroleum Gas	0.029	0.029	0.028	0.028	0.028	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	-0.8%
Petrochemical Feedstocks	0.138	0.135	0.133	0.132	0.130	0.128	0.127	0.125	0.124	0.123	0.121	0.120	0.118	-0.8%
Residual Fuel	0.015	0.015	0.016	0.014	0.010	0.013	0.012	0.015	0.017	0.017	0.017	0.012	0.011	-1.3%
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	-0.3%
Natural Gas	0.446	0.441	0.450	0.445	0.451	0.454	0.451	0.448	0.450	0.448	0.448	0.446	0.446	0.2%
Coal	0.702	0.693	0.701	0.691	0.691	0.694	0.688	0.686	0.688	0.685	0.683	0.675	0.671	-0.2%
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.402	0.414	0.413	0.412	0.412	0.414	0.417	0.420	0.422	0.426	0.428	0.433	0.437	0.8%
Metallurgical Coal	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.010	0.010	0.010	2.3%
Other Industrial Coal	0.409	0.422	0.421	0.420	0.420	0.423	0.426	0.429	0.431	0.435	0.438	0.443	0.447	0.8%
Coal-to-Liquids Heat and Power	0.191	0.189	0.187	0.185	0.183	0.181	0.180	0.179	0.178	0.177	0.176	0.175	0.174	-0.6%
Net Coal Coke Imports	0.115	0.115	0.115	0.115	0.115	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.114	0.0%
Coal Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Renewable Energy 7/ Electricity	-0.109	-0.108	-0.107	-0.106	-0.105	-0.105	-0.104	-0.103	-0.103	-0.102	-0.102	-0.101	-0.101	-7.1%
Delivered Energy	0.197	0.196	0.195	0.194	0.192	0.191	0.191	0.190	0.190	0.189	0.189	0.189	0.188	N/A
Electricity Related Losses	0.084	0.084	0.085	0.085	0.086	0.086	0.087	0.087	0.088	0.088	0.088	0.089	0.090	0.7%
Total	0.294	0.294	0.293	0.292	0.291	0.290	0.289	0.288	0.288	0.288	0.288	0.287	0.286	-0.1%
Delivered Energy	1.686	1.689	1.694	1.682	1.679	1.685	1.680	1.680	1.685	1.685	1.686	1.683	1.683	1.8%
Electricity Related Losses	0.734	0.737	0.737	0.734	0.732	0.733	0.734	0.732	0.735	0.737	0.739	0.741	0.745	0.2%
<b>Total</b>	<b>2.420</b>	<b>2.427</b>	<b>2.431</b>	<b>2.416</b>	<b>2.411</b>	<b>2.417</b>	<b>2.414</b>	<b>2.412</b>	<b>2.420</b>	<b>2.423</b>	<b>2.425</b>	<b>2.424</b>	<b>2.428</b>	<b>1.2%</b>

Table 2. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Middle Atlantic

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Transportation</b>														
Distillate Fuel 8/	0.656	0.664	0.672	0.681	0.691	0.701	0.712	0.723	0.736	0.749	0.761	0.775	0.789	1.6%
Jet Fuel 9/	0.470	0.473	0.471	0.470	0.468	0.467	0.465	0.464	0.463	0.462	0.463	0.464	0.466	0.8%
Motor Gasoline 2/	2.096	2.106	2.114	2.121	2.127	2.134	2.140	2.146	2.154	2.161	2.167	2.174	2.180	0.5%
Residual Fuel	0.101	0.101	0.100	0.100	0.099	0.099	0.098	0.097	0.097	0.096	0.096	0.095	0.095	-0.4%
Liquefied Petroleum Gas	0.009	0.010	0.010	0.010	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.012	4.8%
Other Petroleum 10/	0.017	0.017	0.017	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.016	0.016	0.016	-0.4%
Petroleum Subtotal	3.349	3.369	3.384	3.399	3.413	3.428	3.443	3.459	3.477	3.496	3.515	3.536	3.557	0.8%
Pipeline Fuel Natural Gas	0.062	0.062	0.062	0.062	0.062	0.062	0.061	0.060	0.059	0.058	0.058	0.057	0.057	-1.3%
Compressed Natural Gas	0.011	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	5.0%
Renewable Energy (E85) 11/	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	5.8%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	N/A
Electricity	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.3%
Delivered Energy	3.435	3.455	3.470	3.485	3.500	3.515	3.529	3.544	3.561	3.580	3.599	3.619	3.641	0.7%
Electricity Related Losses	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.032	0.032	0.032	0.032	0.032	0.5%
Total	3.465	3.486	3.501	3.516	3.531	3.546	3.561	3.575	3.593	3.612	3.631	3.651	3.673	0.7%
<b>Delivered Energy Consumption, All Sectors</b>														
Distillate Fuel	1.172	1.174	1.177	1.179	1.183	1.187	1.193	1.198	1.205	1.213	1.221	1.230	1.238	0.3%
Kerosene	0.044	0.043	0.043	0.042	0.042	0.042	0.041	0.041	0.041	0.040	0.040	0.040	0.039	-0.6%
Jet Fuel 9/	0.470	0.473	0.471	0.470	0.468	0.467	0.465	0.464	0.463	0.462	0.463	0.464	0.466	0.8%
Liquefied Petroleum Gas	0.089	0.089	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.4%
Motor Gasoline 2/	2.121	2.131	2.139	2.146	2.152	2.159	2.165	2.171	2.178	2.185	2.192	2.199	2.205	0.5%
Petrochemical Feedstocks	0.138	0.135	0.133	0.132	0.130	0.128	0.127	0.125	0.124	0.123	0.121	0.120	0.118	-0.8%
Residual Fuel	0.205	0.204	0.205	0.202	0.198	0.200	0.199	0.201	0.203	0.202	0.202	0.196	0.195	-0.3%
Other Petroleum 12/	0.459	0.453	0.462	0.458	0.463	0.466	0.463	0.460	0.462	0.460	0.459	0.458	0.457	0.2%
Petroleum Subtotal	4.697	4.702	4.720	4.718	4.726	4.739	4.743	4.749	4.765	4.776	4.789	4.796	4.809	0.4%
Natural Gas	1.984	1.997	2.001	2.000	2.001	2.005	2.010	2.011	2.013	2.018	2.024	2.028	2.034	0.3%
Lease and Plant Fuel 6/	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.010	0.010	0.010	2.3%
Pipeline Natural Gas	0.062	0.062	0.062	0.062	0.062	0.062	0.061	0.060	0.059	0.058	0.058	0.057	0.057	-1.3%
Natural Gas Subtotal	2.053	2.067	2.071	2.070	2.071	2.075	2.080	2.080	2.081	2.086	2.091	2.095	2.102	0.2%
Metallurgical Coal	0.191	0.189	0.187	0.185	0.183	0.181	0.180	0.179	0.178	0.177	0.176	0.175	0.174	-0.6%
Other Coal	0.137	0.137	0.137	0.137	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.136	0.0%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	-0.109	-0.108	-0.107	-0.106	-0.105	-0.105	-0.104	-0.103	-0.103	-0.102	-0.101	-0.101	-0.100	-7.1%
Coal Subtotal	0.219	0.218	0.217	0.215	0.214	0.213	0.212	0.212	0.211	0.211	0.211	0.210	0.210	N/A
Renewable Energy 13/	0.176	0.176	0.176	0.175	0.175	0.174	0.174	0.174	0.174	0.174	0.173	0.173	0.173	-0.1%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	N/A
Electricity	1.399	1.407	1.416	1.421	1.428	1.436	1.445	1.451	1.461	1.470	1.481	1.490	1.500	0.7%
Delivered Energy	8.544	8.570	8.600	8.600	8.615	8.637	8.654	8.667	8.693	8.716	8.746	8.765	8.794	0.7%
Electricity Related Losses	3.500	3.531	3.562	3.579	3.596	3.628	3.670	3.683	3.723	3.764	3.804	3.846	3.906	1.0%
Total	12.044	12.101	12.162	12.179	12.211	12.265	12.324	12.350	12.415	12.480	12.550	12.611	12.700	0.8%
<b>Electric Power 14/</b>														
Distillate Fuel	0.027	0.027	0.027	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.2%
Residual Fuel	0.175	0.196	0.195	0.204	0.196	0.181	0.185	0.189	0.215	0.233	0.234	0.236	0.237	-0.2%
Petroleum Subtotal	0.202	0.223	0.222	0.232	0.224	0.209	0.213	0.216	0.243	0.261	0.262	0.264	0.265	-0.2%
Natural Gas	0.895	0.892	0.927	0.939	0.954	0.960	0.944	0.913	0.864	0.830	0.806	0.784	0.784	2.0%
Steam Coal	1.786	1.790	1.793	1.793	1.809	1.854	1.919	1.968	2.038	2.105	2.179	2.251	2.320	1.5%
Nuclear Power	1.544	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.567	0.1%
Renewable Energy/Other 15/	0.445	0.445	0.445	0.447	0.448	0.448	0.449	0.448	0.448	0.449	0.449	0.449	0.449	0.6%
Electricity Imports	0.027	0.021	0.022	0.022	0.022	0.025	0.021	0.023	0.022	0.021	0.022	0.021	0.022	0.9%
Total	4.899	4.938	4.978	5.000	5.025	5.063	5.115	5.135	5.183	5.234	5.286	5.336	5.406	0.9%

Table 2. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Middle Atlantic

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	1.199	1.201	1.204	1.207	1.211	1.215	1.221	1.226	1.233	1.241	1.249	1.257	1.266	0.3%
Kerosene	0.044	0.043	0.043	0.042	0.042	0.042	0.041	0.041	0.041	0.040	0.040	0.040	0.039	-0.6%
Jet Fuel 9/	0.470	0.473	0.471	0.470	0.468	0.467	0.465	0.464	0.463	0.462	0.463	0.464	0.466	0.8%
Liquefied Petroleum Gas	0.089	0.089	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.090	0.4%
Motor Gasoline 2/	2.121	2.131	2.139	2.146	2.152	2.159	2.165	2.171	2.178	2.185	2.192	2.199	2.205	0.5%
Petrochemical Feedstocks	0.138	0.135	0.133	0.132	0.130	0.128	0.127	0.125	0.124	0.123	0.121	0.120	0.118	-0.8%
Residual Fuel	0.380	0.400	0.400	0.406	0.394	0.381	0.384	0.389	0.418	0.435	0.435	0.432	0.432	-0.2%
Other Petroleum 12/	0.459	0.453	0.462	0.458	0.463	0.466	0.463	0.460	0.462	0.460	0.459	0.458	0.457	0.2%
Petroleum Subtotal	4.899	4.925	4.942	4.950	4.950	4.948	4.956	4.966	5.008	5.037	5.050	5.060	5.074	0.4%
Natural Gas	2.879	2.889	2.929	2.939	2.955	2.965	2.955	2.924	2.878	2.848	2.831	2.812	2.819	0.7%
Lease and Plant Fuel 6/	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.010	0.010	0.010	2.3%
Pipeline Natural Gas	0.062	0.062	0.062	0.062	0.062	0.062	0.061	0.060	0.059	0.058	0.058	0.057	0.057	-1.3%
Natural Gas Subtotal	2.948	2.958	2.999	3.009	3.025	3.035	3.025	2.993	2.946	2.916	2.898	2.879	2.887	0.6%
Metallurgical Coal	0.191	0.189	0.187	0.185	0.183	0.181	0.180	0.179	0.178	0.177	0.176	0.175	0.174	-0.6%
Other Coal	1.923	1.927	1.930	1.929	1.945	1.990	2.055	2.104	2.174	2.241	2.315	2.387	2.456	1.4%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	-0.109	-0.108	-0.107	-0.106	-0.105	-0.105	-0.104	-0.103	-0.103	-0.102	-0.101	-0.101	-0.100	-7.1%
Coal Subtotal	2.005	2.008	2.010	2.008	2.023	2.067	2.132	2.179	2.249	2.316	2.390	2.461	2.529	2.9%
Nuclear Power	1.544	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.568	1.567	0.1%
Renewable Energy 16/	0.621	0.621	0.621	0.622	0.623	0.623	0.623	0.621	0.622	0.623	0.623	0.622	0.622	0.4%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	N/A
Electricity Imports	0.027	0.021	0.022	0.022	0.022	0.025	0.021	0.023	0.022	0.021	0.022	0.021	0.022	0.9%
<b>Total</b>	<b>12.044</b>	<b>12.101</b>	<b>12.162</b>	<b>12.179</b>	<b>12.211</b>	<b>12.265</b>	<b>12.324</b>	<b>12.350</b>	<b>12.415</b>	<b>12.480</b>	<b>12.550</b>	<b>12.611</b>	<b>12.700</b>	<b>0.8%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	8.544	8.570	8.600	8.600	8.615	8.637	8.654	8.667	8.693	8.716	8.746	8.765	8.794	0.7%
Total Energy Use	12.044	12.101	12.162	12.179	12.211	12.265	12.324	12.350	12.415	12.480	12.550	12.611	12.700	0.8%
Population (millions)	41.793	41.846	41.892	41.931	41.965	41.995	42.018	42.037	42.053	42.067	42.079	42.089	42.097	0.2%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 2. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Middle Atlantic

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 3. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Energy Consumption</b>															
<b>Residential</b>															
Distillate Fuel	0.055	0.056	0.056	0.052	0.050	0.050	0.049	0.048	0.048	0.047	0.046	0.045	0.044	0.043	0.042
Kerosene	0.004	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Liquefied Petroleum Gas	0.126	0.129	0.126	0.125	0.125	0.128	0.129	0.131	0.133	0.134	0.135	0.136	0.137	0.138	0.138
Petroleum Subtotal	0.185	0.190	0.187	0.183	0.181	0.183	0.184	0.185	0.186	0.187	0.187	0.187	0.187	0.187	0.186
Natural Gas	1.522	1.432	1.421	1.442	1.434	1.448	1.452	1.459	1.464	1.471	1.467	1.466	1.468	1.473	1.468
Coal	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Renewable Energy 1/ Electricity	0.076	0.076	0.079	0.084	0.084	0.083	0.082	0.081	0.080	0.080	0.080	0.079	0.079	0.079	0.079
Delivered Energy	0.617	0.626	0.663	0.664	0.670	0.681	0.690	0.700	0.707	0.716	0.721	0.729	0.738	0.746	0.752
Electricity Related Losses	2.402	2.326	2.353	2.375	2.371	2.397	2.410	2.427	2.440	2.457	2.457	2.464	2.474	2.488	2.487
Total	1.393	1.423	1.613	1.609	1.648	1.675	1.667	1.707	1.715	1.736	1.754	1.759	1.771	1.778	1.784
Total	3.795	3.750	3.966	3.984	4.018	4.072	4.077	4.134	4.154	4.193	4.210	4.223	4.245	4.266	4.271
<b>Commercial</b>															
Distillate Fuel	0.050	0.052	0.054	0.050	0.050	0.051	0.052	0.052	0.053	0.053	0.053	0.054	0.054	0.054	0.054
Residual Fuel	0.003	0.003	0.003	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Kerosene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Liquefied Petroleum Gas	0.021	0.021	0.021	0.020	0.022	0.022	0.021	0.022	0.021	0.022	0.022	0.022	0.022	0.022	0.022
Motor Gasoline 2/ Petroleum Subtotal	0.008	0.007	0.007	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Natural Gas	0.083	0.085	0.086	0.082	0.083	0.084	0.085	0.086	0.086	0.086	0.087	0.087	0.088	0.088	0.088
Coal	0.764	0.704	0.698	0.680	0.682	0.693	0.704	0.715	0.728	0.740	0.749	0.758	0.770	0.780	0.788
Renewable Energy 3/ Electricity	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Delivered Energy	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018
Electricity Related Losses	0.607	0.620	0.657	0.655	0.667	0.682	0.696	0.709	0.722	0.734	0.745	0.756	0.767	0.779	0.791
Total	1.489	1.445	1.477	1.452	1.468	1.496	1.521	1.546	1.572	1.597	1.617	1.637	1.660	1.683	1.704
Total	1.371	1.410	1.597	1.586	1.641	1.677	1.682	1.729	1.750	1.779	1.810	1.824	1.842	1.855	1.878
Total	2.860	2.855	3.075	3.039	3.109	3.173	3.204	3.275	3.322	3.375	3.427	3.461	3.502	3.537	3.582
<b>Industrial 4/</b>															
Distillate Fuel	0.164	0.168	0.175	0.171	0.170	0.168	0.167	0.167	0.165	0.164	0.163	0.162	0.161	0.161	0.160
Liquefied Petroleum Gas	0.092	0.093	0.091	0.092	0.091	0.090	0.089	0.089	0.089	0.089	0.088	0.088	0.088	0.087	0.087
Petrochemical Feedstocks	0.210	0.228	0.218	0.223	0.226	0.225	0.223	0.223	0.223	0.223	0.222	0.220	0.220	0.219	0.219
Residual Fuel	0.012	0.011	0.012	0.008	0.014	0.020	0.014	0.022	0.021	0.021	0.022	0.019	0.021	0.021	0.021
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.044	0.045	0.045	0.045	0.045	0.045	0.044	0.044	0.044	0.044	0.043	0.043	0.043	0.043	0.043
Natural Gas	0.626	0.626	0.606	0.610	0.659	0.666	0.670	0.671	0.676	0.676	0.676	0.680	0.675	0.686	0.680
Lease and Plant Fuel 6/ Natural Gas Subtotal	1.149	1.171	1.146	1.149	1.204	1.214	1.208	1.215	1.218	1.216	1.213	1.212	1.208	1.217	1.210
Metallurgical Coal	1.184	1.242	1.162	1.199	1.230	1.236	1.262	1.271	1.280	1.291	1.294	1.305	1.320	1.322	1.302
Other Industrial Coal	0.010	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Coal Subtotal	1.195	1.253	1.173	1.210	1.241	1.246	1.272	1.281	1.290	1.301	1.304	1.316	1.330	1.332	1.313
Renewable Energy 7/ Electricity	0.300	0.287	0.294	0.276	0.274	0.269	0.265	0.261	0.258	0.254	0.250	0.246	0.243	0.240	0.237
Net Coal Coke Imports	0.352	0.335	0.345	0.350	0.349	0.349	0.349	0.349	0.349	0.349	0.349	0.348	0.348	0.348	0.348
Coal Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Renewable Energy 7/ Electricity	0.396	0.978	0.579	0.152	0.154	0.152	0.151	0.151	0.151	0.150	0.148	0.147	0.147	0.146	0.146
Coal Subtotal	1.048	1.600	1.218	0.778	0.777	0.770	0.765	0.761	0.758	0.753	0.746	0.742	0.739	0.734	0.731
Renewable Energy 7/ Electricity	0.190	0.202	0.199	0.204	0.209	0.213	0.217	0.220	0.224	0.227	0.229	0.231	0.234	0.237	0.240
Delivered Energy	0.727	0.733	0.736	0.743	0.745	0.750	0.753	0.760	0.767	0.771	0.773	0.777	0.780	0.784	0.785
Electricity Related Losses	4.308	4.960	4.472	4.083	4.176	4.193	4.215	4.238	4.257	4.268	4.266	4.278	4.291	4.304	4.278
Total	1.641	1.667	1.789	1.801	1.833	1.843	1.821	1.855	1.859	1.869	1.879	1.875	1.874	1.867	1.863
Total	5.949	6.627	6.260	5.884	6.009	6.036	6.036	6.093	6.116	6.136	6.145	6.154	6.166	6.171	6.141



Table 3. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Transportation</b>															
Distillate Fuel 8/	0.831	0.867	0.879	0.897	0.917	0.931	0.947	0.962	0.978	0.991	1.001	1.010	1.019	1.029	1.039
Jet Fuel 9/	0.312	0.321	0.322	0.328	0.337	0.343	0.350	0.360	0.371	0.375	0.379	0.382	0.384	0.387	0.391
Motor Gasoline 2/	2.629	2.677	2.686	2.690	2.715	2.739	2.767	2.794	2.818	2.837	2.853	2.871	2.889	2.902	2.918
Residual Fuel	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Liquefied Petroleum Gas	0.004	0.005	0.007	0.007	0.008	0.008	0.009	0.009	0.010	0.010	0.011	0.011	0.011	0.011	0.012
Other Petroleum 10/	0.023	0.025	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.023	0.023	0.023	0.023
Petroleum Subtotal	3.801	3.898	3.921	3.950	4.004	4.049	4.099	4.153	4.203	4.240	4.270	4.300	4.329	4.355	4.386
Pipeline Fuel Natural Gas	0.064	0.064	0.074	0.070	0.067	0.065	0.064	0.062	0.062	0.062	0.062	0.063	0.064	0.064	0.064
Compressed Natural Gas	0.003	0.004	0.004	0.005	0.006	0.006	0.007	0.007	0.008	0.008	0.009	0.009	0.010	0.010	0.010
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.013	0.013	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Delivered Energy	3.881	3.979	4.013	4.038	4.091	4.134	4.184	4.236	4.287	4.325	4.356	4.386	4.417	4.444	4.475
Electricity Related Losses	0.030	0.030	0.032	0.032	0.033	0.033	0.033	0.033	0.033	0.033	0.034	0.033	0.033	0.033	0.033
Total	3.911	4.009	4.045	4.070	4.123	4.167	4.216	4.269	4.320	4.358	4.390	4.420	4.451	4.477	4.508
<b>Delivered Energy Consumption, All Sectors</b>															
Distillate Fuel	1.099	1.143	1.164	1.171	1.186	1.199	1.215	1.230	1.244	1.255	1.264	1.271	1.278	1.287	1.296
Kerosene	0.006	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Jet Fuel 9/	0.312	0.321	0.322	0.328	0.337	0.343	0.350	0.360	0.371	0.375	0.379	0.382	0.384	0.387	0.391
Liquefied Petroleum Gas	0.243	0.248	0.245	0.245	0.245	0.247	0.249	0.251	0.253	0.255	0.256	0.257	0.258	0.258	0.259
Motor Gasoline 2/	2.681	2.730	2.738	2.742	2.768	2.792	2.819	2.846	2.870	2.889	2.904	2.922	2.940	2.953	2.969
Petrochemical Feedstocks	0.210	0.228	0.218	0.223	0.226	0.225	0.223	0.223	0.223	0.223	0.222	0.220	0.220	0.219	0.219
Residual Fuel	0.018	0.018	0.018	0.014	0.020	0.026	0.020	0.027	0.027	0.027	0.027	0.024	0.027	0.026	0.027
Other Petroleum 12/	0.647	0.649	0.628	0.632	0.681	0.688	0.692	0.693	0.697	0.697	0.697	0.702	0.696	0.707	0.701
Petroleum Subtotal	5.217	5.344	5.341	5.363	5.472	5.529	5.576	5.639	5.693	5.730	5.757	5.786	5.812	5.847	5.870
Natural Gas	3.473	3.381	3.286	3.326	3.351	3.383	3.425	3.453	3.480	3.511	3.518	3.539	3.567	3.585	3.569
Lease and Plant Fuel 6/	0.010	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Pipeline Natural Gas	0.064	0.064	0.074	0.070	0.067	0.065	0.064	0.062	0.062	0.062	0.062	0.063	0.064	0.064	0.064
Natural Gas Subtotal	3.548	3.457	3.370	3.406	3.429	3.458	3.498	3.524	3.552	3.583	3.591	3.612	3.641	3.660	3.644
Metallurgical Coal	0.300	0.287	0.294	0.276	0.274	0.269	0.265	0.261	0.258	0.254	0.250	0.246	0.243	0.240	0.237
Other Coal	0.372	0.356	0.366	0.370	0.369	0.369	0.369	0.369	0.370	0.370	0.369	0.369	0.369	0.369	0.369
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.396	0.978	0.579	0.152	0.154	0.152	0.151	0.151	0.151	0.150	0.148	0.147	0.147	0.146	0.146
Coal Subtotal	1.068	1.621	1.239	0.798	0.797	0.791	0.786	0.781	0.779	0.774	0.767	0.762	0.759	0.755	0.751
Renewable Energy 13/	0.284	0.296	0.296	0.307	0.311	0.315	0.317	0.320	0.322	0.325	0.327	0.329	0.332	0.334	0.337
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	1.964	1.993	2.069	2.075	2.096	2.127	2.152	2.182	2.209	2.235	2.253	2.275	2.299	2.323	2.342
Delivered Energy	12.080	12.711	12.315	11.949	12.105	12.219	12.329	12.446	12.555	12.647	12.696	12.766	12.843	12.919	12.944
Electricity Related Losses	4.435	4.530	5.031	5.028	5.154	5.228	5.204	5.325	5.357	5.417	5.477	5.492	5.520	5.533	5.559
Total	16.515	17.241	17.346	16.977	17.259	17.447	17.533	17.771	17.912	18.063	18.172	18.257	18.363	18.452	18.503
<b>Electric Power 14/</b>															
Distillate Fuel	0.036	0.031	0.038	0.038	0.038	0.039	0.039	0.038	0.036	0.034	0.033	0.033	0.033	0.035	0.037
Residual Fuel	0.002	0.001	0.002	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Petroleum Subtotal	0.037	0.032	0.040	0.039	0.038	0.039	0.040	0.038	0.037	0.034	0.033	0.033	0.033	0.035	0.037
Natural Gas	0.208	0.207	0.475	0.439	0.429	0.434	0.433	0.442	0.461	0.501	0.539	0.568	0.601	0.626	0.634
Steam Coal	4.584	4.664	5.005	5.006	5.074	5.181	5.170	5.315	5.363	5.400	5.435	5.436	5.415	5.414	5.444
Nuclear Power	1.487	1.536	1.499	1.523	1.593	1.593	1.597	1.597	1.597	1.597	1.597	1.597	1.601	1.601	1.601
Renewable Energy/Other 15/	0.095	0.095	0.103	0.113	0.125	0.124	0.137	0.137	0.132	0.144	0.148	0.156	0.193	0.201	0.202
Electricity Imports	-0.013	-0.011	-0.023	-0.016	-0.009	-0.017	-0.021	-0.022	-0.023	-0.023	-0.022	-0.022	-0.024	-0.021	-0.018
Total	6.399	6.523	7.100	7.104	7.250	7.355	7.356	7.507	7.566	7.652	7.730	7.767	7.819	7.857	7.901

Table 3. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	1.135	1.174	1.202	1.209	1.224	1.238	1.254	1.268	1.280	1.289	1.297	1.304	1.311	1.322	1.332
Kerosene	0.006	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Jet Fuel 9/	0.312	0.321	0.322	0.328	0.337	0.343	0.350	0.360	0.371	0.375	0.379	0.382	0.384	0.387	0.391
Liquefied Petroleum Gas	0.243	0.248	0.245	0.245	0.245	0.247	0.249	0.251	0.253	0.255	0.256	0.257	0.258	0.258	0.259
Motor Gasoline 2/	2.681	2.730	2.738	2.742	2.768	2.792	2.819	2.846	2.870	2.889	2.904	2.922	2.940	2.953	2.969
Petrochemical Feedstocks	0.210	0.228	0.218	0.223	0.226	0.225	0.223	0.223	0.223	0.223	0.222	0.220	0.220	0.219	0.219
Residual Fuel	0.020	0.019	0.020	0.015	0.020	0.026	0.020	0.028	0.027	0.027	0.027	0.025	0.027	0.026	0.027
Other Petroleum 12/	0.647	0.649	0.628	0.632	0.681	0.688	0.692	0.693	0.697	0.697	0.697	0.702	0.696	0.707	0.701
Petroleum Subtotal	5.254	5.377	5.381	5.402	5.510	5.568	5.615	5.677	5.730	5.763	5.791	5.819	5.845	5.882	5.907
Natural Gas	3.682	3.588	3.761	3.765	3.781	3.817	3.858	3.895	3.941	4.012	4.057	4.107	4.168	4.211	4.203
Lease and Plant Fuel 6/	0.010	0.011	0.011	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Pipeline Natural Gas	0.064	0.064	0.074	0.070	0.067	0.065	0.064	0.062	0.062	0.062	0.062	0.063	0.064	0.064	0.064
Natural Gas Subtotal	3.756	3.664	3.846	3.845	3.858	3.892	3.932	3.966	4.013	4.084	4.129	4.180	4.242	4.286	4.278
Metallurgical Coal	0.300	0.287	0.294	0.276	0.274	0.269	0.265	0.261	0.258	0.254	0.250	0.246	0.243	0.240	0.237
Other Coal	4.956	5.020	5.371	5.376	5.443	5.550	5.539	5.684	5.733	5.770	5.804	5.805	5.784	5.783	5.813
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.396	0.978	0.579	0.152	0.154	0.152	0.151	0.151	0.151	0.150	0.148	0.147	0.147	0.146	0.146
Coal Subtotal	5.652	6.285	6.244	5.804	5.871	5.972	5.955	6.096	6.142	6.174	6.202	6.198	6.174	6.169	6.196
Nuclear Power	1.487	1.536	1.499	1.523	1.593	1.594	1.597	1.597	1.597	1.597	1.597	1.597	1.601	1.601	1.601
Renewable Energy 16/	0.379	0.391	0.399	0.420	0.436	0.439	0.455	0.457	0.454	0.469	0.475	0.485	0.525	0.535	0.539
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	-0.013	-0.011	-0.023	-0.016	-0.009	-0.017	-0.021	-0.022	-0.023	-0.023	-0.022	-0.022	-0.024	-0.021	-0.018
<b>Total</b>	<b>16.515</b>	<b>17.241</b>	<b>17.346</b>	<b>16.977</b>	<b>17.259</b>	<b>17.447</b>	<b>17.533</b>	<b>17.771</b>	<b>17.912</b>	<b>18.063</b>	<b>18.172</b>	<b>18.257</b>	<b>18.363</b>	<b>18.452</b>	<b>18.503</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	12.080	12.711	12.315	11.949	12.105	12.219	12.329	12.446	12.555	12.647	12.696	12.766	12.843	12.919	12.944
Total Energy Use	16.515	17.241	17.346	16.977	17.259	17.447	17.533	17.771	17.912	18.063	18.172	18.257	18.363	18.452	18.503
Population (millions)	45.937	46.101	46.285	46.462	46.632	46.794	46.955	47.110	47.260	47.404	47.541	47.670	47.791	47.903	48.006
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869

Table 3. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East North Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Consumption</b>														
<b>Residential</b>														
Distillate Fuel	0.041	0.039	0.038	0.037	0.035	0.034	0.033	0.031	0.030	0.028	0.027	0.026	0.024	-3.2%
Kerosene	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.9%
Liquefied Petroleum Gas	0.139	0.139	0.140	0.140	0.140	0.141	0.142	0.142	0.142	0.142	0.142	0.142	0.143	0.4%
Petroleum Subtotal	0.185	0.185	0.184	0.183	0.181	0.180	0.180	0.178	0.177	0.176	0.175	0.174	0.173	-0.4%
Natural Gas	1.464	1.458	1.457	1.447	1.441	1.435	1.433	1.421	1.414	1.407	1.405	1.394	1.386	-0.1%
Coal	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	-0.4%
Renewable Energy 1/ Electricity	0.079	0.078	0.078	0.078	0.078	0.077	0.077	0.076	0.076	0.075	0.075	0.074	0.074	-0.1%
Delivered Energy	2.489	2.489	2.496	2.488	2.486	2.484	2.489	2.479	2.477	2.474	2.479	2.470	2.467	0.2%
Electricity Related Losses	1.793	1.799	1.807	1.802	1.795	1.788	1.790	1.800	1.786	1.780	1.782	1.774	1.779	0.9%
Total	4.281	4.287	4.303	4.290	4.281	4.272	4.279	4.279	4.263	4.254	4.261	4.244	4.246	0.5%
<b>Commercial</b>														
Distillate Fuel	0.055	0.055	0.055	0.055	0.056	0.056	0.056	0.056	0.057	0.057	0.057	0.058	0.058	0.4%
Residual Fuel	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	-1.0%
Kerosene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.1%
Liquefied Petroleum Gas	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.3%
Motor Gasoline 2/ Petroleum Subtotal	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.4%
Natural Gas	0.089	0.089	0.089	0.089	0.090	0.090	0.091	0.091	0.091	0.091	0.091	0.092	0.093	0.3%
Coal	0.794	0.799	0.806	0.812	0.818	0.825	0.831	0.836	0.842	0.849	0.855	0.862	0.868	0.8%
Renewable Energy 3/ Electricity	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	-0.1%
Delivered Energy	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.0%
Electricity Related Losses	0.803	0.815	0.828	0.841	0.854	0.867	0.878	0.889	0.902	0.915	0.929	0.943	0.958	1.7%
Total	1.722	1.740	1.759	1.778	1.798	1.818	1.835	1.853	1.872	1.891	1.912	1.934	1.954	1.2%
Electricity Related Losses	1.898	1.915	1.931	1.946	1.955	1.963	1.972	2.000	1.998	2.004	2.016	2.028	2.050	1.4%
Total	3.621	3.655	3.690	3.724	3.753	3.781	3.807	3.853	3.870	3.895	3.928	3.961	4.004	1.3%
<b>Industrial 4/</b>														
Distillate Fuel	0.160	0.159	0.158	0.157	0.157	0.156	0.155	0.155	0.156	0.156	0.156	0.157	0.157	-0.2%
Liquefied Petroleum Gas	0.087	0.087	0.086	0.086	0.086	0.086	0.085	0.085	0.085	0.085	0.085	0.085	0.085	-0.4%
Petrochemical Feedstocks	0.218	0.218	0.217	0.217	0.217	0.216	0.215	0.214	0.213	0.213	0.212	0.211	0.210	-0.3%
Residual Fuel	0.019	0.021	0.018	0.020	0.022	0.022	0.022	0.020	0.018	0.018	0.017	0.021	0.021	2.4%
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.043	0.043	0.043	0.043	0.043	-0.2%
Natural Gas	0.686	0.692	0.697	0.697	0.702	0.693	0.706	0.712	0.721	0.725	0.728	0.739	0.752	0.7%
Lease and Plant Fuel 6/ Natural Gas Subtotal	1.213	1.219	1.219	1.220	1.226	1.215	1.226	1.229	1.236	1.240	1.241	1.256	1.268	0.3%
Metallurgical Coal	1.308	1.310	1.311	1.319	1.323	1.335	1.339	1.351	1.361	1.366	1.371	1.374	1.374	0.4%
Other Industrial Coal	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	-0.2%
Coal-to-Liquids Heat and Power	1.318	1.320	1.321	1.330	1.334	1.346	1.350	1.362	1.372	1.377	1.382	1.385	1.385	0.4%
Net Coal Coke Imports	0.234	0.230	0.226	0.222	0.219	0.216	0.213	0.210	0.208	0.206	0.203	0.201	0.198	-1.4%
Coal Subtotal	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.348	0.349	0.349	0.349	0.350	0.2%
Renewable Energy 7/ Electricity	0.000	0.000	0.156	0.312	0.442	0.533	0.634	0.693	0.781	0.837	0.875	0.955	0.955	42.1%
Delivered Energy	0.145	0.143	0.142	0.140	0.138	0.137	0.136	0.135	0.134	0.134	0.133	0.132	0.131	-7.4%
Electricity Related Losses	0.727	0.721	0.872	1.022	1.147	1.233	1.330	1.386	1.472	1.525	1.560	1.637	1.633	0.1%
Total	0.243	0.245	0.247	0.249	0.252	0.254	0.256	0.258	0.261	0.263	0.265	0.268	0.270	1.1%
Delivered Energy	0.789	0.790	0.790	0.791	0.790	0.791	0.793	0.794	0.797	0.800	0.803	0.805	0.807	0.4%
Electricity Related Losses	4.290	4.296	4.450	4.612	4.749	4.839	4.956	5.030	5.139	5.206	5.251	5.350	5.363	0.3%
Total	1.863	1.856	1.844	1.831	1.810	1.792	1.782	1.786	1.766	1.752	1.742	1.731	1.727	0.1%
Total	6.153	6.153	6.294	6.443	6.559	6.631	6.738	6.816	6.904	6.958	6.993	7.081	7.090	0.3%

Table 3. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East North Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Transportation</b>														
Distillate Fuel 8/	1.049	1.058	1.068	1.080	1.091	1.104	1.117	1.131	1.146	1.162	1.178	1.195	1.212	1.3%
Jet Fuel 9/	0.393	0.395	0.393	0.392	0.390	0.388	0.386	0.384	0.383	0.382	0.382	0.382	0.383	0.7%
Motor Gasoline 2/	2.935	2.947	2.957	2.966	2.973	2.981	2.988	2.995	3.004	3.012	3.019	3.027	3.033	0.5%
Residual Fuel	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	-0.6%
Liquefied Petroleum Gas	0.012	0.012	0.013	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014	4.3%
Other Petroleum 10/	0.023	0.023	0.023	0.023	0.023	0.022	0.022	0.022	0.022	0.022	0.022	0.022	0.022	-0.5%
Petroleum Subtotal	4.415	4.438	4.457	4.475	4.493	4.512	4.530	4.549	4.572	4.595	4.618	4.642	4.667	0.7%
Pipeline Fuel Natural Gas	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.063	0.063	0.063	0.063	0.063	-0.1%
Compressed Natural Gas	0.011	0.011	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.013	0.013	4.8%
Renewable Energy (E85) 11/	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	5.7%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	N/A
Electricity	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.3%
Delivered Energy	4.505	4.528	4.547	4.566	4.583	4.602	4.621	4.640	4.662	4.686	4.709	4.733	4.758	0.7%
Electricity Related Losses	0.033	0.033	0.033	0.033	0.032	0.032	0.032	0.032	0.032	0.031	0.031	0.031	0.031	0.1%
Total	4.538	4.561	4.580	4.598	4.616	4.634	4.653	4.672	4.694	4.717	4.740	4.764	4.789	0.7%
<b>Delivered Energy Consumption, All Sectors</b>														
Distillate Fuel	1.305	1.312	1.320	1.329	1.339	1.349	1.361	1.373	1.388	1.404	1.419	1.435	1.452	0.9%
Kerosene	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.7%
Jet Fuel 9/	0.393	0.395	0.393	0.392	0.390	0.388	0.386	0.384	0.383	0.382	0.382	0.382	0.383	0.7%
Liquefied Petroleum Gas	0.260	0.260	0.261	0.261	0.261	0.262	0.263	0.263	0.264	0.264	0.264	0.264	0.264	0.3%
Motor Gasoline 2/	2.985	2.998	3.007	3.016	3.023	3.031	3.039	3.046	3.054	3.063	3.070	3.078	3.085	0.5%
Petrochemical Feedstocks	0.218	0.218	0.217	0.217	0.217	0.216	0.215	0.214	0.213	0.213	0.212	0.211	0.210	-0.3%
Residual Fuel	0.025	0.027	0.023	0.026	0.028	0.028	0.027	0.025	0.024	0.023	0.023	0.026	0.026	1.5%
Other Petroleum 12/	0.707	0.713	0.718	0.718	0.723	0.713	0.726	0.732	0.741	0.745	0.747	0.759	0.772	0.7%
Petroleum Subtotal	5.902	5.931	5.949	5.967	5.990	5.997	6.026	6.047	6.076	6.103	6.125	6.164	6.201	0.6%
Natural Gas	3.577	3.578	3.584	3.590	3.595	3.607	3.615	3.621	3.630	3.635	3.643	3.642	3.641	0.3%
Lease and Plant Fuel 6/	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	-0.2%
Pipeline Natural Gas	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.063	0.063	0.063	0.063	0.063	-0.1%
Natural Gas Subtotal	3.651	3.653	3.659	3.664	3.669	3.682	3.689	3.696	3.704	3.709	3.718	3.716	3.715	0.3%
Metallurgical Coal	0.234	0.230	0.226	0.222	0.219	0.216	0.213	0.210	0.208	0.206	0.203	0.201	0.198	-1.4%
Other Coal	0.369	0.369	0.369	0.368	0.368	0.368	0.368	0.368	0.368	0.369	0.369	0.370	0.370	0.1%
Coal-to-Liquids Heat and Power	0.000	0.000	0.156	0.312	0.442	0.533	0.634	0.693	0.781	0.837	0.875	0.955	0.955	42.1%
Net Coal Coke Imports	0.145	0.143	0.142	0.140	0.138	0.137	0.136	0.135	0.134	0.134	0.133	0.132	0.131	-7.4%
Coal Subtotal	0.747	0.742	0.892	1.043	1.167	1.254	1.351	1.406	1.492	1.545	1.581	1.657	1.654	0.1%
Renewable Energy 13/	0.340	0.342	0.344	0.346	0.348	0.350	0.352	0.354	0.356	0.357	0.359	0.361	0.362	0.8%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	N/A
Electricity	2.365	2.385	2.407	2.424	2.442	2.461	2.482	2.498	2.520	2.542	2.568	2.589	2.610	1.0%
Delivered Energy	13.006	13.053	13.252	13.444	13.616	13.744	13.901	14.002	14.149	14.257	14.351	14.487	14.542	0.5%
Electricity Related Losses	5.587	5.603	5.615	5.611	5.592	5.576	5.576	5.619	5.582	5.568	5.572	5.563	5.586	0.8%
Total	18.593	18.656	18.867	19.055	19.209	19.319	19.477	19.621	19.731	19.825	19.922	20.051	20.128	0.6%
<b>Electric Power 14/</b>														
Distillate Fuel	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.035	0.035	0.4%
Residual Fuel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-7.3%
Petroleum Subtotal	0.037	0.036	0.036	0.036	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.035	0.035	0.3%
Natural Gas	0.658	0.680	0.698	0.712	0.726	0.733	0.747	0.748	0.740	0.750	0.756	0.762	0.761	5.1%
Steam Coal	5.455	5.462	5.476	5.475	5.465	5.466	5.476	5.553	5.547	5.541	5.564	5.570	5.615	0.7%
Nuclear Power	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	0.2%
Renewable Energy/Other 15/	0.219	0.222	0.226	0.225	0.220	0.217	0.212	0.195	0.193	0.197	0.197	0.198	0.198	2.9%
Electricity Imports	-0.018	-0.013	-0.015	-0.014	-0.015	-0.017	-0.014	-0.015	-0.015	-0.014	-0.014	-0.014	-0.014	0.9%
Total	7.952	7.989	8.022	8.035	8.034	8.037	8.058	8.118	8.102	8.110	8.139	8.152	8.196	0.9%

Table 3. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

East North Central	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	1.341	1.348	1.356	1.365	1.374	1.385	1.397	1.409	1.424	1.439	1.453	1.470	1.486	0.9%
Kerosene	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.7%
Jet Fuel 9/	0.393	0.395	0.393	0.392	0.390	0.388	0.386	0.384	0.383	0.382	0.382	0.382	0.383	0.7%
Liquefied Petroleum Gas	0.260	0.260	0.261	0.261	0.261	0.262	0.263	0.263	0.264	0.264	0.264	0.264	0.264	0.3%
Motor Gasoline 2/	2.985	2.998	3.007	3.016	3.023	3.031	3.039	3.046	3.054	3.063	3.070	3.078	3.085	0.5%
Petrochemical Feedstocks	0.218	0.218	0.217	0.217	0.217	0.216	0.215	0.214	0.213	0.213	0.212	0.211	0.210	-0.3%
Residual Fuel	0.025	0.027	0.024	0.026	0.028	0.028	0.027	0.025	0.024	0.023	0.023	0.026	0.026	1.2%
Other Petroleum 12/	0.707	0.713	0.718	0.718	0.723	0.713	0.726	0.732	0.741	0.745	0.747	0.759	0.772	0.7%
Petroleum Subtotal	5.939	5.967	5.985	6.003	6.026	6.033	6.062	6.082	6.112	6.138	6.160	6.199	6.235	0.6%
Natural Gas	4.235	4.258	4.282	4.302	4.321	4.341	4.362	4.369	4.371	4.386	4.400	4.405	4.403	0.8%
Lease and Plant Fuel 6/	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	-0.2%
Pipeline Natural Gas	0.064	0.064	0.064	0.064	0.064	0.064	0.064	0.063	0.063	0.063	0.063	0.063	0.063	-0.1%
Natural Gas Subtotal	4.310	4.333	4.357	4.377	4.396	4.415	4.437	4.444	4.445	4.460	4.474	4.479	4.476	0.8%
Metallurgical Coal	0.234	0.230	0.226	0.222	0.219	0.216	0.213	0.210	0.208	0.206	0.203	0.201	0.198	-1.4%
Other Coal	5.824	5.831	5.845	5.843	5.834	5.834	5.844	5.921	5.916	5.909	5.933	5.939	5.985	0.7%
Coal-to-Liquids Heat and Power	0.000	0.000	0.156	0.312	0.442	0.533	0.634	0.693	0.781	0.837	0.875	0.955	0.955	42.1%
Net Coal Coke Imports	0.145	0.143	0.142	0.140	0.138	0.137	0.136	0.135	0.134	0.134	0.133	0.132	0.131	-7.4%
Coal Subtotal	6.202	6.204	6.369	6.518	6.633	6.720	6.826	6.959	7.039	7.086	7.144	7.227	7.269	0.6%
Nuclear Power	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	1.601	0.2%
Renewable Energy 16/	0.559	0.564	0.570	0.571	0.568	0.567	0.564	0.549	0.549	0.554	0.557	0.559	0.561	1.4%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	N/A
Electricity Imports	-0.018	-0.013	-0.015	-0.014	-0.015	-0.017	-0.014	-0.015	-0.015	-0.014	-0.014	-0.014	-0.014	0.9%
<b>Total</b>	<b>18.593</b>	<b>18.656</b>	<b>18.867</b>	<b>19.055</b>	<b>19.209</b>	<b>19.319</b>	<b>19.477</b>	<b>19.621</b>	<b>19.731</b>	<b>19.825</b>	<b>19.922</b>	<b>20.051</b>	<b>20.128</b>	<b>0.6%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	13.006	13.053	13.252	13.444	13.616	13.744	13.901	14.002	14.149	14.257	14.351	14.487	14.542	0.5%
Total Energy Use	18.593	18.656	18.867	19.055	19.209	19.319	19.477	19.621	19.731	19.825	19.922	20.051	20.128	0.6%
Population (millions)	48.099	48.183	48.257	48.322	48.379	48.429	48.472	48.509	48.543	48.576	48.608	48.638	48.668	0.2%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 3. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East North Central

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 4. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Energy Consumption</b>															
<b>Residential</b>															
Distillate Fuel	0.022	0.023	0.023	0.022	0.021	0.021	0.021	0.021	0.021	0.021	0.020	0.020	0.020	0.020	0.020
Kerosene	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002
Liquefied Petroleum Gas	0.105	0.108	0.104	0.104	0.103	0.104	0.105	0.105	0.106	0.107	0.107	0.107	0.108	0.108	0.108
Petroleum Subtotal	0.128	0.132	0.129	0.128	0.126	0.127	0.127	0.128	0.129	0.129	0.129	0.129	0.130	0.130	0.130
Natural Gas	0.479	0.458	0.456	0.470	0.469	0.474	0.476	0.479	0.481	0.485	0.484	0.485	0.488	0.491	0.491
Coal	0.001	0.001	0.001	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.001
Renewable Energy 1/ Electricity	0.023	0.024	0.024	0.027	0.027	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026
Delivered Energy	0.320	0.320	0.340	0.343	0.348	0.355	0.360	0.366	0.371	0.377	0.382	0.387	0.393	0.399	0.402
Electricity Related Losses	0.952	0.935	0.951	0.970	0.972	0.984	0.991	1.000	1.008	1.019	1.023	1.029	1.038	1.048	1.051
Total	0.825	0.819	0.862	0.870	0.890	0.904	0.911	0.915	0.910	0.915	0.914	0.913	0.915	0.914	0.906
Total	1.778	1.755	1.813	1.840	1.861	1.888	1.903	1.915	1.919	1.934	1.936	1.942	1.953	1.962	1.957
<b>Commercial</b>															
Distillate Fuel	0.028	0.029	0.030	0.028	0.028	0.028	0.029	0.029	0.029	0.029	0.029	0.030	0.030	0.030	0.030
Residual Fuel	0.004	0.004	0.004	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Kerosene	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Liquefied Petroleum Gas	0.016	0.015	0.015	0.014	0.015	0.016	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.015	0.016
Motor Gasoline 2/ Petroleum Subtotal	0.009	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009
Delivered Energy	0.056	0.057	0.057	0.053	0.054	0.055	0.055	0.056	0.056	0.056	0.057	0.057	0.057	0.057	0.057
Electricity Related Losses	0.312	0.287	0.284	0.283	0.284	0.288	0.292	0.297	0.302	0.307	0.311	0.315	0.321	0.326	0.330
Total	0.012	0.012	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012
Renewable Energy 3/ Electricity	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Delivered Energy	0.296	0.301	0.320	0.322	0.331	0.340	0.347	0.353	0.360	0.368	0.376	0.382	0.389	0.396	0.404
Electricity Related Losses	0.680	0.662	0.677	0.676	0.685	0.700	0.712	0.723	0.735	0.749	0.760	0.771	0.784	0.796	0.808
Total	0.763	0.770	0.809	0.818	0.846	0.865	0.878	0.884	0.885	0.893	0.899	0.902	0.907	0.909	0.909
Total	1.443	1.431	1.486	1.493	1.532	1.565	1.590	1.608	1.621	1.642	1.659	1.673	1.691	1.705	1.717
<b>Industrial 4/</b>															
Distillate Fuel	0.159	0.163	0.170	0.167	0.165	0.164	0.162	0.162	0.161	0.159	0.158	0.158	0.157	0.157	0.156
Liquefied Petroleum Gas	0.115	0.117	0.115	0.116	0.116	0.116	0.115	0.114	0.114	0.114	0.114	0.113	0.113	0.112	0.112
Petrochemical Feedstocks	0.026	0.028	0.027	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.027	0.027	0.027	0.027
Residual Fuel	0.008	0.008	0.008	0.006	0.008	0.010	0.008	0.010	0.010	0.010	0.010	0.009	0.010	0.010	0.010
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.041	0.042	0.042	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.040	0.040	0.040	0.040	0.040
Delivered Energy	0.242	0.249	0.247	0.247	0.262	0.263	0.263	0.263	0.265	0.265	0.264	0.266	0.265	0.269	0.266
Electricity Related Losses	0.592	0.607	0.608	0.604	0.620	0.621	0.617	0.619	0.618	0.616	0.614	0.613	0.612	0.614	0.611
Total	0.411	0.434	0.411	0.426	0.458	0.480	0.508	0.530	0.552	0.575	0.584	0.585	0.587	0.585	0.589
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.032	0.031	0.038	0.039	0.040	0.041	0.041	0.042	0.042	0.042	0.043	0.044	0.043	0.042	0.044
Delivered Energy	0.443	0.465	0.449	0.465	0.498	0.520	0.549	0.572	0.594	0.618	0.627	0.629	0.630	0.628	0.633
Electricity Related Losses	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.234	0.233	0.245	0.251	0.258	0.258	0.258	0.258	0.257	0.257	0.257	0.257	0.257	0.256	0.256
Coal-to-Liquids Heat and Power Net Coal Coke Imports Coal Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.041	0.062	0.072	0.081	0.091	0.109
Delivered Energy	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Related Losses	0.234	0.233	0.245	0.251	0.258	0.258	0.258	0.258	0.278	0.299	0.319	0.328	0.338	0.347	0.365
Total	0.077	0.081	0.080	0.082	0.083	0.084	0.085	0.086	0.087	0.087	0.088	0.089	0.089	0.090	0.091
Renewable Energy 7/ Electricity	0.269	0.272	0.273	0.276	0.282	0.286	0.289	0.294	0.298	0.302	0.303	0.304	0.305	0.306	0.308
Delivered Energy	1.615	1.658	1.655	1.678	1.741	1.769	1.798	1.828	1.875	1.922	1.951	1.963	1.974	1.986	2.007
Electricity Related Losses	0.692	0.695	0.691	0.700	0.722	0.728	0.732	0.735	0.732	0.732	0.725	0.718	0.712	0.703	0.693
Total	2.307	2.353	2.346	2.378	2.463	2.498	2.530	2.563	2.607	2.653	2.677	2.681	2.686	2.688	2.701

Table 4. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Transportation</b>															
Distillate Fuel 8/	0.489	0.510	0.517	0.530	0.543	0.554	0.565	0.577	0.588	0.598	0.606	0.613	0.620	0.627	0.635
Jet Fuel 9/	0.135	0.139	0.139	0.142	0.146	0.149	0.153	0.157	0.162	0.164	0.166	0.168	0.169	0.171	0.173
Motor Gasoline 2/	1.253	1.277	1.281	1.284	1.311	1.332	1.351	1.369	1.384	1.398	1.409	1.422	1.434	1.445	1.456
Residual Fuel	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Liquefied Petroleum Gas	0.002	0.003	0.003	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.006	0.006	0.006	0.006
Other Petroleum 10/	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Petroleum Subtotal	1.892	1.942	1.954	1.973	2.019	2.053	2.088	2.122	2.153	2.179	2.200	2.222	2.243	2.263	2.285
Pipeline Fuel Natural Gas	0.095	0.095	0.109	0.105	0.100	0.096	0.093	0.089	0.088	0.087	0.086	0.085	0.087	0.088	0.087
Compressed Natural Gas	0.001	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.005	0.006	0.006	0.007	0.007	0.007
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Delivered Energy	1.994	2.045	2.072	2.086	2.128	2.159	2.191	2.221	2.252	2.277	2.299	2.319	2.343	2.363	2.386
Electricity Related Losses	0.015	0.015	0.014	0.014	0.015	0.015	0.015	0.015	0.015	0.014	0.014	0.014	0.014	0.014	0.014
Total	2.009	2.059	2.086	2.101	2.143	2.174	2.205	2.236	2.267	2.292	2.313	2.333	2.357	2.377	2.400
<b>Delivered Energy Consumption, All Sectors</b>															
Distillate Fuel	0.697	0.725	0.739	0.746	0.757	0.767	0.778	0.789	0.799	0.807	0.814	0.820	0.826	0.834	0.841
Kerosene	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Jet Fuel 9/	0.135	0.139	0.139	0.142	0.146	0.149	0.153	0.157	0.162	0.164	0.166	0.168	0.169	0.171	0.173
Liquefied Petroleum Gas	0.238	0.243	0.238	0.238	0.239	0.239	0.239	0.240	0.241	0.242	0.241	0.241	0.242	0.241	0.242
Motor Gasoline 2/	1.303	1.327	1.330	1.333	1.361	1.382	1.401	1.419	1.434	1.447	1.458	1.470	1.483	1.493	1.505
Petrochemical Feedstocks	0.026	0.028	0.027	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.027	0.027	0.027	0.027
Residual Fuel	0.013	0.013	0.013	0.009	0.011	0.013	0.011	0.014	0.014	0.014	0.014	0.013	0.014	0.013	0.014
Other Petroleum 12/	0.254	0.261	0.259	0.259	0.274	0.275	0.275	0.275	0.277	0.277	0.276	0.278	0.277	0.281	0.279
Petroleum Subtotal	2.668	2.738	2.748	2.758	2.819	2.856	2.887	2.924	2.956	2.980	3.000	3.021	3.041	3.064	3.083
Natural Gas	1.204	1.181	1.153	1.182	1.215	1.245	1.280	1.311	1.341	1.373	1.385	1.392	1.402	1.410	1.418
Lease and Plant Fuel 6/	0.032	0.031	0.038	0.039	0.040	0.041	0.041	0.042	0.042	0.042	0.043	0.044	0.043	0.042	0.044
Pipeline Natural Gas	0.095	0.095	0.109	0.105	0.100	0.096	0.093	0.089	0.088	0.087	0.086	0.085	0.087	0.088	0.087
Natural Gas Subtotal	1.331	1.307	1.301	1.326	1.355	1.382	1.414	1.441	1.470	1.502	1.514	1.521	1.532	1.540	1.549
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	0.248	0.247	0.259	0.266	0.272	0.272	0.272	0.272	0.272	0.271	0.271	0.271	0.271	0.270	0.270
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.041	0.062	0.072	0.081	0.091	0.109
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.248	0.247	0.259	0.266	0.272	0.272	0.272	0.272	0.292	0.313	0.333	0.342	0.352	0.361	0.379
Renewable Energy 13/	0.105	0.109	0.109	0.113	0.114	0.115	0.116	0.117	0.117	0.118	0.119	0.119	0.120	0.121	0.122
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.891	0.899	0.938	0.947	0.967	0.986	1.002	1.019	1.035	1.053	1.066	1.080	1.094	1.108	1.120
Delivered Energy	5.242	5.300	5.355	5.410	5.527	5.612	5.692	5.773	5.871	5.966	6.033	6.083	6.139	6.193	6.253
Electricity Related Losses	2.295	2.298	2.376	2.402	2.472	2.512	2.536	2.550	2.542	2.555	2.552	2.547	2.548	2.539	2.523
Total	7.537	7.598	7.731	7.812	7.999	8.124	8.228	8.322	8.413	8.521	8.585	8.630	8.687	8.733	8.775
<b>Electric Power 14/</b>															
Distillate Fuel	0.018	0.017	0.017	0.016	0.016	0.016	0.018	0.018	0.018	0.017	0.016	0.016	0.015	0.014	0.014
Residual Fuel	0.006	0.005	0.009	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Petroleum Subtotal	0.024	0.022	0.027	0.020	0.017	0.016	0.018	0.018	0.018	0.018	0.017	0.016	0.015	0.014	0.014
Natural Gas	0.065	0.061	0.092	0.083	0.085	0.083	0.084	0.085	0.088	0.092	0.099	0.105	0.117	0.124	0.125
Steam Coal	2.480	2.461	2.523	2.544	2.631	2.688	2.724	2.749	2.754	2.780	2.785	2.787	2.790	2.793	2.789
Nuclear Power	0.460	0.474	0.465	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470
Renewable Energy/Other 15/	0.167	0.170	0.189	0.218	0.229	0.228	0.226	0.228	0.228	0.230	0.230	0.230	0.230	0.228	0.231
Electricity Imports	-0.010	0.009	0.019	0.013	0.008	0.014	0.017	0.018	0.019	0.019	0.018	0.018	0.019	0.017	0.015
Total	3.186	3.197	3.315	3.349	3.439	3.499	3.538	3.568	3.577	3.608	3.619	3.627	3.642	3.647	3.643



Table 4. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total Energy Consumption															
Distillate Fuel	0.715	0.742	0.757	0.762	0.773	0.783	0.795	0.807	0.817	0.824	0.830	0.836	0.842	0.848	0.855
Kerosene	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Jet Fuel 9/	0.135	0.139	0.139	0.142	0.146	0.149	0.153	0.157	0.162	0.164	0.166	0.168	0.169	0.171	0.173
Liquefied Petroleum Gas	0.238	0.243	0.238	0.238	0.239	0.239	0.239	0.240	0.241	0.242	0.241	0.241	0.242	0.241	0.242
Motor Gasoline 2/	1.303	1.327	1.330	1.333	1.361	1.382	1.401	1.419	1.434	1.447	1.458	1.470	1.483	1.493	1.505
Petrochemical Feedstocks	0.026	0.028	0.027	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.027	0.027	0.027	0.027
Residual Fuel	0.019	0.018	0.023	0.014	0.012	0.013	0.011	0.014	0.014	0.014	0.014	0.013	0.014	0.014	0.014
Other Petroleum 12/	0.254	0.261	0.259	0.259	0.274	0.275	0.275	0.275	0.277	0.277	0.276	0.278	0.277	0.281	0.279
Petroleum Subtotal	2.692	2.760	2.775	2.779	2.836	2.873	2.905	2.943	2.974	2.998	3.017	3.037	3.057	3.078	3.097
Natural Gas	1.268	1.242	1.246	1.265	1.299	1.328	1.364	1.396	1.429	1.465	1.484	1.496	1.520	1.533	1.542
Lease and Plant Fuel 6/	0.032	0.031	0.038	0.039	0.040	0.041	0.041	0.042	0.042	0.042	0.043	0.044	0.043	0.042	0.044
Pipeline Natural Gas	0.095	0.095	0.109	0.105	0.100	0.096	0.093	0.089	0.088	0.087	0.086	0.085	0.087	0.088	0.087
Natural Gas Subtotal	1.395	1.368	1.393	1.409	1.439	1.465	1.498	1.527	1.558	1.594	1.613	1.625	1.649	1.663	1.674
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	2.728	2.708	2.782	2.810	2.903	2.960	2.995	3.020	3.025	3.051	3.056	3.058	3.060	3.063	3.059
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.041	0.062	0.072	0.081	0.091	0.109
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	2.728	2.708	2.782	2.810	2.903	2.960	2.995	3.020	3.046	3.092	3.118	3.130	3.142	3.154	3.167
Nuclear Power	0.460	0.474	0.465	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470
Renewable Energy 16/	0.272	0.279	0.298	0.331	0.343	0.343	0.342	0.345	0.346	0.348	0.349	0.350	0.350	0.349	0.352
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	-0.010	0.009	0.019	0.013	0.008	0.014	0.017	0.018	0.019	0.019	0.018	0.018	0.019	0.017	0.015
Total	7.537	7.598	7.731	7.812	7.999	8.124	8.228	8.322	8.413	8.521	8.585	8.630	8.687	8.733	8.775
Energy Use and Related Statistics															
Delivered Energy Use	5.242	5.300	5.355	5.410	5.527	5.612	5.692	5.773	5.871	5.966	6.033	6.083	6.139	6.193	6.253
Total Energy Use	7.537	7.598	7.731	7.812	7.999	8.124	8.228	8.322	8.413	8.521	8.585	8.630	8.687	8.733	8.775
Population (millions)	19.626	19.728	19.835	19.942	20.047	20.150	20.254	20.356	20.457	20.556	20.653	20.747	20.838	20.927	21.011
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869

Table 4. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

West North Central	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Consumption</b>														
<b>Residential</b>														
Distillate Fuel	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.018	-0.8%
Kerosene	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	2.0%
Liquefied Petroleum Gas	0.108	0.108	0.108	0.107	0.107	0.107	0.108	0.107	0.107	0.107	0.107	0.107	0.107	0.0%
Petroleum Subtotal	0.129	0.129	0.129	0.129	0.129	0.129	0.129	0.128	0.129	0.128	0.128	0.128	0.128	-0.1%
Natural Gas	0.491	0.491	0.492	0.491	0.490	0.490	0.490	0.488	0.487	0.486	0.486	0.483	0.482	0.2%
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-0.3%
Renewable Energy 1/ Electricity	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.026	0.4%
Delivered Energy	0.407	0.412	0.418	0.421	0.426	0.430	0.435	0.438	0.442	0.447	0.452	0.455	0.460	1.4%
Electricity Related Losses	1.056	1.060	1.068	1.069	1.072	1.076	1.082	1.082	1.085	1.088	1.094	1.094	1.096	0.6%
Total	0.904	0.903	0.911	0.914	0.921	0.932	0.948	0.947	0.951	0.969	0.988	1.004	1.019	0.8%
Total	1.960	1.963	1.979	1.983	1.993	2.008	2.029	2.028	2.036	2.057	2.082	2.098	2.115	0.7%
<b>Commercial</b>														
Distillate Fuel	0.030	0.030	0.030	0.030	0.030	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.031	0.3%
Residual Fuel	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.002	-2.1%
Kerosene	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.3%
Liquefied Petroleum Gas	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.015	0.016	0.016	0.1%
Motor Gasoline 2/ Petroleum Subtotal	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.2%
Natural Gas	0.057	0.057	0.057	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.058	0.059	0.059	0.1%
Coal	0.334	0.336	0.339	0.342	0.345	0.348	0.351	0.354	0.357	0.359	0.362	0.366	0.368	1.0%
Renewable Energy 3/ Electricity	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.012	N/A
Delivered Energy	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.0%
Electricity Related Losses	0.411	0.419	0.426	0.434	0.442	0.450	0.457	0.465	0.474	0.482	0.491	0.500	0.509	2.0%
Total	0.819	0.829	0.839	0.850	0.862	0.873	0.884	0.894	0.906	0.917	0.929	0.941	0.953	1.4%
Total	0.913	0.916	0.928	0.941	0.956	0.975	0.997	1.006	1.018	1.045	1.073	1.103	1.128	1.5%
Total	1.732	1.745	1.768	1.791	1.817	1.848	1.880	1.900	1.924	1.962	2.001	2.044	2.081	1.4%
<b>Industrial 4/</b>														
Distillate Fuel	0.155	0.155	0.154	0.153	0.152	0.151	0.151	0.151	0.152	0.152	0.152	0.153	0.153	-0.2%
Liquefied Petroleum Gas	0.112	0.111	0.111	0.110	0.110	0.110	0.110	0.110	0.110	0.110	0.109	0.109	0.109	-0.3%
Petrochemical Feedstocks	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	-0.3%
Residual Fuel	0.009	0.010	0.009	0.010	0.010	0.010	0.010	0.010	0.009	0.009	0.009	0.010	0.010	1.0%
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.040	0.039	0.039	0.039	0.039	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.040	-0.2%
Natural Gas	0.268	0.270	0.272	0.271	0.274	0.271	0.275	0.277	0.281	0.283	0.284	0.288	0.293	0.6%
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.612	0.613	0.612	0.611	0.613	0.609	0.613	0.614	0.618	0.620	0.620	0.626	0.631	0.1%
Metallurgical Coal	0.590	0.590	0.590	0.592	0.594	0.598	0.599	0.603	0.606	0.608	0.609	0.610	0.610	1.3%
Other Industrial Coal	0.045	0.046	0.047	0.047	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.050	0.050	1.9%
Coal-to-Liquids Heat and Power	0.635	0.636	0.636	0.639	0.641	0.645	0.647	0.652	0.655	0.657	0.659	0.660	0.660	1.4%
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.256	0.256	0.255	0.255	0.255	0.255	0.255	0.255	0.255	0.256	0.256	0.256	0.256	0.4%
Renewable Energy 7/ Electricity	0.126	0.143	0.168	0.191	0.219	0.234	0.246	0.264	0.284	0.297	0.318	0.325	0.326	42.3%
Delivered Energy	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Related Losses	0.382	0.399	0.424	0.447	0.474	0.489	0.501	0.519	0.539	0.552	0.574	0.581	0.582	3.6%
Total	0.092	0.092	0.093	0.093	0.094	0.095	0.095	0.096	0.096	0.097	0.098	0.098	0.099	0.8%
Total	0.309	0.310	0.310	0.310	0.310	0.310	0.311	0.311	0.312	0.314	0.314	0.315	0.316	0.6%
Total	2.030	2.050	2.075	2.100	2.133	2.148	2.167	2.192	2.221	2.240	2.265	2.281	2.289	1.2%
Total	0.687	0.678	0.675	0.672	0.671	0.673	0.677	0.673	0.671	0.680	0.687	0.696	0.700	0.0%
Total	2.717	2.729	2.750	2.773	2.803	2.821	2.845	2.864	2.892	2.919	2.952	2.977	2.989	0.9%

Table 4. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West North Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Transportation</b>														
Distillate Fuel 8/	0.644	0.651	0.659	0.667	0.676	0.686	0.696	0.706	0.717	0.729	0.740	0.752	0.765	1.6%
Jet Fuel 9/	0.175	0.176	0.176	0.176	0.176	0.176	0.176	0.175	0.175	0.176	0.176	0.177	0.178	1.0%
Motor Gasoline 2/	1.468	1.478	1.487	1.496	1.504	1.512	1.519	1.527	1.536	1.544	1.552	1.560	1.568	0.8%
Residual Fuel	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-0.3%
Liquefied Petroleum Gas	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.008	0.008	4.3%
Other Petroleum 10/	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	-0.1%
Petroleum Subtotal	2.307	2.325	2.342	2.359	2.376	2.394	2.412	2.430	2.449	2.470	2.490	2.511	2.532	1.0%
Pipeline Fuel Natural Gas	0.088	0.087	0.088	0.089	0.090	0.090	0.091	0.092	0.093	0.094	0.094	0.094	0.095	0.0%
Compressed Natural Gas	0.007	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.010	6.5%
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	6.0%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.5%
Delivered Energy	2.409	2.427	2.445	2.463	2.481	2.499	2.518	2.537	2.558	2.579	2.600	2.622	2.643	1.0%
Electricity Related Losses	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	-0.1%
Total	2.422	2.441	2.459	2.477	2.495	2.513	2.532	2.551	2.571	2.593	2.614	2.636	2.657	1.0%
<b>Delivered Energy Consumption, All Sectors</b>														
Distillate Fuel	0.849	0.855	0.862	0.870	0.878	0.886	0.896	0.906	0.918	0.930	0.942	0.955	0.968	1.1%
Kerosene	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	1.4%
Jet Fuel 9/	0.175	0.176	0.176	0.176	0.176	0.176	0.176	0.175	0.175	0.176	0.176	0.177	0.178	1.0%
Liquefied Petroleum Gas	0.241	0.241	0.241	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.239	0.239	0.239	-0.1%
Motor Gasoline 2/	1.516	1.526	1.535	1.544	1.551	1.560	1.567	1.575	1.584	1.593	1.601	1.609	1.616	0.8%
Petrochemical Feedstocks	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.026	-0.3%
Residual Fuel	0.013	0.014	0.013	0.013	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.014	0.014	0.1%
Other Petroleum 12/	0.280	0.282	0.284	0.284	0.287	0.283	0.287	0.290	0.293	0.295	0.296	0.300	0.305	0.6%
Petroleum Subtotal	3.105	3.125	3.141	3.157	3.176	3.189	3.211	3.230	3.254	3.276	3.296	3.323	3.350	0.8%
Natural Gas	1.422	1.424	1.429	1.433	1.438	1.444	1.449	1.453	1.458	1.462	1.467	1.468	1.470	0.8%
Lease and Plant Fuel 6/	0.045	0.046	0.047	0.047	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.050	0.050	1.9%
Pipeline Natural Gas	0.088	0.087	0.088	0.089	0.090	0.090	0.091	0.092	0.093	0.094	0.094	0.094	0.095	0.0%
Natural Gas Subtotal	1.556	1.558	1.563	1.569	1.575	1.582	1.588	1.594	1.600	1.605	1.610	1.613	1.615	0.8%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	0.270	0.270	0.269	0.269	0.269	0.269	0.269	0.269	0.269	0.270	0.270	0.270	0.270	0.3%
Coal-to-Liquids Heat and Power	0.126	0.143	0.168	0.191	0.219	0.234	0.246	0.264	0.284	0.297	0.318	0.325	0.326	42.3%
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.396	0.413	0.438	0.460	0.488	0.503	0.515	0.533	0.553	0.566	0.588	0.595	0.596	3.4%
Renewable Energy 13/	0.123	0.123	0.124	0.125	0.125	0.126	0.126	0.127	0.127	0.128	0.129	0.129	0.130	0.7%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity	1.134	1.147	1.161	1.172	1.183	1.196	1.210	1.221	1.235	1.249	1.264	1.277	1.291	1.4%
Delivered Energy	6.313	6.366	6.427	6.483	6.547	6.596	6.651	6.705	6.769	6.824	6.888	6.937	6.981	1.1%
Electricity Related Losses	2.518	2.511	2.528	2.541	2.561	2.594	2.635	2.639	2.654	2.707	2.762	2.817	2.861	0.8%
Total	8.831	8.877	8.955	9.023	9.108	9.190	9.286	9.344	9.423	9.531	9.650	9.754	9.841	1.0%
<b>Electric Power 14/</b>														
Distillate Fuel	0.013	0.014	0.011	0.011	0.011	0.014	0.016	0.016	0.016	0.016	0.017	0.017	0.017	-0.1%
Residual Fuel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	-12.3%
Petroleum Subtotal	0.013	0.014	0.011	0.012	0.011	0.014	0.016	0.016	0.016	0.016	0.017	0.017	0.017	-1.0%
Natural Gas	0.128	0.128	0.133	0.133	0.132	0.131	0.132	0.130	0.132	0.131	0.129	0.127	0.124	2.8%
Steam Coal	2.795	2.802	2.830	2.853	2.884	2.929	2.982	2.994	3.023	3.091	3.162	3.235	3.296	1.1%
Nuclear Power	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.0%
Renewable Energy/Other 15/	0.230	0.233	0.233	0.233	0.235	0.232	0.234	0.237	0.236	0.236	0.236	0.233	0.234	1.2%
Electricity Imports	0.015	0.011	0.012	0.012	0.012	0.014	0.011	0.012	0.012	0.012	0.012	0.011	0.012	0.9%
Total	3.652	3.658	3.689	3.712	3.744	3.790	3.845	3.860	3.889	3.956	4.026	4.094	4.152	1.0%

Table 4. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

West North Central	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	0.862	0.869	0.873	0.881	0.889	0.900	0.912	0.922	0.934	0.947	0.959	0.972	0.984	1.1%
Kerosene	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	1.4%
Jet Fuel 9/	0.175	0.176	0.176	0.176	0.176	0.176	0.176	0.175	0.175	0.176	0.176	0.177	0.178	1.0%
Liquefied Petroleum Gas	0.241	0.241	0.241	0.240	0.240	0.240	0.240	0.240	0.240	0.240	0.239	0.239	0.239	-0.1%
Motor Gasoline 2/	1.516	1.526	1.535	1.544	1.551	1.560	1.567	1.575	1.584	1.593	1.601	1.609	1.616	0.8%
Petrochemical Feedstocks	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.026	0.026	0.026	-0.3%
Residual Fuel	0.013	0.014	0.013	0.014	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.014	0.014	-1.0%
Other Petroleum 12/	0.280	0.282	0.284	0.284	0.287	0.283	0.287	0.290	0.293	0.295	0.296	0.300	0.305	0.6%
Petroleum Subtotal	3.118	3.139	3.152	3.168	3.188	3.203	3.227	3.246	3.270	3.293	3.313	3.340	3.367	0.8%
Natural Gas	1.551	1.552	1.561	1.566	1.569	1.575	1.581	1.584	1.591	1.593	1.597	1.596	1.594	1.0%
Lease and Plant Fuel 6/	0.045	0.046	0.047	0.047	0.048	0.048	0.048	0.049	0.049	0.049	0.049	0.050	0.050	1.9%
Pipeline Natural Gas	0.088	0.087	0.088	0.089	0.090	0.090	0.091	0.092	0.093	0.094	0.094	0.094	0.095	0.0%
Natural Gas Subtotal	1.684	1.686	1.696	1.702	1.707	1.713	1.720	1.724	1.732	1.736	1.740	1.740	1.739	0.9%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	3.065	3.072	3.100	3.122	3.153	3.198	3.251	3.263	3.292	3.361	3.432	3.505	3.566	1.1%
Coal-to-Liquids Heat and Power	0.126	0.143	0.168	0.191	0.219	0.234	0.246	0.264	0.284	0.297	0.318	0.325	0.326	42.3%
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	3.191	3.216	3.268	3.314	3.372	3.432	3.497	3.527	3.576	3.657	3.750	3.830	3.891	1.4%
Nuclear Power	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.470	0.0%
Renewable Energy 16/	0.353	0.356	0.357	0.357	0.360	0.358	0.360	0.364	0.363	0.364	0.364	0.362	0.363	1.0%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports	0.015	0.011	0.012	0.012	0.012	0.014	0.011	0.012	0.012	0.012	0.012	0.011	0.012	0.9%
<b>Total</b>	<b>8.831</b>	<b>8.877</b>	<b>8.955</b>	<b>9.023</b>	<b>9.108</b>	<b>9.190</b>	<b>9.286</b>	<b>9.344</b>	<b>9.423</b>	<b>9.531</b>	<b>9.650</b>	<b>9.754</b>	<b>9.841</b>	<b>1.0%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	6.313	6.366	6.427	6.483	6.547	6.596	6.651	6.705	6.769	6.824	6.888	6.937	6.981	1.1%
Total Energy Use	8.831	8.877	8.955	9.023	9.108	9.190	9.286	9.344	9.423	9.531	9.650	9.754	9.841	1.0%
Population (millions)	21.092	21.169	21.242	21.312	21.379	21.442	21.504	21.563	21.621	21.677	21.734	21.790	21.845	0.4%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 4. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West North Central

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 5. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
South Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Energy Consumption</b>															
<b>Residential</b>															
Distillate Fuel	0.086	0.088	0.091	0.081	0.078	0.077	0.076	0.075	0.074	0.073	0.072	0.070	0.068	0.067	0.064
Kerosene	0.025	0.029	0.029	0.031	0.030	0.030	0.029	0.029	0.029	0.028	0.028	0.027	0.027	0.026	0.026
Liquefied Petroleum Gas	0.086	0.089	0.089	0.087	0.088	0.090	0.091	0.093	0.095	0.096	0.098	0.099	0.101	0.103	0.104
Petroleum Subtotal	0.197	0.206	0.208	0.199	0.195	0.196	0.197	0.197	0.197	0.198	0.197	0.197	0.196	0.195	0.194
Natural Gas	0.490	0.475	0.493	0.502	0.512	0.526	0.537	0.549	0.562	0.575	0.584	0.594	0.606	0.619	0.628
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Renewable Energy 1/ Electricity	0.060	0.060	0.064	0.066	0.065	0.065	0.064	0.063	0.063	0.063	0.063	0.062	0.062	0.063	0.062
Delivered Energy	1.091	1.124	1.165	1.183	1.208	1.242	1.270	1.300	1.328	1.359	1.383	1.410	1.439	1.470	1.494
Electricity Related Losses	1.840	1.866	1.931	1.951	1.982	2.031	2.069	2.111	2.151	2.196	2.227	2.265	2.305	2.348	2.379
Total	2.136	2.133	2.200	2.214	2.195	2.227	2.266	2.307	2.285	2.323	2.323	2.342	2.380	2.428	2.475
Total	3.976	3.999	4.131	4.165	4.177	4.258	4.335	4.418	4.436	4.518	4.550	4.607	4.684	4.775	4.853
<b>Commercial</b>															
Distillate Fuel	0.083	0.088	0.092	0.082	0.082	0.083	0.085	0.086	0.087	0.088	0.089	0.090	0.091	0.091	0.092
Residual Fuel	0.009	0.010	0.010	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Kerosene	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Liquefied Petroleum Gas	0.013	0.014	0.013	0.013	0.016	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.016
Motor Gasoline 2/ Petroleum Subtotal	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Natural Gas	0.117	0.124	0.127	0.117	0.120	0.119	0.121	0.123	0.124	0.125	0.127	0.128	0.129	0.129	0.131
Coal	0.373	0.348	0.355	0.348	0.355	0.365	0.374	0.383	0.395	0.406	0.416	0.426	0.436	0.447	0.456
Renewable Energy 3/ Electricity	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Delivered Energy	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019
Electricity Related Losses	0.901	0.932	0.966	0.984	1.018	1.055	1.089	1.122	1.156	1.190	1.223	1.255	1.289	1.323	1.358
Total	1.420	1.434	1.477	1.478	1.522	1.568	1.614	1.657	1.704	1.751	1.795	1.838	1.883	1.928	1.974
Total	1.764	1.768	1.823	1.842	1.850	1.892	1.944	1.991	1.989	2.034	2.054	2.085	2.130	2.186	2.250
Total	3.183	3.202	3.300	3.320	3.372	3.460	3.558	3.648	3.693	3.784	3.849	3.923	4.014	4.114	4.225
<b>Industrial 4/</b>															
Distillate Fuel	0.169	0.178	0.189	0.184	0.182	0.181	0.180	0.181	0.180	0.181	0.181	0.182	0.183	0.185	0.186
Liquefied Petroleum Gas	0.055	0.057	0.056	0.057	0.057	0.057	0.056	0.056	0.057	0.057	0.057	0.057	0.057	0.058	0.058
Petrochemical Feedstocks	0.154	0.169	0.165	0.168	0.169	0.169	0.168	0.168	0.168	0.169	0.170	0.170	0.170	0.171	0.172
Residual Fuel	0.098	0.109	0.120	0.082	0.080	0.078	0.077	0.079	0.075	0.075	0.078	0.076	0.075	0.075	0.076
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.057	0.058	0.058	0.058	0.058	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059	0.059
Natural Gas	0.335	0.347	0.334	0.337	0.340	0.344	0.343	0.346	0.344	0.345	0.347	0.347	0.351	0.352	0.356
Coal	0.868	0.918	0.922	0.885	0.887	0.888	0.883	0.889	0.883	0.886	0.892	0.891	0.896	0.900	0.907
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.571	0.600	0.568	0.590	0.606	0.614	0.624	0.626	0.635	0.640	0.643	0.649	0.654	0.662	0.667
Metallurgical Coal	0.010	0.010	0.014	0.014	0.015	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.018	0.018	0.018
Other Industrial Coal	0.581	0.609	0.582	0.604	0.620	0.629	0.640	0.642	0.652	0.657	0.660	0.667	0.672	0.680	0.685
Coal-to-Liquids Heat and Power	0.075	0.075	0.078	0.076	0.077	0.077	0.077	0.077	0.078	0.079	0.079	0.080	0.081	0.082	0.083
Net Coal Coke Imports	0.274	0.285	0.283	0.285	0.288	0.288	0.288	0.288	0.289	0.289	0.289	0.288	0.289	0.289	0.289
Coal Subtotal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Renewable Energy 7/ Electricity	-0.032	-0.074	-0.047	-0.012	-0.012	-0.011	-0.011	-0.011	-0.011	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
Delivered Energy	0.317	0.286	0.314	0.349	0.353	0.353	0.354	0.355	0.356	0.357	0.357	0.358	0.359	0.361	0.362
Electricity Related Losses	0.437	0.458	0.448	0.456	0.466	0.473	0.480	0.486	0.492	0.497	0.502	0.507	0.512	0.517	0.524
Total	0.569	0.581	0.585	0.588	0.591	0.593	0.594	0.599	0.606	0.612	0.616	0.622	0.628	0.634	0.642
Total	2.771	2.852	2.850	2.883	2.917	2.936	2.950	2.970	2.988	3.009	3.028	3.044	3.068	3.092	3.121
Total	1.113	1.101	1.105	1.102	1.074	1.064	1.061	1.062	1.042	1.046	1.035	1.032	1.037	1.048	1.064
Total	3.884	3.954	3.955	3.985	3.992	4.001	4.011	4.032	4.030	4.055	4.064	4.076	4.105	4.140	4.184

Table 5. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
South Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Transportation</b>															
Distillate Fuel 8/	0.994	1.038	1.052	1.087	1.126	1.160	1.196	1.233	1.268	1.300	1.329	1.356	1.384	1.414	1.446
Jet Fuel 9/	0.333	0.343	0.343	0.353	0.366	0.375	0.386	0.400	0.413	0.421	0.428	0.435	0.442	0.449	0.458
Motor Gasoline 2/	3.341	3.403	3.414	3.453	3.547	3.631	3.719	3.807	3.882	3.951	4.018	4.088	4.161	4.229	4.305
Residual Fuel	0.077	0.082	0.089	0.090	0.089	0.088	0.087	0.086	0.087	0.087	0.088	0.088	0.089	0.090	0.090
Liquefied Petroleum Gas	0.004	0.005	0.008	0.008	0.009	0.010	0.010	0.011	0.012	0.013	0.013	0.014	0.014	0.015	0.015
Other Petroleum 10/	0.028	0.031	0.031	0.031	0.031	0.032	0.032	0.032	0.032	0.033	0.033	0.033	0.033	0.034	0.034
Petroleum Subtotal	4.778	4.902	4.937	5.022	5.167	5.295	5.431	5.569	5.694	5.804	5.909	6.015	6.124	6.231	6.348
Pipeline Fuel Natural Gas	0.056	0.056	0.071	0.069	0.068	0.068	0.067	0.066	0.069	0.070	0.072	0.074	0.076	0.077	0.078
Compressed Natural Gas	0.004	0.004	0.005	0.006	0.007	0.007	0.008	0.009	0.010	0.011	0.011	0.012	0.013	0.013	0.014
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.016	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.018	0.018	0.018	0.018	0.019	0.019	0.019
Delivered Energy	4.853	4.978	5.030	5.113	5.259	5.388	5.523	5.663	5.790	5.904	6.011	6.121	6.232	6.341	6.460
Electricity Related Losses	0.031	0.030	0.030	0.030	0.030	0.030	0.030	0.031	0.030	0.031	0.031	0.031	0.031	0.031	0.032
Total	4.884	5.009	5.060	5.144	5.289	5.418	5.554	5.694	5.821	5.934	6.042	6.151	6.263	6.372	6.492
<b>Delivered Energy Consumption, All Sectors</b>															
Distillate Fuel	1.333	1.393	1.424	1.434	1.467	1.501	1.538	1.575	1.610	1.642	1.671	1.699	1.727	1.757	1.789
Kerosene	0.031	0.037	0.036	0.040	0.038	0.038	0.037	0.037	0.037	0.036	0.036	0.036	0.035	0.035	0.034
Jet Fuel 9/	0.333	0.343	0.343	0.353	0.366	0.375	0.386	0.400	0.413	0.421	0.428	0.435	0.442	0.449	0.458
Liquefied Petroleum Gas	0.158	0.165	0.166	0.165	0.170	0.171	0.173	0.176	0.178	0.181	0.184	0.186	0.188	0.190	0.193
Motor Gasoline 2/	3.405	3.468	3.479	3.518	3.612	3.696	3.785	3.873	3.948	4.017	4.084	4.154	4.228	4.295	4.371
Petrochemical Feedstocks	0.154	0.169	0.165	0.168	0.169	0.169	0.168	0.168	0.168	0.169	0.170	0.170	0.170	0.171	0.172
Residual Fuel	0.183	0.201	0.219	0.180	0.178	0.174	0.172	0.174	0.170	0.171	0.175	0.173	0.173	0.174	0.175
Other Petroleum 12/	0.361	0.376	0.362	0.365	0.369	0.374	0.373	0.376	0.374	0.376	0.378	0.378	0.382	0.384	0.387
Petroleum Subtotal	5.959	6.150	6.194	6.224	6.370	6.498	6.631	6.779	6.898	7.013	7.125	7.231	7.345	7.455	7.580
Natural Gas	1.438	1.427	1.422	1.445	1.479	1.512	1.543	1.567	1.601	1.632	1.653	1.681	1.709	1.740	1.765
Lease and Plant Fuel 6/	0.010	0.010	0.014	0.014	0.015	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.018	0.018	0.018
Pipeline Natural Gas	0.056	0.056	0.071	0.069	0.068	0.068	0.067	0.066	0.069	0.070	0.072	0.074	0.076	0.077	0.078
Natural Gas Subtotal	1.504	1.492	1.506	1.528	1.562	1.596	1.626	1.650	1.686	1.719	1.743	1.773	1.802	1.835	1.861
Metallurgical Coal	0.075	0.075	0.078	0.076	0.077	0.077	0.077	0.077	0.078	0.079	0.079	0.080	0.081	0.082	0.083
Other Coal	0.285	0.296	0.294	0.297	0.300	0.300	0.300	0.300	0.301	0.301	0.300	0.300	0.300	0.301	0.301
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	-0.032	-0.074	-0.047	-0.012	-0.012	-0.011	-0.011	-0.011	-0.011	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
Coal Subtotal	0.329	0.298	0.325	0.361	0.365	0.365	0.366	0.366	0.368	0.369	0.369	0.370	0.371	0.372	0.374
Renewable Energy 13/	0.516	0.537	0.531	0.541	0.550	0.557	0.563	0.568	0.574	0.580	0.584	0.589	0.594	0.600	0.606
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	2.577	2.653	2.731	2.771	2.833	2.907	2.971	3.038	3.107	3.179	3.240	3.306	3.374	3.446	3.513
Delivered Energy	10.884	11.130	11.287	11.425	11.680	11.923	12.156	12.401	12.634	12.859	13.062	13.268	13.488	13.709	13.934
Electricity Related Losses	5.043	5.033	5.158	5.188	5.149	5.214	5.302	5.391	5.346	5.432	5.443	5.490	5.578	5.692	5.821
Total	15.927	16.163	16.445	16.614	16.830	17.136	17.458	17.792	17.980	18.292	18.505	18.758	19.066	19.401	19.755
<b>Electric Power 14/</b>															
Distillate Fuel	0.075	0.051	0.081	0.054	0.057	0.060	0.068	0.076	0.074	0.076	0.077	0.076	0.074	0.073	0.072
Residual Fuel	0.426	0.439	0.428	0.430	0.265	0.256	0.260	0.266	0.260	0.267	0.272	0.270	0.270	0.269	0.271
Petroleum Subtotal	0.501	0.490	0.509	0.484	0.322	0.316	0.328	0.342	0.335	0.343	0.349	0.346	0.343	0.342	0.343
Natural Gas	0.677	0.777	0.613	0.589	0.656	0.692	0.693	0.754	0.776	0.815	0.873	0.922	0.962	1.016	1.070
Steam Coal	4.182	4.086	4.469	4.524	4.582	4.678	4.796	4.784	4.818	4.986	4.976	4.964	4.950	4.920	4.931
Nuclear Power	2.028	2.097	2.054	2.086	2.087	2.090	2.093	2.094	2.094	2.095	2.096	2.163	2.277	2.401	2.537
Renewable Energy/Other 15/	0.232	0.236	0.244	0.276	0.336	0.345	0.362	0.454	0.431	0.374	0.390	0.400	0.420	0.459	0.452
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	7.619	7.686	7.889	7.959	7.983	8.120	8.272	8.428	8.453	8.611	8.684	8.795	8.953	9.138	9.334

Table 5. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

South Atlantic	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	1.408	1.444	1.505	1.488	1.524	1.561	1.606	1.651	1.684	1.717	1.748	1.775	1.801	1.830	1.861
Kerosene	0.031	0.037	0.036	0.040	0.038	0.038	0.037	0.037	0.037	0.036	0.036	0.036	0.035	0.035	0.034
Jet Fuel 9/	0.333	0.343	0.343	0.353	0.366	0.375	0.386	0.400	0.413	0.421	0.428	0.435	0.442	0.449	0.458
Liquefied Petroleum Gas	0.158	0.165	0.166	0.165	0.170	0.171	0.173	0.176	0.178	0.181	0.184	0.186	0.188	0.190	0.193
Motor Gasoline 2/	3.405	3.468	3.479	3.518	3.612	3.696	3.785	3.873	3.948	4.017	4.084	4.154	4.228	4.295	4.371
Petrochemical Feedstocks	0.154	0.169	0.165	0.168	0.169	0.169	0.168	0.168	0.168	0.169	0.170	0.170	0.170	0.171	0.172
Residual Fuel	0.609	0.640	0.647	0.610	0.443	0.430	0.432	0.441	0.431	0.438	0.447	0.442	0.443	0.443	0.447
Other Petroleum 12/	0.361	0.376	0.362	0.365	0.369	0.374	0.373	0.376	0.374	0.376	0.378	0.378	0.382	0.384	0.387
Petroleum Subtotal	6.460	6.640	6.703	6.708	6.691	6.814	6.959	7.121	7.232	7.356	7.474	7.576	7.689	7.797	7.923
Natural Gas	2.115	2.203	2.035	2.034	2.135	2.204	2.236	2.321	2.377	2.446	2.526	2.604	2.672	2.756	2.834
Lease and Plant Fuel 6/	0.010	0.010	0.014	0.014	0.015	0.016	0.016	0.016	0.016	0.017	0.017	0.017	0.018	0.018	0.018
Pipeline Natural Gas	0.056	0.056	0.071	0.069	0.068	0.068	0.067	0.066	0.069	0.070	0.072	0.074	0.076	0.077	0.078
Natural Gas Subtotal	2.181	2.269	2.119	2.117	2.218	2.287	2.319	2.404	2.462	2.533	2.616	2.695	2.765	2.852	2.931
Metallurgical Coal	0.075	0.075	0.078	0.076	0.077	0.077	0.077	0.077	0.078	0.079	0.079	0.080	0.081	0.082	0.083
Other Coal	4.467	4.382	4.763	4.821	4.882	4.978	5.096	5.084	5.118	5.286	5.276	5.264	5.251	5.220	5.232
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	-0.032	-0.074	-0.047	-0.012	-0.012	-0.011	-0.011	-0.011	-0.011	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
Coal Subtotal	4.510	4.384	4.794	4.885	4.947	5.043	5.162	5.150	5.186	5.354	5.345	5.334	5.321	5.292	5.306
Nuclear Power	2.028	2.097	2.054	2.086	2.087	2.090	2.093	2.094	2.094	2.095	2.096	2.163	2.277	2.401	2.537
Renewable Energy 16/	0.748	0.773	0.774	0.818	0.886	0.902	0.925	1.022	1.006	0.954	0.974	0.989	1.014	1.059	1.058
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>	<b>15.927</b>	<b>16.163</b>	<b>16.445</b>	<b>16.614</b>	<b>16.830</b>	<b>17.136</b>	<b>17.458</b>	<b>17.792</b>	<b>17.980</b>	<b>18.292</b>	<b>18.505</b>	<b>18.758</b>	<b>19.066</b>	<b>19.401</b>	<b>19.755</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	10.884	11.130	11.287	11.425	11.680	11.923	12.156	12.401	12.634	12.859	13.062	13.268	13.488	13.709	13.934
Total Energy Use	15.927	16.163	16.445	16.614	16.830	17.136	17.458	17.792	17.980	18.292	18.505	18.758	19.066	19.401	19.755
Population (millions)	54.422	55.266	56.059	56.858	57.660	58.465	59.282	60.107	60.938	61.779	62.628	63.484	64.348	65.220	66.099
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869



Table 5. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
South Atlantic

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Consumption</b>														
<b>Residential</b>														
Distillate Fuel	0.062	0.060	0.058	0.056	0.054	0.051	0.049	0.047	0.044	0.042	0.040	0.038	0.036	-3.4%
Kerosene	0.025	0.024	0.024	0.023	0.022	0.022	0.021	0.020	0.020	0.019	0.018	0.018	0.017	-1.9%
Liquefied Petroleum Gas	0.105	0.106	0.108	0.109	0.110	0.111	0.112	0.113	0.115	0.116	0.118	0.119	0.120	1.2%
Petroleum Subtotal	0.192	0.191	0.190	0.188	0.186	0.184	0.183	0.180	0.179	0.177	0.176	0.174	0.173	-0.7%
Natural Gas	0.638	0.648	0.660	0.668	0.678	0.687	0.698	0.706	0.715	0.724	0.735	0.742	0.750	1.8%
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-0.7%
Renewable Energy 1/ Electricity	0.062	0.062	0.063	0.062	0.062	0.062	0.063	0.062	0.062	0.062	0.062	0.062	0.062	0.1%
Delivered Energy	1.521	1.549	1.580	1.601	1.626	1.652	1.682	1.705	1.733	1.761	1.794	1.818	1.847	1.9%
Electricity Related Losses	2.415	2.451	2.493	2.520	2.553	2.587	2.627	2.655	2.690	2.726	2.768	2.797	2.833	1.6%
Total	2.509	2.507	2.487	2.469	2.450	2.432	2.410	2.373	2.360	2.328	2.293	2.246	2.216	0.1%
Total	4.924	4.958	4.981	4.989	5.003	5.019	5.037	5.028	5.050	5.053	5.061	5.043	5.049	0.9%
<b>Commercial</b>														
Distillate Fuel	0.093	0.094	0.094	0.095	0.096	0.097	0.097	0.098	0.099	0.099	0.100	0.101	0.102	0.6%
Residual Fuel	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	-0.2%
Kerosene	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.007	0.007	0.007	0.007	0.007	0.6%
Liquefied Petroleum Gas	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.016	0.7%
Motor Gasoline 2/ Petroleum Subtotal	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.5%
Natural Gas	0.131	0.132	0.133	0.134	0.135	0.136	0.137	0.137	0.138	0.139	0.140	0.141	0.142	0.5%
Natural Gas	0.465	0.474	0.483	0.492	0.502	0.511	0.520	0.529	0.539	0.549	0.559	0.570	0.581	2.0%
Coal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	N/A
Renewable Energy 3/ Electricity	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.0%
Delivered Energy	1.393	1.429	1.466	1.504	1.543	1.583	1.625	1.666	1.710	1.754	1.801	1.850	1.894	2.8%
Electricity Related Losses	2.019	2.065	2.112	2.160	2.209	2.260	2.311	2.363	2.417	2.472	2.530	2.591	2.646	2.4%
Total	2.298	2.313	2.308	2.319	2.324	2.331	2.327	2.320	2.329	2.319	2.302	2.285	2.272	1.0%
Total	4.318	4.378	4.420	4.479	4.533	4.591	4.638	4.682	4.747	4.791	4.833	4.875	4.918	1.7%
<b>Industrial 4/</b>														
Distillate Fuel	0.187	0.188	0.189	0.190	0.191	0.192	0.193	0.196	0.198	0.201	0.202	0.204	0.207	0.6%
Liquefied Petroleum Gas	0.059	0.059	0.059	0.060	0.060	0.061	0.061	0.062	0.063	0.063	0.064	0.064	0.065	0.5%
Petrochemical Feedstocks	0.174	0.176	0.176	0.177	0.178	0.179	0.181	0.182	0.183	0.185	0.186	0.187	0.189	0.4%
Residual Fuel	0.079	0.080	0.079	0.081	0.082	0.084	0.083	0.086	0.088	0.089	0.090	0.091	0.092	-0.7%
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.059	0.059	0.060	0.060	0.060	0.061	0.061	0.062	0.062	0.063	0.063	0.063	0.064	0.4%
Natural Gas	0.359	0.363	0.366	0.367	0.377	0.380	0.382	0.386	0.392	0.397	0.401	0.405	0.410	0.6%
Natural Gas	0.917	0.925	0.929	0.935	0.949	0.956	0.962	0.973	0.986	0.997	1.005	1.016	1.026	0.4%
Natural Gas	0.671	0.674	0.679	0.682	0.686	0.692	0.699	0.705	0.712	0.719	0.726	0.733	0.740	0.8%
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.019	0.019	0.019	0.019	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.021	0.021	3.0%
Metallurgical Coal	0.689	0.693	0.698	0.701	0.706	0.712	0.719	0.725	0.732	0.740	0.747	0.754	0.761	0.9%
Other Industrial Coal	0.084	0.085	0.085	0.086	0.087	0.088	0.090	0.091	0.093	0.094	0.096	0.097	0.099	1.0%
Coal-to-Liquids Heat and Power	0.290	0.290	0.290	0.290	0.290	0.290	0.291	0.291	0.292	0.293	0.293	0.294	0.294	0.1%
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	-0.009	-0.009	-0.009	-0.009	-0.009	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.007	-0.007	-8.5%
Renewable Energy 7/ Electricity	0.364	0.365	0.366	0.367	0.369	0.370	0.372	0.374	0.377	0.379	0.381	0.384	0.386	1.2%
Delivered Energy	0.531	0.537	0.543	0.549	0.555	0.562	0.569	0.576	0.584	0.592	0.600	0.608	0.617	1.2%
Electricity Related Losses	0.650	0.656	0.662	0.669	0.676	0.684	0.692	0.702	0.714	0.725	0.736	0.747	0.758	1.0%
Total	3.151	3.177	3.198	3.221	3.254	3.284	3.314	3.351	3.393	3.433	3.470	3.509	3.548	0.8%
Total	1.072	1.062	1.043	1.031	1.018	1.006	0.992	0.978	0.972	0.958	0.940	0.923	0.910	-0.7%
Total	4.224	4.239	4.241	4.253	4.272	4.291	4.306	4.328	4.365	4.391	4.410	4.432	4.458	0.5%

Table 5. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
South Atlantic

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Transportation</b>														
Distillate Fuel 8/	1.479	1.510	1.544	1.580	1.618	1.658	1.701	1.744	1.791	1.841	1.891	1.943	1.997	2.5%
Jet Fuel 9/	0.465	0.472	0.475	0.479	0.482	0.486	0.489	0.493	0.497	0.501	0.506	0.512	0.519	1.6%
Motor Gasoline 2/	4.382	4.456	4.526	4.597	4.667	4.739	4.812	4.888	4.966	5.045	5.124	5.204	5.283	1.7%
Residual Fuel	0.091	0.091	0.092	0.093	0.093	0.094	0.094	0.095	0.095	0.096	0.096	0.097	0.098	0.7%
Liquefied Petroleum Gas	0.016	0.017	0.017	0.018	0.019	0.019	0.020	0.020	0.021	0.021	0.022	0.022	0.022	5.7%
Other Petroleum 10/	0.034	0.034	0.035	0.035	0.035	0.036	0.036	0.036	0.037	0.037	0.037	0.038	0.038	0.8%
Petroleum Subtotal	6.467	6.580	6.689	6.801	6.914	7.032	7.152	7.276	7.407	7.541	7.676	7.816	7.958	1.9%
Pipeline Fuel Natural Gas	0.079	0.080	0.080	0.080	0.079	0.079	0.078	0.077	0.077	0.076	0.075	0.074	0.074	1.1%
Compressed Natural Gas	0.014	0.015	0.015	0.016	0.016	0.017	0.017	0.017	0.018	0.018	0.019	0.019	0.020	5.9%
Renewable Energy (E85) 11/	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	7.0%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	N/A
Electricity	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.022	0.022	0.022	0.023	0.023	0.023	1.4%
Delivered Energy	6.581	6.696	6.806	6.918	7.031	7.149	7.270	7.394	7.525	7.659	7.795	7.934	8.077	1.9%
Electricity Related Losses	0.032	0.032	0.032	0.032	0.031	0.031	0.031	0.030	0.030	0.029	0.029	0.028	0.028	-0.3%
Total	6.614	6.728	6.838	6.950	7.063	7.180	7.300	7.424	7.555	7.689	7.823	7.963	8.104	1.9%
<b>Delivered Energy Consumption, All Sectors</b>														
Distillate Fuel	1.821	1.853	1.886	1.921	1.959	1.998	2.040	2.084	2.133	2.183	2.233	2.286	2.342	2.0%
Kerosene	0.034	0.033	0.032	0.032	0.031	0.030	0.030	0.029	0.028	0.028	0.027	0.027	0.026	-1.3%
Jet Fuel 9/	0.465	0.472	0.475	0.479	0.482	0.486	0.489	0.493	0.497	0.501	0.506	0.512	0.519	1.6%
Liquefied Petroleum Gas	0.195	0.197	0.200	0.202	0.205	0.207	0.210	0.212	0.214	0.217	0.219	0.221	0.223	1.2%
Motor Gasoline 2/	4.449	4.523	4.594	4.664	4.735	4.808	4.881	4.957	5.036	5.115	5.195	5.275	5.355	1.7%
Petrochemical Feedstocks	0.174	0.176	0.176	0.177	0.178	0.179	0.181	0.182	0.183	0.185	0.186	0.187	0.189	0.4%
Residual Fuel	0.179	0.181	0.180	0.183	0.185	0.187	0.187	0.190	0.192	0.194	0.196	0.197	0.198	0.0%
Other Petroleum 12/	0.391	0.395	0.398	0.400	0.410	0.413	0.416	0.420	0.427	0.432	0.436	0.441	0.446	0.7%
Petroleum Subtotal	7.708	7.828	7.941	8.058	8.184	8.308	8.433	8.567	8.710	8.854	8.998	9.147	9.299	1.6%
Natural Gas	1.788	1.811	1.838	1.858	1.882	1.907	1.935	1.958	1.984	2.011	2.039	2.064	2.090	1.5%
Lease and Plant Fuel 6/	0.019	0.019	0.019	0.019	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.021	0.021	3.0%
Pipeline Natural Gas	0.079	0.080	0.080	0.080	0.079	0.079	0.078	0.077	0.077	0.076	0.075	0.074	0.074	1.1%
Natural Gas Subtotal	1.886	1.910	1.936	1.957	1.980	2.006	2.033	2.055	2.081	2.107	2.136	2.159	2.185	1.5%
Metallurgical Coal	0.084	0.085	0.085	0.086	0.087	0.088	0.090	0.091	0.093	0.094	0.096	0.097	0.099	1.0%
Other Coal	0.301	0.301	0.301	0.302	0.302	0.302	0.303	0.303	0.304	0.304	0.305	0.305	0.306	0.1%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	-0.009	-0.009	-0.009	-0.009	-0.009	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.007	-0.007	-8.5%
Coal Subtotal	0.376	0.377	0.378	0.379	0.380	0.382	0.384	0.386	0.388	0.391	0.393	0.395	0.397	1.1%
Renewable Energy 13/	0.613	0.619	0.625	0.631	0.638	0.644	0.651	0.659	0.666	0.675	0.683	0.690	0.699	1.0%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	N/A
Electricity	3.584	3.654	3.728	3.794	3.866	3.940	4.020	4.095	4.179	4.263	4.354	4.438	4.522	2.1%
Delivered Energy	14.167	14.388	14.609	14.820	15.048	15.280	15.522	15.762	16.026	16.290	16.563	16.831	17.103	1.7%
Electricity Related Losses	5.911	5.914	5.870	5.850	5.823	5.801	5.759	5.701	5.691	5.634	5.564	5.482	5.426	0.3%
Total	20.079	20.303	20.479	20.670	20.872	21.082	21.281	21.463	21.717	21.924	22.127	22.313	22.530	1.3%
<b>Electric Power 14/</b>														
Distillate Fuel	0.072	0.071	0.070	0.072	0.072	0.072	0.072	0.072	0.072	0.073	0.072	0.071	0.070	1.2%
Residual Fuel	0.275	0.278	0.276	0.277	0.281	0.283	0.281	0.285	0.291	0.289	0.290	0.292	0.291	-1.6%
Petroleum Subtotal	0.347	0.349	0.346	0.349	0.354	0.355	0.354	0.357	0.363	0.361	0.362	0.362	0.361	-1.2%
Natural Gas	1.121	1.148	1.152	1.144	1.122	1.111	1.095	1.100	1.088	1.056	1.024	0.979	0.960	0.8%
Steam Coal	4.982	4.998	5.022	5.082	5.138	5.200	5.234	5.241	5.310	5.389	5.441	5.492	5.518	1.2%
Nuclear Power	2.631	2.654	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	0.9%
Renewable Energy/Other 15/	0.415	0.419	0.420	0.411	0.418	0.417	0.438	0.439	0.450	0.432	0.432	0.428	0.452	2.5%
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Total	9.496	9.568	9.598	9.644	9.689	9.741	9.779	9.796	9.870	9.897	9.917	9.920	9.948	1.0%

Table 5. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
South Atlantic

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	1.893	1.924	1.956	1.993	2.031	2.070	2.113	2.157	2.205	2.256	2.305	2.357	2.411	2.0%
Kerosene	0.034	0.033	0.032	0.032	0.031	0.030	0.030	0.029	0.028	0.028	0.027	0.027	0.026	-1.3%
Jet Fuel 9/	0.465	0.472	0.475	0.479	0.482	0.486	0.489	0.493	0.497	0.501	0.506	0.512	0.519	1.6%
Liquefied Petroleum Gas	0.195	0.197	0.200	0.202	0.205	0.207	0.210	0.212	0.214	0.217	0.219	0.221	0.223	1.2%
Motor Gasoline 2/	4.449	4.523	4.594	4.664	4.735	4.808	4.881	4.957	5.036	5.115	5.195	5.275	5.355	1.7%
Petrochemical Feedstocks	0.174	0.176	0.176	0.177	0.178	0.179	0.181	0.182	0.183	0.185	0.186	0.187	0.189	0.4%
Residual Fuel	0.454	0.459	0.456	0.460	0.466	0.469	0.468	0.474	0.483	0.482	0.486	0.489	0.490	-1.0%
Other Petroleum 12/	0.391	0.395	0.398	0.400	0.410	0.413	0.416	0.420	0.427	0.432	0.436	0.441	0.446	0.7%
Petroleum Subtotal	8.055	8.177	8.287	8.407	8.537	8.663	8.787	8.923	9.074	9.215	9.360	9.510	9.660	1.5%
Natural Gas	2.909	2.959	2.990	3.002	3.004	3.019	3.031	3.059	3.073	3.068	3.065	3.044	3.051	1.3%
Lease and Plant Fuel 6/	0.019	0.019	0.019	0.019	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.021	0.021	3.0%
Pipeline Natural Gas	0.079	0.080	0.080	0.080	0.079	0.079	0.078	0.077	0.077	0.076	0.075	0.074	0.074	1.1%
Natural Gas Subtotal	3.007	3.058	3.089	3.101	3.103	3.117	3.129	3.157	3.170	3.164	3.161	3.139	3.146	1.3%
Metallurgical Coal	0.084	0.085	0.085	0.086	0.087	0.088	0.090	0.091	0.093	0.094	0.096	0.097	0.099	1.0%
Other Coal	5.283	5.299	5.323	5.384	5.439	5.502	5.537	5.544	5.614	5.693	5.746	5.798	5.824	1.1%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	-0.009	-0.009	-0.009	-0.009	-0.009	-0.008	-0.008	-0.008	-0.008	-0.008	-0.008	-0.007	-0.007	-8.5%
Coal Subtotal	5.357	5.375	5.400	5.461	5.518	5.582	5.618	5.627	5.699	5.780	5.834	5.888	5.915	1.2%
Nuclear Power	2.631	2.654	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	2.658	0.9%
Renewable Energy 16/	1.028	1.038	1.045	1.042	1.056	1.061	1.089	1.098	1.117	1.107	1.115	1.118	1.151	1.5%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	0.001	0.001	N/A
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
<b>Total</b>	<b>20.079</b>	<b>20.303</b>	<b>20.479</b>	<b>20.670</b>	<b>20.872</b>	<b>21.082</b>	<b>21.281</b>	<b>21.463</b>	<b>21.717</b>	<b>21.924</b>	<b>22.127</b>	<b>22.313</b>	<b>22.530</b>	<b>1.3%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	14.167	14.388	14.609	14.820	15.048	15.280	15.522	15.762	16.026	16.290	16.563	16.831	17.103	1.7%
Total Energy Use	20.079	20.303	20.479	20.670	20.872	21.082	21.281	21.463	21.717	21.924	22.127	22.313	22.530	1.3%
Population (millions)	66.986	67.881	68.785	69.700	70.628	71.569	72.524	73.491	74.469	75.455	76.451	77.458	78.475	1.4%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 5. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
South Atlantic

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 6. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Energy Consumption</b>															
<b>Residential</b>															
Distillate Fuel	0.003	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Kerosene	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Liquefied Petroleum Gas	0.044	0.043	0.042	0.043	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042
Petroleum Subtotal	0.050	0.051	0.050	0.050	0.049	0.049	0.049	0.050	0.050	0.050	0.049	0.049	0.049	0.049	0.049
Natural Gas	0.216	0.204	0.207	0.214	0.215	0.217	0.218	0.220	0.221	0.223	0.222	0.223	0.223	0.224	0.224
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Renewable Energy 1/ Electricity	0.025	0.025	0.026	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.028	0.029	0.029	0.029
Delivered Energy	0.369	0.373	0.387	0.388	0.391	0.397	0.402	0.407	0.411	0.417	0.420	0.424	0.428	0.433	0.436
Electricity Related Losses	0.662	0.653	0.671	0.683	0.685	0.694	0.700	0.706	0.711	0.719	0.721	0.725	0.730	0.736	0.738
Total	0.872	0.886	0.990	1.004	1.043	1.059	1.073	1.073	1.086	1.097	1.104	1.121	1.123	1.138	1.155
Total	1.534	1.540	1.661	1.687	1.729	1.754	1.773	1.779	1.797	1.815	1.825	1.846	1.854	1.874	1.893
<b>Commercial</b>															
Distillate Fuel	0.018	0.020	0.021	0.020	0.020	0.020	0.021	0.022	0.022	0.022	0.023	0.023	0.023	0.023	0.024
Residual Fuel	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Kerosene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Liquefied Petroleum Gas	0.007	0.008	0.008	0.007	0.009	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.008
Motor Gasoline 2/ Petroleum Subtotal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Natural Gas	0.028	0.030	0.031	0.030	0.031	0.031	0.032	0.032	0.033	0.033	0.034	0.034	0.034	0.034	0.035
Coal	0.151	0.138	0.139	0.142	0.142	0.145	0.147	0.149	0.152	0.156	0.158	0.161	0.164	0.167	0.169
Coal	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Renewable Energy 3/ Electricity	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Delivered Energy	0.263	0.276	0.290	0.293	0.302	0.313	0.321	0.330	0.338	0.347	0.356	0.364	0.372	0.381	0.390
Electricity Related Losses	0.455	0.457	0.474	0.477	0.489	0.501	0.513	0.524	0.536	0.549	0.561	0.572	0.583	0.595	0.607
Total	0.622	0.655	0.743	0.758	0.807	0.833	0.859	0.870	0.893	0.914	0.936	0.963	0.976	1.001	1.033
Total	1.077	1.112	1.217	1.235	1.296	1.335	1.372	1.393	1.430	1.463	1.496	1.535	1.560	1.596	1.640
<b>Industrial 4/</b>															
Distillate Fuel	0.076	0.080	0.085	0.083	0.082	0.082	0.081	0.081	0.081	0.081	0.082	0.082	0.083	0.083	0.084
Liquefied Petroleum Gas	0.053	0.055	0.054	0.055	0.055	0.055	0.054	0.054	0.054	0.055	0.055	0.055	0.055	0.055	0.056
Petrochemical Feedstocks	0.113	0.124	0.121	0.123	0.124	0.124	0.123	0.123	0.124	0.124	0.125	0.125	0.125	0.125	0.126
Residual Fuel	0.009	0.009	0.010	0.007	0.008	0.009	0.008	0.009	0.009	0.009	0.009	0.008	0.009	0.009	0.009
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.026	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.027	0.028
Natural Gas	0.274	0.284	0.276	0.278	0.303	0.303	0.306	0.308	0.313	0.316	0.317	0.321	0.322	0.330	0.332
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.552	0.579	0.573	0.572	0.599	0.599	0.600	0.603	0.608	0.612	0.615	0.619	0.621	0.630	0.634
Coal	0.475	0.496	0.472	0.488	0.498	0.506	0.514	0.517	0.522	0.525	0.527	0.529	0.534	0.535	0.539
Coal	0.026	0.026	0.023	0.022	0.022	0.021	0.021	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Metallurgical Coal	0.501	0.522	0.495	0.511	0.520	0.527	0.535	0.538	0.542	0.545	0.547	0.549	0.554	0.555	0.559
Other Industrial Coal	0.081	0.082	0.084	0.082	0.083	0.083	0.083	0.083	0.085	0.085	0.086	0.087	0.087	0.088	0.090
Coal-to-Liquids Heat and Power	0.166	0.173	0.173	0.175	0.172	0.173	0.173	0.173	0.173	0.173	0.173	0.173	0.173	0.173	0.173
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	-0.034	-0.080	-0.051	-0.013	-0.012	-0.012	-0.012	-0.012	-0.012	-0.011	-0.011	-0.011	-0.011	-0.011	-0.010
Renewable Energy 7/ Electricity	0.213	0.175	0.206	0.244	0.243	0.243	0.244	0.244	0.246	0.247	0.247	0.248	0.250	0.251	0.252
Delivered Energy	0.259	0.273	0.266	0.272	0.278	0.282	0.286	0.290	0.294	0.297	0.300	0.303	0.306	0.310	0.314
Electricity Related Losses	0.417	0.427	0.430	0.432	0.434	0.436	0.437	0.440	0.445	0.449	0.453	0.456	0.461	0.466	0.472
Total	1.942	1.975	1.971	2.031	2.074	2.088	2.102	2.115	2.135	2.150	2.162	2.176	2.192	2.211	2.231
Total	0.986	1.014	1.100	1.119	1.158	1.163	1.167	1.160	1.175	1.182	1.191	1.207	1.208	1.224	1.249
Total	2.928	2.989	3.071	3.150	3.232	3.251	3.269	3.275	3.310	3.332	3.353	3.383	3.400	3.435	3.480

Table 6. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Transportation</b>															
Distillate Fuel 8/	0.494	0.515	0.523	0.536	0.550	0.562	0.574	0.586	0.599	0.609	0.617	0.625	0.633	0.642	0.651
Jet Fuel 9/	0.158	0.163	0.163	0.167	0.173	0.176	0.181	0.187	0.193	0.196	0.199	0.201	0.204	0.206	0.209
Motor Gasoline 2/	1.128	1.149	1.153	1.156	1.177	1.193	1.211	1.227	1.242	1.254	1.266	1.279	1.292	1.303	1.316
Residual Fuel	0.012	0.013	0.014	0.014	0.014	0.014	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Liquefied Petroleum Gas	0.001	0.001	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.004	0.004	0.004	0.004	0.004
Other Petroleum 10/	0.011	0.013	0.012	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Petroleum Subtotal	1.805	1.854	1.867	1.888	1.928	1.960	1.994	2.029	2.062	2.089	2.112	2.135	2.158	2.180	2.205
Pipeline Fuel Natural Gas	0.074	0.074	0.084	0.082	0.082	0.083	0.085	0.084	0.086	0.089	0.092	0.094	0.096	0.098	0.098
Compressed Natural Gas	0.001	0.002	0.002	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.005	0.006	0.006	0.006	0.007
Renewable Energy (E85) 11/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005	0.005
Delivered Energy	1.886	1.935	1.959	1.977	2.018	2.052	2.088	2.122	2.158	2.188	2.214	2.240	2.266	2.291	2.316
Electricity Related Losses	0.012	0.012	0.013	0.013	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014	0.014
Total	1.897	1.947	1.971	1.990	2.032	2.066	2.102	2.136	2.172	2.202	2.228	2.254	2.280	2.305	2.331
<b>Delivered Energy Consumption, All Sectors</b>															
Distillate Fuel	0.592	0.619	0.632	0.642	0.655	0.667	0.679	0.692	0.705	0.716	0.725	0.733	0.742	0.751	0.761
Kerosene	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Jet Fuel 9/	0.158	0.163	0.163	0.167	0.173	0.176	0.181	0.187	0.193	0.196	0.199	0.201	0.204	0.206	0.209
Liquefied Petroleum Gas	0.105	0.107	0.107	0.107	0.108	0.107	0.107	0.108	0.108	0.109	0.109	0.109	0.109	0.109	0.110
Motor Gasoline 2/	1.155	1.177	1.181	1.184	1.205	1.222	1.239	1.255	1.270	1.283	1.294	1.307	1.320	1.331	1.344
Petrochemical Feedstocks	0.113	0.124	0.121	0.123	0.124	0.124	0.123	0.123	0.124	0.124	0.125	0.125	0.125	0.125	0.126
Residual Fuel	0.022	0.023	0.025	0.022	0.023	0.023	0.022	0.023	0.022	0.022	0.023	0.022	0.022	0.022	0.022
Other Petroleum 12/	0.285	0.295	0.287	0.289	0.315	0.314	0.318	0.320	0.324	0.327	0.329	0.333	0.334	0.342	0.343
Petroleum Subtotal	2.435	2.514	2.522	2.540	2.608	2.640	2.675	2.714	2.752	2.783	2.809	2.836	2.862	2.894	2.923
Natural Gas	0.844	0.839	0.820	0.847	0.858	0.871	0.883	0.890	0.900	0.908	0.913	0.919	0.927	0.932	0.939
Lease and Plant Fuel 6/	0.026	0.026	0.023	0.022	0.022	0.021	0.021	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Pipeline Natural Gas	0.074	0.074	0.084	0.082	0.082	0.083	0.085	0.084	0.086	0.089	0.092	0.094	0.096	0.098	0.098
Natural Gas Subtotal	0.944	0.940	0.927	0.951	0.962	0.976	0.989	0.995	1.006	1.017	1.025	1.033	1.043	1.050	1.057
Metallurgical Coal	0.081	0.082	0.084	0.082	0.083	0.083	0.083	0.083	0.085	0.085	0.086	0.087	0.087	0.088	0.090
Other Coal	0.175	0.183	0.183	0.185	0.182	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183	0.183
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	-0.034	-0.080	-0.051	-0.013	-0.012	-0.012	-0.012	-0.012	-0.012	-0.011	-0.011	-0.011	-0.011	-0.011	-0.010
Coal Subtotal	0.222	0.185	0.216	0.254	0.253	0.253	0.254	0.254	0.256	0.257	0.257	0.258	0.260	0.261	0.262
Renewable Energy 13/	0.288	0.302	0.297	0.305	0.311	0.315	0.319	0.323	0.327	0.330	0.333	0.336	0.339	0.343	0.347
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity	1.055	1.080	1.112	1.118	1.133	1.151	1.165	1.181	1.199	1.218	1.233	1.250	1.267	1.286	1.303
Delivered Energy	4.945	5.021	5.075	5.169	5.267	5.336	5.403	5.468	5.541	5.605	5.658	5.713	5.771	5.833	5.892
Electricity Related Losses	2.492	2.567	2.845	2.893	3.022	3.069	3.113	3.116	3.168	3.207	3.245	3.305	3.322	3.377	3.451
Total	7.437	7.588	7.920	8.062	8.289	8.405	8.515	8.584	8.709	8.813	8.903	9.019	9.093	9.210	9.343
<b>Electric Power 14/</b>															
Distillate Fuel	0.013	0.015	0.017	0.018	0.018	0.018	0.019	0.020	0.018	0.019	0.018	0.018	0.019	0.020	0.021
Residual Fuel	0.045	0.058	0.059	0.052	0.028	0.028	0.029	0.029	0.029	0.030	0.030	0.031	0.031	0.031	0.031
Petroleum Subtotal	0.058	0.072	0.077	0.070	0.046	0.046	0.048	0.049	0.047	0.049	0.049	0.049	0.050	0.051	0.052
Natural Gas	0.197	0.236	0.412	0.401	0.397	0.405	0.421	0.417	0.472	0.516	0.566	0.584	0.584	0.602	0.600
Steam Coal	2.365	2.387	2.520	2.550	2.601	2.653	2.691	2.710	2.725	2.729	2.731	2.782	2.818	2.864	2.953
Nuclear Power	0.709	0.735	0.728	0.748	0.857	0.857	0.857	0.857	0.857	0.865	0.865	0.865	0.865	0.865	0.865
Renewable Energy/Other 15/	0.218	0.216	0.220	0.244	0.254	0.259	0.261	0.265	0.267	0.266	0.268	0.276	0.273	0.281	0.284
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	3.548	3.647	3.957	4.012	4.155	4.221	4.278	4.297	4.367	4.425	4.478	4.555	4.589	4.663	4.754

Table 6. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	0.605	0.634	0.649	0.659	0.673	0.685	0.699	0.713	0.723	0.734	0.743	0.752	0.761	0.772	0.783
Kerosene	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006
Jet Fuel 9/	0.158	0.163	0.163	0.167	0.173	0.176	0.181	0.187	0.193	0.196	0.199	0.201	0.204	0.206	0.209
Liquefied Petroleum Gas	0.105	0.107	0.107	0.107	0.108	0.107	0.107	0.108	0.108	0.109	0.109	0.109	0.109	0.109	0.110
Motor Gasoline 2/	1.155	1.177	1.181	1.184	1.205	1.222	1.239	1.255	1.270	1.283	1.294	1.307	1.320	1.331	1.344
Petrochemical Feedstocks	0.113	0.124	0.121	0.123	0.124	0.124	0.123	0.123	0.124	0.124	0.125	0.125	0.125	0.125	0.126
Residual Fuel	0.067	0.081	0.085	0.074	0.051	0.051	0.050	0.052	0.051	0.053	0.053	0.053	0.053	0.053	0.053
Other Petroleum 12/	0.285	0.295	0.287	0.289	0.315	0.314	0.318	0.320	0.324	0.327	0.329	0.333	0.334	0.342	0.343
Petroleum Subtotal	2.494	2.587	2.599	2.610	2.654	2.686	2.723	2.764	2.799	2.832	2.858	2.885	2.912	2.945	2.975
Natural Gas	1.041	1.075	1.232	1.247	1.255	1.277	1.304	1.307	1.372	1.424	1.478	1.503	1.511	1.534	1.539
Lease and Plant Fuel 6/	0.026	0.026	0.023	0.022	0.022	0.021	0.021	0.021	0.020	0.020	0.020	0.020	0.020	0.020	0.020
Pipeline Natural Gas	0.074	0.074	0.084	0.082	0.082	0.083	0.085	0.084	0.086	0.089	0.092	0.094	0.096	0.098	0.098
Natural Gas Subtotal	1.141	1.176	1.339	1.351	1.359	1.381	1.410	1.411	1.478	1.533	1.590	1.617	1.627	1.652	1.657
Metallurgical Coal	0.081	0.082	0.084	0.082	0.083	0.083	0.083	0.083	0.085	0.085	0.086	0.087	0.087	0.088	0.090
Other Coal	2.540	2.570	2.703	2.734	2.784	2.836	2.874	2.893	2.908	2.912	2.914	2.965	3.000	3.047	3.137
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	-0.034	-0.080	-0.051	-0.013	-0.012	-0.012	-0.012	-0.012	-0.012	-0.011	-0.011	-0.011	-0.011	-0.011	-0.010
Coal Subtotal	2.587	2.572	2.737	2.804	2.854	2.906	2.945	2.964	2.981	2.986	2.988	3.040	3.077	3.124	3.216
Nuclear Power	0.709	0.735	0.728	0.748	0.857	0.857	0.857	0.857	0.857	0.865	0.865	0.865	0.865	0.865	0.865
Renewable Energy 16/	0.507	0.518	0.518	0.549	0.565	0.575	0.580	0.588	0.593	0.597	0.601	0.611	0.613	0.624	0.631
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>	<b>7.437</b>	<b>7.588</b>	<b>7.920</b>	<b>8.062</b>	<b>8.289</b>	<b>8.405</b>	<b>8.515</b>	<b>8.584</b>	<b>8.709</b>	<b>8.813</b>	<b>8.903</b>	<b>9.019</b>	<b>9.093</b>	<b>9.210</b>	<b>9.343</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	4.945	5.021	5.075	5.169	5.267	5.336	5.403	5.468	5.541	5.605	5.658	5.713	5.771	5.833	5.892
Total Energy Use	7.437	7.588	7.920	8.062	8.289	8.405	8.515	8.584	8.709	8.813	8.903	9.019	9.093	9.210	9.343
Population (millions)	17.385	17.506	17.606	17.705	17.802	17.897	17.993	18.088	18.182	18.276	18.369	18.460	18.551	18.641	18.730
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869

Table 6. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East South Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Consumption</b>														
<b>Residential</b>														
Distillate Fuel	0.003	0.003	0.003	0.003	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	-2.4%
Kerosene	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.6%
Liquefied Petroleum Gas	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.042	0.043	0.043	0.043	0.043	0.0%
Petroleum Subtotal	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	0.049	-0.1%
Natural Gas	0.223	0.223	0.223	0.222	0.222	0.221	0.221	0.219	0.219	0.218	0.218	0.217	0.216	0.2%
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-0.2%
Renewable Energy 1/ Electricity	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.029	0.6%
Delivered Energy	0.440	0.443	0.448	0.451	0.454	0.457	0.462	0.464	0.468	0.471	0.476	0.479	0.482	1.0%
Electricity Related Losses	0.742	0.745	0.751	0.751	0.754	0.757	0.762	0.762	0.765	0.769	0.774	0.775	0.778	0.7%
Total	1.183	1.228	1.266	1.297	1.333	1.375	1.428	1.463	1.499	1.543	1.593	1.633	1.661	2.4%
Total	1.925	1.973	2.016	2.048	2.087	2.132	2.190	2.225	2.265	2.312	2.366	2.408	2.439	1.8%
<b>Commercial</b>														
Distillate Fuel	0.024	0.024	0.025	0.025	0.025	0.026	0.026	0.026	0.027	0.027	0.027	0.028	0.028	1.3%
Residual Fuel	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-0.7%
Kerosene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.2%
Liquefied Petroleum Gas	0.008	0.008	0.008	0.008	0.008	0.008	0.008	0.009	0.009	0.008	0.008	0.009	0.009	0.3%
Motor Gasoline 2/ Petroleum Subtotal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.4%
Natural Gas	0.035	0.035	0.036	0.036	0.036	0.037	0.037	0.037	0.038	0.038	0.038	0.039	0.039	1.0%
Coal	0.171	0.174	0.176	0.178	0.180	0.183	0.185	0.187	0.190	0.192	0.195	0.198	0.201	1.4%
Coal	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	N/A
Renewable Energy 3/ Electricity	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.0%
Delivered Energy	0.399	0.408	0.417	0.427	0.437	0.447	0.458	0.468	0.479	0.490	0.502	0.513	0.525	2.5%
Electricity Related Losses	0.619	0.630	0.642	0.654	0.667	0.680	0.693	0.706	0.720	0.734	0.748	0.764	0.778	2.1%
Total	1.073	1.130	1.178	1.229	1.283	1.345	1.416	1.475	1.536	1.604	1.678	1.751	1.808	4.0%
Total	1.692	1.760	1.820	1.883	1.950	2.025	2.109	2.181	2.256	2.338	2.426	2.514	2.587	3.3%
<b>Industrial 4/</b>														
Distillate Fuel	0.084	0.085	0.085	0.086	0.086	0.086	0.087	0.088	0.089	0.090	0.091	0.092	0.093	0.6%
Liquefied Petroleum Gas	0.056	0.057	0.057	0.058	0.058	0.059	0.059	0.060	0.060	0.061	0.061	0.062	0.062	0.5%
Petrochemical Feedstocks	0.128	0.129	0.129	0.130	0.131	0.132	0.133	0.133	0.134	0.136	0.136	0.138	0.139	0.4%
Residual Fuel	0.009	0.009	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.010	0.010	0.1%
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.028	0.028	0.028	0.028	0.028	0.028	0.028	0.029	0.029	0.029	0.029	0.030	0.030	0.4%
Natural Gas	0.334	0.339	0.341	0.344	0.348	0.349	0.359	0.365	0.371	0.380	0.387	0.393	0.395	1.3%
Coal	0.639	0.646	0.648	0.654	0.660	0.663	0.676	0.684	0.693	0.705	0.714	0.723	0.729	0.9%
Natural Gas	0.542	0.544	0.548	0.550	0.554	0.561	0.562	0.567	0.572	0.575	0.578	0.582	0.589	0.7%
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.020	-1.1%
Metallurgical Coal	0.562	0.564	0.568	0.569	0.573	0.580	0.582	0.586	0.591	0.594	0.597	0.602	0.609	0.6%
Other Industrial Coal	0.091	0.092	0.092	0.093	0.094	0.096	0.097	0.098	0.100	0.102	0.104	0.105	0.107	1.0%
Coal-to-Liquids Heat and Power	0.173	0.174	0.174	0.174	0.174	0.174	0.174	0.175	0.175	0.175	0.176	0.176	0.176	0.1%
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	-0.010	-0.010	-0.010	-0.010	-0.009	-0.009	-0.009	-0.009	-0.009	-0.008	-0.008	-0.008	-0.008	-8.5%
Renewable Energy 7/ Electricity	0.254	0.255	0.256	0.257	0.259	0.260	0.262	0.264	0.266	0.269	0.271	0.273	0.275	1.8%
Delivered Energy	0.318	0.321	0.325	0.329	0.333	0.337	0.341	0.346	0.351	0.356	0.361	0.366	0.371	1.2%
Electricity Related Losses	0.478	0.482	0.486	0.491	0.496	0.502	0.508	0.516	0.524	0.533	0.541	0.549	0.557	1.0%
Total	2.250	2.268	2.284	2.301	2.322	2.342	2.369	2.396	2.426	2.456	2.484	2.513	2.541	1.0%
Electricity Related Losses	1.286	1.336	1.372	1.414	1.457	1.508	1.573	1.625	1.680	1.743	1.808	1.872	1.916	2.5%
Total	3.536	3.604	3.656	3.715	3.779	3.850	3.942	4.022	4.106	4.199	4.292	4.385	4.457	1.5%





Table 6. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East South Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	0.794	0.803	0.813	0.824	0.835	0.847	0.861	0.874	0.889	0.904	0.919	0.934	0.951	1.6%
Kerosene	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.6%
Jet Fuel 9/	0.212	0.213	0.214	0.214	0.214	0.214	0.215	0.215	0.216	0.216	0.217	0.219	0.221	1.2%
Liquefied Petroleum Gas	0.111	0.111	0.112	0.112	0.113	0.114	0.114	0.115	0.116	0.117	0.117	0.118	0.119	0.4%
Motor Gasoline 2/	1.357	1.369	1.380	1.390	1.400	1.410	1.420	1.431	1.441	1.452	1.463	1.473	1.483	0.9%
Petrochemical Feedstocks	0.128	0.129	0.129	0.130	0.131	0.132	0.133	0.133	0.134	0.136	0.136	0.138	0.139	0.4%
Residual Fuel	0.053	0.052	0.051	0.052	0.051	0.050	0.050	0.049	0.045	0.044	0.044	0.044	0.044	-2.4%
Other Petroleum 12/	0.346	0.350	0.353	0.356	0.360	0.360	0.371	0.377	0.383	0.392	0.399	0.405	0.408	1.2%
Petroleum Subtotal	3.006	3.035	3.058	3.084	3.110	3.134	3.170	3.200	3.231	3.268	3.302	3.337	3.370	1.0%
Natural Gas	1.525	1.530	1.513	1.493	1.477	1.481	1.478	1.469	1.473	1.474	1.482	1.470	1.490	1.3%
Lease and Plant Fuel 6/	0.020	0.020	0.020	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.019	0.020	-1.1%
Pipeline Natural Gas	0.098	0.098	0.097	0.095	0.094	0.093	0.091	0.090	0.088	0.087	0.086	0.084	0.084	0.4%
Natural Gas Subtotal	1.643	1.648	1.629	1.608	1.590	1.593	1.589	1.578	1.580	1.580	1.587	1.574	1.593	1.2%
Metallurgical Coal	0.091	0.092	0.092	0.093	0.094	0.096	0.097	0.098	0.100	0.102	0.104	0.105	0.107	1.0%
Other Coal	3.279	3.447	3.614	3.777	3.948	4.129	4.346	4.528	4.705	4.910	5.125	5.347	5.491	3.0%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	-0.010	-0.010	-0.010	-0.010	-0.009	-0.009	-0.009	-0.009	-0.009	-0.008	-0.008	-0.008	-0.008	-8.5%
Coal Subtotal	3.360	3.528	3.696	3.860	4.033	4.215	4.435	4.618	4.797	5.003	5.220	5.444	5.590	3.0%
Nuclear Power	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.865	0.6%
Renewable Energy 16/	0.635	0.640	0.644	0.648	0.655	0.659	0.663	0.670	0.680	0.684	0.686	0.690	0.693	1.1%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
<b>Total</b>	<b>9.509</b>	<b>9.717</b>	<b>9.891</b>	<b>10.065</b>	<b>10.253</b>	<b>10.466</b>	<b>10.721</b>	<b>10.931</b>	<b>11.153</b>	<b>11.400</b>	<b>11.660</b>	<b>11.909</b>	<b>12.111</b>	<b>1.8%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	5.952	6.008	6.059	6.109	6.164	6.221	6.287	6.349	6.419	6.490	6.562	6.633	6.705	1.1%
Total Energy Use	9.509	9.717	9.891	10.065	10.253	10.466	10.721	10.931	11.153	11.400	11.660	11.909	12.111	1.8%
Population (millions)	18.819	18.907	18.994	19.083	19.172	19.261	19.352	19.444	19.536	19.629	19.722	19.816	19.910	0.5%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 6. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
East South Central

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.





Table 7. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	1.330	1.354	1.392	1.417	1.452	1.484	1.521	1.558	1.590	1.619	1.647	1.672	1.703	1.733	1.763
Kerosene	0.008	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009
Jet Fuel 9/	0.840	0.863	0.865	0.890	0.925	0.952	0.983	1.023	1.061	1.084	1.104	1.124	1.142	1.162	1.186
Liquefied Petroleum Gas	1.755	1.820	1.808	1.815	1.845	1.833	1.819	1.818	1.827	1.838	1.846	1.850	1.854	1.858	1.874
Motor Gasoline 2/	2.087	2.126	2.133	2.152	2.190	2.230	2.274	2.318	2.357	2.393	2.427	2.464	2.502	2.537	2.577
Petrochemical Feedstocks	0.654	0.715	0.699	0.711	0.718	0.715	0.711	0.710	0.714	0.718	0.720	0.721	0.722	0.724	0.730
Residual Fuel	0.192	0.238	0.212	0.203	0.201	0.199	0.196	0.194	0.195	0.194	0.196	0.196	0.198	0.199	0.200
Other Petroleum 12/	1.337	1.321	1.293	1.298	1.517	1.494	1.535	1.556	1.613	1.647	1.653	1.694	1.705	1.780	1.796
Petroleum Subtotal	8.202	8.447	8.411	8.495	8.858	8.917	9.047	9.186	9.366	9.502	9.601	9.730	9.835	10.002	10.134
Natural Gas	5.785	5.745	5.329	5.445	5.535	5.687	5.756	5.831	5.984	6.091	6.207	6.272	6.360	6.357	6.391
Lease and Plant Fuel 6/	0.538	0.527	0.534	0.533	0.525	0.535	0.538	0.538	0.555	0.560	0.575	0.578	0.577	0.574	0.574
Pipeline Natural Gas	0.173	0.173	0.169	0.168	0.165	0.167	0.167	0.165	0.169	0.174	0.178	0.178	0.179	0.179	0.179
Natural Gas Subtotal	6.496	6.445	6.032	6.146	6.225	6.388	6.461	6.533	6.708	6.825	6.960	7.028	7.115	7.109	7.143
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	2.486	2.512	2.431	2.440	2.468	2.511	2.613	2.629	2.636	2.601	2.552	2.553	2.553	2.604	2.595
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	2.486	2.512	2.431	2.440	2.468	2.511	2.613	2.629	2.636	2.601	2.552	2.553	2.553	2.604	2.595
Nuclear Power	0.701	0.725	0.719	0.730	0.732	0.733	0.735	0.737	0.738	0.739	0.740	0.740	0.740	0.752	0.765
Renewable Energy 16/	0.365	0.383	0.406	0.456	0.518	0.528	0.540	0.563	0.570	0.578	0.595	0.602	0.612	0.617	0.622
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
<b>Total</b>	<b>18.250</b>	<b>18.512</b>	<b>17.998</b>	<b>18.266</b>	<b>18.800</b>	<b>19.077</b>	<b>19.396</b>	<b>19.648</b>	<b>20.018</b>	<b>20.245</b>	<b>20.448</b>	<b>20.651</b>	<b>20.855</b>	<b>21.085</b>	<b>21.259</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	14.716	15.068	14.962	15.176	15.646	15.863	16.082	16.283	16.560	16.758	16.935	17.109	17.285	17.489	17.687
Total Energy Use	18.250	18.512	17.998	18.266	18.800	19.077	19.396	19.648	20.018	20.245	20.448	20.651	20.855	21.085	21.259
Population (millions)	32.899	33.332	33.755	34.179	34.601	35.020	35.442	35.865	36.289	36.718	37.151	37.587	38.027	38.471	38.918
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869







Table 7. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West South Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	1.793	1.821	1.852	1.885	1.920	1.956	1.996	2.037	2.083	2.129	2.176	2.225	2.276	2.0%
Kerosene	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.009	0.0%
Jet Fuel 9/	1.205	1.223	1.230	1.238	1.246	1.254	1.263	1.272	1.282	1.293	1.307	1.324	1.344	1.7%
Liquefied Petroleum Gas	1.891	1.905	1.918	1.936	1.952	1.970	1.988	2.008	2.029	2.050	2.061	2.078	2.093	0.5%
Motor Gasoline 2/	2.618	2.657	2.696	2.734	2.772	2.811	2.851	2.893	2.936	2.979	3.022	3.066	3.110	1.5%
Petrochemical Feedstocks	0.737	0.744	0.747	0.751	0.755	0.760	0.765	0.770	0.776	0.782	0.787	0.794	0.801	0.4%
Residual Fuel	0.201	0.202	0.202	0.203	0.204	0.205	0.206	0.207	0.208	0.209	0.210	0.212	0.213	-0.4%
Other Petroleum 12/	1.797	1.823	1.829	1.858	1.860	1.869	1.969	2.005	2.040	2.123	2.194	2.218	2.197	2.0%
Petroleum Subtotal	10.252	10.384	10.484	10.614	10.719	10.835	11.047	11.201	11.362	11.575	11.767	11.926	12.043	1.4%
Natural Gas	6.429	6.476	6.523	6.531	6.573	6.611	6.604	6.640	6.689	6.660	6.581	6.525	6.588	0.5%
Lease and Plant Fuel 6/	0.570	0.567	0.559	0.553	0.549	0.548	0.542	0.531	0.527	0.520	0.513	0.506	0.501	-0.2%
Pipeline Natural Gas	0.179	0.179	0.177	0.176	0.175	0.175	0.174	0.171	0.170	0.168	0.167	0.165	0.164	-0.2%
Natural Gas Subtotal	7.177	7.222	7.259	7.260	7.297	7.334	7.320	7.341	7.386	7.347	7.261	7.195	7.253	0.5%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	2.594	2.606	2.612	2.611	2.614	2.604	2.625	2.637	2.636	2.686	2.787	2.872	2.905	0.6%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	2.594	2.606	2.612	2.611	2.614	2.604	2.625	2.637	2.636	2.686	2.787	2.872	2.905	0.6%
Nuclear Power	0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.765	0.2%
Renewable Energy 16/	0.626	0.627	0.633	0.637	0.641	0.648	0.662	0.670	0.686	0.694	0.714	0.720	0.728	2.5%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.9%
<b>Total</b>	<b>21.414</b>	<b>21.604</b>	<b>21.752</b>	<b>21.886</b>	<b>22.036</b>	<b>22.185</b>	<b>22.419</b>	<b>22.615</b>	<b>22.835</b>	<b>23.068</b>	<b>23.294</b>	<b>23.478</b>	<b>23.695</b>	<b>1.0%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	17.867	18.048	18.217	18.377	18.551	18.751	19.003	19.211	19.443	19.702	19.954	20.187	20.412	1.2%
Total Energy Use	21.414	21.604	21.752	21.886	22.036	22.185	22.419	22.615	22.835	23.068	23.294	23.478	23.695	1.0%
Population (millions)	39.369	39.825	40.287	40.756	41.235	41.725	42.226	42.738	43.257	43.784	44.319	44.862	45.413	1.2%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 7. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
West South Central

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 8. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Mountain

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Energy Consumption</b>															
<b>Residential</b>															
Distillate Fuel	0.005	0.005	0.005	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Kerosene	0.002	0.003	0.003	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003
Liquefied Petroleum Gas	0.041	0.045	0.044	0.044	0.044	0.046	0.046	0.048	0.048	0.049	0.050	0.051	0.052	0.053	0.054
Petroleum Subtotal	0.048	0.053	0.052	0.053	0.052	0.053	0.054	0.055	0.056	0.057	0.058	0.059	0.059	0.060	0.061
Natural Gas	0.350	0.362	0.370	0.384	0.389	0.400	0.409	0.419	0.430	0.440	0.447	0.456	0.467	0.481	0.490
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Renewable Energy 1/ Electricity	0.276	0.282	0.291	0.298	0.305	0.315	0.323	0.332	0.341	0.350	0.357	0.365	0.374	0.384	0.392
Delivered Energy	0.696	0.722	0.739	0.763	0.775	0.796	0.814	0.834	0.854	0.874	0.889	0.906	0.927	0.951	0.969
Electricity Related Losses	0.907	0.956	0.982	0.993	1.008	1.027	1.097	1.116	1.139	1.155	1.162	1.171	1.195	1.248	1.292
Total	1.604	1.678	1.721	1.756	1.784	1.823	1.911	1.950	1.993	2.029	2.051	2.077	2.122	2.199	2.261
<b>Commercial</b>															
Distillate Fuel	0.020	0.021	0.022	0.020	0.020	0.020	0.020	0.020	0.020	0.021	0.021	0.021	0.021	0.021	0.022
Residual Fuel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Kerosene	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Liquefied Petroleum Gas	0.007	0.007	0.008	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007
Motor Gasoline 2/ Petroleum Subtotal	0.029	0.031	0.031	0.028	0.028	0.029	0.029	0.029	0.029	0.030	0.030	0.030	0.030	0.031	0.031
Natural Gas	0.220	0.214	0.215	0.213	0.214	0.218	0.223	0.229	0.235	0.241	0.246	0.251	0.258	0.267	0.274
Coal	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010
Renewable Energy 3/ Electricity	0.285	0.289	0.299	0.304	0.313	0.324	0.334	0.345	0.355	0.366	0.376	0.386	0.396	0.407	0.419
Delivered Energy	0.547	0.547	0.559	0.558	0.569	0.584	0.600	0.616	0.633	0.650	0.665	0.680	0.698	0.718	0.737
Electricity Related Losses	0.936	0.979	1.008	1.011	1.035	1.056	1.134	1.158	1.188	1.208	1.225	1.238	1.264	1.324	1.382
Total	1.483	1.526	1.566	1.569	1.604	1.641	1.734	1.774	1.821	1.858	1.890	1.918	1.962	2.042	2.119
<b>Industrial 4/</b>															
Distillate Fuel	0.117	0.124	0.130	0.129	0.129	0.129	0.129	0.130	0.131	0.131	0.133	0.134	0.135	0.137	0.138
Liquefied Petroleum Gas	0.021	0.021	0.020	0.020	0.023	0.023	0.023	0.023	0.023	0.024	0.026	0.023	0.023	0.024	0.024
Petrochemical Feedstocks	0.017	0.018	0.017	0.017	0.018	0.018	0.019	0.019	0.019	0.019	0.019	0.019	0.020	0.019	0.019
Residual Fuel	0.001	0.001	0.001	0.001	0.000	0.006	0.006	0.005	0.007	0.007	0.005	0.005	0.004	0.005	0.006
Motor Gasoline 2/ Other Petroleum 5/ Petroleum Subtotal	0.366	0.378	0.380	0.382	0.406	0.416	0.417	0.423	0.435	0.442	0.450	0.455	0.461	0.469	0.475
Natural Gas	0.245	0.255	0.243	0.250	0.258	0.262	0.271	0.276	0.275	0.276	0.275	0.278	0.281	0.284	0.286
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.432	0.447	0.462	0.469	0.473	0.479	0.485	0.490	0.489	0.493	0.496	0.501	0.499	0.498	0.504
Metallurgical Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Other Industrial Coal	0.096	0.092	0.092	0.094	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.096	0.097
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.041	0.062	0.072	0.081	0.091	0.109
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.097	0.092	0.093	0.095	0.097	0.097	0.097	0.097	0.118	0.138	0.159	0.168	0.178	0.188	0.206
Renewable Energy 7/ Electricity	0.038	0.041	0.040	0.041	0.043	0.044	0.045	0.046	0.047	0.048	0.049	0.050	0.051	0.052	0.053
Delivered Energy	1.164	1.188	1.210	1.225	1.260	1.279	1.289	1.304	1.340	1.376	1.412	1.435	1.454	1.475	1.510
Electricity Related Losses	0.758	0.781	0.793	0.794	0.796	0.794	0.833	0.834	0.842	0.842	0.841	0.838	0.845	0.872	0.899
Total	1.922	1.969	2.003	2.019	2.056	2.074	2.122	2.138	2.183	2.218	2.253	2.273	2.299	2.347	2.409



Table 8. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

Mountain	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	0.615	0.646	0.663	0.676	0.694	0.711	0.730	0.749	0.767	0.783	0.798	0.815	0.829	0.847	0.865
Kerosene	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Jet Fuel 9/	0.204	0.210	0.210	0.217	0.225	0.231	0.238	0.247	0.255	0.260	0.265	0.269	0.274	0.278	0.284
Liquefied Petroleum Gas	0.071	0.075	0.074	0.074	0.078	0.079	0.080	0.082	0.084	0.086	0.089	0.087	0.088	0.090	0.091
Motor Gasoline 2/	1.137	1.158	1.162	1.179	1.194	1.212	1.236	1.270	1.295	1.322	1.347	1.374	1.397	1.424	1.449
Petrochemical Feedstocks	0.017	0.018	0.017	0.017	0.018	0.018	0.019	0.019	0.019	0.019	0.019	0.019	0.020	0.019	0.019
Residual Fuel	0.006	0.006	0.009	0.009	0.008	0.013	0.014	0.013	0.014	0.014	0.013	0.012	0.012	0.013	0.013
Other Petroleum 12/	0.193	0.197	0.196	0.197	0.219	0.223	0.223	0.229	0.238	0.243	0.249	0.257	0.262	0.266	0.270
Petroleum Subtotal	2.246	2.315	2.335	2.372	2.439	2.491	2.543	2.612	2.675	2.730	2.783	2.837	2.885	2.941	2.995
Natural Gas	1.252	1.344	1.468	1.461	1.465	1.504	1.498	1.527	1.576	1.652	1.707	1.763	1.829	1.871	1.864
Lease and Plant Fuel 6/	0.187	0.192	0.219	0.218	0.215	0.216	0.214	0.215	0.214	0.217	0.221	0.224	0.218	0.214	0.218
Pipeline Natural Gas	0.109	0.110	0.109	0.107	0.103	0.101	0.098	0.096	0.095	0.097	0.099	0.101	0.098	0.096	0.097
Natural Gas Subtotal	1.548	1.645	1.796	1.786	1.783	1.822	1.810	1.838	1.885	1.966	2.027	2.087	2.145	2.181	2.180
Metallurgical Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
Other Coal	2.371	2.408	2.355	2.355	2.405	2.444	2.677	2.734	2.786	2.786	2.785	2.783	2.820	2.967	3.141
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.021	0.041	0.062	0.072	0.081	0.091	0.109
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	2.372	2.409	2.356	2.355	2.406	2.444	2.678	2.735	2.808	2.828	2.848	2.856	2.902	3.059	3.250
Nuclear Power	0.308	0.319	0.318	0.326	0.333	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334
Renewable Energy 16/	0.461	0.462	0.474	0.531	0.548	0.551	0.554	0.554	0.556	0.558	0.559	0.560	0.561	0.563	0.569
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.001	0.001	0.003	0.002	0.001	0.002	0.002	0.002	0.003	0.003	0.002	0.002	0.003	0.002	0.002
<b>Total</b>	<b>6.937</b>	<b>7.151</b>	<b>7.281</b>	<b>7.372</b>	<b>7.511</b>	<b>7.644</b>	<b>7.921</b>	<b>8.076</b>	<b>8.261</b>	<b>8.419</b>	<b>8.554</b>	<b>8.676</b>	<b>8.830</b>	<b>9.081</b>	<b>9.330</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	4.317	4.416	4.480	4.555	4.652	4.747	4.837	4.947	5.070	5.192	5.305	5.408	5.504	5.615	5.733
Total Energy Use	6.937	7.151	7.281	7.372	7.511	7.644	7.921	8.076	8.261	8.419	8.554	8.676	8.830	9.081	9.330
Population (millions)	19.427	19.829	20.166	20.506	20.850	21.196	21.547	21.903	22.263	22.628	22.999	23.375	23.757	24.144	24.535
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869





Table 8. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

Mountain	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	0.883	0.902	0.920	0.940	0.961	0.985	1.008	1.034	1.061	1.089	1.117	1.146	1.175	2.3%
Kerosene	0.004	0.004	0.004	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	-0.4%
Jet Fuel 9/	0.289	0.293	0.295	0.297	0.300	0.302	0.304	0.307	0.309	0.312	0.315	0.319	0.324	1.7%
Liquefied Petroleum Gas	0.092	0.098	0.098	0.102	0.107	0.111	0.108	0.108	0.107	0.112	0.114	0.104	0.124	1.9%
Motor Gasoline 2/	1.478	1.507	1.535	1.561	1.588	1.615	1.645	1.675	1.705	1.735	1.764	1.793	1.823	1.8%
Petrochemical Feedstocks	0.019	0.019	0.019	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.018	0.018	0.0%
Residual Fuel	0.014	0.012	0.014	0.014	0.015	0.013	0.015	0.015	0.015	0.015	0.015	0.015	0.015	3.5%
Other Petroleum 12/	0.271	0.276	0.283	0.285	0.289	0.292	0.301	0.308	0.314	0.318	0.330	0.345	0.331	2.0%
Petroleum Subtotal	3.051	3.110	3.169	3.222	3.282	3.339	3.402	3.468	3.532	3.603	3.678	3.743	3.812	1.9%
Natural Gas	1.848	1.832	1.804	1.779	1.737	1.704	1.693	1.678	1.672	1.666	1.666	1.670	1.676	0.9%
Lease and Plant Fuel 6/	0.221	0.227	0.228	0.231	0.233	0.235	0.239	0.241	0.243	0.246	0.248	0.251	0.255	1.1%
Pipeline Natural Gas	0.099	0.101	0.101	0.102	0.102	0.103	0.104	0.105	0.106	0.106	0.107	0.108	0.109	0.0%
Natural Gas Subtotal	2.168	2.159	2.133	2.112	2.072	2.042	2.036	2.025	2.022	2.018	2.021	2.029	2.040	0.8%
Metallurgical Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	1.3%
Other Coal	3.305	3.435	3.586	3.709	3.907	4.075	4.245	4.414	4.608	4.809	4.992	5.149	5.308	3.1%
Coal-to-Liquids Heat and Power	0.126	0.143	0.168	0.191	0.219	0.234	0.246	0.264	0.284	0.297	0.318	0.325	0.326	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	3.432	3.579	3.755	3.901	4.127	4.309	4.492	4.678	4.892	5.107	5.311	5.475	5.634	3.3%
Nuclear Power	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.334	0.2%
Renewable Energy 16/	0.579	0.591	0.605	0.618	0.626	0.642	0.658	0.676	0.694	0.702	0.706	0.707	0.708	1.7%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.9%
<b>Total</b>	<b>9.567</b>	<b>9.776</b>	<b>9.998</b>	<b>10.189</b>	<b>10.442</b>	<b>10.668</b>	<b>10.924</b>	<b>11.183</b>	<b>11.476</b>	<b>11.766</b>	<b>12.051</b>	<b>12.290</b>	<b>12.531</b>	<b>2.2%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	5.853	5.971	6.095	6.212	6.340	6.458	6.585	6.714	6.850	6.981	7.124	7.248	7.370	2.0%
Total Energy Use	9.567	9.776	9.998	10.189	10.442	10.668	10.924	11.183	11.476	11.766	12.051	12.290	12.531	2.2%
Population (millions)	24.931	25.333	25.738	26.150	26.568	26.993	27.423	27.861	28.302	28.748	29.198	29.652	30.111	1.6%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%



Table 8. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Mountain

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.





Table 9. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	0.900	0.941	0.972	0.984	1.003	1.021	1.041	1.063	1.083	1.101	1.118	1.134	1.150	1.168	1.185
Kerosene	0.003	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004
Jet Fuel 9/	0.851	0.874	0.876	0.899	0.931	0.954	0.980	1.015	1.049	1.068	1.086	1.102	1.117	1.133	1.153
Liquefied Petroleum Gas	0.065	0.066	0.067	0.068	0.103	0.107	0.111	0.116	0.120	0.126	0.127	0.135	0.142	0.156	0.169
Motor Gasoline 2/	2.527	2.574	2.582	2.605	2.674	2.715	2.764	2.824	2.866	2.908	2.948	2.993	3.029	3.073	3.112
Petrochemical Feedstocks	0.012	0.012	0.011	0.012	0.012	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013
Residual Fuel	0.252	0.268	0.344	0.349	0.340	0.338	0.336	0.334	0.340	0.342	0.344	0.356	0.352	0.355	0.357
Other Petroleum 12/	0.690	0.737	0.730	0.732	0.797	0.803	0.807	0.811	0.822	0.817	0.845	0.841	0.837	0.811	0.824
Petroleum Subtotal	5.299	5.477	5.586	5.652	5.866	5.955	6.057	6.181	6.297	6.380	6.484	6.578	6.645	6.713	6.818
Natural Gas	2.766	2.832	2.662	2.608	2.605	2.707	2.663	2.698	2.687	2.782	2.834	2.897	2.975	3.013	3.013
Lease and Plant Fuel 6/	0.353	0.340	0.298	0.290	0.281	0.279	0.275	0.271	0.270	0.271	0.272	0.274	0.327	0.379	0.388
Pipeline Natural Gas	0.027	0.027	0.031	0.030	0.028	0.028	0.024	0.023	0.023	0.024	0.025	0.026	0.068	0.109	0.117
Natural Gas Subtotal	3.147	3.199	2.991	2.929	2.915	3.013	2.962	2.992	2.980	3.078	3.131	3.197	3.370	3.501	3.518
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Other Coal	0.260	0.246	0.255	0.255	0.260	0.263	0.265	0.266	0.264	0.267	0.267	0.267	0.268	0.269	0.268
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Coal Subtotal	0.260	0.246	0.255	0.255	0.260	0.263	0.265	0.266	0.264	0.267	0.267	0.267	0.268	0.269	0.268
Nuclear Power	0.440	0.455	0.446	0.453	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454
Renewable Energy 16/	2.109	2.069	2.083	2.303	2.440	2.470	2.504	2.591	2.626	2.666	2.701	2.751	2.787	2.832	2.876
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Electricity Imports	0.007	-0.006	-0.011	-0.008	-0.005	-0.008	-0.010	-0.011	-0.012	-0.012	-0.011	-0.011	-0.012	-0.011	-0.009
<b>Total</b>	<b>11.261</b>	<b>11.440</b>	<b>11.349</b>	<b>11.584</b>	<b>11.929</b>	<b>12.147</b>	<b>12.232</b>	<b>12.472</b>	<b>12.608</b>	<b>12.832</b>	<b>13.026</b>	<b>13.236</b>	<b>13.511</b>	<b>13.758</b>	<b>13.925</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	9.147	9.342	9.354	9.472	9.696	9.856	10.005	10.176	10.340	10.466	10.600	10.743	10.975	11.216	11.383
Total Energy Use	11.261	11.440	11.349	11.584	11.929	12.147	12.232	12.472	12.608	12.832	13.026	13.236	13.511	13.758	13.925
Population (millions)	47.152	47.682	48.209	48.737	49.265	49.791	50.324	50.860	51.401	51.951	52.509	53.073	53.642	54.215	54.790
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795	5900	5967	5978	6080	6182	6281	6365	6440	6536	6595	6654	6718	6794	6869

Table 9. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Pacific

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Consumption</b>														
<b>Residential</b>														
Distillate Fuel	0.020	0.020	0.019	0.018	0.018	0.017	0.016	0.016	0.015	0.015	0.014	0.013	0.013	-2.8%
Kerosene	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.1%
Liquefied Petroleum Gas	0.040	0.041	0.042	0.041	0.041	0.041	0.041	0.041	0.041	0.042	0.042	0.043	0.043	2.2%
Petroleum Subtotal	0.063	0.064	0.064	0.063	0.061	0.061	0.060	0.059	0.059	0.059	0.059	0.059	0.058	0.3%
Natural Gas	0.766	0.770	0.776	0.778	0.782	0.786	0.792	0.793	0.797	0.802	0.808	0.811	0.814	0.9%
Coal	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	-0.2%
Renewable Energy 1/ Electricity	0.085	0.085	0.086	0.086	0.086	0.086	0.087	0.087	0.088	0.088	0.088	0.089	0.089	0.8%
Delivered Energy	0.586	0.594	0.603	0.608	0.615	0.623	0.632	0.638	0.646	0.654	0.663	0.669	0.677	1.4%
Electricity Related Losses	1.501	1.513	1.529	1.535	1.545	1.557	1.572	1.579	1.591	1.603	1.620	1.628	1.639	1.0%
Total	0.873	0.894	0.920	0.937	0.945	0.956	0.970	0.966	0.964	0.957	0.953	0.943	0.935	0.9%
Total	2.374	2.407	2.450	2.473	2.490	2.513	2.542	2.545	2.554	2.560	2.572	2.571	2.574	1.0%
<b>Commercial</b>														
Distillate Fuel	0.039	0.039	0.039	0.040	0.040	0.040	0.040	0.040	0.040	0.040	0.041	0.041	0.041	0.1%
Residual Fuel	0.003	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.7%
Kerosene	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.0%
Liquefied Petroleum Gas	0.006	0.005	0.006	0.005	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.006	0.7%
Motor Gasoline 2/ Petroleum Subtotal	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.2%
Delivered Energy	0.055	0.055	0.056	0.055	0.056	0.056	0.056	0.056	0.057	0.057	0.057	0.057	0.058	0.2%
Electricity Related Losses	0.407	0.411	0.416	0.422	0.427	0.433	0.438	0.443	0.448	0.454	0.459	0.465	0.467	1.1%
Total	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.007	0.0%
Renewable Energy 3/ Electricity	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.010	0.0%
Delivered Energy	0.761	0.776	0.791	0.806	0.823	0.841	0.858	0.875	0.893	0.912	0.930	0.949	0.968	2.2%
Electricity Related Losses	1.240	1.259	1.280	1.300	1.323	1.346	1.369	1.391	1.415	1.439	1.463	1.488	1.509	1.7%
Total	1.132	1.168	1.207	1.243	1.264	1.291	1.316	1.325	1.333	1.335	1.336	1.337	1.337	1.7%
Total	2.372	2.427	2.487	2.543	2.586	2.637	2.685	2.717	2.748	2.773	2.799	2.825	2.846	1.7%
<b>Industrial 4/</b>														
Distillate Fuel	0.187	0.189	0.191	0.193	0.195	0.197	0.200	0.203	0.207	0.210	0.213	0.217	0.221	1.1%
Liquefied Petroleum Gas	0.119	0.113	0.112	0.115	0.120	0.119	0.122	0.119	0.121	0.122	0.123	0.124	0.125	5.3%
Petrochemical Feedstocks	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.0%
Residual Fuel	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	-8.6%
Motor Gasoline 2/ Petroleum Subtotal	0.040	0.040	0.041	0.041	0.041	0.041	0.042	0.042	0.042	0.043	0.043	0.043	0.043	0.6%
Delivered Energy	0.821	0.810	0.821	0.820	0.829	0.834	0.833	0.846	0.855	0.861	0.866	0.872	0.879	0.8%
Electricity Related Losses	1.181	1.166	1.177	1.182	1.198	1.205	1.210	1.223	1.238	1.248	1.258	1.269	1.281	1.1%
Total	0.976	1.011	1.015	1.029	1.035	1.047	1.063	1.071	1.083	1.095	1.108	1.122	1.134	0.9%
Lease and Plant Fuel 6/ Natural Gas Subtotal	0.398	0.395	0.392	0.385	0.379	0.373	0.366	0.360	0.355	0.351	0.347	0.343	0.339	0.0%
Delivered Energy	1.374	1.407	1.407	1.414	1.414	1.420	1.429	1.431	1.438	1.446	1.455	1.465	1.473	0.6%
Electricity Related Losses	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Total	0.051	0.051	0.051	0.051	0.051	0.051	0.052	0.052	0.052	0.052	0.053	0.053	0.053	0.5%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.051	0.051	0.051	0.051	0.051	0.051	0.052	0.052	0.052	0.052	0.053	0.053	0.053	0.5%
Renewable Energy 7/ Electricity	0.192	0.197	0.201	0.206	0.211	0.216	0.221	0.226	0.232	0.238	0.244	0.251	0.257	2.2%
Delivered Energy	0.366	0.371	0.375	0.380	0.386	0.391	0.397	0.404	0.412	0.419	0.426	0.433	0.441	1.5%
Electricity Related Losses	3.165	3.191	3.211	3.233	3.259	3.283	3.309	3.337	3.372	3.404	3.436	3.471	3.505	1.0%
Total	0.545	0.558	0.573	0.586	0.593	0.601	0.609	0.612	0.614	0.613	0.611	0.611	0.609	1.0%
Total	3.710	3.748	3.784	3.818	3.852	3.884	3.918	3.949	3.986	4.017	4.047	4.082	4.115	1.0%



Table 9. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

Pacific	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Energy Consumption</b>														
Distillate Fuel	1.204	1.225	1.244	1.266	1.288	1.311	1.337	1.363	1.392	1.422	1.452	1.484	1.517	1.9%
Kerosene	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.1%
Jet Fuel 9/	1.169	1.183	1.187	1.192	1.197	1.202	1.207	1.212	1.218	1.226	1.235	1.246	1.260	1.4%
Liquefied Petroleum Gas	0.178	0.173	0.173	0.177	0.182	0.182	0.184	0.181	0.184	0.186	0.188	0.189	0.191	4.1%
Motor Gasoline 2/	3.159	3.204	3.248	3.286	3.324	3.365	3.407	3.451	3.496	3.542	3.588	3.634	3.681	1.4%
Petrochemical Feedstocks	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	0.0%
Residual Fuel	0.360	0.362	0.365	0.367	0.369	0.372	0.375	0.377	0.380	0.382	0.385	0.387	0.390	1.5%
Other Petroleum 12/	0.849	0.838	0.849	0.848	0.857	0.862	0.862	0.875	0.884	0.890	0.895	0.902	0.908	0.8%
Petroleum Subtotal	6.937	7.002	7.083	7.152	7.233	7.310	7.387	7.475	7.570	7.664	7.759	7.860	7.964	1.5%
Natural Gas	3.011	3.070	3.045	3.043	3.019	3.039	3.055	3.049	3.043	3.036	3.051	3.073	3.094	0.3%
Lease and Plant Fuel 6/	0.398	0.395	0.392	0.385	0.379	0.373	0.366	0.360	0.355	0.351	0.347	0.343	0.339	0.0%
Pipeline Natural Gas	0.125	0.125	0.125	0.124	0.124	0.124	0.124	0.124	0.123	0.123	0.123	0.123	0.123	6.0%
Natural Gas Subtotal	3.534	3.591	3.561	3.552	3.521	3.536	3.545	3.533	3.521	3.511	3.521	3.540	3.555	0.4%
Metallurgical Coal	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Other Coal	0.270	0.270	0.305	0.336	0.343	0.343	0.348	0.348	0.349	0.349	0.346	0.345	0.346	1.3%
Coal-to-Liquids Heat and Power	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Net Coal Coke Imports	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.270	0.270	0.305	0.336	0.343	0.343	0.348	0.348	0.349	0.349	0.346	0.345	0.346	1.3%
Nuclear Power	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.454	0.0%
Renewable Energy 16/	2.951	3.031	3.151	3.237	3.340	3.424	3.514	3.577	3.649	3.709	3.757	3.786	3.812	2.4%
Liquid Hydrogen	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.001	0.001	0.001	0.001	N/A
Electricity Imports	-0.009	-0.007	-0.007	-0.007	-0.007	-0.008	-0.007	-0.007	-0.007	-0.007	-0.007	-0.007	-0.007	0.9%
<b>Total</b>	<b>14.138</b>	<b>14.341</b>	<b>14.547</b>	<b>14.725</b>	<b>14.884</b>	<b>15.058</b>	<b>15.240</b>	<b>15.380</b>	<b>15.535</b>	<b>15.679</b>	<b>15.831</b>	<b>15.977</b>	<b>16.125</b>	<b>1.3%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	11.563	11.697	11.822	11.933	12.057	12.184	12.319	12.450	12.598	12.748	12.905	13.060	13.218	1.3%
Total Energy Use	14.138	14.341	14.547	14.725	14.884	15.058	15.240	15.380	15.535	15.679	15.831	15.977	16.125	1.3%
Population (millions)	55.369	55.950	56.533	57.121	57.718	58.323	58.936	59.558	60.182	60.809	61.439	62.072	62.710	1.1%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6952	7030	7119	7206	7296	7387	7494	7587	7690	7799	7912	8019	8114	1.2%

Table 9. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
Pacific

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.







Table 10. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

United States	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Total Energy Consumption</b>															
Distillate Fuel	8.48	8.72	8.95	8.92	9.07	9.22	9.40	9.57	9.72	9.85	9.97	10.08	10.19	10.32	10.45
Kerosene	0.11	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13
Jet Fuel 9/	3.26	3.35	3.36	3.45	3.57	3.66	3.76	3.89	4.02	4.09	4.16	4.22	4.27	4.33	4.41
Liquefied Petroleum Gas	2.76	2.85	2.83	2.84	2.92	2.91	2.91	2.92	2.95	2.97	2.99	3.00	3.02	3.04	3.08
Motor Gasoline 2/	16.98	17.30	17.35	17.47	17.80	18.07	18.38	18.70	18.96	19.20	19.43	19.67	19.91	20.13	20.38
Petrochemical Feedstocks	1.37	1.49	1.43	1.47	1.49	1.48	1.48	1.48	1.49	1.49	1.49	1.49	1.49	1.49	1.50
Residual Fuel	1.74	1.91	1.93	1.84	1.69	1.69	1.67	1.68	1.67	1.70	1.71	1.71	1.67	1.66	1.66
Other Petroleum 12/	4.26	4.32	4.23	4.24	4.65	4.66	4.70	4.75	4.83	4.88	4.92	4.97	4.99	5.07	5.10
Petroleum Subtotal	38.96	40.08	40.22	40.37	41.32	41.84	42.43	43.14	43.78	44.33	44.80	45.28	45.69	46.19	46.70
Natural Gas	21.19	21.24	21.00	20.99	21.25	21.75	21.95	22.28	22.76	23.33	23.81	24.21	24.71	25.04	25.18
Lease and Plant Fuel 6/	1.16	1.14	1.14	1.13	1.11	1.12	1.12	1.12	1.13	1.14	1.17	1.17	1.22	1.27	1.28
Pipeline Natural Gas	0.69	0.69	0.72	0.70	0.68	0.67	0.66	0.65	0.66	0.67	0.68	0.69	0.74	0.78	0.79
Natural Gas Subtotal	23.04	23.07	22.86	22.83	23.04	23.55	23.73	24.04	24.54	25.14	25.66	26.07	26.67	27.09	27.25
Metallurgical Coal	0.67	0.65	0.66	0.63	0.63	0.63	0.62	0.62	0.62	0.62	0.61	0.61	0.61	0.60	0.60
Other Coal	21.66	21.74	22.63	22.79	23.18	23.64	24.18	24.45	24.51	24.81	24.79	24.83	24.88	25.09	25.40
Coal-to-Liquids Heat and Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.08	0.12	0.14	0.16	0.18	0.22
Net Coal Coke Imports	0.05	0.14	0.08	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Coal Subtotal	22.38	22.53	23.37	23.44	23.84	24.29	24.82	25.09	25.19	25.52	25.54	25.59	25.66	25.90	26.23
Nuclear Power	7.96	8.23	8.08	8.22	8.41	8.42	8.44	8.44	8.45	8.46	8.47	8.54	8.66	8.80	8.94
Renewable Energy 16/	5.70	5.74	5.88	6.36	6.71	6.77	6.86	7.08	7.11	7.13	7.21	7.31	7.43	7.55	7.64
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Imports	0.02	0.04	0.08	0.05	0.03	0.06	0.07	0.07	0.08	0.08	0.07	0.07	0.08	0.07	0.06
<b>Total</b>	<b>98.05</b>	<b>99.68</b>	<b>100.49</b>	<b>101.27</b>	<b>103.35</b>	<b>104.93</b>	<b>106.36</b>	<b>107.87</b>	<b>109.16</b>	<b>110.67</b>	<b>111.75</b>	<b>112.87</b>	<b>114.18</b>	<b>115.58</b>	<b>116.83</b>
<b>Energy Use and Related Statistics</b>															
Delivered Energy Use	71.87	73.18	73.34	73.83	75.39	76.48	77.53	78.62	79.79	80.80	81.63	82.48	83.46	84.49	85.40
Total Energy Use	98.05	99.68	100.49	101.27	103.35	104.93	106.36	107.87	109.16	110.67	111.75	112.87	114.18	115.58	116.83
Population (millions)	291.39	294.10	296.79	299.48	302.15	304.79	307.45	310.12	312.78	315.46	318.16	320.85	323.55	326.25	328.94
US GDP (billion 2000 dollars)	10321	10756	11147	11513	11875	12288	12671	13043	13417	13793	14191	14622	15082	15575	16092
Carbon Dioxide Emissions (million metric tons)	5795.5	5899.9	5967.0	5977.8	6079.8	6182.2	6280.5	6364.9	6440.0	6535.5	6595.1	6653.7	6717.6	6794.0	6868.7





Table 10. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)

United States	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2030
<b>Total Energy Consumption</b>														
Distillate Fuel	10.58	10.70	10.83	10.97	11.12	11.28	11.46	11.64	11.84	12.05	12.25	12.47	12.70	1.5%
Kerosene	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	-0.6%
Jet Fuel 9/	4.47	4.52	4.53	4.55	4.56	4.58	4.60	4.61	4.63	4.66	4.69	4.74	4.79	1.4%
Liquefied Petroleum Gas	3.11	3.13	3.14	3.17	3.20	3.23	3.25	3.27	3.30	3.33	3.35	3.36	3.40	0.7%
Motor Gasoline 2/	20.63	20.87	21.10	21.31	21.52	21.74	21.96	22.19	22.43	22.67	22.90	23.14	23.38	1.2%
Petrochemical Feedstocks	1.50	1.51	1.51	1.51	1.51	1.52	1.52	1.53	1.53	1.54	1.54	1.55	1.55	0.2%
Residual Fuel	1.67	1.70	1.69	1.71	1.71	1.70	1.70	1.72	1.75	1.77	1.78	1.79	1.79	-0.3%
Other Petroleum 12/	5.14	5.17	5.21	5.25	5.29	5.30	5.43	5.50	5.58	5.69	5.79	5.86	5.86	1.2%
Petroleum Subtotal	47.24	47.72	48.14	48.59	49.04	49.46	50.04	50.57	51.18	51.82	52.43	53.02	53.58	1.1%
Natural Gas	25.34	25.54	25.62	25.65	25.65	25.72	25.74	25.75	25.76	25.70	25.64	25.55	25.67	0.7%
Lease and Plant Fuel 6/	1.29	1.29	1.28	1.27	1.27	1.26	1.26	1.24	1.23	1.23	1.22	1.21	1.21	0.2%
Pipeline Natural Gas	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.79	0.79	0.78	0.78	0.78	0.78	0.5%
Natural Gas Subtotal	27.44	27.64	27.70	27.72	27.71	27.78	27.79	27.78	27.78	27.71	27.64	27.54	27.66	0.7%
Metallurgical Coal	0.60	0.60	0.59	0.59	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	-0.4%
Other Coal	25.77	26.12	26.55	26.94	27.43	27.95	28.55	29.07	29.63	30.31	31.04	31.73	32.29	1.5%
Coal-to-Liquids Heat and Power	0.25	0.29	0.49	0.69	0.88	1.00	1.13	1.22	1.35	1.43	1.51	1.61	1.61	33.8%
Net Coal Coke Imports	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	-8.1%
Coal Subtotal	26.64	27.02	27.65	28.24	28.91	29.54	30.27	30.89	31.57	32.33	33.15	33.93	34.49	1.7%
Nuclear Power	9.04	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	9.09	0.4%
Renewable Energy 16/	7.73	7.85	8.00	8.11	8.25	8.36	8.51	8.61	8.74	8.82	8.91	8.95	9.02	1.8%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electricity Imports	0.06	0.05	0.05	0.05	0.05	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.9%
<b>Total</b>	<b>118.14</b>	<b>119.36</b>	<b>120.63</b>	<b>121.80</b>	<b>123.05</b>	<b>124.29</b>	<b>125.75</b>	<b>126.99</b>	<b>128.41</b>	<b>129.82</b>	<b>131.26</b>	<b>132.58</b>	<b>133.88</b>	<b>1.1%</b>
<b>Energy Use and Related Statistics</b>														
Delivered Energy Use	86.34	87.19	88.19	89.10	90.07	91.02	92.09	93.04	94.15	95.22	96.33	97.40	98.40	1.1%
Total Energy Use	118.14	119.36	120.63	121.80	123.05	124.29	125.75	126.99	128.41	129.82	131.26	132.58	133.88	1.1%
Population (millions)	331.63	334.31	336.99	339.68	342.38	345.11	347.86	350.64	353.43	356.24	359.07	361.92	364.79	0.8%
US GDP (billion 2000 dollars)	16599	17064	17541	18021	18515	19026	19562	20123	20701	21286	21871	22482	23112	3.0%
Carbon Dioxide Emissions (million metric tons)	6951.8	7029.8	7119.0	7205.7	7296.3	7387.3	7493.7	7586.7	7689.6	7799.4	7911.9	8019.2	8114.5	1.2%

Table 10. Energy Consumption by Sector and Source  
(quadrillion Btu, unless otherwise noted)  
United States

1/ Includes wood used for residential heating. See Annual Energy Outlook 2006 Appendix A Table 4 and/or Table 17 for estimates of nonmarketed renewable energy consumption for geothermal heat pumps, solar thermal hot water heating, and solar photovoltaic electricity generation.

2/ Includes ethanol (blends of 10 percent or less) and ethers blended into gasoline.

3/ Includes commercial sector consumption of wood and wood waste, landfill gas, municipal solid waste, and other biomass for combined heat and power. See Annual Energy Outlook 2006 Appendix A Table 17 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.

5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.

6/ Represents natural gas used in the field gathering and processing plant machinery.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass.

8/ Diesel fuel for on- and off-road use.

9/ Includes only kerosene type.

10/ Includes aviation gasoline and lubricants.

11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.

12/ Includes unfinished oils, natural gasoline, motor gasoline blending components, aviation gasoline, lubricants, still gas, asphalt, road oil, petroleum coke, and miscellaneous petroleum products.

13/ Includes electricity generated for sale to the grid and for own use from renewable sources, and non-electric energy from renewable sources. Excludes nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

14/ Includes consumption of energy by electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat to the public. Includes small power producers and exempt wholesale generators.

15/ Includes conventional hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, petroleum coke, wind, photovoltaic and solar thermal sources. Excludes net electricity imports.

16/ Includes hydroelectric, geothermal, wood and wood waste, municipal solid waste, other biomass, wind, photovoltaic and solar thermal sources. Includes ethanol components of E85; excludes ethanol blends (10 percent or less) in motor gasoline. Excludes net electricity imports and nonmarketed renewable energy consumption for geothermal heat pumps, buildings photovoltaic systems, and solar thermal hot water heaters.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports. Consumption values of 0.00 are values that round to 0.00, because they are less than 0.005.

Sources: 2003 and 2004 consumption based on: Energy Information Administration (EIA), Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005) 2003 and 2004 population and gross domestic product: Global Insight macroeconomic model CTL0805. 2003 and 2004 carbon dioxide emissions: EIA, Emissions of Greenhouse Gases in the United States 2004, DOE/EIA-0573(2004) (Washington, DC, December 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.





Table 11. Energy Prices by Sector and Source  
 (2004 dollars per million Btu, unless otherwise noted)  
 New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	10.97	13.14	15.79	16.36	15.28	14.88	14.39	13.92	13.93	13.93	13.89	13.84	13.89	14.08	14.11
Distillate Fuel	9.88	13.22	14.83	15.82	14.28	14.00	13.54	13.15	13.26	13.33	13.31	13.25	13.34	13.54	13.50
Jet Fuel	6.98	9.46	13.26	13.62	11.03	10.81	10.37	10.09	10.23	10.33	10.14	10.24	10.28	10.46	10.39
Liquefied Petroleum Gas	18.14	20.21	23.52	25.78	21.90	21.10	20.52	19.93	19.98	19.91	19.85	19.78	19.71	20.33	20.44
Motor Gasoline 8/ Residual Fuel	13.65 4.74	15.74 5.09	19.09 7.47	19.34 7.19	18.82 5.65	18.24 5.38	17.64 5.04	17.01 4.73	16.92 4.72	16.84 4.70	16.79 4.67	16.72 4.63	16.70 4.62	16.91 4.65	16.93 4.71
Natural Gas	8.42	9.19	11.04	10.32	9.80	9.55	9.21	8.90	8.77	8.60	8.64	8.53	8.11	8.14	8.18
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Coal 5/	2.55	2.64	2.95	2.99	2.88	2.87	2.60	2.62	2.55	2.52	2.50	2.47	2.45	2.44	2.43
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	24.46	23.71	22.69	21.91	21.87	21.41	21.32	21.23	21.20	21.47	21.48
Electricity	31.88	31.21	34.59	33.20	29.87	28.68	28.07	27.41	27.24	27.08	27.49	27.69	27.15	27.68	27.79
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	11.53	13.08	14.69	14.22	13.11	12.90	12.78	12.65	12.74	12.85	12.91	12.96	12.82	13.08	13.09
Commercial	7.91	8.02	9.40	8.85	8.17	8.03	7.94	7.84	7.90	7.94	8.14	8.28	8.24	8.53	8.67
Industrial	4.30	4.74	5.34	5.31	4.99	4.84	4.59	4.40	4.31	4.23	4.24	4.20	4.09	4.16	4.17
Transportation	13.49	16.04	19.87	20.35	19.64	19.41	19.11	18.81	19.07	19.26	19.46	19.58	19.82	20.23	20.45
Total Non-Renewable Expenditures	37.23	41.88	49.29	48.73	45.91	45.19	44.42	43.71	44.03	44.28	44.75	45.03	44.98	45.99	46.38
Transportation Renewable Expenditures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Expenditures	37.23	41.88	49.29	48.73	45.91	45.19	44.42	43.71	44.03	44.29	44.75	45.03	44.99	46.00	46.38



Table 11. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
New England

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	14.28	14.45	14.67	14.73	14.86	15.02	15.14	15.22	15.36	15.45	15.57	15.59	15.73	0.7%
Distillate Fuel	13.73	13.87	14.01	13.98	14.12	14.42	14.55	14.56	14.80	14.93	15.10	14.99	15.19	0.5%
Jet Fuel	10.64	10.76	10.93	11.03	11.16	11.18	11.29	11.32	11.44	11.57	11.77	11.82	11.94	0.9%
Liquefied Petroleum Gas	20.96	21.29	21.75	22.14	22.42	22.71	22.99	23.27	23.46	23.66	23.86	24.04	24.24	0.7%
Motor Gasoline 8/	17.07	17.24	17.44	17.53	17.64	17.74	17.84	17.94	18.03	18.08	18.17	18.24	18.32	0.6%
Residual Fuel	4.75	4.80	4.85	4.92	4.99	5.07	5.14	5.21	5.26	5.30	5.35	5.39	5.44	0.3%
Natural Gas	8.28	8.41	8.29	8.36	8.42	8.51	8.64	8.77	8.85	8.95	9.03	9.14	8.96	-0.1%
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Coal 5/	2.42	2.43	2.42	2.42	2.43	2.42	2.43	2.43	2.43	2.44	2.45	2.45	2.46	-0.3%
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol (E85) 11/	21.67	21.89	21.91	21.99	22.14	22.23	22.34	22.49	22.73	22.66	23.00	23.09	23.21	0.5%
Electricity	27.92	28.16	27.73	27.99	28.14	28.16	28.32	28.71	28.76	29.05	29.25	29.37	29.04	-0.3%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	13.28	13.43	13.44	13.53	13.65	13.73	13.87	13.98	14.04	14.13	14.25	14.27	14.23	0.3%
Commercial	8.83	9.03	9.02	9.22	9.40	9.55	9.75	10.00	10.18	10.41	10.64	10.84	10.89	1.2%
Industrial	4.20	4.25	4.20	4.22	4.24	4.23	4.26	4.32	4.35	4.40	4.44	4.46	4.41	-0.3%
Transportation	20.85	21.26	21.68	21.91	22.20	22.60	22.91	23.16	23.56	23.88	24.26	24.47	24.85	1.7%
Total Non-Renewable Expenditures	47.17	47.97	48.34	48.89	49.50	50.11	50.79	51.46	52.12	52.83	53.59	54.04	54.37	1.0%
Transportation Renewable Expenditures	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.7%
Total Expenditures	47.17	47.97	48.35	48.89	49.51	50.12	50.79	51.47	52.13	52.84	53.59	54.05	54.38	1.0%

Table 11. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
New England

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 12. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/ Petroleum Products 2/ Distillate Fuel	10.53	12.36	15.13	15.62	14.41	14.02	13.52	13.19	13.18	13.16	13.15	13.11	13.19	13.40	13.42
Jet Fuel	10.24	13.19	15.30	16.12	14.63	14.36	13.90	13.53	13.67	13.73	13.77	13.68	13.80	13.95	13.90
Liquefied Petroleum Gas	6.63	9.00	12.61	12.94	10.61	10.39	9.95	9.70	9.88	10.00	9.82	9.95	10.00	10.19	10.14
Motor Gasoline 8/ Residual Fuel	17.78	19.26	22.79	25.12	21.04	20.25	19.71	19.13	19.18	19.12	19.07	19.01	18.95	19.57	19.69
Natural Gas	13.61	15.68	19.02	19.27	18.58	18.04	17.44	16.85	16.79	16.72	16.67	16.60	16.58	16.79	16.81
Metallurgical Coal 5/ Other Coal 5/ Coal to Liquids	5.05	5.29	7.31	7.41	6.01	5.74	5.38	5.10	5.07	5.05	5.04	5.01	5.01	5.07	5.12
Ethanol (E85) 11/ Electricity	8.71	9.64	11.38	10.60	9.94	9.63	9.28	8.96	8.70	8.53	8.57	8.42	8.12	8.09	8.09
	1.89	2.22	2.27	2.34	2.34	2.35	2.37	2.33	2.30	2.27	2.23	2.21	2.20	2.19	2.20
	1.50	1.61	1.72	1.72	1.75	1.79	1.80	1.81	1.75	1.73	1.71	1.69	1.65	1.64	1.62
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	16.71	20.24	22.36	22.59	23.98	23.28	22.26	21.48	21.44	20.98	20.89	20.80	20.77	21.04	21.05
	29.89	29.77	31.54	30.07	27.39	26.10	25.32	24.58	24.28	24.55	25.11	24.98	24.69	24.86	24.98
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	29.56	31.97	35.30	33.49	31.12	30.44	30.07	29.75	29.78	30.09	30.33	30.20	29.94	30.30	30.32
Commercial	24.02	24.99	27.92	25.53	23.65	23.05	22.52	22.01	21.88	22.15	22.67	22.68	22.57	22.92	23.20
Industrial	11.22	11.07	13.72	14.59	13.62	13.16	12.34	11.91	11.57	11.50	11.57	11.37	11.21	11.31	11.35
Transportation	34.52	41.30	51.56	52.79	50.18	49.46	48.43	47.58	48.24	48.62	48.93	49.10	49.56	50.44	50.81
Total Non-Renewable Expenditures	99.32	109.33	128.50	126.41	118.57	116.12	113.36	111.25	111.46	112.35	113.50	113.35	113.28	114.96	115.68
Transportation Renewable Expenditures	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Expenditures	99.32	109.34	128.50	126.41	118.57	116.12	113.37	111.26	111.47	112.36	113.51	113.36	113.29	114.98	115.69



Table 12. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

Middle Atlantic	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	13.59	13.72	13.92	13.93	14.06	14.29	14.37	14.44	14.53	14.60	14.73	14.75	14.88	0.7%
Distillate Fuel	14.09	14.23	14.35	14.27	14.37	14.72	14.83	14.79	15.07	15.21	15.40	15.24	15.45	0.6%
Jet Fuel	10.40	10.54	10.71	10.83	10.96	10.99	11.11	11.14	11.27	11.40	11.61	11.66	11.79	1.0%
Liquefied Petroleum Gas	20.22	20.56	21.02	21.41	21.71	21.99	22.28	22.56	22.76	22.95	23.15	23.34	23.55	0.8%
Motor Gasoline 8/	16.96	17.14	17.36	17.44	17.56	17.64	17.74	17.83	17.91	17.99	18.09	18.17	18.27	0.6%
Residual Fuel	5.18	5.21	5.26	5.32	5.39	5.48	5.54	5.62	5.65	5.68	5.73	5.77	5.81	0.4%
Natural Gas	8.23	8.34	8.28	8.40	8.47	8.54	8.67	8.82	8.94	9.06	9.14	9.24	9.24	-0.2%
Metallurgical Coal 5/	2.20	2.22	2.24	2.26	2.28	2.28	2.29	2.30	2.31	2.32	2.31	2.31	2.32	0.2%
Other Coal 5/	1.62	1.61	1.61	1.61	1.61	1.61	1.62	1.63	1.64	1.65	1.67	1.68	1.69	0.2%
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol (E85) 11/	21.25	21.46	21.48	21.56	21.71	21.80	21.91	22.06	22.30	22.23	22.57	22.65	22.78	0.5%
Electricity	25.39	25.76	25.68	26.03	26.21	26.26	26.43	26.70	26.63	26.67	26.57	26.61	26.73	-0.4%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	30.78	31.11	31.16	31.37	31.57	31.68	31.96	32.13	32.16	32.27	32.37	32.40	32.50	0.1%
Commercial	23.76	24.29	24.39	24.90	25.29	25.61	26.04	26.55	26.82	27.15	27.41	27.73	28.11	0.5%
Industrial	11.49	11.73	11.77	11.78	11.87	12.08	12.09	12.23	12.27	12.34	12.34	12.35	12.40	0.4%
Transportation	51.72	52.57	53.48	53.83	54.42	55.20	55.79	56.20	57.03	57.71	58.52	58.90	59.72	1.4%
Total Non-Renewable Expenditures	117.75	119.69	120.80	121.88	123.15	124.57	125.89	127.11	128.28	129.48	130.64	131.38	132.72	0.7%
Transportation Renewable Expenditures	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	6.3%
Total Expenditures	117.76	119.70	120.82	121.90	123.16	124.58	125.90	127.12	128.29	129.49	130.65	131.39	132.74	0.7%



Table 12. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Middle Atlantic

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 13. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

East North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	10.95	12.68	15.51	15.94	15.06	14.61	14.13	13.71	13.75	13.72	13.72	13.66	13.72	13.85	13.89
Distillate Fuel	10.32	12.61	15.48	15.92	14.23	13.91	13.46	13.16	13.40	13.43	13.55	13.43	13.61	13.64	13.61
Jet Fuel	6.47	8.78	12.30	12.62	10.24	9.94	9.50	9.23	9.38	9.49	9.40	9.41	9.55	9.73	9.71
Liquefied Petroleum Gas	14.84	15.99	18.72	20.70	17.88	17.21	16.71	16.22	16.28	16.22	16.16	16.09	16.02	16.58	16.68
Motor Gasoline 8/	12.77	14.74	17.87	18.12	17.92	17.35	16.77	16.20	16.18	16.11	16.05	15.98	15.95	16.17	16.18
Residual Fuel	4.66	5.56	7.89	8.01	7.61	7.42	7.11	6.45	6.63	6.63	6.43	6.58	6.51	6.59	6.61
Natural Gas	7.41	7.99	10.06	9.34	8.67	8.35	7.96	7.66	7.43	7.31	7.36	7.23	7.03	7.01	7.07
Metallurgical Coal 5/	1.97	2.32	2.39	2.46	2.47	2.48	2.49	2.46	2.42	2.39	2.34	2.32	2.30	2.29	2.30
Other Coal 5/	1.27	1.34	1.47	1.49	1.48	1.46	1.43	1.45	1.42	1.42	1.40	1.39	1.38	1.37	1.37
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	17.21	19.27	20.36	21.07	21.04	20.57	20.48	20.39	20.26	20.53	20.53
Electricity	19.68	19.47	20.54	19.98	20.78	20.09	19.70	19.41	19.31	19.31	19.77	19.75	19.72	19.84	19.92
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	30.38	31.30	35.10	33.96	33.68	32.90	32.41	32.27	32.33	32.53	33.00	32.97	32.84	33.21	33.41
Commercial	19.83	20.17	23.08	22.03	22.29	22.04	21.83	21.79	21.93	22.20	22.94	23.17	23.35	23.81	24.24
Industrial	25.71	29.02	32.82	32.06	31.29	30.38	29.31	28.38	27.93	27.68	28.06	27.91	27.82	27.94	28.05
Transportation	45.47	54.35	67.64	69.06	66.64	65.38	63.95	62.73	63.62	64.01	64.43	64.51	65.11	66.23	66.66
Total Non-Renewable Expenditures	121.40	134.84	158.64	157.11	153.90	150.70	147.50	145.17	145.81	146.42	148.44	148.56	149.11	151.18	152.36
Transportation Renewable Expenditures	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Expenditures	121.40	134.84	158.65	157.12	153.91	150.71	147.51	145.18	145.82	146.43	148.45	148.57	149.12	151.19	152.37



Table 13. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

East North Central	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	14.04	14.18	14.36	14.45	14.56	14.70	14.76	14.80	14.91	15.02	15.22	15.19	15.29	0.7%
Distillate Fuel	13.74	13.86	13.96	14.03	14.10	14.27	14.35	14.26	14.42	14.56	14.75	14.44	14.63	0.6%
Jet Fuel	9.94	9.98	10.27	10.35	10.46	10.56	10.50	10.53	10.68	10.85	11.15	11.21	11.33	1.0%
Liquefied Petroleum Gas	17.14	17.41	17.78	18.06	18.32	18.51	18.84	18.97	19.11	19.63	20.86	20.76	20.68	1.0%
Motor Gasoline 8/	16.35	16.52	16.75	16.82	16.94	17.02	17.11	17.20	17.28	17.35	17.46	17.52	17.62	0.7%
Residual Fuel	6.61	6.63	6.92	6.87	6.84	6.90	7.11	7.17	7.18	7.26	7.24	7.24	7.44	1.1%
Natural Gas	7.22	7.35	7.35	7.47	7.54	7.61	7.72	7.85	7.93	8.03	8.09	8.17	8.34	0.2%
Metallurgical Coal 5/	2.30	2.32	2.34	2.36	2.38	2.38	2.39	2.40	2.41	2.41	2.41	2.41	2.42	0.2%
Other Coal 5/	1.36	1.36	1.37	1.38	1.38	1.39	1.40	1.41	1.42	1.44	1.45	1.46	1.47	0.4%
Coal to Liquids	0.00	0.00	1.38	1.39	1.41	1.41	1.42	1.43	1.44	1.45	1.46	1.46	1.47	N/A
Ethanol (E85) 11/	20.73	20.89	20.90	20.98	21.12	21.22	21.33	21.48	21.73	21.64	22.00	22.08	22.21	0.4%
Electricity	20.11	20.26	20.22	20.39	20.49	20.56	20.69	20.85	20.82	20.84	20.77	20.81	21.03	0.3%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	33.96	34.40	34.61	34.93	35.20	35.44	35.89	36.17	36.34	36.65	36.99	37.12	37.60	0.7%
Commercial	24.86	25.42	25.73	26.31	26.81	27.31	27.87	28.48	28.90	29.39	29.81	30.30	31.06	1.7%
Industrial	28.50	28.92	28.93	29.30	29.65	29.98	30.22	30.58	30.87	31.19	31.47	31.73	32.23	0.4%
Transportation	67.82	68.83	70.03	70.64	71.36	72.12	72.76	73.25	74.10	74.91	75.97	76.18	77.15	1.4%
Total Non-Renewable Expenditures	155.16	157.57	159.31	161.17	163.03	164.85	166.74	168.47	170.22	172.14	174.25	175.33	178.04	1.1%
Transportation Renewable Expenditures	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	6.1%
Total Expenditures	155.17	157.58	159.32	161.19	163.05	164.86	166.76	168.49	170.23	172.15	174.26	175.34	178.06	1.1%

Table 13. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
East North Central

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 14. Energy Prices by Sector and Source  
 (2004 dollars per million Btu, unless otherwise noted)  
 West North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	11.43	13.27	16.11	16.63	14.99	14.56	14.06	13.64	13.71	13.68	13.68	13.61	13.67	13.82	13.86
Distillate Fuel	9.96	12.24	14.93	15.41	13.79	13.50	13.05	12.77	13.04	13.06	13.19	13.07	13.25	13.30	13.27
Jet Fuel	6.84	9.27	13.00	13.34	10.56	10.26	9.82	9.52	9.66	9.75	9.64	9.64	9.76	9.94	9.91
Liquefied Petroleum Gas	12.01	12.79	15.11	16.76	14.94	14.38	13.96	13.54	13.59	13.54	13.49	13.44	13.38	13.85	13.94
Motor Gasoline 8/	13.75	15.84	19.21	19.46	17.50	16.94	16.34	15.78	15.75	15.68	15.61	15.54	15.52	15.74	15.75
Residual Fuel	4.27	4.95	6.96	7.02	7.36	7.23	6.88	6.25	6.43	6.43	6.23	6.38	6.32	6.40	6.41
Natural Gas	7.31	8.03	10.02	9.51	8.93	8.65	8.26	7.94	7.74	7.59	7.64	7.53	7.20	7.16	7.22
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Coal 5/	0.92	0.93	1.07	1.09	1.06	1.04	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	0.91	0.95	0.94	0.96	0.97	0.99
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	16.51	18.59	19.53	20.25	20.22	19.74	19.65	19.56	19.53	19.80	19.81
Electricity	18.15	18.07	19.99	20.24	19.65	19.29	19.25	19.36	18.95	18.64	18.71	18.69	18.57	18.65	18.72
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	12.78	13.32	15.42	15.56	15.12	14.99	14.91	14.97	14.89	14.88	15.00	15.05	14.98	15.18	15.32
Commercial	8.31	8.55	10.09	10.13	9.98	10.02	10.07	10.20	10.17	10.21	10.43	10.55	10.59	10.80	11.03
Industrial	10.13	11.22	13.13	13.76	13.32	13.14	12.90	12.80	12.83	12.81	12.93	12.84	12.68	12.68	12.84
Transportation	23.79	28.41	35.38	36.17	32.87	32.44	31.84	31.33	31.87	32.15	32.46	32.58	32.99	33.64	33.94
Total Non-Renewable Expenditures	55.02	61.50	74.03	75.63	71.29	70.59	69.71	69.30	69.77	70.04	70.82	71.01	71.24	72.31	73.14
Transportation Renewable Expenditures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Total Expenditures	55.02	61.50	74.03	75.63	71.29	70.59	69.71	69.30	69.77	70.04	70.82	71.02	71.25	72.31	73.14





Table 14. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

West North Central	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	14.02	14.17	14.36	14.44	14.55	14.69	14.75	14.79	14.91	15.02	15.24	15.20	15.31	0.6%
Distillate Fuel	13.40	13.52	13.64	13.70	13.76	13.91	13.98	13.89	14.06	14.20	14.38	14.09	14.27	0.6%
Jet Fuel	10.13	10.16	10.44	10.52	10.62	10.72	10.65	10.68	10.83	10.99	11.28	11.34	11.46	0.8%
Liquefied Petroleum Gas	14.35	14.59	14.87	15.08	15.31	15.46	15.75	15.84	15.96	16.41	17.40	17.36	17.29	1.2%
Motor Gasoline 8/	15.92	16.10	16.33	16.40	16.52	16.60	16.69	16.78	16.87	16.93	17.04	17.10	17.21	0.3%
Residual Fuel	6.41	6.43	6.72	6.67	6.66	6.71	6.92	6.98	6.98	7.06	7.03	7.05	7.25	1.5%
Natural Gas	7.37	7.55	7.51	7.61	7.68	7.75	7.88	8.00	8.09	8.18	8.26	8.35	8.55	0.2%
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Coal 5/	1.03	1.03	1.04	1.05	1.06	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.14	0.8%
Coal to Liquids	0.98	0.98	0.99	1.02	1.02	1.03	1.05	1.07	1.07	1.08	1.08	1.09	1.09	N/A
Ethanol (E85) 11/	20.01	20.22	20.23	20.31	20.46	20.55	20.66	20.81	21.06	20.98	21.33	21.41	21.54	0.2%
Electricity	18.76	18.81	18.76	18.76	18.76	18.72	18.79	18.84	18.84	18.88	18.88	18.95	19.12	0.2%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	15.55	15.77	15.89	16.00	16.13	16.24	16.47	16.61	16.75	16.94	17.20	17.30	17.53	1.1%
Commercial	11.28	11.53	11.68	11.90	12.11	12.30	12.57	12.83	13.06	13.32	13.57	13.84	14.21	2.0%
Industrial	13.00	13.19	13.17	13.28	13.41	13.56	13.64	13.77	13.94	14.13	14.36	14.48	14.73	1.1%
Transportation	34.63	35.26	35.97	36.39	36.88	37.40	37.86	38.22	38.79	39.35	40.03	40.23	40.89	1.4%
Total Non-Renewable Expenditures	74.46	75.75	76.71	77.57	78.53	79.51	80.55	81.43	82.54	83.73	85.16	85.86	87.36	1.4%
Transportation Renewable Expenditures	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.3%
Total Expenditures	74.46	75.76	76.72	77.58	78.54	79.51	80.55	81.44	82.55	83.74	85.17	85.87	87.37	1.4%

Table 14. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
West North Central

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 15. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
South Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Residential	19.57	20.36	22.19	22.16	21.34	20.66	20.38	20.14	19.83	19.66	19.69	19.58	19.46	19.53	19.57
Primary Energy 1/	11.92	13.67	14.77	14.72	13.92	13.55	13.15	12.81	12.61	12.56	12.55	12.46	12.40	12.53	12.55
Petroleum Products 2/	13.12	15.85	17.67	19.41	18.33	17.85	17.30	16.85	16.91	17.04	16.84	16.94	17.01	17.63	17.74
Distillate Fuel	9.90	13.68	14.38	15.65	14.32	14.01	13.41	12.97	12.88	13.11	12.64	12.79	12.86	13.23	13.15
Liquefied Petroleum Gas	17.44	20.11	22.89	24.86	23.74	22.84	22.15	21.50	21.59	21.50	21.42	21.32	21.24	21.96	22.05
Natural Gas	11.47	12.76	13.58	12.89	12.27	11.97	11.66	11.39	11.12	11.04	11.12	11.01	10.93	10.94	10.97
Electricity	24.40	24.41	26.67	26.58	25.70	24.80	24.56	24.36	23.96	23.70	23.73	23.58	23.41	23.41	23.43
Commercial	16.12	16.84	19.40	19.59	18.76	18.19	17.92	17.70	17.37	17.28	17.38	17.31	17.23	17.32	17.37
Primary Energy 1/	9.01	10.19	11.23	10.96	10.31	10.02	9.69	9.45	9.26	9.19	9.20	9.10	9.03	9.07	9.07
Petroleum Products 2/	8.24	10.49	11.65	12.79	11.94	11.56	11.08	10.74	10.88	10.91	10.78	10.78	10.85	11.06	11.04
Distillate Fuel	6.93	9.58	10.08	10.97	10.72	10.47	10.01	9.77	9.94	9.99	9.86	9.87	9.99	10.16	10.12
Residual Fuel	4.72	5.87	8.73	8.76	7.91	7.74	7.42	6.74	6.94	6.95	6.73	6.90	6.82	6.92	6.91
Natural Gas	9.44	10.33	11.35	10.61	10.00	9.75	9.46	9.23	8.94	8.85	8.90	8.77	8.67	8.66	8.67
Electricity	20.07	20.29	23.56	23.77	22.79	22.02	21.74	21.49	21.09	20.96	21.08	21.00	20.89	20.98	21.03
Industrial 3/	7.65	8.28	9.94	10.04	9.50	9.19	8.88	8.64	8.51	8.44	8.50	8.44	8.44	8.45	8.53
Primary Energy	5.80	6.54	8.03	8.06	7.50	7.24	6.92	6.69	6.62	6.56	6.60	6.53	6.55	6.53	6.60
Petroleum Products 2/	7.13	8.04	9.61	10.33	9.68	9.42	9.04	8.82	8.90	8.83	8.85	8.82	8.90	8.85	9.00
Distillate Fuel	7.29	10.08	10.60	11.54	11.05	10.89	10.41	10.31	10.81	10.79	10.83	10.74	10.93	11.02	10.99
Liquefied Petroleum Gas	15.72	15.54	19.20	21.66	16.38	15.76	15.28	14.83	14.90	14.84	14.78	14.71	14.66	15.15	15.24
Residual Fuel	4.78	5.96	8.87	8.88	8.00	7.83	7.51	6.83	7.03	7.04	6.82	6.99	6.91	7.01	7.00
Natural Gas 4/	6.10	6.92	9.19	8.21	7.44	7.05	6.63	6.27	6.00	5.93	6.00	5.88	5.80	5.81	5.83
Metallurgical Coal 5/	1.71	2.03	2.11	2.18	2.19	2.19	2.20	2.16	2.13	2.09	2.04	2.02	2.00	1.98	1.99
Other Industrial Coal 5/	2.07	2.11	2.17	2.27	2.31	2.30	2.30	2.29	2.26	2.23	2.22	2.19	2.19	2.19	2.18
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	13.47	13.92	15.97	16.23	15.79	15.33	15.04	14.75	14.39	14.25	14.36	14.31	14.24	14.32	14.37
Transportation	11.74	13.65	16.85	17.09	15.93	15.51	14.98	14.51	14.54	14.52	14.51	14.43	14.47	14.63	14.62
Primary Energy	11.71	13.63	16.84	17.08	15.91	15.50	14.96	14.49	14.52	14.51	14.49	14.42	14.45	14.62	14.61
Petroleum Products 2/	11.71	13.64	16.84	17.08	15.92	15.50	14.97	14.50	14.53	14.51	14.50	14.43	14.46	14.63	14.62
Distillate Fuel 6/	10.73	12.65	16.23	16.38	14.84	14.50	14.04	13.75	13.96	13.88	13.96	13.79	13.98	14.00	13.94
Jet Fuel 7/	6.74	9.15	12.82	13.16	10.48	10.26	9.82	9.57	9.73	9.85	9.67	9.79	9.84	10.02	9.97
Motor Gasoline 8/	12.73	14.68	17.81	18.05	17.12	16.64	16.07	15.53	15.51	15.47	15.41	15.35	15.32	15.54	15.55
Residual Fuel	4.31	4.61	5.01	6.24	7.70	7.50	7.11	6.71	6.68	6.65	6.61	6.58	6.55	6.61	6.68
Liquefied Petroleum Gas 9/	17.15	17.15	21.43	23.29	20.85	20.17	19.63	19.12	19.16	19.06	18.97	18.86	18.77	19.27	19.33
Natural Gas 10/	9.24	10.29	12.41	11.62	10.99	10.71	10.40	10.13	9.90	9.86	9.97	9.88	9.82	9.85	9.88
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	23.86	23.17	22.14	21.36	21.33	20.88	20.79	20.70	20.67	20.94	20.94
Electricity	19.70	19.65	20.83	21.36	20.26	19.57	19.38	19.24	18.91	18.77	18.84	18.75	18.63	18.69	18.72
Average End-Use Energy	12.75	13.98	16.56	16.73	15.83	15.40	15.02	14.70	14.61	14.56	14.60	14.55	14.54	14.67	14.70
Primary Energy	10.19	11.75	14.27	14.45	13.51	13.17	12.74	12.37	12.37	12.35	12.37	12.31	12.34	12.47	12.50
Electricity	20.44	20.64	23.25	23.35	22.55	21.83	21.59	21.38	21.00	20.83	20.92	20.83	20.72	20.78	20.82
Electric Power 12/															
Fossil Fuel Average	2.56	2.68	3.05	2.93	2.80	2.74	2.64	2.63	2.56	2.54	2.56	2.55	2.55	2.57	2.59
Petroleum Products	5.09	5.14	7.27	6.85	7.75	7.60	7.29	6.88	6.92	6.94	6.78	6.85	6.81	6.92	6.93
Distillate Fuel	6.50	8.97	9.43	10.27	9.75	9.55	9.10	8.80	8.77	8.91	8.55	8.70	8.73	8.99	8.95
Residual Fuel	4.85	4.70	6.85	6.42	7.32	7.14	6.81	6.33	6.40	6.39	6.27	6.33	6.28	6.36	6.39
Natural Gas	6.05	6.30	8.21	7.22	6.49	6.13	5.73	5.46	5.20	5.17	5.28	5.19	5.13	5.17	5.22
Steam Coal 5/	1.69	1.70	1.87	1.95	1.93	1.91	1.87	1.88	1.83	1.80	1.79	1.76	1.75	1.74	1.72

Table 15. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

South Atlantic	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	10.57	12.25	15.06	15.45	14.71	14.35	13.86	13.43	13.50	13.49	13.47	13.43	13.49	13.65	13.67
Distillate Fuel	9.82	12.08	14.67	15.22	13.86	13.59	13.11	12.81	13.01	13.04	13.14	13.02	13.21	13.28	13.23
Jet Fuel	6.74	9.15	12.82	13.16	10.48	10.26	9.82	9.57	9.73	9.85	9.67	9.79	9.84	10.02	9.97
Liquefied Petroleum Gas	16.74	18.26	21.42	23.59	20.53	19.83	19.28	18.75	18.84	18.78	18.72	18.65	18.60	19.24	19.33
Motor Gasoline 8/	12.73	14.68	17.81	18.05	17.12	16.64	16.07	15.53	15.51	15.47	15.41	15.35	15.32	15.54	15.55
Residual Fuel	4.77	4.92	7.00	6.76	7.53	7.35	7.01	6.50	6.57	6.56	6.44	6.51	6.46	6.53	6.56
Natural Gas	7.92	8.50	10.34	9.50	8.74	8.39	8.05	7.72	7.45	7.38	7.43	7.30	7.21	7.21	7.22
Metallurgical Coal 5/	1.71	2.03	2.11	2.18	2.19	2.19	2.20	2.16	2.13	2.09	2.04	2.02	2.00	1.98	1.99
Other Coal 5/	1.71	1.73	1.89	1.98	1.95	1.93	1.90	1.90	1.85	1.83	1.81	1.79	1.78	1.76	1.75
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	23.86	23.17	22.14	21.36	21.33	20.88	20.79	20.70	20.67	20.94	20.94
Electricity	20.44	20.64	23.25	23.35	22.55	21.83	21.59	21.38	21.00	20.83	20.92	20.83	20.72	20.78	20.82
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	34.84	36.77	41.44	41.77	40.90	40.61	40.85	41.25	41.40	41.93	42.63	43.14	43.65	44.63	45.32
Commercial	22.58	23.83	28.28	28.59	28.20	28.18	28.58	28.99	29.27	29.92	30.87	31.50	32.12	33.07	33.97
Industrial	17.64	19.85	23.66	23.87	22.79	22.14	21.45	20.97	20.76	20.69	20.95	20.90	21.03	21.22	21.59
Transportation	56.31	67.20	83.55	86.20	82.66	82.49	81.71	81.18	83.17	84.68	86.14	87.25	89.04	91.63	93.32
Total Non-Renewable Expenditures	131.37	147.65	176.94	180.43	174.55	173.42	172.59	172.38	174.60	177.23	180.59	182.79	185.85	190.54	194.21
Transportation Renewable Expenditures	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02
Total Expenditures	131.38	147.65	176.95	180.44	174.56	173.43	172.60	172.39	174.61	177.24	180.60	182.80	185.86	190.56	194.23



Table 15. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

South Atlantic	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	13.82	13.98	14.19	14.28	14.39	14.51	14.60	14.69	14.79	14.90	15.03	15.04	15.19	0.8%
Distillate Fuel	13.37	13.51	13.61	13.68	13.74	13.91	14.00	14.08	14.25	14.39	14.60	14.39	14.60	0.7%
Jet Fuel	10.22	10.36	10.53	10.64	10.77	10.80	10.91	10.95	11.07	11.21	11.41	11.46	11.59	0.9%
Liquefied Petroleum Gas	19.83	20.13	20.56	20.89	21.18	21.40	21.65	21.90	22.07	22.31	22.55	22.73	22.99	0.9%
Motor Gasoline 8/	15.72	15.90	16.14	16.22	16.34	16.42	16.51	16.60	16.67	16.75	16.84	16.90	17.01	0.6%
Residual Fuel	6.60	6.63	6.81	6.83	6.86	6.93	7.09	7.16	7.19	7.26	7.28	7.31	7.47	1.6%
Natural Gas	7.36	7.46	7.50	7.65	7.77	7.85	7.99	8.13	8.22	8.35	8.43	8.53	8.70	0.1%
Metallurgical Coal 5/	2.00	2.02	2.04	2.06	2.08	2.08	2.09	2.10	2.11	2.12	2.11	2.10	2.11	0.2%
Other Coal 5/	1.73	1.72	1.72	1.72	1.73	1.73	1.74	1.74	1.75	1.76	1.77	1.78	1.79	0.1%
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol (E85) 11/	21.14	21.30	21.32	21.40	21.54	21.64	21.75	21.90	22.14	22.07	22.41	22.49	22.62	0.4%
Electricity	20.94	21.04	21.03	21.11	21.13	21.10	21.20	21.31	21.33	21.36	21.31	21.37	21.55	0.2%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	46.39	47.33	48.20	49.00	49.79	50.50	51.58	52.50	53.35	54.28	55.12	55.98	57.26	1.7%
Commercial	35.10	36.17	37.08	38.19	39.23	40.22	41.46	42.78	43.93	45.14	46.26	47.55	49.09	2.8%
Industrial	22.03	22.44	22.65	23.05	23.49	23.91	24.26	24.78	25.26	25.75	26.16	26.64	27.30	1.2%
Transportation	96.10	98.85	101.88	104.10	106.56	109.08	111.61	114.12	116.92	119.79	122.88	125.02	128.32	2.5%
Total Non-Renewable Expenditures	199.63	204.80	209.80	214.33	219.07	223.72	228.91	234.18	239.47	244.96	250.42	255.19	261.97	2.2%
Transportation Renewable Expenditures	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	7.5%
Total Expenditures	199.64	204.82	209.82	214.36	219.09	223.74	228.93	234.21	239.49	244.99	250.44	255.22	262.00	2.2%

Table 15. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
South Atlantic

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.





Table 16. Energy Prices by Sector and Source  
 (2004 dollars per million Btu, unless otherwise noted)  
 East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	10.73	12.32	15.16	15.57	14.50	14.07	13.59	13.20	13.26	13.23	13.23	13.16	13.22	13.35	13.37
Distillate Fuel	10.05	12.10	15.05	15.38	14.10	13.76	13.29	13.00	13.21	13.22	13.37	13.22	13.40	13.44	13.38
Jet Fuel	6.57	8.91	12.47	12.82	10.49	10.19	9.74	9.50	9.69	9.81	9.65	9.78	9.84	10.04	9.99
Liquefied Petroleum Gas	14.68	15.66	18.54	20.55	18.03	17.38	16.86	16.36	16.41	16.36	16.23	16.06	16.08	16.69	16.77
Motor Gasoline 8/	13.10	15.11	18.32	18.57	17.42	16.87	16.30	15.76	15.75	15.68	15.62	15.55	15.53	15.75	15.76
Residual Fuel	4.17	4.16	5.84	5.54	6.65	6.48	6.11	5.65	5.72	5.67	5.59	5.64	5.59	5.64	5.70
Natural Gas	7.17	7.44	9.47	8.58	7.83	7.48	7.10	6.84	6.55	6.47	6.53	6.42	6.35	6.36	6.41
Metallurgical Coal 5/	1.83	2.19	2.28	2.34	2.35	2.35	2.37	2.34	2.28	2.22	2.18	2.14	2.11	2.10	2.11
Other Coal 5/	1.45	1.49	1.62	1.66	1.64	1.64	1.61	1.64	1.60	1.58	1.55	1.52	1.51	1.51	1.51
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	23.43	22.70	21.98	21.31	21.28	20.81	20.72	20.63	20.60	20.87	20.87
Electricity	16.77	17.12	19.54	19.48	19.21	18.63	18.44	18.30	18.02	17.85	17.96	17.90	17.82	17.90	17.97
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	10.44	10.88	12.81	12.71	12.48	12.23	12.14	12.14	12.08	12.10	12.20	12.21	12.24	12.41	12.50
Commercial	6.77	7.22	8.11	8.10	8.08	8.07	8.14	8.24	8.31	8.45	8.70	8.85	9.00	9.25	9.49
Industrial	11.05	11.89	14.85	15.09	14.48	14.05	13.67	13.41	13.28	13.25	13.42	13.40	13.48	13.64	13.88
Transportation	21.35	25.59	31.96	32.74	30.83	30.41	29.88	29.48	30.05	30.38	30.71	30.88	31.32	31.99	32.33
Total Non-Renewable Expenditures	49.61	55.58	67.72	68.64	65.87	64.76	63.82	63.27	63.73	64.18	65.02	65.34	66.05	67.28	68.20
Transportation Renewable Expenditures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Expenditures	49.61	55.58	67.73	68.65	65.88	64.76	63.83	63.28	63.73	64.18	65.03	65.34	66.05	67.28	68.20



Table 16. Energy Prices by Sector and Source  
 (2004 dollars per million Btu, unless otherwise noted)  
 East South Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	13.52	13.67	13.83	13.91	14.03	14.16	14.22	14.31	14.43	14.53	14.71	14.69	14.82	0.7%
Distillate Fuel	13.50	13.63	13.73	13.79	13.84	14.01	14.09	14.17	14.33	14.48	14.68	14.45	14.65	0.7%
Jet Fuel	10.26	10.40	10.58	10.70	10.84	10.87	10.99	11.03	11.16	11.30	11.51	11.57	11.70	1.1%
Liquefied Petroleum Gas	17.21	17.46	17.81	18.06	18.30	18.48	18.79	18.90	19.04	19.54	20.72	20.61	20.52	1.0%
Motor Gasoline 8/	15.93	16.12	16.34	16.42	16.54	16.63	16.72	16.81	16.90	16.96	17.07	17.13	17.24	0.5%
Residual Fuel	5.73	5.78	5.93	5.96	6.01	6.10	6.23	6.30	6.37	6.45	6.46	6.52	6.68	1.8%
Natural Gas	6.59	6.69	6.75	6.91	7.01	7.09	7.21	7.36	7.44	7.54	7.59	7.67	7.82	0.2%
Metallurgical Coal 5/	2.12	2.14	2.16	2.18	2.20	2.20	2.21	2.22	2.23	2.23	2.23	2.21	2.20	0.0%
Other Coal 5/	1.54	1.53	1.54	1.54	1.54	1.55	1.57	1.59	1.62	1.63	1.66	1.68	1.70	0.5%
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol (E85) 11/	21.07	21.29	21.30	21.38	21.52	21.62	21.73	21.88	22.13	22.04	22.40	22.48	22.61	0.4%
Electricity	18.08	18.13	18.12	18.17	18.18	18.14	18.23	18.31	18.32	18.36	18.33	18.38	18.52	0.3%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	12.68	12.80	12.92	13.02	13.11	13.17	13.35	13.46	13.57	13.71	13.87	13.96	14.14	1.0%
Commercial	9.78	10.02	10.24	10.51	10.76	10.99	11.31	11.63	11.91	12.22	12.50	12.82	13.21	2.4%
Industrial	14.20	14.45	14.60	14.85	15.13	15.39	15.65	15.98	16.30	16.63	16.95	17.26	17.66	1.5%
Transportation	33.05	33.74	34.47	34.95	35.50	36.08	36.64	37.18	37.85	38.49	39.25	39.58	40.35	1.8%
Total Non-Renewable Expenditures	69.70	71.02	72.23	73.33	74.50	75.64	76.94	78.25	79.63	81.05	82.58	83.62	85.37	1.7%
Transportation Renewable Expenditures	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.6%
Total Expenditures	69.71	71.03	72.24	73.33	74.51	75.65	76.95	78.26	79.63	81.06	82.58	83.62	85.37	1.7%

Table 16. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
East South Central

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 17. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
West South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Residential	19.58	20.51	26.83	24.68	20.16	19.53	19.25	19.05	18.71	18.62	18.90	18.77	18.57	18.50	18.55
Primary Energy 1/	9.73	10.80	12.52	11.94	11.32	11.00	10.69	10.46	10.24	10.17	10.24	10.14	10.08	10.15	10.22
Petroleum Products 2/	14.42	16.59	18.89	20.47	19.92	19.18	18.58	18.02	18.06	18.03	17.87	17.71	17.73	18.42	18.51
Distillate Fuel	7.66	10.60	11.13	12.12	11.89	11.57	11.05	10.69	10.62	10.81	10.39	10.54	10.59	10.90	10.85
Liquefied Petroleum Gas	14.56	16.80	19.12	20.76	20.14	19.39	18.78	18.21	18.25	18.21	18.06	17.89	17.91	18.60	18.69
Natural Gas	9.35	10.28	11.96	11.21	10.59	10.30	10.00	9.80	9.55	9.48	9.56	9.46	9.39	9.40	9.46
Electricity	25.96	26.53	35.53	32.56	25.51	24.60	24.29	24.07	23.64	23.51	23.88	23.72	23.41	23.25	23.25
Commercial	16.56	17.01	19.01	19.16	18.11	17.66	17.35	17.10	16.68	16.49	16.75	16.61	16.44	16.38	16.37
Primary Energy 1/	7.93	8.86	10.23	9.67	9.03	8.75	8.45	8.26	8.04	7.97	8.01	7.91	7.84	7.88	7.92
Petroleum Products 2/	9.17	11.25	12.55	13.52	12.66	12.20	11.70	11.36	11.46	11.47	11.34	11.29	11.36	11.60	11.60
Distillate Fuel	6.50	8.97	9.43	10.27	10.36	10.04	9.60	9.37	9.54	9.59	9.45	9.46	9.58	9.75	9.71
Residual Fuel	4.20	5.23	7.76	7.79	7.18	7.01	6.69	6.02	6.21	6.22	6.00	6.17	6.09	6.19	6.18
Natural Gas	7.73	8.41	9.79	9.03	8.40	8.16	7.90	7.74	7.47	7.41	7.48	7.37	7.29	7.30	7.35
Electricity	22.43	22.09	24.33	24.74	23.40	22.81	22.48	22.15	21.60	21.32	21.68	21.50	21.25	21.09	21.02
Industrial 3/	8.34	9.20	11.76	12.04	9.36	8.90	8.50	8.17	8.05	8.01	8.03	7.94	7.91	8.08	8.15
Primary Energy	7.78	8.65	11.17	11.47	8.72	8.30	7.91	7.60	7.52	7.50	7.49	7.41	7.39	7.58	7.65
Petroleum Products 2/	10.06	11.29	13.92	15.34	10.94	10.56	10.20	9.89	9.94	9.91	9.84	9.75	9.79	10.05	10.13
Distillate Fuel	7.00	9.67	10.16	11.07	10.96	10.73	10.25	10.15	10.65	10.63	10.67	10.58	10.77	10.86	10.83
Liquefied Petroleum Gas	12.50	14.17	17.51	19.75	12.98	12.49	12.10	11.72	11.77	11.73	11.63	11.49	11.51	11.98	12.07
Residual Fuel	4.23	5.28	7.84	7.85	7.33	7.16	6.84	6.17	6.36	6.37	6.15	6.32	6.24	6.34	6.33
Natural Gas 4/	5.08	5.52	7.85	6.82	6.00	5.59	5.17	4.87	4.61	4.55	4.63	4.53	4.44	4.47	4.52
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Industrial Coal 5/	1.31	1.48	1.47	1.48	1.48	1.47	1.50	1.51	1.50	1.49	1.49	1.48	1.50	1.52	1.52
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	15.58	16.33	19.18	19.30	17.82	17.02	16.48	15.91	15.15	14.98	15.26	15.11	14.87	14.75	14.72
Transportation	10.40	12.27	15.39	15.67	14.79	14.33	13.82	13.39	13.43	13.44	13.42	13.37	13.42	13.57	13.55
Primary Energy	10.38	12.25	15.37	15.65	14.77	14.32	13.80	13.37	13.42	13.43	13.40	13.35	13.41	13.56	13.54
Petroleum Products 2/	10.38	12.25	15.37	15.66	14.78	14.32	13.81	13.38	13.42	13.43	13.41	13.36	13.41	13.57	13.55
Distillate Fuel 6/	10.75	12.67	16.25	16.41	14.61	14.19	13.73	13.45	13.65	13.57	13.65	13.48	13.67	13.69	13.63
Jet Fuel 7/	6.17	8.38	11.73	12.04	10.16	9.86	9.43	9.18	9.36	9.48	9.31	9.44	9.50	9.69	9.65
Motor Gasoline 8/	12.44	14.37	17.44	17.66	17.64	17.06	16.47	15.91	15.88	15.84	15.78	15.71	15.69	15.90	15.92
Residual Fuel	4.52	4.83	5.25	6.90	7.83	7.44	7.04	6.64	6.61	6.58	6.55	6.51	6.48	6.55	6.61
Liquefied Petroleum Gas 9/	15.84	15.84	17.90	19.45	16.60	16.06	15.62	15.19	15.21	15.14	15.00	14.83	14.82	15.28	15.33
Natural Gas 10/	9.25	10.05	12.47	11.58	10.86	10.53	10.17	9.90	9.66	9.60	9.69	9.59	9.51	9.52	9.57
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	23.88	23.16	22.13	21.35	21.32	20.87	20.78	20.69	20.66	20.92	20.93
Electricity	19.08	19.39	21.07	21.51	20.92	20.28	20.08	19.97	19.63	19.54	19.92	19.81	19.58	19.50	19.52
Average End-Use Energy	10.33	11.43	14.48	14.55	12.36	11.92	11.52	11.20	11.11	11.10	11.16	11.09	11.08	11.23	11.27
Primary Energy	8.74	9.96	12.67	12.91	10.92	10.51	10.10	9.78	9.76	9.76	9.76	9.71	9.72	9.90	9.95
Electricity	21.53	21.85	26.84	25.91	22.44	21.70	21.35	21.02	20.47	20.30	20.64	20.49	20.23	20.09	20.06
Electric Power 12/															
Fossil Fuel Average	3.29	3.35	4.06	3.68	3.34	3.19	2.98	2.89	2.84	2.87	2.97	2.95	2.94	2.95	2.98
Petroleum Products	6.27	5.85	9.00	10.08	9.58	9.31	8.90	8.58	8.54	8.81	8.42	8.56	8.59	8.84	8.81
Distillate Fuel	6.59	9.11	9.57	10.43	9.86	9.58	9.14	8.83	8.80	8.94	8.58	8.73	8.76	9.03	8.98
Residual Fuel	5.34	5.18	7.57	7.10	7.64	7.37	7.04	6.55	6.62	6.61	6.49	6.55	6.50	6.58	6.61
Natural Gas	5.67	5.88	7.75	6.77	6.00	5.64	5.25	4.97	4.75	4.71	4.82	4.72	4.65	4.67	4.74
Steam Coal 5/	1.25	1.31	1.47	1.50	1.46	1.42	1.40	1.40	1.40	1.39	1.39	1.39	1.40	1.41	1.41

Table 17. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
West South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	10.39	11.93	14.84	15.68	13.12	12.72	12.30	11.95	12.01	12.01	11.97	11.91	11.97	12.18	12.21
Distillate Fuel	9.92	12.07	14.97	15.34	13.79	13.45	13.00	12.73	12.94	12.96	13.10	12.96	13.13	13.17	13.12
Jet Fuel	6.17	8.38	11.73	12.04	10.16	9.86	9.43	9.18	9.36	9.48	9.31	9.44	9.50	9.69	9.65
Liquefied Petroleum Gas	12.56	14.23	17.54	19.76	13.13	12.64	12.25	11.87	11.92	11.89	11.79	11.65	11.67	12.15	12.24
Motor Gasoline 8/	12.44	14.36	17.43	17.66	17.64	17.06	16.47	15.91	15.88	15.84	15.78	15.71	15.69	15.90	15.92
Residual Fuel	4.56	4.93	5.54	6.96	7.80	7.42	7.03	6.61	6.59	6.56	6.52	6.50	6.47	6.53	6.59
Natural Gas	5.70	6.08	8.21	7.22	6.44	6.06	5.67	5.39	5.13	5.08	5.17	5.07	4.99	5.02	5.08
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Coal 5/	1.25	1.31	1.47	1.50	1.46	1.42	1.40	1.40	1.40	1.39	1.39	1.40	1.40	1.41	1.41
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	23.88	23.16	22.13	21.35	21.32	20.87	20.78	20.69	20.66	20.92	20.93
Electricity	21.53	21.85	26.84	25.91	22.44	21.70	21.35	21.02	20.47	20.30	20.64	20.49	20.23	20.09	20.06
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	20.55	21.37	28.59	26.67	22.28	22.19	22.27	22.41	22.35	22.62	23.20	23.35	23.44	23.75	24.07
Commercial	14.25	14.56	16.67	16.66	16.10	16.09	16.17	16.27	16.23	16.40	16.97	17.14	17.29	17.56	17.88
Industrial	50.90	58.40	72.77	75.33	59.77	57.21	54.72	52.70	52.04	52.01	52.43	51.98	52.00	53.13	53.97
Transportation	42.84	52.10	65.97	68.43	66.22	65.57	64.71	64.28	66.02	67.27	68.28	69.13	70.52	72.46	73.62
Total Non-Renewable Expenditures	128.54	146.42	183.99	187.08	164.36	161.07	157.87	155.66	156.64	158.29	160.87	161.60	163.25	166.89	169.54
Transportation Renewable Expenditures	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Expenditures	128.54	146.42	183.99	187.09	164.37	161.07	157.88	155.66	156.65	158.30	160.88	161.61	163.26	166.90	169.55





Table 17. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
West South Central

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	12.42	12.58	12.76	12.89	13.03	13.15	13.29	13.36	13.48	13.65	13.98	13.98	14.06	0.6%
Distillate Fuel	13.24	13.38	13.47	13.53	13.59	13.76	13.84	13.91	14.07	14.22	14.42	14.20	14.40	0.7%
Jet Fuel	9.91	10.05	10.22	10.34	10.48	10.51	10.62	10.66	10.79	10.92	11.13	11.18	11.31	1.2%
Liquefied Petroleum Gas	12.63	12.85	13.07	13.32	13.56	13.67	13.97	14.04	14.15	14.55	15.39	15.38	15.33	0.3%
Motor Gasoline 8/	16.08	16.26	16.49	16.57	16.69	16.78	16.87	16.97	17.05	17.12	17.23	17.30	17.41	0.7%
Residual Fuel	6.65	6.71	6.79	6.88	6.96	7.06	7.16	7.25	7.31	7.38	7.43	7.49	7.62	1.7%
Natural Gas	5.26	5.36	5.40	5.54	5.63	5.69	5.81	5.94	6.02	6.12	6.17	6.24	6.38	0.2%
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Coal 5/	1.42	1.42	1.42	1.43	1.44	1.44	1.45	1.45	1.46	1.48	1.48	1.49	1.49	0.5%
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol (E85) 11/	21.13	21.34	21.35	21.43	21.58	21.67	21.78	21.93	22.18	22.10	22.45	22.54	22.66	0.4%
Electricity	20.14	20.44	20.45	20.70	20.87	20.94	21.16	21.51	21.66	21.84	21.83	21.79	22.34	0.1%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	24.56	25.18	25.56	26.09	26.57	26.99	27.65	28.31	28.83	29.43	29.92	30.25	31.22	1.5%
Commercial	18.33	18.93	19.29	19.88	20.40	20.81	21.42	22.13	22.74	23.34	23.84	24.28	25.34	2.2%
Industrial	55.85	57.21	58.21	59.77	61.21	62.35	64.02	65.50	66.88	68.90	71.37	72.30	73.79	0.9%
Transportation	75.80	77.86	79.94	81.56	83.36	85.18	87.05	88.85	91.02	93.18	95.72	97.22	99.83	2.5%
Total Non-Renewable Expenditures	174.54	179.19	183.01	187.30	191.53	195.33	200.13	204.79	209.47	214.86	220.85	224.06	230.17	1.8%
Transportation Renewable Expenditures	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	7.3%
Total Expenditures	174.55	179.20	183.02	187.32	191.55	195.34	200.14	204.80	209.48	214.87	220.87	224.07	230.19	1.8%

Table 17. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
West South Central

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 18. Energy Prices by Sector and Source  
 (2004 dollars per million Btu, unless otherwise noted)  
 Mountain

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	11.18	13.12	16.07	16.48	16.83	16.96	16.49	15.39	15.73	15.43	15.40	15.22	15.67	15.47	15.79
Distillate Fuel	10.71	12.98	16.00	16.44	15.57	15.95	15.53	14.52	15.10	14.86	14.91	14.69	15.26	14.89	15.17
Jet Fuel	7.27	9.85	13.82	14.19	11.92	12.22	11.85	10.76	11.12	10.86	10.71	10.80	11.26	11.02	11.28
Liquefied Petroleum Gas	13.49	14.89	17.30	19.02	17.02	16.38	15.91	15.44	15.45	15.41	15.21	15.20	15.21	15.81	15.89
Motor Gasoline 8/	12.80	14.75	17.90	18.14	19.89	20.00	19.43	18.06	18.36	17.98	17.90	17.67	18.11	17.96	18.34
Residual Fuel	5.34	5.50	8.06	7.69	7.76	7.49	7.15	6.77	6.87	6.86	6.73	6.72	6.81	6.81	6.89
Natural Gas	6.14	6.83	8.73	8.63	8.09	7.81	7.34	7.02	6.85	6.80	6.86	6.80	6.30	6.01	6.12
Metallurgical Coal 5/	1.71	2.00	1.91	1.90	1.87	1.92	1.94	1.94	1.94	1.94	1.94	1.94	1.95	1.96	1.97
Other Coal 5/	1.07	1.08	1.17	1.19	1.17	1.16	1.16	1.14	1.13	1.12	1.12	1.11	1.11	1.12	1.13
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.77	0.77	0.76	0.76	0.75	0.75
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	24.16	23.65	22.63	21.59	21.68	21.11	21.01	20.85	20.97	21.13	21.25
Electricity	20.26	20.18	22.38	22.75	21.73	21.25	20.64	20.17	19.81	19.72	19.91	19.92	19.73	19.34	19.45
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	10.00	10.82	12.37	12.90	12.57	12.61	12.52	12.58	12.73	13.01	13.34	13.58	13.58	13.67	14.03
Commercial	7.60	7.94	9.20	9.42	9.23	9.30	9.23	9.21	9.27	9.45	9.76	9.99	10.10	10.12	10.46
Industrial	6.84	7.48	8.74	9.19	9.04	8.95	8.64	8.35	8.38	8.34	8.47	8.48	8.49	8.39	8.64
Transportation	21.32	25.65	32.21	33.34	34.96	36.04	35.89	34.33	35.92	36.00	36.64	36.95	38.73	38.97	40.53
Total Non-Renewable Expenditures	45.77	51.88	62.53	64.84	65.80	66.89	66.28	64.47	66.30	66.80	68.22	69.00	70.90	71.14	73.66
Transportation Renewable Expenditures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Total Expenditures	45.77	51.88	62.53	64.84	65.80	66.90	66.29	64.47	66.31	66.81	68.22	69.00	70.91	71.15	73.67

Table 18. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Mountain

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Residential</b>	15.09	15.51	15.65	15.86	15.95	16.00	16.21	16.39	16.48	16.65	16.89	16.96	17.20	0.4%
Primary Energy 1/	9.43	9.71	9.81	9.97	10.07	10.16	10.31	10.45	10.57	10.72	10.94	11.03	11.23	0.6%
Petroleum Products 2/	17.22	17.49	17.91	18.29	18.64	18.81	19.11	19.21	19.39	19.92	21.20	21.11	21.05	1.2%
Distillate Fuel	12.62	12.55	12.77	12.85	12.93	12.97	12.91	12.92	13.07	13.02	13.09	13.04	13.08	0.1%
Liquefied Petroleum Gas	17.88	18.17	18.58	18.98	19.34	19.48	19.80	19.87	20.03	20.58	21.93	21.80	21.71	1.1%
Natural Gas	8.49	8.78	8.84	8.98	9.06	9.15	9.28	9.43	9.54	9.65	9.76	9.87	10.11	0.5%
Electricity	23.01	23.58	23.75	23.99	24.01	23.97	24.22	24.41	24.41	24.55	24.76	24.76	24.99	0.1%
<b>Commercial</b>	14.45	14.89	15.07	15.30	15.36	15.35	15.64	15.81	15.88	16.13	16.38	16.46	16.74	0.5%
Primary Energy 1/	7.36	7.59	7.65	7.76	7.82	7.88	7.98	8.08	8.17	8.26	8.36	8.44	8.63	0.4%
Petroleum Products 2/	12.77	12.81	12.96	13.16	13.24	13.35	13.35	13.35	13.52	13.64	13.94	13.92	13.98	0.8%
Distillate Fuel	11.13	11.11	11.21	11.37	11.38	11.49	11.43	11.43	11.61	11.65	11.73	11.71	11.82	0.6%
Residual Fuel	6.36	6.42	6.65	6.67	6.64	6.69	6.76	6.77	6.97	7.05	6.81	6.83	6.95	1.2%
Natural Gas	6.95	7.21	7.26	7.37	7.43	7.50	7.61	7.73	7.82	7.90	7.99	8.08	8.30	0.3%
Electricity	19.73	20.25	20.47	20.73	20.73	20.63	20.99	21.16	21.16	21.47	21.78	21.82	22.10	0.3%
<b>Industrial 3/</b>	8.54	8.69	8.61	8.63	8.58	8.63	8.57	8.56	8.55	8.60	8.66	8.63	8.92	0.0%
Primary Energy	6.85	6.92	6.80	6.82	6.79	6.87	6.78	6.75	6.76	6.81	6.87	6.83	7.12	0.0%
Petroleum Products 2/	10.69	10.84	10.79	10.97	11.12	11.40	11.19	11.20	11.34	11.45	11.62	11.51	12.00	1.0%
Distillate Fuel	12.29	12.29	12.33	12.57	12.57	12.75	12.67	12.66	12.86	12.94	13.11	13.07	13.25	0.8%
Liquefied Petroleum Gas	12.80	13.03	13.27	13.54	13.79	13.90	14.14	14.14	14.26	14.67	15.57	15.55	15.49	0.9%
Residual Fuel	6.77	6.82	7.05	7.07	7.04	7.09	7.16	7.17	7.37	7.45	7.21	7.23	7.36	1.0%
Natural Gas 4/	4.90	5.17	5.23	5.36	5.43	5.50	5.61	5.73	5.83	5.92	6.02	6.12	6.34	0.3%
Metallurgical Coal 5/	1.98	2.00	2.00	2.02	2.03	2.04	2.06	2.07	2.08	2.09	2.10	2.12	2.14	0.3%
Other Industrial Coal 5/	1.58	1.59	1.60	1.61	1.64	1.65	1.67	1.69	1.70	1.71	1.71	1.72	1.72	0.5%
Coal to Liquids	0.76	0.77	0.77	0.77	0.78	0.79	0.80	0.80	0.81	0.82	0.82	0.83	0.83	N/A
Electricity	14.60	15.11	15.28	15.47	15.47	15.40	15.52	15.65	15.60	15.67	15.83	15.81	16.02	0.3%
<b>Transportation</b>	16.72	16.70	16.80	17.07	17.10	17.21	17.11	17.06	17.26	17.28	17.46	17.53	17.65	0.9%
Primary Energy	16.71	16.69	16.79	17.07	17.09	17.20	17.10	17.05	17.25	17.27	17.45	17.52	17.64	0.9%
Petroleum Products 2/	16.74	16.72	16.82	17.10	17.12	17.24	17.13	17.08	17.28	17.31	17.49	17.55	17.68	0.9%
Distillate Fuel 6/	15.92	15.90	15.88	16.12	16.08	16.27	16.16	16.12	16.31	16.37	16.58	16.50	16.69	0.8%
Jet Fuel 7/	11.31	11.23	11.35	11.61	11.64	11.68	11.55	11.47	11.64	11.71	11.94	12.02	12.12	0.8%
Motor Gasoline 8/	18.32	18.31	18.44	18.74	18.78	18.87	18.77	18.70	18.90	18.89	19.05	19.19	19.29	1.0%
Residual Fuel	3.85	3.87	3.89	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	4.87	1.2%
Liquefied Petroleum Gas 9/	16.65	16.86	17.11	17.38	17.63	17.72	17.96	17.95	18.05	18.48	19.46	19.39	19.31	0.6%
Natural Gas 10/	8.27	8.55	8.62	8.74	8.81	8.88	8.99	9.11	9.19	9.28	9.36	9.45	9.67	0.9%
Ethanol (E85) 11/	21.39	21.54	21.52	21.68	21.80	21.90	21.93	22.02	22.32	22.21	22.59	22.70	22.82	0.5%
Electricity	19.00	19.55	19.76	19.95	19.95	19.89	20.10	20.24	20.19	20.27	20.45	20.42	20.63	0.2%
<b>Average End-Use Energy</b>	14.22	14.37	14.43	14.62	14.62	14.69	14.70	14.73	14.82	14.91	15.07	15.12	15.34	0.6%
Primary Energy	12.82	12.88	12.91	13.08	13.08	13.18	13.12	13.10	13.23	13.28	13.42	13.47	13.67	0.7%
Electricity	19.63	20.17	20.38	20.62	20.62	20.56	20.83	21.00	20.98	21.18	21.42	21.43	21.68	0.3%
<b>Electric Power 12/</b>	1.98	2.00	1.96	1.93	1.89	1.86	1.85	1.86	1.85	1.85	1.85	1.85	1.85	-0.1%
Fossil Fuel Average	9.43	9.44	9.67	9.75	9.86	9.95	9.95	10.02	10.21	10.24	10.24	10.26	10.32	0.8%
Petroleum Products	10.41	10.35	10.55	10.60	10.65	10.67	10.63	10.64	10.79	10.78	10.77	10.76	10.80	0.1%
Distillate Fuel	6.95	7.00	7.10	7.11	7.21	7.30	7.28	7.32	7.48	7.55	7.43	7.49	7.61	1.3%
Residual Fuel	5.18	5.45	5.47	5.58	5.63	5.68	5.79	5.89	5.96	6.03	6.12	6.22	6.44	0.6%
Natural Gas	1.15	1.16	1.19	1.20	1.22	1.25	1.28	1.31	1.35	1.37	1.39	1.40	1.41	1.1%
Steam Coal 5/														

Table 18. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

Mountain	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	15.78	15.79	15.87	16.14	16.18	16.33	16.22	16.18	16.37	16.42	16.61	16.65	16.82	1.0%
Distillate Fuel	15.10	15.08	15.09	15.32	15.29	15.46	15.36	15.33	15.52	15.58	15.76	15.70	15.89	0.8%
Jet Fuel	11.31	11.23	11.35	11.61	11.64	11.68	11.55	11.47	11.64	11.71	11.94	12.02	12.12	0.8%
Liquefied Petroleum Gas	16.36	16.47	16.86	17.14	17.31	17.37	17.80	17.89	18.11	18.49	19.60	19.97	19.20	1.0%
Motor Gasoline 8/	18.32	18.31	18.44	18.74	18.78	18.87	18.77	18.70	18.90	18.89	19.05	19.19	19.29	1.0%
Residual Fuel	6.85	6.93	7.07	7.09	7.12	7.20	7.22	7.24	7.42	7.50	7.32	7.35	7.47	1.2%
Natural Gas	6.31	6.61	6.70	6.85	6.97	7.08	7.24	7.39	7.51	7.63	7.75	7.87	8.10	0.7%
Metallurgical Coal 5/	1.98	2.00	2.00	2.02	2.03	2.04	2.06	2.07	2.08	2.09	2.10	2.12	2.14	0.3%
Other Coal 5/	1.16	1.17	1.20	1.21	1.23	1.27	1.29	1.32	1.36	1.38	1.40	1.41	1.41	1.1%
Coal to Liquids	0.76	0.77	0.77	0.77	0.78	0.79	0.80	0.80	0.81	0.82	0.82	0.83	0.83	N/A
Ethanol (E85) 11/	21.39	21.54	21.52	21.68	21.80	21.90	21.93	22.02	22.32	22.21	22.59	22.70	22.82	0.5%
Electricity	19.63	20.17	20.38	20.62	20.62	20.56	20.83	21.00	20.98	21.18	21.42	21.43	21.68	0.3%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	14.50	15.15	15.58	15.99	16.33	16.64	17.17	17.58	17.95	18.41	18.99	19.30	19.85	2.4%
Commercial	10.85	11.40	11.79	12.23	12.56	12.86	13.40	13.86	14.24	14.80	15.37	15.82	16.43	2.8%
Industrial	8.80	9.16	9.30	9.54	9.71	9.94	10.08	10.31	10.55	10.81	11.11	11.27	11.78	1.8%
Transportation	41.29	42.06	43.10	44.59	45.45	46.61	47.23	48.01	49.50	50.56	52.07	53.28	54.70	3.0%
Total Non-Renewable Expenditures	75.44	77.76	79.77	82.34	84.06	86.05	87.87	89.77	92.25	94.58	97.54	99.67	102.75	2.7%
Transportation Renewable Expenditures	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	7.6%
Total Expenditures	75.44	77.77	79.78	82.35	84.06	86.05	87.88	89.78	92.26	94.59	97.55	99.68	102.76	2.7%

Table 18. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Mountain

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 19. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Residential	17.44	18.16	19.67	19.75	18.83	18.17	17.79	17.52	17.26	17.06	17.11	17.04	16.59	16.36	16.30
Primary Energy 1/	9.24	10.10	12.29	12.26	11.26	11.08	10.75	10.57	10.55	10.45	10.59	10.52	10.02	9.72	9.62
Petroleum Products 2/	13.60	16.69	18.33	19.99	11.57	11.68	12.45	13.72	14.79	14.29	15.25	15.00	13.50	10.57	9.01
Distillate Fuel	10.06	13.89	14.61	15.90	14.62	14.18	13.63	13.38	13.48	13.60	13.35	13.35	13.63	13.66	13.71
Liquefied Petroleum Gas	17.96	20.70	23.56	25.60	8.92	9.75	11.75	14.35	16.26	15.20	17.12	16.62	13.73	8.79	6.41
Natural Gas	8.92	9.57	11.80	11.66	11.25	11.04	10.62	10.33	10.22	10.16	10.24	10.18	9.75	9.66	9.68
Electricity	29.95	30.28	30.91	31.08	30.17	28.74	28.22	27.78	27.10	26.69	26.54	26.39	25.98	25.84	25.80
Commercial	20.95	20.52	21.56	21.68	20.89	20.25	19.79	19.44	18.96	18.69	18.64	18.51	18.08	17.91	17.85
Primary Energy 1/	7.89	8.59	10.60	10.50	9.86	9.76	9.43	9.23	9.16	9.08	9.13	9.05	8.66	8.51	8.49
Petroleum Products 2/	9.20	11.73	13.04	14.03	11.59	11.84	11.65	11.62	11.96	11.86	12.02	11.93	11.83	11.31	11.16
Distillate Fuel	7.42	10.27	10.79	11.74	11.37	11.26	10.91	10.78	10.97	11.07	11.06	11.05	11.14	11.14	11.19
Residual Fuel	4.89	6.10	9.06	9.08	7.49	7.31	6.68	6.76	6.89	6.92	6.73	6.73	6.95	6.90	6.95
Natural Gas	7.81	8.23	10.40	10.14	9.73	9.59	9.24	9.00	8.89	8.80	8.84	8.76	8.33	8.23	8.23
Electricity	31.07	29.34	29.59	29.52	28.44	27.23	26.60	26.09	25.30	24.85	24.67	24.46	24.00	23.80	23.69
Industrial 3/	9.07	9.46	10.69	11.01	10.05	9.87	9.55	9.47	9.48	9.31	9.46	9.37	9.02	8.63	8.49
Primary Energy	6.65	7.47	8.97	9.35	8.41	8.27	7.99	7.98	8.08	7.96	8.15	8.05	7.70	7.25	7.09
Petroleum Products 2/	7.90	9.11	10.10	11.13	9.58	9.59	9.46	9.76	10.03	9.86	10.10	9.98	9.76	9.05	8.69
Distillate Fuel	7.87	10.88	11.43	12.44	12.01	12.18	11.88	11.81	12.20	12.20	12.44	12.41	12.41	12.40	12.46
Liquefied Petroleum Gas	16.39	16.20	20.03	22.59	6.43	6.36	8.18	10.30	11.78	10.99	12.41	12.09	10.04	6.21	4.32
Residual Fuel	4.80	5.99	8.90	8.93	7.49	7.31	6.68	6.76	6.89	6.92	6.73	6.73	6.95	6.90	6.95
Natural Gas 4/	5.62	6.02	8.09	7.82	7.38	7.07	6.60	6.22	6.10	6.02	6.09	6.01	5.55	5.46	5.47
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Industrial Coal 5/	1.78	1.85	1.90	1.94	1.99	1.95	2.02	2.04	2.02	2.00	2.00	1.99	1.99	2.01	2.02
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	23.92	22.06	21.16	21.07	20.23	19.78	19.32	18.79	18.14	17.68	17.55	17.45	17.10	17.01	16.98
Transportation	12.49	14.61	18.16	18.52	16.47	16.81	16.28	15.54	15.73	15.61	15.58	15.36	15.55	15.42	15.61
Primary Energy	12.45	14.57	18.13	18.49	16.44	16.78	16.25	15.51	15.70	15.59	15.56	15.33	15.54	15.41	15.59
Petroleum Products 2/	12.45	14.58	18.14	18.50	16.45	16.79	16.26	15.52	15.72	15.60	15.57	15.35	15.55	15.42	15.61
Distillate Fuel 6/	12.24	14.41	18.50	18.67	15.92	16.02	15.75	15.61	15.80	15.75	16.04	15.97	15.89	15.85	15.88
Jet Fuel 7/	6.96	9.45	13.23	13.59	10.66	10.71	10.49	10.12	10.16	10.06	10.08	9.96	9.96	10.01	10.03
Motor Gasoline 8/	15.11	17.38	21.07	21.36	19.64	20.20	19.47	18.31	18.62	18.46	18.30	17.95	18.33	18.10	18.42
Residual Fuel	4.78	5.13	5.56	7.48	7.45	7.29	6.66	7.02	6.97	6.98	6.78	6.76	6.92	6.88	6.89
Liquefied Petroleum Gas 9/	16.78	16.78	22.07	23.98	8.69	8.65	10.44	12.56	14.03	13.19	14.61	14.24	12.12	8.20	6.25
Natural Gas 10/	6.75	8.04	10.21	10.06	9.65	9.49	9.08	8.80	8.74	8.74	8.86	8.84	8.43	8.37	8.41
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	22.42	22.24	21.41	20.68	20.75	20.30	20.20	20.05	20.09	20.12	20.13
Electricity	25.11	25.06	26.55	26.57	25.52	24.96	24.35	23.84	23.09	22.64	22.44	22.24	21.79	21.61	21.51
Average End-Use Energy	13.27	14.43	16.89	17.16	15.65	15.62	15.18	14.72	14.75	14.62	14.64	14.48	14.40	14.20	14.25
Primary Energy	10.38	11.98	14.83	15.14	13.54	13.69	13.27	12.81	12.97	12.88	12.93	12.77	12.74	12.52	12.59
Electricity	28.99	27.98	28.11	28.13	27.16	26.07	25.54	25.05	24.34	23.92	23.76	23.60	23.19	23.04	22.97
Electric Power 12/															
Fossil Fuel Average	4.57	4.79	7.23	6.73	6.41	6.27	5.73	5.52	5.40	5.48	5.58	5.57	5.31	5.23	5.22
Petroleum Products	6.03	6.18	8.50	8.15	8.37	8.18	7.61	7.76	7.80	7.82	7.64	7.62	7.80	7.76	7.78
Distillate Fuel	7.06	9.78	10.27	11.18	10.46	10.17	9.73	9.55	9.62	9.70	9.55	9.55	9.75	9.77	9.83
Residual Fuel	5.79	5.61	8.20	7.69	8.03	7.87	7.29	7.50	7.53	7.55	7.37	7.35	7.53	7.48	7.52
Natural Gas	5.16	5.39	8.48	7.94	7.44	7.21	6.61	6.27	6.10	6.14	6.26	6.21	5.79	5.69	5.67
Steam Coal 5/	1.82	1.62	1.78	1.81	1.81	1.79	1.78	1.79	1.78	1.77	1.76	1.75	1.75	1.74	1.74



Table 19. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	11.71	13.66	16.63	17.13	15.10	15.38	14.95	14.44	14.66	14.55	14.57	14.37	14.49	14.25	14.32
Distillate Fuel	11.17	13.57	16.65	17.13	14.90	15.03	14.76	14.62	14.83	14.84	15.16	15.09	15.06	15.03	15.08
Jet Fuel	6.96	9.45	13.23	13.59	10.66	10.71	10.49	10.12	10.16	10.06	10.08	9.96	9.96	10.01	10.03
Liquefied Petroleum Gas	16.99	18.07	21.65	23.96	7.30	7.52	9.38	11.60	13.16	12.26	13.82	13.39	11.10	6.98	4.96
Motor Gasoline 8/	15.11	17.38	21.07	21.36	19.64	20.20	19.47	18.31	18.62	18.46	18.30	17.95	18.33	18.10	18.42
Residual Fuel	4.91	5.21	6.31	7.57	7.61	7.46	6.84	7.15	7.13	7.16	6.96	6.95	7.12	7.07	7.10
Natural Gas	6.56	6.91	9.45	9.17	8.73	8.46	8.02	7.69	7.58	7.51	7.58	7.50	7.05	6.95	6.97
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Coal 5/	1.83	1.67	1.81	1.84	1.85	1.83	1.84	1.84	1.83	1.82	1.82	1.81	1.80	1.80	1.80
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	22.42	22.24	21.41	20.68	20.75	20.30	20.20	20.05	20.09	20.12	20.13
Electricity	28.99	27.98	28.11	28.13	27.16	26.07	25.54	25.05	24.34	23.92	23.76	23.60	23.19	23.04	22.97
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	20.42	21.38	23.71	24.16	23.22	22.81	22.61	22.58	22.53	22.59	22.83	22.97	22.67	22.71	22.85
Commercial	20.29	19.79	21.05	21.14	20.76	20.52	20.46	20.47	20.38	20.50	20.83	21.06	21.00	21.25	21.59
Industrial	15.12	16.10	17.79	18.47	17.30	17.14	16.73	16.59	16.63	16.36	16.63	16.61	16.17	15.86	15.83
Transportation	53.21	64.05	80.37	83.19	75.98	78.88	77.89	76.08	78.55	79.23	80.23	80.26	82.34	82.85	85.06
Total Non-Renewable Expenditures	109.03	121.32	142.92	146.95	137.26	139.35	137.70	135.73	138.09	138.69	140.53	140.90	142.18	142.68	145.33
Transportation Renewable Expenditures	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total Expenditures	109.04	121.32	142.93	146.96	137.27	139.36	137.71	135.73	138.10	138.70	140.54	140.91	142.19	142.69	145.35

Table 19. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Pacific

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Residential	16.40	16.69	16.72	16.91	17.01	16.92	17.08	17.28	17.36	17.41	17.55	17.68	17.92	-0.1%
Primary Energy 1/	9.76	10.04	10.00	10.25	10.40	10.47	10.68	10.86	10.96	11.01	11.14	11.26	11.51	0.5%
Petroleum Products 2/	9.21	10.15	10.15	12.27	13.50	13.41	14.76	15.40	15.55	14.92	15.52	15.82	15.51	-0.3%
Distillate Fuel	13.89	14.00	14.33	14.45	14.69	14.86	14.92	15.26	15.39	15.58	15.81	15.97	15.96	0.5%
Liquefied Petroleum Gas	6.82	8.32	8.23	11.43	13.19	13.00	14.97	15.76	15.92	14.95	15.71	16.06	15.64	-1.1%
Natural Gas	9.82	10.04	9.99	10.09	10.17	10.25	10.38	10.53	10.63	10.73	10.82	10.94	11.23	0.6%
Electricity	25.80	26.02	26.08	26.14	26.08	25.69	25.71	25.86	25.85	25.84	25.93	26.02	26.20	-0.6%
Commercial	17.91	18.08	18.09	18.17	18.16	17.93	18.04	18.23	18.25	18.25	18.36	18.47	18.77	-0.3%
Primary Energy 1/	8.63	8.77	8.74	8.84	8.89	8.95	9.06	9.19	9.27	9.33	9.41	9.50	10.03	0.6%
Petroleum Products 2/	11.57	11.47	11.70	12.09	12.25	12.31	12.55	12.92	13.07	13.07	13.21	13.35	13.42	0.5%
Distillate Fuel	11.61	11.22	11.58	11.68	11.71	11.79	11.91	12.30	12.48	12.53	12.67	12.78	12.92	0.9%
Residual Fuel	6.87	7.03	7.16	7.22	7.36	7.45	7.58	7.70	7.88	8.13	8.04	8.20	8.28	1.2%
Natural Gas	8.34	8.52	8.45	8.52	8.56	8.62	8.72	8.83	8.90	8.97	9.05	9.13	9.73	0.6%
Electricity	23.63	23.76	23.75	23.77	23.68	23.23	23.28	23.46	23.39	23.32	23.40	23.48	23.57	-0.8%
Industrial 3/	8.65	8.80	8.86	9.13	9.27	9.31	9.45	9.68	9.78	9.80	9.92	10.08	10.24	0.3%
Primary Energy	7.27	7.40	7.45	7.76	7.92	8.03	8.18	8.42	8.54	8.56	8.68	8.85	9.01	0.7%
Petroleum Products 2/	8.88	9.01	9.16	9.69	9.93	10.08	10.30	10.65	10.81	10.77	10.94	11.18	11.23	0.8%
Distillate Fuel	13.10	12.34	12.81	12.92	12.84	12.90	13.09	13.66	13.89	13.84	13.98	14.05	14.32	1.1%
Liquefied Petroleum Gas	4.70	6.09	6.02	8.20	9.37	9.31	10.46	11.16	11.20	10.74	11.10	11.51	11.08	-1.4%
Residual Fuel	6.87	7.03	7.16	7.22	7.36	7.45	7.58	7.70	7.88	8.13	8.04	8.20	8.28	1.3%
Natural Gas 4/	5.60	5.81	5.74	5.83	5.88	5.95	6.06	6.18	6.25	6.34	6.42	6.51	6.81	0.5%
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Industrial Coal 5/	2.02	2.04	2.13	2.14	2.16	2.20	2.23	2.27	2.30	2.32	2.34	2.34	2.34	0.9%
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electricity	16.99	17.19	17.23	17.28	17.22	16.85	16.85	16.98	16.93	16.90	16.97	17.03	17.16	-1.0%
Transportation	15.80	15.58	15.84	16.03	16.10	16.18	16.26	16.53	16.67	16.70	16.82	16.93	17.03	0.6%
Primary Energy	15.78	15.56	15.82	16.01	16.08	16.17	16.25	16.52	16.66	16.69	16.80	16.91	17.02	0.6%
Petroleum Products 2/	15.80	15.58	15.84	16.03	16.10	16.19	16.27	16.54	16.67	16.70	16.82	16.93	17.04	0.6%
Distillate Fuel 6/	16.58	15.62	16.11	16.19	16.03	16.04	16.24	16.87	17.09	16.97	17.09	17.13	17.43	0.7%
Jet Fuel 7/	10.43	10.13	10.46	10.56	10.57	10.60	10.63	11.06	11.13	11.19	11.32	11.51	11.49	0.8%
Motor Gasoline 8/	18.38	18.37	18.53	18.76	18.89	18.98	19.03	19.12	19.22	19.25	19.35	19.43	19.51	0.4%
Residual Fuel	6.76	6.99	7.00	7.14	7.27	7.64	7.49	7.58	7.85	8.05	8.12	8.34	8.41	1.9%
Liquefied Petroleum Gas 9/	6.60	7.96	7.86	10.07	11.25	11.15	12.33	13.01	13.03	12.52	12.88	13.27	12.82	-1.0%
Natural Gas 10/	8.56	8.79	8.75	8.84	8.90	8.97	9.08	9.19	9.27	9.34	9.42	9.51	9.79	0.8%
Ethanol (E85) 11/	20.29	20.70	20.40	20.88	21.01	21.15	21.25	21.35	21.64	21.56	21.91	21.98	22.12	0.3%
Electricity	21.47	21.63	21.64	21.65	21.56	21.12	21.12	21.23	21.17	21.11	21.16	21.20	21.31	-0.6%
Average End-Use Energy	14.41	14.39	14.55	14.75	14.84	14.86	14.97	15.21	15.32	15.35	15.47	15.60	15.76	0.3%
Primary Energy	12.77	12.71	12.89	13.11	13.22	13.31	13.43	13.68	13.81	13.85	13.97	14.11	14.27	0.7%
Electricity	22.94	23.12	23.14	23.18	23.11	22.69	22.72	22.88	22.82	22.78	22.86	22.93	23.05	-0.7%
Electric Power 12/														
Fossil Fuel Average	5.28	5.46	5.25	5.19	5.19	5.24	5.28	5.34	5.39	5.45	5.49	5.58	5.77	0.7%
Petroleum Products	7.70	7.89	7.97	8.07	8.19	8.39	8.38	8.48	8.68	8.88	8.89	9.06	9.13	1.5%
Distillate Fuel	9.96	10.03	10.24	10.33	10.50	10.62	10.66	10.80	10.94	11.12	11.25	11.40	11.39	0.6%
Residual Fuel	7.41	7.60	7.66	7.75	7.88	8.10	8.08	8.18	8.39	8.60	8.59	8.77	8.84	1.8%
Natural Gas	5.78	5.99	5.85	5.91	5.95	5.98	6.06	6.14	6.21	6.28	6.34	6.43	6.71	0.8%
Steam Coal 5/	1.73	1.73	1.69	1.65	1.65	1.65	1.65	1.66	1.67	1.67	1.67	1.68	1.67	0.1%

Table 19. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Pacific

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	14.49	14.37	14.61	14.88	14.99	15.09	15.21	15.50	15.64	15.66	15.79	15.93	16.02	0.6%
Distillate Fuel	15.75	14.88	15.35	15.44	15.32	15.35	15.55	16.16	16.38	16.30	16.43	16.47	16.77	0.8%
Jet Fuel	10.43	10.13	10.46	10.56	10.57	10.60	10.63	11.06	11.13	11.19	11.32	11.51	11.49	0.8%
Liquefied Petroleum Gas	5.33	6.78	6.72	9.13	10.41	10.32	11.66	12.39	12.45	11.87	12.33	12.72	12.30	-1.5%
Motor Gasoline 8/	18.38	18.37	18.53	18.76	18.89	18.98	19.03	19.12	19.22	19.25	19.35	19.43	19.51	0.4%
Residual Fuel	6.98	7.19	7.22	7.35	7.48	7.80	7.70	7.80	8.04	8.25	8.29	8.50	8.57	1.9%
Natural Gas	7.11	7.30	7.24	7.33	7.40	7.47	7.58	7.70	7.80	7.89	7.98	8.07	8.41	0.8%
Metallurgical Coal 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Coal 5/	1.80	1.80	1.77	1.73	1.74	1.74	1.75	1.76	1.77	1.78	1.79	1.79	1.79	0.3%
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol (E85) 11/	20.29	20.70	20.40	20.88	21.01	21.15	21.25	21.35	21.64	21.56	21.91	21.98	22.12	0.3%
Electricity	22.94	23.12	23.14	23.18	23.11	22.69	22.72	22.88	22.82	22.78	22.86	22.93	23.05	-0.7%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	23.24	23.83	24.13	24.52	24.82	24.88	25.36	25.77	26.09	26.38	26.87	27.21	27.79	1.0%
Commercial	22.02	22.58	22.97	23.44	23.84	23.96	24.51	25.18	25.64	26.08	26.69	27.30	28.14	1.4%
Industrial	16.33	16.84	17.05	17.64	18.01	18.26	18.75	19.41	19.89	20.24	20.74	21.34	22.08	1.2%
Transportation	87.37	87.39	89.90	92.00	93.45	95.05	96.68	99.50	101.61	103.17	105.29	107.46	109.68	2.1%
Total Non-Renewable Expenditures	148.96	150.65	154.05	157.60	160.12	162.14	165.30	169.87	173.23	175.87	179.59	183.30	187.69	1.7%
Transportation Renewable Expenditures	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	7.1%
Total Expenditures	148.97	150.67	154.07	157.62	160.14	162.16	165.32	169.89	173.25	175.89	179.61	183.32	187.71	1.7%

Table 19. Energy Prices by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
Pacific

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 20. Energy by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
United States

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Residential	16.25	17.31	19.49	19.09	18.02	17.47	17.19	16.98	16.82	16.77	16.91	16.84	16.65	16.68	16.74
Primary Energy 1/	9.90	11.39	13.15	13.01	12.27	11.96	11.59	11.28	11.14	11.07	11.11	11.03	10.82	10.85	10.88
Petroleum Products 2/	11.61	14.63	15.95	17.44	16.07	15.63	15.19	14.77	14.84	14.89	14.78	14.78	14.72	15.05	15.02
Distillate Fuel	9.85	13.62	14.31	15.58	14.17	13.83	13.34	12.85	12.83	12.95	12.72	12.75	12.73	13.04	13.00
Liquefied Petroleum Gas	15.00	17.30	19.73	21.40	19.72	19.00	18.55	18.17	18.34	18.22	18.24	18.12	17.91	18.20	18.10
Natural Gas	9.43	10.40	12.30	11.75	11.21	10.94	10.60	10.33	10.14	10.05	10.13	10.04	9.80	9.77	9.83
Electricity	26.14	26.19	28.74	27.87	26.16	25.18	24.93	24.78	24.54	24.42	24.61	24.49	24.24	24.20	24.23
Commercial	15.95	16.56	18.43	18.29	17.47	16.97	16.58	16.27	15.98	15.87	16.04	15.98	15.80	15.83	15.88
Primary Energy 1/	8.11	9.20	10.68	10.40	9.76	9.53	9.20	8.96	8.81	8.72	8.75	8.64	8.45	8.44	8.46
Petroleum Products 2/	8.17	10.39	11.77	12.70	11.56	11.31	10.89	10.56	10.70	10.69	10.63	10.60	10.65	10.78	10.78
Distillate Fuel	7.24	9.99	10.49	11.43	11.11	10.85	10.43	10.15	10.35	10.37	10.30	10.27	10.39	10.52	10.50
Residual Fuel	5.11	6.37	9.47	9.49	7.06	6.79	6.48	6.14	6.14	6.12	6.07	6.07	6.04	6.10	6.14
Natural Gas	8.26	9.10	10.65	10.07	9.52	9.30	8.99	8.76	8.54	8.43	8.48	8.36	8.12	8.08	8.10
Electricity	23.90	23.52	25.49	25.20	24.09	23.24	22.73	22.31	21.87	21.70	21.93	21.85	21.66	21.67	21.70
Industrial 3/	8.03	8.67	10.60	10.79	9.47	9.12	8.74	8.48	8.35	8.26	8.31	8.23	8.15	8.17	8.22
Primary Energy	6.66	7.42	9.30	9.50	8.07	7.77	7.41	7.19	7.13	7.05	7.08	6.99	6.92	6.94	6.99
Petroleum Products 2/	8.60	9.65	11.57	12.67	10.29	10.00	9.64	9.46	9.54	9.48	9.49	9.40	9.44	9.47	9.53
Distillate Fuel	7.45	10.29	10.82	11.78	11.44	11.37	10.93	10.75	11.29	11.25	11.31	11.22	11.42	11.44	11.47
Liquefied Petroleum Gas	12.93	14.24	17.59	19.84	13.19	12.69	12.34	12.03	12.12	12.05	12.01	11.87	11.80	12.07	12.04
Residual Fuel	4.72	5.88	8.74	8.76	7.39	7.18	6.85	6.31	6.45	6.43	6.27	6.38	6.32	6.40	6.42
Natural Gas 4/	5.59	6.10	8.41	7.56	6.84	6.45	6.02	5.69	5.46	5.38	5.45	5.35	5.16	5.15	5.19
Metallurgical Coal 5/	1.90	2.24	2.30	2.36	2.37	2.38	2.39	2.36	2.32	2.28	2.24	2.21	2.19	2.18	2.19
Other Industrial Coal 5/	1.62	1.74	1.78	1.82	1.85	1.84	1.85	1.86	1.84	1.83	1.82	1.80	1.80	1.80	1.80
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.84	0.86	0.85	0.86	0.86	0.87
Electricity	15.49	15.54	17.57	17.72	17.18	16.65	16.16	15.65	15.15	14.97	15.16	15.10	14.95	14.98	15.03
Transportation	11.83	13.81	17.13	17.40	16.22	15.94	15.40	14.83	14.91	14.85	14.83	14.73	14.82	14.91	14.95
Primary Energy	11.80	13.79	17.12	17.38	16.21	15.92	15.39	14.82	14.89	14.83	14.81	14.71	14.80	14.89	14.94
Petroleum Products 2/	11.80	13.79	17.12	17.39	16.21	15.93	15.40	14.82	14.90	14.84	14.82	14.72	14.82	14.90	14.95
Distillate Fuel 6/	11.24	13.25	16.99	17.16	15.33	15.07	14.63	14.29	14.53	14.43	14.53	14.37	14.56	14.53	14.51
Jet Fuel 7/	6.65	9.02	12.64	12.97	10.54	10.39	10.01	9.67	9.82	9.86	9.75	9.79	9.87	9.99	9.99
Motor Gasoline 8/	13.31	15.34	18.60	18.85	18.16	17.83	17.22	16.52	16.56	16.47	16.39	16.27	16.34	16.46	16.55
Residual Fuel	4.63	4.91	5.33	6.92	7.26	7.02	6.53	6.43	6.40	6.38	6.29	6.27	6.31	6.33	6.38
Liquefied Petroleum Gas 9/	17.14	17.14	19.67	21.37	17.48	16.93	16.80	16.72	16.96	16.75	16.88	16.72	16.33	16.11	15.84
Natural Gas 10/	8.90	9.94	12.23	11.61	11.02	10.75	10.38	10.09	9.91	9.85	9.94	9.85	9.61	9.59	9.63
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	22.16	22.17	21.65	21.19	21.18	20.71	20.62	20.52	20.50	20.72	20.73
Electricity	21.74	21.67	22.98	23.36	21.93	21.23	20.95	20.76	20.50	20.41	20.61	20.51	20.25	20.25	20.27
Average End-Use Energy	11.82	13.00	15.57	15.65	14.45	14.10	13.69	13.32	13.26	13.20	13.26	13.18	13.16	13.21	13.27
Primary Energy	9.58	11.04	13.61	13.78	12.59	12.32	11.90	11.52	11.52	11.46	11.48	11.40	11.40	11.46	11.51
Electricity	22.28	22.19	24.44	24.07	22.92	22.14	21.76	21.43	21.06	20.92	21.14	21.07	20.87	20.89	20.93
Electric Power 12/															
Fossil Fuel Average	2.35	2.46	3.05	2.85	2.67	2.60	2.46	2.41	2.37	2.39	2.44	2.44	2.41	2.41	2.41
Petroleum Products	5.35	5.43	7.53	7.29	7.33	7.11	6.78	6.50	6.51	6.51	6.39	6.43	6.52	6.64	6.69
Distillate Fuel	6.65	9.23	9.71	10.61	10.06	9.80	9.38	9.04	9.04	9.16	8.85	8.98	9.02	9.23	9.23
Residual Fuel	4.90	4.76	6.98	6.55	6.57	6.35	5.99	5.70	5.72	5.71	5.65	5.67	5.72	5.78	5.83
Natural Gas	5.66	5.92	8.09	7.24	6.54	6.22	5.77	5.46	5.26	5.24	5.36	5.28	5.08	5.06	5.10
Steam Coal 5/	1.33	1.36	1.50	1.53	1.51	1.50	1.47	1.48	1.45	1.44	1.43	1.41	1.40	1.40	1.39

Table 20. Energy by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
United States

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Average Price to All Users 13/															
Petroleum Products 2/	10.86	12.61	15.47	16.01	14.59	14.32	13.86	13.41	13.50	13.45	13.44	13.36	13.45	13.54	13.60
Distillate Fuel	10.20	12.62	15.28	15.82	14.28	14.08	13.64	13.30	13.53	13.54	13.66	13.54	13.72	13.74	13.74
Jet Fuel	6.65	9.02	12.64	12.97	10.54	10.39	10.01	9.67	9.82	9.86	9.75	9.79	9.87	9.99	9.99
Liquefied Petroleum Gas	13.40	14.89	18.04	20.17	14.55	14.03	13.70	13.39	13.51	13.44	13.42	13.30	13.19	13.46	13.41
Motor Gasoline 8/	13.30	15.33	18.60	18.85	18.16	17.83	17.22	16.52	16.56	16.46	16.39	16.27	16.34	16.46	16.55
Residual Fuel	4.80	5.04	6.79	7.08	6.96	6.73	6.32	6.07	6.09	6.07	5.99	6.00	6.03	6.09	6.13
Natural Gas	6.98	7.52	9.60	8.88	8.21	7.89	7.49	7.19	6.96	6.87	6.93	6.83	6.60	6.58	6.63
Metallurgical Coal 5/	1.90	2.24	2.30	2.36	2.37	2.38	2.39	2.36	2.32	2.28	2.24	2.21	2.19	2.18	2.19
Other Coal 5/	1.35	1.39	1.52	1.55	1.54	1.52	1.50	1.51	1.48	1.47	1.45	1.44	1.43	1.42	1.42
Coal to Liquids	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.84	0.86	0.85	0.86	0.86	0.87
Ethanol (E85) 11/	16.71	20.24	22.36	22.59	22.16	22.17	21.65	21.19	21.18	20.71	20.62	20.52	20.50	20.72	20.73
Electricity	22.28	22.19	24.44	24.07	22.92	22.14	21.76	21.43	21.06	20.92	21.14	21.07	20.87	20.89	20.93
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)															
Residential	180.52	190.90	219.43	215.43	204.47	201.68	200.56	200.59	200.84	202.61	205.45	206.44	206.16	208.92	210.91
Commercial	131.57	135.07	153.80	150.46	146.46	145.31	144.94	145.01	145.35	147.22	151.31	153.21	154.28	157.31	160.54
Industrial	153.18	170.01	203.08	208.05	186.53	180.92	174.35	169.60	167.85	166.97	168.84	167.83	167.05	168.32	170.20
Transportation	312.29	374.67	468.51	482.26	459.99	460.09	453.40	445.81	456.51	461.61	467.28	470.25	479.43	488.43	496.71
Total Non-Renewable Expenditures	777.56	870.65	1044.82	1056.20	997.46	988.00	973.25	961.01	970.55	978.41	992.89	997.73	1006.92	1022.97	1038.37
Transportation Renewable Expenditures	0.02	0.02	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09
Total Expenditures	777.58	870.67	1044.85	1056.25	997.50	988.05	973.30	961.06	970.61	978.47	992.95	997.81	1007.00	1023.05	1038.45

Table 20. Energy by Sector and Source  
 (2004 dollars per million Btu, unless otherwise noted)  
 United States

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Residential</b>	16.94	17.15	17.19	17.36	17.48	17.54	17.70	17.89	17.97	18.10	18.20	18.30	18.51	0.3%
Primary Energy 1/	11.09	11.27	11.31	11.48	11.60	11.70	11.86	12.01	12.11	12.23	12.38	12.47	12.62	0.4%
Petroleum Products 2/	15.41	15.67	15.94	16.27	16.61	16.79	17.10	17.31	17.47	17.70	18.23	18.29	18.42	0.9%
Distillate Fuel	13.30	13.43	13.55	13.65	13.87	13.98	14.12	14.23	14.29	14.32	14.41	14.41	14.56	0.3%
Liquefied Petroleum Gas	18.57	18.95	19.34	19.90	20.32	20.52	20.96	21.19	21.37	21.72	22.65	22.68	22.68	1.0%
Natural Gas	9.99	10.16	10.16	10.30	10.39	10.48	10.61	10.76	10.86	10.97	11.05	11.15	11.32	0.3%
Electricity	24.34	24.50	24.44	24.55	24.57	24.51	24.61	24.76	24.75	24.80	24.76	24.80	25.02	-0.2%
<b>Commercial</b>	16.05	16.26	16.28	16.45	16.54	16.58	16.75	16.95	17.03	17.14	17.22	17.30	17.52	0.2%
Primary Energy 1/	8.61	8.73	8.74	8.84	8.92	8.99	9.10	9.21	9.29	9.37	9.45	9.50	9.65	0.2%
Petroleum Products 2/	10.97	11.07	11.22	11.31	11.44	11.59	11.71	11.78	11.91	12.01	12.20	12.17	12.28	0.6%
Distillate Fuel	10.69	10.75	10.89	10.91	11.02	11.20	11.29	11.33	11.50	11.58	11.71	11.62	11.77	0.6%
Residual Fuel	6.18	6.22	6.31	6.36	6.43	6.50	6.59	6.66	6.71	6.77	6.80	6.85	6.91	0.3%
Natural Gas	8.25	8.38	8.37	8.47	8.54	8.60	8.71	8.83	8.91	8.99	9.05	9.12	9.29	0.1%
Electricity	21.83	22.03	22.00	22.16	22.22	22.16	22.32	22.52	22.54	22.63	22.65	22.69	22.90	-0.1%
<b>Industrial 3/</b>	8.36	8.48	8.48	8.57	8.62	8.68	8.75	8.84	8.89	8.98	9.13	9.16	9.27	0.3%
Primary Energy	7.12	7.23	7.24	7.32	7.39	7.46	7.54	7.62	7.68	7.79	7.96	8.00	8.09	0.3%
Petroleum Products 2/	9.67	9.82	9.94	10.10	10.26	10.44	10.53	10.63	10.74	10.90	11.24	11.29	11.36	0.6%
Distillate Fuel	11.68	11.67	11.84	11.93	11.98	12.15	12.24	12.35	12.55	12.65	12.84	12.69	12.91	0.9%
Liquefied Petroleum Gas	12.40	12.70	12.92	13.25	13.51	13.62	13.95	14.06	14.16	14.51	15.31	15.32	15.25	0.3%
Residual Fuel	6.44	6.46	6.70	6.69	6.70	6.75	6.94	6.99	7.01	7.09	7.08	7.11	7.27	0.8%
Natural Gas 4/	5.36	5.49	5.49	5.62	5.69	5.76	5.87	5.99	6.07	6.16	6.22	6.29	6.45	0.2%
Metallurgical Coal 5/	2.19	2.21	2.23	2.25	2.26	2.26	2.27	2.28	2.29	2.29	2.29	2.28	2.28	0.1%
Other Industrial Coal 5/	1.80	1.80	1.81	1.82	1.82	1.83	1.85	1.86	1.87	1.88	1.90	1.91	1.92	0.4%
Coal to Liquids	0.87	0.88	1.04	1.12	1.15	1.18	1.21	1.22	1.23	1.24	1.25	1.26	1.26	N/A
Electricity	15.16	15.35	15.35	15.49	15.55	15.53	15.62	15.76	15.76	15.80	15.77	15.77	15.95	0.1%
<b>Transportation</b>	15.10	15.18	15.38	15.48	15.57	15.68	15.76	15.84	15.97	16.05	16.19	16.20	16.32	0.6%
Primary Energy	15.09	15.17	15.36	15.47	15.56	15.67	15.74	15.83	15.96	16.04	16.18	16.18	16.31	0.6%
Petroleum Products 2/	15.10	15.18	15.38	15.48	15.57	15.68	15.76	15.84	15.97	16.05	16.19	16.20	16.32	0.7%
Distillate Fuel 6/	14.67	14.66	14.78	14.83	14.84	15.02	15.09	15.15	15.35	15.46	15.65	15.44	15.65	0.6%
Jet Fuel 7/	10.26	10.26	10.49	10.60	10.69	10.73	10.79	10.92	11.04	11.15	11.35	11.44	11.53	0.9%
Motor Gasoline 8/	16.67	16.80	17.02	17.14	17.25	17.34	17.41	17.49	17.58	17.64	17.74	17.82	17.92	0.6%
Residual Fuel	6.37	6.49	6.54	6.65	6.75	6.95	6.95	7.05	7.19	7.30	7.37	7.49	7.59	1.7%
Liquefied Petroleum Gas 9/	16.23	16.62	16.82	17.36	17.72	17.82	18.20	18.40	18.49	18.66	19.23	19.31	19.25	0.4%
Natural Gas 10/	9.78	9.92	9.90	10.01	10.07	10.12	10.22	10.32	10.38	10.45	10.49	10.55	10.68	0.3%
Ethanol (E85) 11/	20.92	21.15	21.10	21.26	21.40	21.50	21.60	21.74	22.00	21.92	22.27	22.35	22.48	0.4%
Electricity	20.40	20.58	20.56	20.68	20.71	20.63	20.72	20.86	20.83	20.85	20.83	20.84	21.00	-0.1%
<b>Average End-Use Energy</b>	13.44	13.57	13.66	13.77	13.85	13.93	14.02	14.14	14.22	14.32	14.45	14.48	14.64	0.5%
Primary Energy	11.67	11.79	11.89	12.00	12.08	12.17	12.25	12.35	12.45	12.54	12.70	12.73	12.86	0.6%
Electricity	21.05	21.25	21.23	21.38	21.43	21.39	21.52	21.69	21.70	21.76	21.75	21.79	22.00	0.0%
<b>Electric Power 12/</b>														
Fossil Fuel Average	2.44	2.48	2.46	2.48	2.48	2.48	2.49	2.50	2.51	2.50	2.49	2.47	2.49	0.0%
Petroleum Products	6.76	6.79	6.91	6.95	7.06	7.21	7.30	7.37	7.39	7.44	7.47	7.52	7.61	1.3%
Distillate Fuel	9.43	9.48	9.62	9.67	9.85	9.92	9.99	10.05	10.12	10.14	10.19	10.21	10.28	0.4%
Residual Fuel	5.86	5.90	6.02	6.06	6.14	6.27	6.36	6.43	6.47	6.54	6.56	6.63	6.73	1.3%
Natural Gas	5.26	5.41	5.40	5.52	5.59	5.65	5.76	5.87	5.93	6.02	6.06	6.12	6.26	0.2%
Steam Coal 5/	1.39	1.39	1.39	1.40	1.40	1.41	1.43	1.44	1.46	1.47	1.49	1.50	1.51	0.4%

Table 20. Energy by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)

United States	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Average Price to All Users 13/														
Petroleum Products 2/	13.76	13.86	14.05	14.18	14.30	14.43	14.51	14.61	14.73	14.83	15.02	15.04	15.16	0.7%
Distillate Fuel	13.93	13.93	14.07	14.13	14.18	14.35	14.44	14.52	14.71	14.82	15.00	14.83	15.04	0.7%
Jet Fuel	10.26	10.26	10.49	10.60	10.69	10.73	10.79	10.92	11.04	11.15	11.35	11.44	11.53	0.9%
Liquefied Petroleum Gas	13.80	14.12	14.38	14.76	15.05	15.18	15.53	15.66	15.78	16.12	16.94	16.96	16.90	0.5%
Motor Gasoline 8/	16.67	16.80	17.02	17.13	17.25	17.34	17.41	17.49	17.58	17.64	17.74	17.82	17.92	0.6%
Residual Fuel	6.15	6.21	6.31	6.38	6.46	6.61	6.67	6.75	6.82	6.90	6.93	7.01	7.12	1.3%
Natural Gas	6.79	6.92	6.93	7.06	7.14	7.21	7.34	7.47	7.55	7.66	7.73	7.82	7.98	0.2%
Metallurgical Coal 5/	2.19	2.21	2.23	2.25	2.26	2.26	2.27	2.28	2.29	2.29	2.29	2.28	2.28	0.1%
Other Coal 5/	1.41	1.41	1.42	1.42	1.43	1.44	1.45	1.46	1.48	1.50	1.51	1.52	1.53	0.4%
Coal to Liquids	0.87	0.88	1.04	1.12	1.15	1.18	1.21	1.22	1.23	1.24	1.25	1.26	1.26	N/A
Ethanol (E85) 11/	20.92	21.15	21.10	21.26	21.40	21.50	21.60	21.74	22.00	21.92	22.27	22.35	22.48	0.4%
Electricity	21.05	21.25	21.23	21.38	21.43	21.39	21.52	21.69	21.70	21.76	21.75	21.79	22.00	0.0%
Non-Renewable Energy Expenditures by Sector (billion 2004 dollars)														
Residential	214.94	219.01	221.50	224.45	227.17	229.27	233.30	236.52	239.07	242.21	245.58	247.78	252.12	1.1%
Commercial	164.81	169.37	172.19	176.59	180.39	183.62	188.33	193.44	197.43	201.86	206.09	210.49	216.48	1.8%
Industrial	174.29	178.14	179.83	183.50	186.84	189.80	193.19	197.21	200.68	204.80	209.46	212.38	216.86	0.9%
Transportation	508.64	517.83	530.44	539.97	549.19	559.32	568.53	578.48	590.39	601.04	614.00	622.34	635.46	2.1%
Total Non-Renewable Expenditures	1062.69	1084.35	1103.97	1124.51	1143.60	1162.01	1183.36	1205.65	1227.56	1249.90	1275.14	1292.99	1320.94	1.6%
Transportation Renewable Expenditures	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	6.9%
Total Expenditures	1062.78	1084.44	1104.07	1124.61	1143.70	1162.12	1183.47	1205.76	1227.68	1250.03	1275.26	1293.12	1321.07	1.6%



Table 20. Energy by Sector and Source  
(2004 dollars per million Btu, unless otherwise noted)  
United States

- 1/ Weighted average price includes fuels below as well as coal.
  - 2/ This quantity is the weighted average for all petroleum products, not just those listed below.
  - 3/ Includes energy for combined heat and power plants, except those whose primary business is to sell electricity, or electricity and heat, to the public.
  - 4/ Excludes use for lease and plant fuel.
  - 5/ Excludes imported coal.
  - 6/ Diesel fuel for on-road use. Includes Federal and State taxes while excluding county and local taxes.
  - 7/ Kerosene-type jet fuel. Includes Federal and State taxes while excluding county and local taxes.
  - 8/ Sales weighted-average price for all grades. Includes Federal, State, and local taxes.
  - 9/ Includes Federal and State taxes while excluding county and local taxes.
  - 10/ Compressed natural gas used as a vehicle fuel. Includes estimated motor vehicle fuel taxes.
  - 11/ E85 refers to a blend of 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable). To address cold starting issues, the percentage of ethanol actually varies seasonally. The annual average ethanol content of 74 percent is used for this forecast.
  - 12/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.
- Btu = British thermal unit.

Note: Data for 2003 and 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004 prices for motor gasoline, distillate, and jet fuel are based on prices in the Energy Information Administration (EIA), Petroleum Marketing Annual DOE/EIA-0487(2004) (Washington, DC, August 2005). 2003 residential and commercial natural gas delivered prices: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). 2004 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 industrial natural gas delivered prices are estimated based on: EIA, Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 transportation sector natural gas delivered prices are based on: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and estimated state and federal taxes. 2004 transportation sector natural gas delivered prices are model results. 2003 and 2004 electric power sector natural gas prices: EIA, Electric Power Monthly, May 2004 through April 2005, Table 4.11.A. 2003 and 2004 coal prices based on: EIA, Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005) and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. 2003 and 2004 electricity prices: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). 2003 and 2004 ethanol prices derived from weekly spot prices in the Oxy Fuel News. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 21. Residential Sector Equipment Stock and Efficiency

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Equipment Stock (million units)														
Main Space Heaters														
Electric Heat Pumps	11.01	11.45	11.92	12.30	12.69	13.08	13.46	13.82	14.18	14.52	14.87	15.22	15.58	15.93
Electric Other	20.97	21.12	21.30	21.47	21.65	21.85	22.05	22.24	22.43	22.61	22.78	22.96	23.15	23.33
Natural Gas Heat Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Other	60.82	61.78	62.79	63.75	64.65	65.54	66.40	67.30	68.19	69.05	69.90	70.75	71.62	72.49
Distillate	8.02	8.01	8.00	7.99	7.97	7.96	7.95	7.94	7.93	7.91	7.90	7.89	7.87	7.86
Liquefied Petroleum Gas	5.06	5.13	5.19	5.22	5.27	5.32	5.37	5.42	5.47	5.51	5.55	5.60	5.64	5.69
Kerosene	0.81	0.81	0.80	0.80	0.79	0.79	0.78	0.78	0.78	0.77	0.77	0.77	0.76	0.76
Wood Stoves	2.04	2.04	2.02	2.01	2.00	1.98	1.97	1.96	1.94	1.93	1.92	1.91	1.90	1.89
Geothermal Heat Pumps	0.09	0.11	0.14	0.17	0.21	0.23	0.25	0.28	0.30	0.32	0.35	0.37	0.39	0.41
Total	108.83	110.46	112.17	113.70	115.22	116.75	118.24	119.73	121.20	122.63	124.04	125.46	126.91	128.35
Space Cooling (million units)														
Electric Heat Pumps	11.01	11.45	11.92	12.30	12.69	13.08	13.46	13.82	14.18	14.52	14.87	15.22	15.58	15.93
Natural Gas Heat Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal Heat Pumps	0.09	0.11	0.14	0.17	0.21	0.23	0.25	0.28	0.30	0.32	0.35	0.37	0.39	0.41
Central Air Conditioners	49.82	51.29	52.80	54.22	55.63	57.04	58.43	59.82	61.21	62.55	63.88	65.21	66.56	67.90
Room Air Conditioners	34.49	34.43	34.38	34.33	34.28	34.23	34.18	34.14	34.09	34.05	34.00	33.95	33.91	33.87
Total	95.41	97.28	99.23	101.03	102.80	104.58	106.32	108.06	109.77	111.45	113.10	114.76	116.44	118.11
Water Heaters (million units)														
Electric	41.65	42.17	42.72	43.19	43.67	44.18	44.66	45.12	45.58	46.01	46.44	46.88	47.32	47.76
Natural Gas	60.04	61.12	62.24	63.30	64.31	65.31	66.29	67.29	68.29	69.26	70.22	71.18	72.16	73.13
Distillate	4.58	4.54	4.51	4.47	4.43	4.39	4.35	4.32	4.28	4.24	4.21	4.17	4.14	4.11
Liquefied Petroleum Gas	3.04	3.11	3.16	3.19	3.24	3.29	3.35	3.40	3.45	3.50	3.54	3.59	3.64	3.69
Solar Thermal	0.33	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.43	0.44	0.45	0.46	0.47	0.48
Total	109.65	111.28	112.99	114.53	116.04	117.57	119.06	120.55	122.02	123.45	124.86	126.28	127.72	129.17
Cooking Equipment (million units) 1/														
Electric	67.14	68.26	69.44	70.49	71.53	72.58	73.59	74.59	75.57	76.51	77.43	78.36	79.30	80.23
Natural Gas	38.05	38.50	38.98	39.43	39.87	40.30	40.73	41.18	41.63	42.08	42.53	42.99	43.46	43.93
Liquefied Petroleum Gas	4.77	4.83	4.87	4.90	4.94	4.99	5.03	5.07	5.11	5.15	5.18	5.21	5.25	5.28
Total	109.96	111.59	113.29	114.83	116.34	117.86	119.35	120.84	122.31	123.74	125.15	126.56	128.01	129.45
Clothes Dryers (million units)														
Electric	63.22	64.48	65.77	66.95	68.10	69.26	70.39	71.52	72.63	73.69	74.73	75.77	76.83	77.89
Natural Gas	17.85	18.36	18.89	19.39	19.88	20.36	20.83	21.31	21.80	22.29	22.78	23.27	23.77	24.26
Total	81.07	82.84	84.67	86.34	87.97	89.61	91.22	92.83	94.43	95.98	97.51	99.04	100.60	102.15
Other Appliances (million units)														
Refrigerators	129.13	130.86	132.66	134.28	135.87	137.47	139.03	140.59	142.14	143.63	145.11	146.59	148.11	149.62
Freezers	35.06	35.53	36.02	36.47	36.89	37.32	37.74	38.16	38.57	38.97	39.37	39.77	40.17	40.57

Table 21. Residential Sector Equipment Stock and Efficiency

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Stock Average Equipment Efficiency														
Main Space Heaters														
Electric Heat Pumps (HSPF)	7.26	7.29	7.32	7.42	7.50	7.56	7.62	7.67	7.72	7.76	7.81	7.85	7.88	7.92
Natural Gas Heat Pumps (GCOP)	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.32	1.33	1.34	1.35	1.36	1.36	1.37
Geothermal Heat Pumps (COP)	3.40	3.43	3.44	3.46	3.47	3.47	3.48	3.48	3.49	3.49	3.49	3.49	3.50	3.50
Natural Gas Furnace (AFUE)	0.80	0.81	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84	0.85	0.85	0.85	0.85
Distillate Furnace (AFUE)	0.81	0.81	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.83	0.83	0.83	0.83	0.83
Space Cooling														
Electric Heat Pumps (SEER)	10.71	10.77	10.83	11.10	11.30	11.49	11.66	11.83	11.99	12.14	12.30	12.44	12.57	12.69
Natural Gas Heat Pumps (GCOP)	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62	0.62
Geothermal Heat Pumps (EER)	13.64	14.16	14.54	14.86	15.07	15.20	15.32	15.41	15.48	15.55	15.61	15.67	15.72	15.77
Cent. Air Conditioners (SEER)	10.53	10.61	10.67	10.91	11.11	11.30	11.49	11.67	11.83	11.99	12.15	12.29	12.42	12.54
Room Air Conditioners (EER)	9.19	9.27	9.34	9.40	9.45	9.51	9.57	9.63	9.67	9.72	9.75	9.78	9.79	9.80
Water Heaters														
Electric (EF)	0.88	0.88	0.88	0.89	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.91	0.91
Natural Gas (EF)	0.55	0.56	0.56	0.57	0.57	0.57	0.58	0.58	0.58	0.59	0.59	0.59	0.59	0.59
Distillate (EF)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55
Liquefied Petroleum Gas (EF)	0.55	0.56	0.56	0.57	0.57	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.59	0.59
Other Appliances (kilowatthours per year) 2/														
Refrigerators	733.74	711.53	691.13	671.51	654.23	637.92	622.90	607.95	594.52	582.42	571.66	562.15	553.79	546.48
Freezers	535.20	515.72	499.11	485.96	475.29	466.16	458.46	451.98	446.86	442.87	439.63	437.05	435.08	433.66
Building Shell Efficiency Index														
Space Heating														
Pre-1998 Homes	0.99	0.99	0.98	0.98	0.97	0.96	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94
New Construction	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.70	0.67	0.67	0.67	0.67	0.67	0.67
All Homes	0.98	0.97	0.96	0.95	0.94	0.93	0.93	0.92	0.91	0.91	0.90	0.90	0.89	0.88
Space Cooling														
Pre-1998 Homes	1.00	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.98	0.98	0.98
New Construction	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.82	0.82	0.82	0.82	0.82	0.82
All Homes	0.99	0.99	0.98	0.98	0.97	0.97	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94

Table 21. Residential Sector Equipment Stock and Efficiency

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
Equipment Stock (million units)															
Main Space Heaters															
Electric Heat Pumps	16.29	16.66	17.01	17.35	17.68	18.00	18.32	18.65	18.98	19.31	19.64	19.97	20.30	20.63	2.3%
Electric Other	23.52	23.71	23.90	24.07	24.24	24.40	24.56	24.73	24.90	25.07	25.25	25.43	25.61	25.80	0.8%
Natural Gas Heat Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.1%
Natural Gas Other	73.34	74.19	75.02	75.86	76.66	77.45	78.22	78.98	79.76	80.53	81.29	82.03	82.75	83.47	1.2%
Distillate	7.84	7.82	7.80	7.78	7.76	7.74	7.71	7.69	7.66	7.64	7.61	7.59	7.57	7.55	-0.2%
Liquefied Petroleum Gas	5.73	5.77	5.81	5.83	5.86	5.88	5.90	5.91	5.93	5.95	5.97	5.98	5.99	6.00	0.6%
Kerosene	0.76	0.75	0.75	0.75	0.74	0.74	0.74	0.73	0.73	0.72	0.72	0.72	0.71	0.71	-0.5%
Wood Stoves	1.87	1.86	1.85	1.84	1.83	1.81	1.80	1.79	1.78	1.76	1.75	1.74	1.73	1.72	-0.6%
Geothermal Heat Pumps	0.44	0.46	0.48	0.51	0.53	0.56	0.58	0.60	0.63	0.65	0.67	0.70	0.72	0.74	7.5%
Total	129.79	131.23	132.63	133.99	135.30	136.58	137.83	139.08	140.35	141.64	142.91	144.15	145.38	146.62	1.1%
Space Cooling (million units)															
Electric Heat Pumps	16.29	16.66	17.01	17.35	17.68	18.00	18.32	18.65	18.98	19.31	19.64	19.97	20.30	20.63	2.3%
Natural Gas Heat Pumps	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14.1%
Geothermal Heat Pumps	0.44	0.46	0.48	0.51	0.53	0.56	0.58	0.60	0.63	0.65	0.67	0.70	0.72	0.74	7.5%
Central Air Conditioners	69.23	70.55	71.84	73.12	74.35	75.56	76.75	77.93	79.12	80.32	81.50	82.66	83.81	84.96	2.0%
Room Air Conditioners	33.82	33.78	33.73	33.69	33.64	33.59	33.54	33.49	33.44	33.40	33.35	33.30	33.25	33.21	-0.1%
Total	119.78	121.44	123.07	124.66	126.21	127.72	129.20	130.68	132.17	133.68	135.17	136.63	138.08	139.54	1.4%
Water Heaters (million units)															
Electric	48.22	48.68	49.13	49.55	49.95	50.35	50.74	51.14	51.56	51.98	52.41	52.83	53.26	53.70	0.9%
Natural Gas	74.08	75.03	75.95	76.88	77.78	78.65	79.51	80.35	81.21	82.07	82.91	83.72	84.52	85.32	1.3%
Distillate	4.08	4.05	4.02	3.98	3.95	3.92	3.88	3.85	3.82	3.79	3.76	3.73	3.70	3.67	-0.8%
Liquefied Petroleum Gas	3.74	3.79	3.83	3.87	3.90	3.92	3.95	3.98	4.00	4.03	4.05	4.07	4.09	4.11	1.1%
Solar Thermal	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	2.2%
Total	130.60	132.04	133.44	134.80	136.10	137.38	138.63	139.88	141.15	142.44	143.71	144.94	146.17	147.42	1.1%
Cooking Equipment (million units) 1/															
Electric	81.16	82.09	83.01	83.90	84.78	85.64	86.50	87.36	88.23	89.12	90.00	90.87	91.73	92.59	1.2%
Natural Gas	44.41	44.88	45.33	45.77	46.18	46.57	46.94	47.31	47.68	48.06	48.43	48.79	49.14	49.51	1.0%
Liquefied Petroleum Gas	5.32	5.35	5.38	5.40	5.42	5.44	5.47	5.49	5.51	5.52	5.54	5.55	5.57	5.58	0.6%
Total	130.89	132.32	133.72	135.07	136.38	137.66	138.90	140.15	141.42	142.70	143.97	145.21	146.44	147.68	1.1%
Clothes Dryers (million units)															
Electric	78.95	80.00	81.04	82.05	83.04	84.01	84.96	85.91	86.86	87.82	88.75	89.66	90.55	91.44	1.4%
Natural Gas	24.73	25.20	25.65	26.09	26.51	26.92	27.32	27.72	28.12	28.53	28.94	29.35	29.75	30.16	1.9%
Total	103.68	105.20	106.69	108.14	109.55	110.93	112.28	113.62	114.98	116.35	117.70	119.00	120.30	121.60	1.5%
Other Appliances (million units)															
Refrigerators	151.13	152.63	154.09	155.51	156.88	158.22	159.52	160.82	162.15	163.49	164.82	166.11	167.39	168.68	1.0%
Freezers	40.97	41.35	41.73	42.10	42.46	42.80	43.13	43.46	43.80	44.14	44.47	44.78	45.10	45.41	0.9%

Table 21. Residential Sector Equipment Stock and Efficiency

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Stock Average Equipment Efficiency															
Main Space Heaters															
Electric Heat Pumps (HSPF)	7.95	7.97	8.00	8.02	8.05	8.07	8.09	8.10	8.11	8.12	8.12	8.13	8.13	8.13	0.4%
Natural Gas Heat Pumps (GCOP)	1.37	1.38	1.38	1.40	1.41	1.42	1.44	1.44	1.45	1.46	1.47	1.47	1.48	1.48	0.5%
Geothermal Heat Pumps (COP)	3.50	3.50	3.50	3.53	3.55	3.57	3.59	3.60	3.62	3.64	3.65	3.67	3.68	3.70	0.3%
Natural Gas Furnace (AFUE)	0.85	0.85	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.2%
Distillate Furnace (AFUE)	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.1%
Space Cooling															
Electric Heat Pumps (SEER)	12.80	12.90	12.99	13.07	13.14	13.20	13.25	13.29	13.32	13.34	13.34	13.35	13.35	13.35	0.8%
Natural Gas Heat Pumps (GCOP)	0.62	0.62	0.62	0.63	0.64	0.65	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.4%
Geothermal Heat Pumps (EER)	15.81	15.85	15.88	16.02	16.14	16.26	16.37	16.47	16.56	16.65	16.74	16.83	16.91	16.98	0.7%
Cent. Air Conditioners (SEER)	12.64	12.73	12.81	12.92	13.01	13.10	13.17	13.23	13.29	13.33	13.36	13.39	13.42	13.45	0.9%
Room Air Conditioners (EER)	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	9.81	0.2%
Water Heaters															
Electric (EF)	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.92	0.92	0.92	0.2%
Natural Gas (EF)	0.59	0.59	0.59	0.59	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.3%
Distillate (EF)	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.0%
Liquefied Petroleum Gas (EF)	0.59	0.59	0.59	0.59	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.61	0.3%
Other Appliances (kilowatthours per year) 2/															
Refrigerators	540.18	534.73	530.08	525.91	522.22	519.02	516.33	514.13	512.45	511.30	510.71	510.28	509.93	509.65	-1.3%
Freezers	432.74	432.21	431.98	432.04	432.27	432.65	433.18	433.86	434.47	435.04	435.54	435.96	436.31	436.58	-0.6%
Building Shell Efficiency Index															
Space Heating															
Pre-1998 Homes	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.91	0.90	0.90	0.89	0.89	0.89	0.88	-0.4%
New Construction	0.67	0.67	0.67	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	-0.2%
All Homes	0.88	0.87	0.86	0.86	0.85	0.85	0.84	0.84	0.83	0.83	0.82	0.82	0.81	0.81	-0.7%
Space Cooling															
Pre-1998 Homes	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	0.96	0.96	0.95	-0.2%
New Construction	0.82	0.82	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	-0.1%
All Homes	0.94	0.93	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.90	-0.3%

Table 21. Residential Sector Equipment Stock and Efficiency

1/ Does not include microwave ovens or outdoor grills.

2/ Kilowatt-hours per year to run the appliance under certain test conditions as specified by the Department of Energy.

HSPF = Heating Seasonal Performance Factor: The total heating output of a heat pump in Btu during its normal annual usage period for heating divided by total electric input in watt-hours during the same period.

COP = Coefficient of Performance: Energy efficiency rating measure determined, under specific testing conditions, by dividing the energy output by the energy input.

GCOP = Gas Coefficient of Performance: Energy efficiency rating measure determined, under specific testing conditions, by dividing the energy output by the energy input.

AFUE = Annual Fuel Utilization Efficiency: Efficiency rating based on average usage, including on and off cycling, as set out in the standardized Department of Energy test procedures.

SEER = Seasonal Energy Efficiency Ratio: The total cooling of a central unitary air conditioner or a unitary heat pump in Btu during its normal annual usage period for cooling divided by the total electric energy input in watt-hours during the same period.

EER = Energy Efficiency Ratio: A ratio calculated by dividing the cooling capacity in Btu per hour by the power input in watts at any given set of rating conditions, expressed in Btu per hour per watt.

EF = Efficiency Factor: Efficiency (measured in Btu out / Btu in) of water heaters under certain test conditions specified by the Department of Energy.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Commercial Building Delivered</b>														
<b>Energy Consumption (quadrillion Btu) 1/</b>														
Assembly	0.50	0.49	0.49	0.49	0.50	0.51	0.52	0.52	0.53	0.54	0.55	0.55	0.56	0.57
Education	0.71	0.70	0.71	0.72	0.73	0.75	0.76	0.77	0.79	0.80	0.81	0.82	0.84	0.85
Food Sales	0.21	0.21	0.22	0.22	0.22	0.23	0.23	0.24	0.24	0.24	0.25	0.25	0.26	0.26
Food Service	0.45	0.45	0.46	0.46	0.47	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55
Health Care	0.42	0.42	0.43	0.44	0.45	0.47	0.48	0.49	0.50	0.52	0.53	0.54	0.56	0.57
Lodging	0.45	0.45	0.45	0.44	0.45	0.46	0.46	0.47	0.48	0.49	0.51	0.52	0.53	0.54
Office - Large	0.72	0.73	0.75	0.76	0.79	0.81	0.83	0.85	0.87	0.89	0.90	0.92	0.94	0.95
Office - Small	0.41	0.41	0.42	0.43	0.44	0.46	0.47	0.48	0.48	0.49	0.50	0.51	0.52	0.53
Mercantile/Service	1.24	1.24	1.26	1.28	1.31	1.35	1.38	1.42	1.45	1.48	1.51	1.54	1.57	1.60
Warehouse	0.50	0.49	0.49	0.51	0.52	0.53	0.54	0.55	0.56	0.58	0.59	0.60	0.61	0.62
Other	0.38	0.38	0.39	0.40	0.41	0.42	0.44	0.45	0.46	0.48	0.49	0.50	0.51	0.52
Total	5.99	5.97	6.07	6.14	6.30	6.44	6.59	6.72	6.87	7.02	7.15	7.28	7.42	7.57
<b>Commercial Building Floorspace</b>														
<b>(billion square feet)</b>														
Assembly	8.36	8.48	8.57	8.66	8.74	8.84	8.93	9.02	9.12	9.21	9.31	9.41	9.51	9.61
Education	9.59	9.84	9.99	10.14	10.30	10.45	10.61	10.77	10.93	11.10	11.27	11.44	11.61	11.78
Food Sales	1.08	1.10	1.12	1.14	1.16	1.18	1.19	1.21	1.23	1.25	1.27	1.29	1.30	1.32
Food Service	2.01	2.05	2.08	2.11	2.14	2.18	2.21	2.25	2.28	2.31	2.34	2.38	2.41	2.45
Health Care	2.01	2.06	2.11	2.15	2.20	2.24	2.29	2.33	2.37	2.42	2.46	2.51	2.56	2.61
Lodging	4.95	5.04	5.13	5.22	5.32	5.43	5.53	5.64	5.75	5.86	5.97	6.08	6.19	6.31
Office - Large	7.87	7.94	8.02	8.11	8.19	8.28	8.38	8.47	8.57	8.67	8.76	8.85	8.94	9.04
Office - Small	6.14	6.21	6.28	6.36	6.43	6.51	6.59	6.67	6.75	6.83	6.91	6.99	7.07	7.15
Mercantile/Service	15.24	15.58	15.85	16.11	16.38	16.66	16.93	17.21	17.49	17.77	18.05	18.34	18.63	18.92
Warehouse	11.62	11.85	12.03	12.21	12.40	12.61	12.84	13.08	13.32	13.58	13.83	14.09	14.35	14.61
Other	4.78	4.88	5.02	5.15	5.28	5.42	5.55	5.67	5.80	5.93	6.06	6.19	6.33	6.46
Total	73.67	75.04	76.20	77.37	78.56	79.79	81.05	82.33	83.63	84.93	86.24	87.57	88.90	90.26
<b>Stock Average Equipment Efficiency 2/</b>														
<b>Space Heating</b>														
Electricity	1.09	1.10	1.12	1.13	1.14	1.15	1.15	1.16	1.17	1.18	1.18	1.19	1.19	1.20
Natural Gas	0.75	0.75	0.76	0.77	0.77	0.78	0.78	0.78	0.78	0.78	0.78	0.79	0.79	0.79
Distillate	0.76	0.76	0.77	0.77	0.77	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
<b>Space Cooling</b>														
Electricity	2.75	2.77	2.80	2.82	2.84	2.86	2.88	2.93	2.98	3.02	3.06	3.10	3.13	3.17
Natural Gas	0.87	0.90	0.92	0.95	0.97	1.00	1.01	1.03	1.04	1.06	1.07	1.08	1.09	1.10
<b>Water Heating</b>														
Electricity	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Natural Gas	0.84	0.86	0.87	0.88	0.89	0.89	0.89	0.90	0.90	0.91	0.91	0.91	0.91	0.91
Distillate	0.75	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.77

Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Ventilation (cubic feet per minute per Btu) 3/ Electricity	0.35	0.36	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.40	0.41	0.41
Cooking														
Electricity	0.72	0.73	0.73	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.75	0.75	0.75
Natural Gas	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Lighting Efficacy 4/ (efficacy in lumens per watt)														
Electricity	49.74	50.12	50.89	51.56	51.89	52.19	52.31	52.36	52.42	52.49	52.55	52.63	52.69	52.75
Refrigeration														
Electricity	1.40	1.40	1.41	1.41	1.42	1.42	1.43	1.43	1.44	1.45	1.45	1.45	1.46	1.46



Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Commercial Building Delivered</b>															
<b>Energy Consumption (quadrillion Btu) 1/</b>															
Assembly	0.57	0.58	0.58	0.59	0.60	0.60	0.61	0.62	0.63	0.63	0.64	0.65	0.66	0.66	1.2%
Education	0.86	0.87	0.88	0.89	0.90	0.92	0.93	0.94	0.95	0.96	0.97	0.99	1.00	1.01	1.4%
Food Sales	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.32	0.32	0.33	1.7%
Food Service	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.69	1.6%
Health Care	0.59	0.60	0.61	0.63	0.64	0.65	0.67	0.68	0.70	0.71	0.72	0.74	0.76	0.77	2.3%
Lodging	0.55	0.56	0.57	0.59	0.60	0.61	0.62	0.63	0.65	0.66	0.67	0.69	0.70	0.72	1.8%
Office - Large	0.97	0.99	1.01	1.03	1.05	1.07	1.09	1.11	1.13	1.16	1.18	1.21	1.24	1.27	2.2%
Office - Small	0.54	0.54	0.55	0.56	0.57	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	1.8%
Mercantile/Service	1.63	1.66	1.68	1.71	1.73	1.76	1.79	1.81	1.84	1.87	1.90	1.93	1.96	1.99	1.8%
Warehouse	0.63	0.64	0.65	0.66	0.67	0.68	0.70	0.71	0.72	0.73	0.74	0.75	0.77	0.78	1.8%
Other	0.54	0.55	0.56	0.57	0.59	0.60	0.61	0.63	0.64	0.65	0.67	0.68	0.70	0.71	2.5%
Total	7.71	7.84	7.96	8.10	8.23	8.36	8.51	8.65	8.79	8.94	9.09	9.25	9.41	9.57	1.8%
<b>Commercial Building Floorspace</b>															
<b>(billion square feet)</b>															
Assembly	9.72	9.82	9.94	10.05	10.17	10.29	10.41	10.54	10.66	10.79	10.92	11.06	11.19	11.33	1.1%
Education	11.95	12.13	12.31	12.49	12.68	12.87	13.06	13.25	13.45	13.65	13.86	14.07	14.28	14.50	1.5%
Food Sales	1.34	1.36	1.38	1.40	1.42	1.44	1.46	1.48	1.51	1.53	1.55	1.57	1.60	1.62	1.5%
Food Service	2.48	2.51	2.55	2.59	2.62	2.66	2.70	2.74	2.78	2.82	2.86	2.90	2.94	2.98	1.5%
Health Care	2.66	2.70	2.75	2.80	2.85	2.91	2.96	3.01	3.06	3.12	3.18	3.23	3.29	3.35	1.9%
Lodging	6.42	6.54	6.66	6.79	6.91	7.04	7.17	7.31	7.45	7.59	7.74	7.89	8.04	8.19	1.9%
Office - Large	9.13	9.23	9.33	9.43	9.53	9.64	9.75	9.86	9.97	10.08	10.20	10.31	10.43	10.55	1.1%
Office - Small	7.23	7.32	7.40	7.49	7.58	7.67	7.76	7.85	7.95	8.04	8.14	8.24	8.34	8.44	1.2%
Mercantile/Service	19.22	19.52	19.83	20.15	20.47	20.80	21.13	21.47	21.82	22.18	22.54	22.91	23.29	23.67	1.6%
Warehouse	14.88	15.16	15.45	15.74	16.03	16.32	16.62	16.92	17.22	17.53	17.84	18.16	18.49	18.82	1.8%
Other	6.60	6.74	6.89	7.04	7.18	7.33	7.48	7.63	7.79	7.94	8.10	8.26	8.42	8.58	2.2%
Total	91.64	93.05	94.50	95.96	97.45	98.97	100.50	102.07	103.65	105.27	106.92	108.60	110.31	112.04	1.6%
<b>Stock Average Equipment Efficiency 2/</b>															
<b>Space Heating</b>															
Electricity	1.20	1.21	1.21	1.22	1.23	1.23	1.24	1.25	1.25	1.26	1.27	1.27	1.28	1.29	0.6%
Natural Gas	0.79	0.79	0.79	0.79	0.79	0.79	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.2%
Distillate	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.1%
<b>Space Cooling</b>															
Electricity	3.20	3.22	3.25	3.28	3.30	3.33	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.48	0.9%
Natural Gas	1.11	1.12	1.13	1.13	1.14	1.15	1.15	1.16	1.16	1.17	1.17	1.17	1.18	1.18	1.0%
<b>Water Heating</b>															
Electricity	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.0%
Natural Gas	0.91	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.93	0.93	0.93	0.93	0.93	0.3%
Distillate	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.78	0.78	0.78	0.78	0.78	0.1%

Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Ventilation (cubic feet per minute per Btu) 3/ Electricity	0.42	0.42	0.42	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.45	0.45	0.45	0.9%
Cooking															
Electricity	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.1%
Natural Gas	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.53	0.53	0.53	0.1%
Lighting Efficacy 4/ (efficacy in lumens per watt)															
Electricity	52.83	52.92	53.03	53.14	53.35	53.55	53.71	53.94	54.15	54.32	54.48	54.64	54.77	55.17	0.4%
Refrigeration															
Electricity	1.46	1.47	1.47	1.47	1.47	1.47	1.47	1.48	1.48	1.48	1.48	1.48	1.48	1.48	0.2%

Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency

1/ Excludes commercial sector energy consumption (from uses such as street lights) that is not attributable to buildings.

2/ Unless noted otherwise, the efficiency measures are in the terms of Btu of energy output divided by Btu of energy input.

3/ The efficiency measure for ventilation is in terms of cubic feet per minute (cfm) of ventilation air delivered divided by Btu of energy input.

4/ A measurement of the ratio of light produced by a light source to the electrical power used to produce that quantity of light, expressed in lumens per watt.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 23. Industrial Sector Macroeconomic Indicators

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GDP (billion 2000 dollars)	10320.6	10755.7	11146.7	11512.9	11875.1	12288.4	12670.9	13042.7	13416.6	13793.4	14191.1	14622.1	15081.5	15575.3
Nonfarm Employment (millions)	129.9	131.4	133.6	135.8	137.6	139.5	141.0	142.1	143.0	143.9	145.0	146.2	147.6	149.1
Value of Shipments (billion 2000 dollars)														
Nonmanufacturing Sector														
Agriculture/Forestry/Fishing/Hunting	248.0	240.8	245.1	246.3	248.1	251.0	254.7	258.2	260.1	261.1	262.4	264.3	266.5	269.3
Mining	193.8	197.4	199.8	204.0	204.5	208.0	211.0	212.2	214.0	215.6	218.1	219.4	221.9	226.3
Construction	950.7	1000.5	1040.8	1058.3	1066.7	1082.8	1086.6	1101.9	1119.3	1133.0	1149.5	1173.3	1200.6	1228.1
Manufacturing Sector														
Food Products	428.6	429.0	439.1	447.7	457.6	466.5	475.8	484.8	494.1	503.9	513.2	522.8	533.0	543.8
Beverages and Tobacco Products	102.8	104.4	106.1	106.6	107.7	108.8	109.7	110.7	111.8	113.2	114.4	115.6	116.9	118.0
Textile Mills and Products	76.1	79.3	78.1	73.9	71.0	68.9	67.9	67.5	67.3	67.1	66.6	66.1	65.6	65.1
Apparel	53.6	57.6	53.5	49.8	47.2	45.1	43.3	41.8	40.4	39.0	37.6	36.3	35.0	34.0
Wood Products	90.1	101.0	95.5	93.1	92.5	93.0	93.2	94.7	96.3	96.8	97.6	99.5	101.9	104.7
Furniture and Related Products	69.2	73.2	73.0	73.2	74.0	74.9	75.9	77.2	79.0	80.7	82.2	83.6	85.1	85.9
Paper Products	161.7	168.8	166.8	170.7	174.5	177.2	179.7	182.3	184.8	186.9	188.5	190.0	191.7	193.5
Printing	88.3	86.7	86.2	87.5	88.9	90.0	91.3	92.5	93.9	95.1	96.4	97.7	99.0	100.2
Chemical Manufacturing	436.4	444.8	433.6	445.0	456.7	463.7	470.9	479.6	490.0	499.9	509.0	518.3	528.9	537.8
Bulk Chemicals	191.0	201.4	197.8	203.0	206.8	207.5	207.9	208.7	210.7	212.1	212.7	213.2	214.4	215.3
Inorganic	29.0	29.0	28.9	29.3	29.8	29.9	29.8	29.5	29.3	29.1	28.8	28.5	28.3	28.1
Organic	77.6	83.5	82.4	83.9	85.6	86.2	86.9	87.5	88.5	89.1	89.5	89.9	90.5	91.0
Resin, Synthetic Rubber, and Fibers	67.0	70.9	68.3	71.2	72.9	72.8	72.5	72.9	74.1	75.1	75.6	76.0	76.8	77.4
Agricultural Chemicals	17.5	18.1	18.2	18.6	18.6	18.6	18.7	18.8	18.9	18.8	18.7	18.7	18.7	18.7
Other Chemical Products	245.4	243.4	235.8	242.0	249.9	256.2	263.0	270.9	279.3	287.9	296.4	305.2	314.5	322.5
Petroleum and Coal Products	230.5	254.6	256.3	260.7	264.4	267.0	270.8	274.7	277.8	281.9	284.8	286.9	289.0	292.8
Petroleum Refineries	211.6	230.6	231.9	236.2	239.0	241.6	244.9	248.1	250.6	254.1	256.4	258.0	259.6	263.0
Other Petroleum and Coal Products	18.9	23.9	24.4	24.5	25.4	25.4	26.0	26.5	27.2	27.8	28.4	28.9	29.4	29.8
Plastics and Rubber Products	179.7	191.3	192.4	196.9	201.3	204.1	207.5	211.4	217.0	222.5	227.0	231.4	236.4	241.1
Leather and Leather Products	10.2	9.6	9.1	8.6	8.3	8.0	7.8	7.7	7.5	7.4	7.2	7.1	6.9	6.8
Stone, Clay, and Glass Products	83.7	84.2	86.6	91.7	95.6	96.6	97.7	99.9	102.7	104.9	106.5	108.1	109.9	111.7
Glass and Glass Products	22.2	22.2	22.4	23.6	24.4	24.6	24.8	25.7	26.8	28.0	28.8	29.3	29.7	30.4
Cement Manufacturing	7.6	7.8	7.9	8.3	8.7	8.7	8.8	8.8	9.0	9.0	9.0	9.1	9.1	9.2
Other Nonmetallic Mineral Products	53.9	54.2	56.4	59.8	62.4	63.2	64.1	65.3	67.0	67.9	68.6	69.7	71.0	72.1
Primary Metals Industry	136.8	144.8	140.8	146.8	152.8	154.5	155.5	157.9	161.5	163.9	164.5	165.6	167.1	169.0
Iron and Steel Mills and Products	65.8	70.9	65.0	68.5	71.5	72.2	73.0	74.3	75.9	76.7	77.0	77.9	79.0	79.8
Alumina and Aluminum Products	28.7	29.8	29.9	30.4	31.3	31.9	32.1	32.5	33.1	33.5	33.3	33.3	33.6	34.1
Other Primary Metal Products	42.2	44.1	45.8	47.9	50.1	50.4	50.5	51.1	52.5	53.7	54.3	54.5	54.5	55.1
Fabricated Metal Products	240.8	250.9	251.7	259.7	267.6	272.9	276.1	279.2	286.1	292.2	296.3	301.0	305.9	309.9
Machinery	249.6	283.4	301.6	312.8	323.1	326.7	329.7	334.3	341.6	349.4	356.4	363.9	371.6	380.0
Other Electronic/Electric Products	490.0	550.9	612.1	646.4	674.8	711.5	743.6	775.7	815.7	861.2	903.8	946.0	990.3	1035.1
Transportation Equipment	615.6	636.5	632.0	641.8	654.8	671.4	692.1	705.2	712.5	718.9	726.5	741.4	752.7	764.0
Instruments and Related Products	108.9	119.5	128.1	131.5	133.4	134.1	135.3	137.2	138.9	140.9	143.5	146.7	150.0	153.3
Miscellaneous Manufacturing	132.6	133.9	136.4	142.6	149.3	155.3	161.9	169.0	176.6	184.3	192.5	201.0	209.9	219.2
Total Industrial Value of Shipments	5377.7	5643.0	5764.8	5895.9	6014.6	6131.8	6238.4	6355.5	6489.0	6619.6	6744.7	6886.0	7036.0	7189.6

Table 23. Industrial Sector Macroeconomic Indicators

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
GDP (billion 2000 dollars)	16091.6	16599.3	17064.3	17540.6	18021.4	18514.8	19026.4	19562.1	20123.0	20701.0	21286.1	21871.0	22481.6	23112.2	3.0%
Nonfarm Employment (millions)	151.0	153.0	154.7	156.2	157.7	159.2	160.8	162.5	164.2	166.0	167.9	169.8	171.6	173.6	1.1%
Value of Shipments (billion 2000 dollars)															
Nonmanufacturing Sector															
Agriculture/Forestry/Fishing/Hunting	271.9	274.5	276.8	279.0	281.1	283.3	285.7	288.2	290.8	293.4	295.9	298.2	300.4	302.6	0.9%
Mining	227.6	228.4	228.8	228.8	228.4	228.0	228.3	228.0	227.4	227.9	227.3	227.3	227.1	227.0	0.5%
Construction	1247.6	1266.1	1282.1	1300.7	1315.2	1332.0	1349.8	1374.9	1407.4	1440.8	1466.7	1484.1	1507.8	1539.3	1.7%
Manufacturing Sector															
Food Products	554.9	565.8	576.5	586.9	597.0	607.4	618.0	628.7	639.4	650.7	662.2	673.4	684.3	695.4	1.9%
Beverages and Tobacco Products	119.1	120.1	120.9	121.7	122.5	123.3	124.2	125.0	126.0	127.1	128.2	129.4	130.6	131.8	0.9%
Textile Mills and Products	64.7	64.2	63.6	62.9	62.3	61.7	61.2	60.9	60.8	60.7	60.5	60.1	59.7	59.5	-1.1%
Apparel	33.0	32.1	31.2	30.4	29.6	28.8	28.1	27.4	26.8	26.2	25.6	25.0	24.4	23.9	-3.3%
Wood Products	106.3	107.3	107.9	108.4	108.9	109.6	110.4	112.3	115.3	118.6	120.3	121.0	122.3	123.5	0.8%
Furniture and Related Products	87.6	90.0	92.0	94.1	96.6	99.2	101.6	103.8	106.3	108.8	111.6	114.4	117.2	120.7	1.9%
Paper Products	195.8	198.3	200.3	202.2	204.1	206.1	208.2	210.2	212.4	214.7	217.2	219.5	221.9	224.3	1.1%
Printing	101.7	103.3	104.8	106.2	107.7	109.2	110.6	112.0	113.5	115.0	116.5	118.1	119.6	121.2	1.3%
Chemical Manufacturing	546.5	555.7	564.4	572.8	581.7	591.0	600.6	610.5	620.6	631.5	642.6	653.6	664.9	676.0	1.6%
Bulk Chemicals	216.9	218.6	219.4	220.0	220.9	221.8	223.0	224.1	225.2	226.7	228.3	229.5	230.9	231.9	0.5%
Inorganic	28.0	27.9	27.7	27.4	27.1	26.9	26.7	26.6	26.4	26.3	26.1	26.0	25.9	25.7	-0.5%
Organic	91.7	92.4	92.9	93.2	93.6	94.1	94.7	95.2	95.7	96.4	97.1	97.6	98.3	98.7	0.6%
Resin, Synthetic Rubber, and Fibers	78.4	79.5	80.2	80.8	81.5	82.3	83.0	83.8	84.6	85.6	86.6	87.4	88.4	89.2	0.9%
Agricultural Chemicals	18.7	18.8	18.7	18.6	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.5	18.4	18.4	0.1%
Other Chemical Products	329.6	337.2	345.0	352.8	360.9	369.2	377.7	386.4	395.4	404.8	414.3	424.0	434.0	444.1	2.3%
Petroleum and Coal Products	295.7	297.8	301.3	304.3	307.3	309.5	312.9	317.8	321.1	324.5	327.8	333.3	336.5	339.5	1.1%
Petroleum Refineries	265.3	266.6	269.6	272.2	274.5	276.2	279.0	283.3	286.1	288.8	291.4	296.2	298.8	301.0	1.0%
Other Petroleum and Coal Products	30.4	31.2	31.7	32.2	32.8	33.4	33.9	34.4	35.1	35.7	36.4	37.1	37.7	38.5	1.8%
Plastics and Rubber Products	247.1	253.7	259.5	265.2	271.3	277.6	283.9	290.2	297.0	304.2	311.7	318.9	326.3	333.4	2.2%
Leather and Leather Products	6.6	6.5	6.3	6.2	6.1	5.9	5.8	5.7	5.6	5.5	5.4	5.3	5.2	5.1	-2.4%
Stone, Clay, and Glass Products	114.2	116.9	118.9	120.5	122.2	124.1	125.9	127.7	129.7	132.0	134.5	137.0	139.4	141.4	2.0%
Glass and Glass Products	31.1	31.9	32.5	33.0	33.4	33.9	34.4	35.0	35.5	36.2	36.8	37.5	38.1	38.7	2.1%
Cement Manufacturing	9.4	9.4	9.5	9.6	9.6	9.6	9.7	9.8	9.9	10.0	10.1	10.2	10.3	10.4	1.1%
Other Nonmetallic Mineral Products	73.7	75.6	76.9	78.0	79.2	80.5	81.7	82.9	84.3	85.9	87.6	89.3	91.0	92.4	2.1%
Primary Metals Industry	171.7	173.8	175.1	176.3	177.6	179.3	181.2	183.1	185.2	188.0	190.6	193.2	195.9	197.9	1.2%
Iron and Steel Mills and Products	80.8	81.6	82.1	82.4	82.7	83.1	83.7	84.3	84.9	85.8	86.6	87.3	88.0	88.5	0.9%
Alumina and Aluminum Products	34.6	34.9	34.8	34.8	34.8	34.9	35.1	35.2	35.3	35.8	36.1	36.4	36.8	36.9	0.8%
Other Primary Metal Products	56.2	57.3	58.2	59.1	60.1	61.2	62.4	63.6	64.9	66.5	68.0	69.5	71.0	72.5	1.9%
Fabricated Metal Products	315.0	321.3	326.4	330.9	336.7	343.0	349.2	355.1	362.1	369.9	377.8	385.8	394.0	403.4	1.8%
Machinery	389.0	397.8	406.0	414.2	424.3	434.8	445.4	455.5	467.4	480.6	493.4	506.3	520.6	536.2	2.5%
Other Electronic/Electric Products	1091.3	1146.4	1191.2	1237.4	1287.8	1339.3	1392.1	1446.5	1504.8	1566.9	1631.5	1696.6	1765.9	1840.8	4.7%
Transportation Equipment	774.5	784.6	794.0	802.8	812.3	823.9	837.3	852.8	869.7	887.0	904.6	920.8	935.2	950.4	1.6%
Instruments and Related Products	156.6	159.9	163.2	166.6	170.1	173.5	177.1	180.7	184.3	188.1	192.0	196.0	200.1	204.2	2.1%
Miscellaneous Manufacturing	228.5	238.3	248.5	259.0	269.8	280.8	292.2	303.6	315.4	327.8	340.6	353.6	366.8	380.5	4.1%
Total Industrial Value of Shipments	7346.9	7502.9	7639.6	7777.6	7920.6	8071.4	8229.6	8400.7	8589.1	8789.7	8984.5	9170.6	9366.1	9577.7	2.1%

Table 23. Industrial Sector Macroeconomic Indicators

GDP = Gross domestic product.

Note: Totals may not equal sum of components due to independent rounding.

Source: 2004: Global Insight macroeconomic model CTL0805. Projections: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 24. Refining Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	211.65	230.65	231.87	236.19	239.02	241.56	244.87	248.13	250.64	254.09	256.40	257.98	259.60	262.97
Energy Consumption (trillion Btu) 1/														
Residual Oil	20.4	13.8	13.8	13.8	11.2	26.2	16.7	32.7	32.8	32.9	33.0	33.2	29.3	33.6
Distillate Oil	5.5	4.8	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas	19.6	12.8	12.8	12.8	30.7	33.7	37.1	40.8	44.9	49.4	52.5	55.9	61.2	70.6
Petroleum Coke	564.9	569.9	569.9	569.9	756.6	756.0	758.9	754.1	780.1	807.5	785.5	826.9	831.1	881.1
Still Gas	1548.0	1554.2	1554.2	1554.2	1654.3	1672.5	1720.8	1777.1	1826.3	1859.6	1905.8	1920.8	1939.7	1956.7
Other Petroleum 2/	33.8	33.8	33.8	33.8	118.1	105.7	102.5	101.8	120.1	114.5	128.1	130.9	125.7	129.3
Petroleum Subtotal	2192.3	2189.3	2189.3	2189.3	2570.8	2594.1	2636.0	2706.5	2804.2	2864.0	2905.0	2967.6	2987.0	3071.4
Natural Gas	768.2	746.5	752.2	756.4	826.5	873.6	905.4	926.3	905.3	894.8	891.5	863.4	865.4	815.2
Steam Coal 3/	85.1	101.9	113.5	122.2	126.8	126.5	126.5	125.8	166.6	206.1	246.9	266.3	286.0	304.8
Purchased Electricity	121.3	130.4	131.3	131.8	126.2	135.8	135.8	139.1	144.9	143.9	151.9	153.3	155.0	160.5
Total	3166.8	3168.2	3186.3	3199.7	3650.3	3729.9	3803.7	3897.7	4021.0	4108.8	4195.3	4250.6	4293.5	4351.8
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Residual Oil	0.10	0.06	0.06	0.06	0.05	0.11	0.07	0.13	0.13	0.13	0.13	0.13	0.11	0.13
Distillate Oil	0.03	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas	0.09	0.06	0.06	0.05	0.13	0.14	0.15	0.16	0.18	0.19	0.20	0.22	0.24	0.27
Petroleum Coke	2.67	2.47	2.46	2.41	3.17	3.13	3.10	3.04	3.11	3.18	3.06	3.21	3.20	3.35
Still Gas	7.31	6.74	6.70	6.58	6.92	6.92	7.03	7.16	7.29	7.32	7.43	7.45	7.47	7.44
Other Petroleum 2/	0.16	0.15	0.15	0.14	0.49	0.44	0.42	0.41	0.48	0.45	0.50	0.51	0.48	0.49
Petroleum Subtotal	10.36	9.49	9.44	9.27	10.76	10.74	10.77	10.91	11.19	11.27	11.33	11.50	11.51	11.68
Natural Gas	3.63	3.24	3.24	3.20	3.46	3.62	3.70	3.73	3.61	3.52	3.48	3.35	3.33	3.10
Steam Coal 3/	0.40	0.44	0.49	0.52	0.53	0.52	0.52	0.51	0.66	0.81	0.96	1.03	1.10	1.16
Purchased Electricity	0.57	0.57	0.57	0.56	0.53	0.56	0.55	0.56	0.58	0.57	0.59	0.59	0.60	0.61
Total	14.96	13.74	13.74	13.55	15.27	15.44	15.53	15.71	16.04	16.17	16.36	16.48	16.54	16.55
Carbon Dioxide Emissions 4/ (million metric tons)	205.1	206.7	208.3	209.2	234.8	240.7	244.9	251.3	260.9	267.3	275.3	279.2	282.3	287.0
Combined Heat and Power Generating Capacity (gigawatts)														
Petroleum	0.09	0.86	0.86	0.86	0.95	0.93	0.99	1.06	1.10	1.24	1.07	1.15	1.14	1.18
Natural Gas	3.19	3.25	3.25	3.25	3.28	3.31	3.35	3.39	3.43	3.47	3.47	3.51	3.53	3.56
Coal	0.02	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.50	0.99	1.49	1.73	1.96	2.20
Other 5/	0.95	0.95	0.95	0.95	0.62	0.63	0.64	0.65	0.65	0.66	0.66	0.67	0.67	0.68
Total	4.25	5.07	5.07	5.07	4.85	4.87	4.98	5.10	5.67	6.35	6.69	7.05	7.30	7.62
Net Generation (billion kilowatthours)														
Petroleum	1.05	0.73	1.71	1.71	6.76	6.49	7.45	8.03	8.40	9.54	8.14	8.83	8.78	9.25
Natural Gas	14.85	17.28	17.28	17.28	21.51	21.76	22.15	22.50	22.74	23.07	23.11	23.39	23.58	23.84
Coal	0.50	0.23	0.06	0.06	0.00	0.00	0.00	0.00	3.91	7.81	11.72	13.59	15.46	17.27
Other 5/	6.52	4.54	4.84	4.84	4.09	4.15	4.20	4.26	4.30	4.34	4.38	4.42	4.46	4.49
Total	22.92	22.78	23.89	23.89	32.36	32.40	33.80	34.78	39.34	44.76	47.35	50.22	52.28	54.85
Disposition														
Sales to the Grid	3.03	4.83	5.58	5.58	11.88	11.29	12.38	13.01	15.82	19.47	20.36	22.25	23.31	24.90
Generation for Own Use	19.89	17.94	18.31	18.31	20.49	21.11	21.42	21.77	23.52	25.29	26.99	27.97	28.97	29.95

Table 24. Refining Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Energy Consumed at Ethanol Plants (trillion Btu)														
Natural Gas	41.3	49.3	54.9	59.1	85.6	116.3	147.7	171.1	200.8	215.4	230.5	235.8	241.4	246.1
Coal	84.2	101.1	113.5	122.2	126.8	126.5	126.5	125.8	125.5	123.8	123.5	123.1	123.1	122.8
Electricity	5.2	6.3	7.1	7.6	13.5	16.7	19.9	22.3	25.4	26.8	28.4	29.0	29.7	30.3
Total	130.7	156.6	175.5	189.0	226.0	259.4	294.0	319.3	351.7	366.0	382.4	388.0	394.2	399.2



Table 24. Refining Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments (billion 2000 dollars)	265.33	266.61	269.60	272.17	274.51	276.17	279.00	283.33	286.09	288.80	291.39	296.23	298.77	301.05	1.0%
Energy Consumption (trillion Btu) 1/															
Residual Oil	33.6	33.6	33.6	33.7	33.8	32.9	34.0	34.2	34.4	34.7	33.9	33.2	32.6	32.2	3.3%
Distillate Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas	79.5	87.5	86.7	84.5	91.3	101.0	103.2	101.6	97.7	97.9	101.9	105.7	96.5	113.5	8.7%
Petroleum Coke	870.6	866.8	870.1	889.4	886.2	878.6	869.9	897.3	904.1	919.8	942.2	961.1	976.4	973.5	2.1%
Still Gas	1995.0	2028.1	2040.2	2069.5	2098.5	2118.7	2128.6	2227.2	2270.5	2302.6	2366.6	2425.5	2446.1	2441.5	1.8%
Other Petroleum 2/	131.4	135.0	134.3	134.7	135.5	136.1	138.1	139.3	140.4	142.2	145.2	154.7	166.4	147.5	5.8%
Petroleum Subtotal	3110.0	3150.9	3165.0	3211.9	3245.4	3267.3	3273.8	3399.5	3447.1	3497.2	3589.7	3680.1	3717.9	3708.3	2.0%
Natural Gas	774.0	750.0	774.9	768.0	745.5	737.6	754.7	708.7	707.0	688.3	641.0	600.3	595.5	624.2	-0.7%
Steam Coal 3/	339.8	376.1	410.8	616.6	818.2	1002.6	1123.8	1249.6	1344.5	1472.6	1554.3	1635.2	1729.0	1730.0	11.5%
Purchased Electricity	159.0	164.1	165.9	160.3	167.7	167.9	164.5	171.7	172.7	175.0	179.0	182.7	184.2	178.9	1.2%
Total	4382.8	4441.0	4516.5	4756.9	4976.8	5175.4	5316.8	5529.5	5671.3	5833.0	5964.0	6098.2	6226.6	6241.3	2.6%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)															
Residual Oil	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	2.3%
Distillate Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas	0.30	0.33	0.32	0.31	0.33	0.37	0.37	0.36	0.34	0.34	0.35	0.36	0.32	0.38	7.6%
Petroleum Coke	3.28	3.25	3.23	3.27	3.23	3.18	3.12	3.17	3.16	3.18	3.23	3.24	3.27	3.23	1.0%
Still Gas	7.52	7.61	7.57	7.60	7.64	7.67	7.63	7.86	7.94	7.97	8.12	8.19	8.19	8.11	0.7%
Other Petroleum 2/	0.50	0.51	0.50	0.50	0.49	0.49	0.49	0.49	0.49	0.49	0.50	0.52	0.56	0.49	4.8%
Petroleum Subtotal	11.72	11.82	11.74	11.80	11.82	11.83	11.73	12.00	12.05	12.11	12.32	12.42	12.44	12.32	1.0%
Natural Gas	2.92	2.81	2.87	2.82	2.72	2.67	2.71	2.50	2.47	2.38	2.20	2.03	1.99	2.07	-1.7%
Steam Coal 3/	1.28	1.41	1.52	2.27	2.98	3.63	4.03	4.41	4.70	5.10	5.33	5.52	5.79	5.75	10.4%
Purchased Electricity	0.60	0.62	0.62	0.59	0.61	0.61	0.59	0.61	0.60	0.61	0.61	0.62	0.62	0.59	0.2%
Total	16.52	16.66	16.75	17.48	18.13	18.74	19.06	19.52	19.82	20.20	20.47	20.59	20.84	20.73	1.6%
Carbon Dioxide Emissions 4/ (million metric tons)	290.4	296.1	301.8	322.4	343.6	361.9	374.1	392.5	404.5	418.9	430.5	442.2	453.4	453.3	3.1%
Combined Heat and Power Generating Capacity (gigawatts)															
Petroleum	1.14	1.08	1.09	1.27	1.10	1.10	1.12	1.13	1.15	1.15	1.15	1.15	1.16	1.17	1.2%
Natural Gas	3.58	3.60	3.63	3.67	3.68	3.70	3.73	3.76	3.79	3.79	3.79	3.79	3.82	3.86	0.7%
Coal	2.62	3.04	3.46	5.94	8.42	10.91	12.27	13.63	14.99	16.44	17.88	19.33	19.34	19.35	29.4%
Other 5/	0.68	0.69	0.69	0.70	0.70	0.71	0.71	0.72	0.72	0.72	0.72	0.72	0.73	0.74	-1.0%
Total	8.02	8.41	8.86	11.57	13.90	16.42	17.83	19.24	20.65	22.09	23.54	24.99	25.05	25.11	6.3%
Net Generation (billion kilowatthours)															
Petroleum	8.95	8.45	8.50	10.01	8.58	8.60	8.63	8.76	8.89	9.00	9.01	9.01	9.02	9.12	10.2%
Natural Gas	24.00	24.15	24.35	24.72	24.76	24.96	25.17	25.38	25.60	25.61	25.61	25.61	25.61	26.19	1.6%
Coal	20.62	23.92	27.21	46.78	65.91	83.40	94.90	106.85	115.85	128.01	135.76	143.44	152.34	152.44	28.5%
Other 5/	4.53	4.57	4.61	4.65	4.69	4.73	4.77	4.81	4.85	4.85	4.85	4.85	4.85	4.96	0.3%
Total	58.10	61.09	64.68	86.16	103.94	121.70	133.47	145.80	155.19	167.46	175.22	182.91	191.82	192.70	8.6%
Disposition															
Sales to the Grid	26.59	28.08	30.16	43.83	54.03	64.81	71.92	79.41	85.09	92.67	97.45	102.17	107.65	107.83	12.7%
Generation for Own Use	31.52	33.01	34.52	42.33	49.91	56.88	61.55	66.39	70.10	74.79	77.78	80.74	84.17	84.88	6.2%

Table 24. Refining Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Energy Consumed at Ethanol Plants (trillion Btu)															
Natural Gas	213.5	228.4	239.9	239.5	239.9	240.3	240.4	240.4	240.6	240.8	240.7	240.8	240.8	240.8	6.3%
Coal	122.5	124.1	124.0	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	0.8%
Electricity	27.0	28.7	30.1	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3	30.3	30.3	30.3	6.3%
Total	362.9	381.2	394.0	393.3	393.8	394.2	394.3	394.3	394.5	394.7	394.7	394.8	394.8	394.7	3.6%

Table 24. Refining Industry Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power and consumption at ethanol plants.

2/ Includes lubricants and miscellaneous petroleum products.

3/ Where coal-to-liquids (CTL) technology is adopted in the forecast, the plants are assumed to produce oil products and to generate electricity. A portion of the coal use is attributed to feedstock use to produce the liquids. The feedstock portion is assumed to be equal to the Btu content of the liquids produced. The rest of the coal used in CTL plants is accounted for in industrial steam coal consumption, a portion of which is reflected in energy used for end-use sector combined heat and power.

4/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

5/ May include wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). 2003 and 2004 coal and natural gas consumption at ethanol plants: Carbon Dioxide Emissions from the Production and Combustion of Fuel Ethanol from Corn," Marland, G. and A.F. Turhollow, 1991. 2003 and 2004 electricity consumption at ethanol plants: U.S. Department of Agriculture, 1998 Ethanol Cost-of-Production Survey, Agricultural Economic Report Number 808. Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 25. Food Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	428.56	429.05	439.14	447.74	457.55	466.49	475.81	484.83	494.11	503.88	513.22	522.80	532.96	543.77
Energy Consumption (trillion Btu) 1/														
Residual Oil	8.0	7.9	7.0	6.2	7.2	7.1	7.0	7.2	6.8	6.7	7.0	6.8	6.5	6.5
Distillate Oil	22.6	18.6	21.4	18.2	18.3	17.7	17.4	17.4	16.2	16.2	16.8	16.6	15.8	15.9
Liquefied Petroleum Gas	5.4	5.2	5.4	4.5	5.8	5.8	5.6	5.5	5.3	5.4	5.5	5.5	5.4	5.6
Other Petroleum 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Subtotal	36.0	31.7	33.8	28.9	31.3	30.6	30.0	30.1	28.4	28.3	29.3	28.9	27.8	27.9
Natural Gas	541.2	531.3	527.0	540.4	548.5	558.0	568.3	577.5	588.4	598.3	606.3	616.8	629.4	641.3
Steam Coal	195.0	199.9	213.6	213.7	214.0	214.2	214.4	214.6	214.7	214.9	215.1	215.3	215.5	215.6
Renewables	41.5	41.6	42.7	43.6	44.7	45.7	46.8	47.8	48.9	50.0	51.0	52.1	53.3	54.5
Purchased Electricity	227.0	227.9	231.4	233.5	236.6	239.9	243.4	246.4	249.8	253.4	256.7	260.0	263.4	267.2
Total	1040.8	1032.4	1048.4	1060.2	1075.1	1088.4	1102.8	1116.4	1130.2	1144.8	1158.4	1173.0	1189.3	1206.6
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Residual Oil	0.02	0.02	0.02	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Distillate Oil	0.05	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03
Liquefied Petroleum Gas	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Other Petroleum 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Subtotal	0.08	0.07	0.08	0.06	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05
Natural Gas	1.26	1.24	1.20	1.21	1.20	1.20	1.19	1.19	1.19	1.19	1.18	1.18	1.18	1.18
Steam Coal	0.46	0.47	0.49	0.48	0.47	0.46	0.45	0.44	0.43	0.43	0.42	0.41	0.40	0.40
Renewables	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Purchased Electricity	0.53	0.53	0.53	0.52	0.52	0.51	0.51	0.51	0.51	0.50	0.50	0.50	0.49	0.49
Total	2.43	2.41	2.39	2.37	2.35	2.33	2.32	2.30	2.29	2.27	2.26	2.24	2.23	2.22
Carbon Dioxide Emissions 3/ (million metric tons)	92.7	92.1	94.0	94.4	95.3	96.5	97.8	98.7	99.4	100.7	101.5	102.3	103.1	104.2
Combined Heat and Power 4/ Generating Capacity (gigawatts)														
Petroleum	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Natural Gas	0.46	0.45	0.47	0.49	0.51	0.53	0.56	0.59	0.62	0.65	0.68	0.71	0.76	0.81
Coal	0.86	0.86	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Other 5/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total	1.42	1.41	1.53	1.55	1.57	1.59	1.62	1.65	1.68	1.71	1.74	1.77	1.82	1.87
Net Generation (billion kilowatthours)														
Petroleum	0.07	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Natural Gas	2.01	1.55	1.65	1.81	1.97	2.15	2.36	2.58	2.79	3.00	3.23	3.49	3.82	4.18
Coal	3.96	4.06	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46
Other 5/	0.11	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Total	6.15	5.77	6.28	6.44	6.60	6.78	6.99	7.21	7.42	7.63	7.86	8.12	8.45	8.81
Disposition														
Sales to the Grid	0.21	0.15	0.22	0.31	0.40	0.51	0.64	0.77	0.90	1.02	1.16	1.32	1.51	1.73
Generation for Own Use	5.94	5.62	6.07	6.13	6.19	6.27	6.35	6.44	6.52	6.61	6.70	6.80	6.93	7.08

Table 25. Food Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments (billion 2000 dollars)	554.88	565.78	576.50	586.93	597.04	607.38	617.97	628.74	639.44	650.70	662.18	673.38	684.33	695.42	1.9%
Energy Consumption (trillion Btu) 1/															
Residual Oil	6.5	6.7	6.9	6.7	6.8	7.0	7.0	7.1	7.2	7.3	7.4	7.5	7.6	7.7	-0.1%
Distillate Oil	16.2	16.7	17.4	17.1	17.7	18.2	18.4	18.7	19.2	19.4	19.8	20.3	21.0	21.5	0.6%
Liquefied Petroleum Gas	5.8	5.9	6.0	6.0	6.0	6.1	6.2	6.2	6.3	6.5	6.6	6.6	6.7	7.0	1.1%
Other Petroleum 2/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	28.4	29.3	30.3	29.7	30.6	31.2	31.6	31.9	32.7	33.2	33.7	34.4	35.4	36.1	0.5%
Natural Gas	653.1	663.9	674.7	688.3	700.2	712.8	725.8	738.8	751.2	764.7	778.2	791.3	803.3	815.2	1.7%
Steam Coal	215.8	216.0	216.1	216.3	216.5	216.6	216.8	217.0	217.1	217.3	217.5	217.7	217.8	218.0	0.3%
Renewables	55.8	57.1	58.3	59.5	60.7	61.9	63.2	64.4	65.7	67.0	68.4	69.7	71.1	72.4	2.2%
Purchased Electricity	271.1	275.1	278.8	282.2	285.5	288.8	292.2	295.8	299.2	303.1	307.0	310.9	314.6	317.9	1.3%
Total	1224.3	1241.2	1258.3	1276.0	1293.4	1311.4	1329.6	1347.9	1366.0	1385.2	1404.8	1424.0	1442.2	1459.6	1.3%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)															
Residual Oil	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-2.0%
Distillate Oil	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-1.3%
Liquefied Petroleum Gas	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.7%
Other Petroleum 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Petroleum Subtotal	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-1.3%
Natural Gas	1.18	1.17	1.17	1.17	1.17	1.17	1.17	1.18	1.17	1.18	1.18	1.18	1.17	1.17	-0.2%
Steam Coal	0.39	0.38	0.37	0.37	0.36	0.36	0.35	0.35	0.34	0.33	0.33	0.32	0.32	0.31	-1.5%
Renewables	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.3%
Purchased Electricity	0.49	0.49	0.48	0.48	0.48	0.48	0.47	0.47	0.47	0.47	0.46	0.46	0.46	0.46	-0.6%
Total	2.21	2.19	2.18	2.17	2.17	2.16	2.15	2.14	2.14	2.13	2.12	2.11	2.11	2.10	-0.5%
Carbon Dioxide Emissions 3/ (million metric tons)	105.5	106.8	108.1	109.3	110.6	112.0	113.4	114.8	116.3	117.8	119.4	121.0	122.5	123.9	1.1%
Combined Heat and Power 4/ Generating Capacity (gigawatts)															
Petroleum	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	N/A
Natural Gas	0.86	0.91	0.96	1.02	1.08	1.14	1.19	1.24	1.30	1.35	1.40	1.45	1.49	1.54	4.8%
Coal	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.4%
Other 5/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Total	1.92	1.97	2.02	2.08	2.14	2.20	2.25	2.30	2.36	2.41	2.46	2.50	2.55	2.59	2.4%
Net Generation (billion kilowatthours)															
Petroleum	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	N/A
Natural Gas	4.56	4.94	5.33	5.75	6.18	6.60	6.99	7.38	7.76	8.13	8.48	8.84	9.17	9.48	7.2%
Coal	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	0.4%
Other 5/	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	N/A
Total	9.19	9.57	9.96	10.38	10.81	11.23	11.62	12.01	12.39	12.76	13.12	13.47	13.80	14.11	3.5%
Disposition															
Sales to the Grid	1.96	2.19	2.42	2.68	2.93	3.18	3.42	3.65	3.88	4.10	4.31	4.53	4.73	4.91	14.2%
Generation for Own Use	7.23	7.38	7.54	7.71	7.88	8.05	8.20	8.36	8.51	8.66	8.80	8.94	9.07	9.20	1.9%

Table 25. Food Industry Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

4/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

5/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 26. Paper Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	161.67	168.85	166.80	170.69	174.51	177.19	179.73	182.29	184.81	186.86	188.48	189.96	191.68	193.48
Energy Consumption (trillion Btu) 1/														
Residual Oil	112.5	112.7	106.0	102.5	105.2	104.7	104.4	105.7	104.1	103.7	104.8	103.7	103.2	102.9
Distillate Oil	15.2	15.1	16.0	15.2	15.0	14.9	14.8	14.8	14.5	14.5	14.5	14.5	14.4	14.4
Liquefied Petroleum Gas	5.0	5.2	5.2	4.7	5.8	5.8	5.7	5.6	5.6	5.6	5.6	5.6	5.6	5.6
Petroleum Subtotal	132.7	133.0	127.1	122.4	126.0	125.3	125.0	126.1	124.2	123.8	124.9	123.8	123.2	122.9
Natural Gas	545.1	542.3	536.9	545.8	546.8	549.7	552.8	554.6	558.8	560.7	560.6	562.7	565.3	567.4
Steam Coal	256.2	284.2	288.5	288.1	287.8	287.4	287.1	286.7	286.4	286.1	285.7	285.4	285.1	284.8
Renewables	1213.1	1265.3	1251.4	1277.7	1304.2	1323.3	1341.7	1360.8	1379.9	1396.0	1409.3	1421.8	1436.1	1451.1
Purchased Electricity	241.3	252.7	246.2	248.2	251.0	252.7	254.0	255.4	257.3	258.5	258.9	259.1	259.7	260.7
Total	2388.3	2477.3	2450.1	2482.2	2515.8	2538.5	2560.6	2583.6	2606.6	2625.1	2639.4	2652.8	2669.3	2686.9
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Residual Oil	0.70	0.67	0.64	0.60	0.60	0.59	0.58	0.58	0.56	0.56	0.56	0.55	0.54	0.53
Distillate Oil	0.09	0.09	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07
Liquefied Petroleum Gas	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Petroleum Subtotal	0.82	0.79	0.76	0.72	0.72	0.71	0.70	0.69	0.67	0.66	0.66	0.65	0.64	0.64
Natural Gas	3.37	3.21	3.22	3.20	3.13	3.10	3.08	3.04	3.02	3.00	2.97	2.96	2.95	2.93
Steam Coal	1.58	1.68	1.73	1.69	1.65	1.62	1.60	1.57	1.55	1.53	1.52	1.50	1.49	1.47
Renewables	7.50	7.49	7.50	7.49	7.47	7.47	7.47	7.46	7.47	7.47	7.48	7.48	7.49	7.50
Purchased Electricity	1.49	1.50	1.48	1.45	1.44	1.43	1.41	1.40	1.39	1.38	1.37	1.36	1.36	1.35
Total	14.77	14.67	14.69	14.54	14.42	14.33	14.25	14.17	14.10	14.05	14.00	13.97	13.93	13.89
Carbon Dioxide Emissions 2/ (million metric tons)	108.9	113.1	111.7	111.7	112.2	112.7	113.2	113.4	113.4	113.8	113.6	113.3	113.0	113.0
Combined Heat and Power 3/ Generating Capacity (gigawatts)														
Petroleum	0.31	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33
Natural Gas	2.07	2.07	2.10	2.14	2.18	2.23	2.28	2.33	2.37	2.41	2.45	2.49	2.53	2.58
Coal	1.40	1.40	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
Other 4/	4.21	4.23	4.23	4.40	4.57	4.69	4.80	4.92	5.04	5.13	5.22	5.29	5.38	5.47
Total	7.99	8.04	8.09	8.31	8.52	8.68	8.84	9.01	9.17	9.31	9.43	9.55	9.68	9.82
Net Generation (billion kilowatthours)														
Petroleum	3.21	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36
Natural Gas	8.97	8.34	8.57	8.90	9.24	9.59	9.97	10.35	10.68	10.99	11.28	11.58	11.92	12.25
Coal	6.77	7.51	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65
Other 4/	29.02	29.08	29.08	30.09	31.05	31.74	32.40	33.08	33.77	34.35	34.83	35.28	35.80	36.34
Total	47.98	48.28	48.65	49.99	51.29	52.33	53.38	54.44	55.46	56.34	57.12	57.86	58.72	59.59
Disposition														
Sales to the Grid	2.00	1.98	2.12	2.89	3.67	4.29	4.92	5.55	6.17	6.70	7.16	7.61	8.12	8.65
Generation for Own Use	45.97	46.30	46.53	47.10	47.63	48.04	48.46	48.88	49.29	49.64	49.96	50.25	50.59	50.94

Table 26. Paper Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments (billion 2000 dollars)	195.85	198.33	200.29	202.15	204.14	206.14	208.16	210.18	212.36	214.72	217.18	219.49	221.86	224.27	1.1%
Energy Consumption (trillion Btu) 1/															
Residual Oil	103.1	103.7	104.1	103.1	103.8	104.3	104.4	104.1	104.4	104.7	104.9	105.5	106.0	105.8	-0.2%
Distillate Oil	14.4	14.4	14.5	14.5	14.5	14.5	14.5	14.5	14.6	14.6	14.6	14.6	14.7	14.7	-0.1%
Liquefied Petroleum Gas	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.8	5.7	5.7	5.9	0.5%
Petroleum Subtotal	123.2	123.8	124.3	123.2	123.9	124.4	124.5	124.3	124.7	125.1	125.3	125.8	126.4	126.4	-0.2%
Natural Gas	569.8	571.7	573.5	577.7	580.6	584.0	587.7	591.7	595.3	599.2	603.4	607.2	610.9	615.0	0.5%
Steam Coal	284.6	284.3	284.1	284.0	283.9	283.9	283.8	283.8	283.8	283.8	283.8	283.8	283.8	283.9	0.0%
Renewables	1470.2	1490.5	1507.4	1524.0	1541.8	1559.9	1578.4	1597.2	1617.5	1639.2	1661.9	1683.8	1706.4	1729.6	1.2%
Purchased Electricity	262.8	265.3	266.9	268.3	270.1	271.9	273.8	276.0	278.9	282.2	285.8	289.3	292.9	296.4	0.6%
Total	2710.6	2735.6	2756.2	2777.3	2800.3	2824.1	2848.3	2872.9	2900.0	2929.4	2960.1	2989.9	3020.4	3051.3	0.8%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)															
Residual Oil	0.53	0.52	0.52	0.51	0.51	0.51	0.50	0.50	0.49	0.49	0.48	0.48	0.48	0.47	-1.3%
Distillate Oil	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	-1.2%
Liquefied Petroleum Gas	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.6%
Petroleum Subtotal	0.63	0.62	0.62	0.61	0.61	0.60	0.60	0.59	0.59	0.58	0.57	0.57	0.56	0.56	-1.3%
Natural Gas	2.91	2.88	2.86	2.86	2.84	2.83	2.82	2.82	2.80	2.79	2.78	2.77	2.75	2.74	-0.6%
Steam Coal	1.45	1.43	1.42	1.40	1.39	1.38	1.36	1.35	1.34	1.32	1.31	1.29	1.28	1.27	-1.1%
Renewables	7.51	7.52	7.53	7.54	7.55	7.57	7.58	7.60	7.62	7.63	7.65	7.67	7.69	7.71	0.1%
Purchased Electricity	1.34	1.34	1.33	1.33	1.32	1.32	1.32	1.31	1.31	1.31	1.32	1.32	1.32	1.32	-0.5%
Total	13.84	13.79	13.76	13.74	13.72	13.70	13.68	13.67	13.66	13.64	13.63	13.62	13.61	13.61	-0.3%
Carbon Dioxide Emissions 2/ (million metric tons)	113.4	113.9	114.3	114.7	115.2	115.7	116.3	117.0	117.8	118.7	119.7	120.7	121.7	122.6	0.3%
Combined Heat and Power 3/ Generating Capacity (gigawatts)															
Petroleum	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	N/A
Natural Gas	2.62	2.66	2.70	2.74	2.79	2.83	2.87	2.91	2.95	2.99	3.02	3.06	3.10	3.13	1.6%
Coal	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	0.1%
Other 4/	5.59	5.72	5.82	5.92	6.03	6.15	6.26	6.38	6.50	6.63	6.77	6.91	7.05	7.19	2.1%
Total	9.98	10.14	10.29	10.43	10.58	10.74	10.89	11.05	11.21	11.38	11.56	11.74	11.91	12.09	1.6%
Net Generation (billion kilowatthours)															
Petroleum	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	3.36	N/A
Natural Gas	12.58	12.88	13.18	13.51	13.83	14.16	14.46	14.75	15.05	15.34	15.63	15.92	16.19	16.43	2.6%
Coal	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	7.65	0.1%
Other 4/	37.03	37.76	38.36	38.96	39.60	40.25	40.92	41.60	42.33	43.11	43.92	44.71	45.53	46.36	1.8%
Total	60.61	61.64	62.55	63.47	64.44	65.41	66.38	67.36	68.38	69.45	70.56	71.63	72.72	73.80	1.6%
Disposition															
Sales to the Grid	9.26	9.88	10.42	10.98	11.55	12.14	12.72	13.31	13.92	14.56	15.23	15.87	16.52	17.17	8.7%
Generation for Own Use	51.35	51.76	52.13	52.50	52.88	53.27	53.66	54.05	54.46	54.89	55.33	55.76	56.19	56.63	0.8%



Table 26. Paper Industry Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power.

2/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

3/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

4/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 27. Bulk Chemical Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	191.04	201.40	197.79	203.00	206.81	207.51	207.92	208.74	210.66	212.09	212.66	213.19	214.40	215.26
Energy Consumption (trillion Btu) 1/														
Heat and Power														
Residual Oil	28.2	26.1	21.4	19.4	21.9	21.4	21.1	21.7	20.4	20.0	20.5	19.6	18.9	18.6
Distillate Oil	5.8	5.1	5.4	4.8	4.9	4.7	4.7	4.6	4.4	4.3	4.3	4.2	4.0	4.0
Liquefied Petroleum Gas	31.3	31.2	32.3	22.0	37.0	36.2	35.0	34.4	32.8	32.7	33.4	33.3	32.8	31.5
Petroleum Coke	108.2	113.2	113.2	109.3	109.5	106.9	104.3	104.7	100.7	99.6	101.3	98.2	97.2	96.0
Other Petroleum 2/	257.3	269.2	269.4	260.0	260.5	254.3	248.1	249.0	239.4	236.8	241.0	233.7	231.2	228.5
Petroleum Subtotal	430.8	444.7	441.7	415.5	433.8	423.6	413.2	414.4	397.7	393.4	400.6	389.0	384.1	378.5
Natural Gas	1463.5	1496.0	1470.6	1521.4	1521.8	1531.8	1544.4	1545.6	1570.3	1578.7	1571.2	1583.9	1594.7	1604.0
Steam Coal	238.0	251.4	250.5	250.9	251.1	250.8	250.5	250.1	249.9	249.6	249.2	248.8	248.4	248.0
Purchased Electricity	428.3	460.3	451.7	459.0	462.4	459.1	454.0	449.8	448.8	446.9	442.5	437.7	434.4	430.9
Total Heat and Power	2560.6	2652.5	2614.6	2646.8	2669.1	2665.3	2662.1	2659.8	2666.7	2668.5	2663.5	2659.4	2661.6	2661.4
Feedstock														
Liquefied Petroleum Gas	1996.5	2109.6	2062.3	2098.4	2120.6	2111.9	2100.1	2098.6	2111.1	2121.9	2125.5	2127.8	2133.3	2137.0
Petrochemical Feedstocks	1229.3	1294.3	1252.7	1279.1	1296.2	1291.0	1284.7	1283.9	1290.8	1294.9	1293.3	1291.5	1294.4	1294.1
Natural Gas	584.1	606.9	599.7	607.5	610.0	607.9	607.6	606.4	607.8	606.7	604.1	602.0	602.0	600.7
Total Feedstocks	3809.9	4010.8	3914.7	3985.0	4026.8	4010.8	3992.4	3988.9	4009.7	4023.5	4022.9	4021.2	4029.8	4031.8
Total	6370.5	6663.3	6529.3	6631.8	6695.9	6676.1	6654.5	6648.7	6676.4	6692.1	6686.4	6680.6	6691.4	6693.2
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Heat and Power														
Residual Oil	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Distillate Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Petroleum Coke	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
Other Petroleum	1.3	1.3	1.4	1.3	1.3	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1
Petroleum Subtotal	2.3	2.2	2.2	2.0	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.8	1.8	1.8
Natural Gas	7.7	7.4	7.4	7.5	7.4	7.4	7.4	7.4	7.5	7.4	7.4	7.4	7.4	7.5
Steam Coal	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Purchased Electricity	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.0	2.0
Total Heat and Power	13.4	13.2	13.2	13.0	12.9	12.8	12.8	12.7	12.7	12.6	12.5	12.5	12.4	12.4
Feedstock														
Liquefied Petroleum Gas	10.5	10.5	10.4	10.3	10.3	10.2	10.1	10.1	10.0	10.0	10.0	10.0	10.0	9.9
Petrochemical Feedstocks	6.4	6.4	6.3	6.3	6.3	6.2	6.2	6.2	6.1	6.1	6.1	6.1	6.0	6.0
Natural Gas	3.1	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.8	2.8	2.8	2.8
Total Feedstocks	19.9	19.9	19.8	19.6	19.5	19.3	19.2	19.1	19.0	19.0	18.9	18.9	18.8	18.7
Total	33.3	33.1	33.0	32.7	32.4	32.2	32.0	31.9	31.7	31.6	31.4	31.3	31.2	31.1
Carbon Dioxide Emissions 3/ (million metric tons)	328.1	343.4	337.4	341.2	343.7	342.5	341.3	340.2	340.0	340.4	339.1	337.4	336.6	335.7

Table 27. Bulk Chemical Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Combined Heat and Power 4/ Generating Capacity (gigawatts)														
Petroleum	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Natural Gas	7.73	7.79	7.86	7.91	8.00	8.09	8.21	8.35	8.48	8.61	8.75	8.90	9.05	9.21
Coal	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38
Other 5/	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Total	8.75	8.81	8.89	8.94	9.02	9.11	9.23	9.37	9.50	9.63	9.77	9.92	10.08	10.24
Net Generation (billion kilowatthours)														
Petroleum	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Natural Gas	45.99	43.78	44.31	44.70	45.33	46.04	46.98	48.01	49.02	50.01	51.05	52.19	53.39	54.59
Coal	2.85	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10
Other 5/	7.04	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40
Total	56.00	53.38	53.91	54.30	54.93	55.64	56.58	57.61	58.62	59.61	60.65	61.79	62.99	64.19
Disposition														
Sales to the Grid	9.43	8.94	9.07	9.30	9.68	10.11	10.67	11.29	11.89	12.49	13.11	13.79	14.52	15.24
Generation for Own Use	46.57	44.43	44.84	45.00	45.25	45.54	45.91	46.32	46.73	47.12	47.54	47.99	48.47	48.96

Table 27. Bulk Chemical Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments (billion 2000 dollars)	216.90	218.55	219.44	220.03	220.86	221.83	222.96	224.09	225.25	226.73	228.26	229.52	230.94	231.93	0.5%
Energy Consumption (trillion Btu) 1/															
Heat and Power															
Residual Oil	18.5	18.8	19.0	18.1	18.3	18.5	18.4	18.2	18.3	18.2	18.2	18.5	18.6	18.4	-1.3%
Distillate Oil	3.9	3.9	3.9	3.8	3.7	3.7	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.4	-1.5%
Liquefied Petroleum Gas	31.6	31.4	31.4	31.0	31.1	31.0	31.1	31.1	31.7	32.0	31.6	29.4	29.9	30.9	0.0%
Petroleum Coke	96.7	98.6	99.9	98.5	100.3	101.7	102.5	102.6	104.0	105.2	106.1	107.0	108.0	108.3	-0.2%
Other Petroleum 2/	230.1	234.5	237.5	234.2	238.5	242.0	243.9	244.1	247.3	250.2	252.3	254.6	256.8	257.5	-0.2%
Petroleum Subtotal	380.8	387.2	391.6	385.5	392.0	397.0	399.6	399.6	404.9	409.2	411.7	413.1	416.8	418.5	-0.2%
Natural Gas	1610.1	1611.1	1612.0	1622.1	1622.2	1626.1	1633.3	1642.6	1646.5	1653.5	1661.9	1669.4	1673.7	1676.9	0.4%
Steam Coal	247.8	247.5	247.3	247.0	246.8	246.6	246.4	246.3	246.2	246.2	246.2	246.1	246.0	245.8	-0.1%
Purchased Electricity	429.3	427.9	424.4	420.1	416.4	413.2	410.5	408.1	405.8	404.3	403.2	401.5	400.2	397.6	-0.6%
Total Heat and Power	2668.0	2673.7	2675.3	2674.6	2677.4	2682.8	2689.9	2696.7	2703.4	2713.3	2722.9	2730.1	2736.7	2738.9	0.1%
Feedstock															
Liquefied Petroleum Gas	2151.6	2168.5	2179.5	2191.1	2206.2	2221.8	2238.2	2255.4	2273.1	2293.5	2314.8	2328.0	2343.4	2356.1	0.4%
Petrochemical Feedstocks	1298.9	1305.1	1309.6	1310.4	1312.6	1315.4	1318.8	1321.5	1324.7	1329.6	1335.2	1339.2	1345.8	1350.7	0.2%
Natural Gas	601.1	601.6	600.3	597.7	597.2	598.2	599.8	601.0	602.1	604.3	606.0	607.4	609.2	609.6	0.0%
Total Feedstocks	4051.6	4075.2	4089.3	4099.2	4116.0	4135.3	4156.8	4178.0	4199.9	4227.5	4256.0	4274.6	4298.4	4316.4	0.3%
Total	6719.6	6748.9	6764.7	6773.8	6793.4	6818.2	6846.7	6874.6	6903.3	6940.8	6978.9	7004.7	7035.2	7055.2	0.2%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)															
Heat and Power															
Residual Oil	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-1.9%
Distillate Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.1%
Liquefied Petroleum Gas	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-0.6%
Petroleum Coke	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-0.7%
Other Petroleum	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	-0.7%
Petroleum Subtotal	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-0.8%
Natural Gas	7.4	7.4	7.3	7.4	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.2	7.2	-0.1%
Steam Coal	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	-0.6%
Purchased Electricity	2.0	2.0	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	-1.1%
Total Heat and Power	12.3	12.2	12.2	12.2	12.1	12.1	12.1	12.0	12.0	12.0	11.9	11.9	11.9	11.8	-0.4%
Feedstock															
Liquefied Petroleum Gas	9.9	9.9	9.9	10.0	10.0	10.0	10.0	10.1	10.1	10.1	10.1	10.1	10.1	10.2	-0.1%
Petrochemical Feedstocks	6.0	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.8	-0.4%
Natural Gas	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.6	2.6	-0.5%
Total Feedstocks	18.7	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	18.6	-0.3%
Total	31.0	30.9	30.8	30.8	30.8	30.7	30.7	30.7	30.6	30.6	30.6	30.5	30.5	30.4	-0.3%
Carbon Dioxide Emissions 3/ (million metric tons)	336.2	337.0	337.1	336.6	336.9	337.5	338.2	339.1	340.0	341.3	342.8	343.7	344.8	345.2	0.0%

Table 27. Bulk Chemical Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Combined Heat and Power 4/ Generating Capacity (gigawatts)															
Petroleum	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	N/A
Natural Gas	9.37	9.52	9.67	9.82	9.96	10.09	10.22	10.34	10.46	10.58	10.69	10.79	10.89	10.98	1.3%
Coal	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	N/A
Other 5/	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	N/A
Total	10.40	10.54	10.69	10.84	10.98	11.12	11.24	11.37	11.49	11.60	11.71	11.82	11.91	12.01	1.2%
Net Generation (billion kilowatthours)															
Petroleum	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	N/A
Natural Gas	55.79	56.91	58.03	59.14	60.19	61.21	62.18	63.09	63.97	64.82	65.65	66.43	67.15	67.86	1.7%
Coal	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.10	N/A
Other 5/	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	6.40	N/A
Total	65.39	66.51	67.63	68.74	69.79	70.81	71.77	72.69	73.57	74.42	75.25	76.03	76.74	77.46	1.4%
Disposition															
Sales to the Grid	15.96	16.63	17.30	17.97	18.60	19.21	19.79	20.33	20.87	21.37	21.87	22.34	22.77	23.20	3.7%
Generation for Own Use	49.43	49.88	50.33	50.77	51.19	51.60	51.99	52.35	52.71	53.05	53.38	53.69	53.98	54.26	0.8%

Table 27. Bulk Chemical Industry Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power.

2/ Includes lubricants, and miscellaneous petroleum products.

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

4/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

5/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 28. Glass Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	22.25	22.25	22.36	23.56	24.43	24.60	24.79	25.71	26.80	27.99	28.85	29.34	29.71	30.38
Energy Consumption (trillion Btu) 1/														
Residual Oil	1.8	1.7	1.2	1.0	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Distillate Oil	9.1	7.3	9.3	7.7	7.4	7.1	7.1	7.1	6.8	6.9	7.1	7.2	7.0	7.1
Liquefied Petroleum Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Subtotal	10.9	9.0	10.5	8.7	8.9	8.6	8.6	8.7	8.3	8.5	8.8	8.8	8.5	8.6
Natural Gas	144.2	145.1	142.6	152.1	157.4	158.1	159.0	164.3	171.1	177.9	182.4	185.0	187.2	190.8
Steam Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchased Electricity	42.0	42.2	42.6	44.5	45.8	45.9	46.0	47.5	49.3	51.2	52.5	53.2	53.7	54.8
Total	197.1	196.2	195.8	205.3	212.0	212.6	213.6	220.5	228.7	237.6	243.7	247.0	249.5	254.2
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Residual Oil	0.08	0.07	0.05	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05
Distillate Oil	0.41	0.33	0.42	0.33	0.30	0.29	0.29	0.28	0.25	0.25	0.25	0.25	0.24	0.23
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Subtotal	0.49	0.40	0.47	0.37	0.36	0.35	0.35	0.34	0.31	0.30	0.30	0.30	0.29	0.28
Natural Gas	6.48	6.52	6.38	6.45	6.44	6.43	6.41	6.39	6.38	6.35	6.32	6.31	6.30	6.28
Steam Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Purchased Electricity	1.89	1.90	1.91	1.89	1.87	1.86	1.86	1.85	1.84	1.83	1.82	1.81	1.81	1.80
Total	8.86	8.82	8.75	8.71	8.68	8.64	8.62	8.57	8.53	8.49	8.45	8.42	8.40	8.37
Carbon Dioxide Emissions 2/ (million metric tons)	16.4	16.3	16.4	17.0	17.5	17.5	17.6	18.2	18.8	19.5	20.0	20.2	20.3	20.6
Combined Heat and Power 3/ Generating Capacity (gigawatts)														
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Generation (billion kilowatthours)														
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Disposition														
Sales to the Grid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Generation for own use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 28. Glass Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments (billion 2000 dollars)	31.11	31.87	32.49	33.00	33.42	33.93	34.43	34.99	35.54	36.16	36.82	37.47	38.12	38.67	2.1%
Energy Consumption (trillion Btu) 1/															
Residual Oil	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	0.1%
Distillate Oil	7.3	7.5	7.6	7.6	7.8	7.9	7.9	8.1	8.3	8.3	8.4	8.4	8.8	8.9	0.7%
Liquefied Petroleum Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	8.8	9.1	9.2	9.2	9.4	9.6	9.5	9.7	9.9	9.9	10.1	10.1	10.5	10.6	0.6%
Natural Gas	194.7	198.7	201.8	204.6	206.7	209.4	212.3	215.3	218.2	221.7	225.4	229.1	232.4	235.4	1.9%
Steam Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Purchased Electricity	55.9	57.2	58.2	59.0	59.6	60.4	61.2	62.1	62.9	63.9	65.0	66.1	67.2	68.1	1.9%
Total	259.5	264.9	269.2	272.8	275.7	279.4	283.0	287.1	291.0	295.5	300.5	305.3	310.1	314.1	1.8%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)															
Residual Oil	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	-2.0%
Distillate Oil	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.22	0.23	0.23	-1.4%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Petroleum Subtotal	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.28	0.27	-1.5%
Natural Gas	6.26	6.23	6.21	6.20	6.18	6.17	6.17	6.15	6.14	6.13	6.12	6.11	6.10	6.09	-0.3%
Steam Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Purchased Electricity	1.80	1.79	1.79	1.79	1.78	1.78	1.78	1.77	1.77	1.77	1.77	1.76	1.76	1.76	-0.3%
Total	8.34	8.31	8.29	8.27	8.25	8.23	8.22	8.20	8.19	8.17	8.16	8.15	8.14	8.12	-0.3%
Carbon Dioxide Emissions 2/ (million metric tons)	21.0	21.4	21.8	22.1	22.3	22.6	22.9	23.3	23.6	24.0	24.4	24.8	25.3	25.6	1.8%
Combined Heat and Power 3/															
Generating Capacity (gigawatts)															
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Net Generation (billion kilowatthours)															
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Disposition															
Sales to the Grid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Generation for own use	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A



Table 28. Glass Industry Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power.

2/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

3/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

4/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 29. Cement Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	7.55	7.75	7.92	8.31	8.70	8.73	8.76	8.84	8.98	9.02	9.03	9.07	9.14	9.24
Energy Consumption (trillion Btu) 1/														
Residual Oil	1.1	1.1	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Distillate Oil	15.1	8.0	8.6	8.4	8.4	8.3	8.3	8.3	8.1	8.1	8.1	8.1	8.0	8.0
Petroleum Coke	55.4	56.2	56.7	58.5	60.4	60.1	59.9	59.9	60.3	60.1	59.8	59.6	59.7	59.8
Other Petroleum 2/	35.3	35.8	36.1	37.3	38.5	38.4	38.2	38.2	38.5	38.4	38.1	38.0	38.1	38.2
Petroleum Subtotal	106.8	101.0	102.3	105.1	108.4	107.9	107.5	107.6	108.0	107.8	107.2	106.9	106.9	107.2
Natural Gas	22.4	22.4	22.0	23.4	24.4	24.5	24.6	24.8	25.2	25.3	25.3	25.4	25.6	25.9
Steam Coal	239.7	250.6	253.7	261.8	270.0	269.4	268.8	269.4	271.4	271.3	270.4	270.3	270.9	272.2
Metallurgical Coal	7.9	8.1	8.2	8.4	8.7	8.7	8.7	8.7	8.8	8.8	8.7	8.7	8.7	8.8
Coal Subtotal	247.7	258.6	261.8	270.2	278.7	278.1	277.5	278.1	280.1	280.1	279.1	279.0	279.6	280.9
Purchased Electricity	44.0	45.2	46.2	48.1	50.0	50.0	49.9	50.2	50.8	50.9	50.8	50.8	51.0	51.4
Total	420.9	427.4	432.3	446.8	461.5	460.5	459.5	460.7	464.2	464.0	462.4	462.2	463.1	465.4
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Residual Oil	0.15	0.14	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12
Distillate Oil	2.00	1.03	1.08	1.01	0.97	0.95	0.94	0.94	0.91	0.90	0.90	0.89	0.88	0.87
Petroleum Coke	7.33	7.24	7.15	7.04	6.94	6.88	6.83	6.78	6.72	6.67	6.62	6.57	6.52	6.47
Other Petroleum 2/	4.68	4.62	4.56	4.49	4.43	4.39	4.36	4.32	4.28	4.25	4.22	4.19	4.16	4.13
Petroleum Subtotal	14.15	13.03	12.92	12.65	12.46	12.35	12.26	12.16	12.04	11.95	11.87	11.79	11.69	11.59
Natural Gas	2.97	2.89	2.78	2.81	2.80	2.81	2.81	2.81	2.81	2.81	2.80	2.79	2.80	2.80
Steam Coal	31.75	32.31	32.03	31.51	31.03	30.85	30.67	30.46	30.23	30.07	29.94	29.79	29.62	29.44
Metallurgical Coal	1.05	1.04	1.03	1.02	1.00	1.00	0.99	0.98	0.98	0.97	0.97	0.96	0.95	0.95
Coal Subtotal	32.80	33.35	33.06	32.53	32.04	31.84	31.66	31.45	31.21	31.04	30.90	30.75	30.57	30.39
Purchased Electricity	5.83	5.83	5.84	5.79	5.75	5.72	5.70	5.67	5.66	5.64	5.62	5.60	5.58	5.56
Total	55.74	55.11	54.59	53.78	53.05	52.73	52.43	52.09	51.71	51.43	51.19	50.93	50.64	50.34
Carbon Dioxide Emissions 3/ (million metric tons)	39.3	40.1	40.6	41.9	43.3	43.2	43.1	43.2	43.5	43.5	43.3	43.2	43.3	43.4
Combined Heat and Power 4/ Generating Capacity (gigawatts)														
Petroleum	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Natural Gas	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04
Coal	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Other 5/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Net Generation (billion kilowatthours)														
Petroleum	0.20	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Natural Gas	0.05	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16
Coal	0.26	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
Other 5/	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.55	0.51	0.51	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63
Disposition														
Sales to the Grid	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Generation for Own Use	0.50	0.47	0.47	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.55	0.56	0.58	0.59

Table 29. Cement Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments (billion 2000 dollars)	9.36	9.44	9.50	9.55	9.59	9.65	9.72	9.81	9.88	10.00	10.10	10.19	10.29	10.37	1.1%
<b>Energy Consumption (trillion Btu) 1/</b>															
Residual Oil	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.2	0.3%
Distillate Oil	8.1	8.1	8.2	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.4	0.2%
Petroleum Coke	60.1	60.2	60.4	60.3	60.3	60.4	60.6	60.7	60.8	61.1	61.3	61.5	61.8	62.0	0.4%
Other Petroleum 2/	38.3	38.4	38.5	38.5	38.5	38.5	38.6	38.7	38.8	38.9	39.1	39.2	39.4	39.5	0.4%
Petroleum Subtotal	107.6	107.8	108.2	108.0	108.1	108.2	108.5	108.7	108.8	109.3	109.7	110.1	110.7	111.0	0.4%
Natural Gas	26.1	26.2	26.3	26.5	26.6	26.7	27.0	27.2	27.4	27.7	27.9	28.2	28.4	28.6	0.9%
Steam Coal	273.8	274.8	275.3	275.3	275.2	275.7	276.3	277.3	278.2	279.9	281.5	283.2	285.0	286.5	0.5%
Metallurgical Coal	8.8	8.9	8.9	8.9	8.9	8.9	8.9	8.9	9.0	9.0	9.1	9.2	9.2	9.3	0.5%
Coal Subtotal	282.6	283.6	284.1	284.2	284.1	284.5	285.2	286.3	287.2	288.9	290.7	292.4	294.2	295.8	0.5%
Purchased Electricity	51.9	52.2	52.4	52.5	52.6	52.8	53.1	53.4	53.7	54.2	54.7	55.1	55.6	55.9	0.8%
Total	468.2	469.9	471.0	471.2	471.3	472.3	473.7	475.5	477.1	480.1	483.0	485.8	488.8	491.3	0.5%
<b>Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)</b>															
Residual Oil	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	-0.9%
Distillate Oil	0.87	0.86	0.86	0.85	0.85	0.85	0.84	0.83	0.83	0.82	0.82	0.81	0.81	0.81	-0.9%
Petroleum Coke	6.42	6.38	6.35	6.31	6.29	6.26	6.23	6.19	6.15	6.11	6.07	6.03	6.00	5.97	-0.7%
Other Petroleum 2/	4.10	4.07	4.05	4.03	4.01	3.99	3.97	3.95	3.92	3.89	3.87	3.85	3.83	3.81	-0.7%
Petroleum Subtotal	11.50	11.42	11.38	11.31	11.27	11.22	11.16	11.08	11.01	10.93	10.86	10.80	10.75	10.70	-0.8%
Natural Gas	2.79	2.78	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.77	2.76	2.76	-0.2%
Steam Coal	29.26	29.10	28.96	28.83	28.70	28.57	28.43	28.28	28.14	28.00	27.88	27.78	27.70	27.62	-0.6%
Metallurgical Coal	0.94	0.94	0.93	0.93	0.92	0.92	0.91	0.91	0.91	0.91	0.90	0.90	0.90	0.90	-0.6%
Coal Subtotal	30.20	30.04	29.89	29.76	29.63	29.49	29.34	29.19	29.05	28.91	28.78	28.68	28.59	28.51	-0.6%
Purchased Electricity	5.55	5.53	5.52	5.50	5.49	5.47	5.46	5.45	5.43	5.42	5.41	5.41	5.40	5.39	-0.3%
Total	50.04	49.77	49.56	49.34	49.16	48.95	48.73	48.49	48.26	48.03	47.82	47.66	47.51	47.36	-0.6%
Carbon Dioxide Emissions 3/ (million metric tons)	43.7	43.9	44.0	44.0	44.0	44.1	44.2	44.4	44.6	44.9	45.2	45.5	45.8	46.1	0.5%
<b>Combined Heat and Power 4/</b>															
<b>Generating Capacity (gigawatts)</b>															
Petroleum	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	N/A
Natural Gas	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	4.3%
Coal	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	N/A
Other 5/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	N/A
Total	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.15	1.2%
<b>Net Generation (billion kilowatthours)</b>															
Petroleum	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	N/A
Natural Gas	0.17	0.18	0.20	0.21	0.22	0.23	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.32	8.2%
Coal	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	N/A
Other 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.64	0.65	0.66	0.68	0.69	0.70	0.71	0.72	0.74	0.75	0.76	0.77	0.78	0.79	1.7%
<b>Disposition</b>															
Sales to the Grid	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	N/A
Generation for Own Use	0.60	0.61	0.62	0.63	0.65	0.66	0.67	0.68	0.70	0.71	0.72	0.73	0.74	0.75	1.8%

Table 29. Cement Industry Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

4/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

5/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 30. Iron and Steel Industries Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	65.79	70.86	65.04	68.52	71.46	72.19	73.03	74.26	75.92	76.68	76.98	77.89	79.03	79.79
Energy Consumption (trillion Btu) 1/														
Distillate Oil	8.8	8.8	8.2	8.3	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.5
Residual Oil	2.1	1.9	1.4	1.2	1.3	1.3	1.3	1.4	1.3	1.2	1.3	1.2	1.2	1.2
Other Petroleum 2/	6.9	7.1	6.8	6.9	7.0	7.0	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Petroleum Subtotal	17.8	17.8	16.4	16.4	16.9	16.8	16.8	17.0	16.9	16.9	16.9	16.8	16.8	16.7
Natural Gas	407.3	416.4	380.1	395.8	405.4	404.7	404.9	406.9	411.7	412.4	410.9	412.6	415.5	416.7
Metallurgical Coal	614.8	629.7	592.5	600.1	603.9	598.0	593.1	590.5	590.3	586.3	580.5	577.8	576.5	573.6
Net Coke Imports	20.1	22.8	19.3	20.2	20.2	19.2	18.3	17.8	17.7	17.3	16.7	16.5	16.3	16.1
Steam Coal	52.3	55.3	53.1	53.7	54.1	53.9	53.7	53.7	53.8	53.7	53.5	53.4	53.5	53.4
Coal Subtotal	687.2	707.8	664.9	673.9	678.2	671.1	665.1	661.9	661.9	657.4	650.7	647.7	646.2	643.1
Purchased Electricity	186.7	199.7	182.8	193.2	200.6	201.9	203.4	206.1	210.7	212.6	213.2	215.4	218.1	219.9
Total	1299.0	1341.6	1244.2	1279.4	1301.0	1294.5	1290.2	1291.9	1301.1	1299.3	1291.7	1292.6	1296.6	1296.4
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Distillate Oil	0.13	0.12	0.13	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Residual Oil	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01
Other Petroleum 2/	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Petroleum Subtotal	0.27	0.25	0.25	0.24	0.24	0.23	0.23	0.23	0.22	0.22	0.22	0.22	0.21	0.21
Natural Gas	6.19	5.88	5.84	5.78	5.67	5.61	5.54	5.48	5.42	5.38	5.34	5.30	5.26	5.22
Metallurgical Coal	9.35	8.89	9.11	8.76	8.45	8.28	8.12	7.95	7.77	7.65	7.54	7.42	7.29	7.19
Net Coke Imports	0.31	0.32	0.30	0.29	0.28	0.27	0.25	0.24	0.23	0.23	0.22	0.21	0.21	0.20
Steam Coal	0.80	0.78	0.82	0.78	0.76	0.75	0.74	0.72	0.71	0.70	0.69	0.69	0.68	0.67
Coal Subtotal	10.45	9.99	10.22	9.84	9.49	9.30	9.11	8.91	8.72	8.57	8.45	8.32	8.18	8.06
Purchased Electricity	2.84	2.82	2.81	2.82	2.81	2.80	2.78	2.78	2.77	2.77	2.77	2.77	2.76	2.76
Total	19.75	18.93	19.13	18.67	18.21	17.93	17.67	17.40	17.14	16.94	16.78	16.60	16.41	16.25
Carbon Dioxide Emissions 3/ (million metric tons)	122.3	126.9	117.8	121.1	123.1	122.7	122.6	122.8	123.5	123.6	122.8	122.7	122.9	122.8
Combined Heat and Power 4/ Generating Capacity (gigawatts)														
Petroleum	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Natural Gas	0.26	0.26	0.26	0.26	0.26	0.26	0.27	0.27	0.28	0.29	0.29	0.30	0.31	0.32
Coal	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Other 5/	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Total	1.43	1.43	1.43	1.43	1.44	1.44	1.44	1.45	1.46	1.46	1.47	1.47	1.48	1.49
Net Generation (billion kilowatthours)														
Petroleum	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Natural Gas	0.41	0.61	0.61	0.62	0.64	0.67	0.71	0.75	0.80	0.84	0.89	0.95	1.01	1.08
Coal	1.49	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61
Other 5/	3.98	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01
Total	5.90	7.25	7.25	7.27	7.29	7.32	7.35	7.40	7.44	7.49	7.54	7.59	7.66	7.73
Disposition														
Sales to the Grid	0.74	0.70	0.70	0.71	0.71	0.71	0.71	0.72	0.72	0.73	0.73	0.74	0.75	0.75
Generation for Own Use	5.16	6.55	6.55	6.56	6.58	6.60	6.64	6.68	6.72	6.76	6.80	6.85	6.91	6.97

Table 30. Iron and Steel Industries Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
Value of Shipments (billion 2000 dollars)	80.83	81.63	82.05	82.37	82.69	83.13	83.67	84.32	84.92	85.75	86.58	87.31	88.04	88.54	0.9%
Energy Consumption (trillion Btu) 1/															
Distillate Oil	8.5	8.5	8.5	8.4	8.4	8.3	8.3	8.2	8.2	8.2	8.2	8.2	8.2	8.1	-0.3%
Residual Oil	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	-1.7%
Other Petroleum 2/	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.1	0.0%
Petroleum Subtotal	16.7	16.8	16.7	16.6	16.5	16.5	16.4	16.4	16.4	16.4	16.4	16.4	16.4	16.4	-0.3%
Natural Gas	419.3	420.7	420.5	420.5	421.0	422.2	424.0	426.3	428.4	431.5	434.6	437.4	440.1	441.9	0.2%
Metallurgical Coal	572.2	569.8	565.8	561.6	557.5	554.1	551.2	549.6	548.3	548.1	548.0	547.6	547.2	545.9	-0.5%
Net Coke Imports	16.1	16.1	15.8	15.5	15.2	15.0	14.9	14.9	14.9	15.0	15.2	15.3	15.4	15.4	-1.5%
Steam Coal	53.5	53.4	53.3	53.1	53.0	52.8	52.8	52.7	52.7	52.7	52.8	52.8	52.8	52.8	-0.2%
Coal Subtotal	641.7	639.3	634.9	630.2	625.7	621.9	618.9	617.3	615.9	615.9	615.9	615.7	615.4	614.2	-0.5%
Purchased Electricity	222.8	225.1	226.3	227.1	228.1	229.3	230.8	232.8	234.8	237.5	240.2	242.8	245.4	247.4	0.8%
Total	1300.5	1301.9	1298.4	1294.4	1291.2	1290.0	1290.2	1292.8	1295.5	1301.2	1307.1	1312.3	1317.4	1319.8	-0.1%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)															
Distillate Oil	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	-1.1%
Residual Oil	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-2.5%
Other Petroleum 2/	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	-0.9%
Petroleum Subtotal	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.19	0.19	0.19	0.18	-1.2%
Natural Gas	5.19	5.15	5.12	5.11	5.09	5.08	5.07	5.06	5.04	5.03	5.02	5.01	5.00	4.99	-0.6%
Metallurgical Coal	7.08	6.98	6.90	6.82	6.74	6.66	6.59	6.52	6.46	6.39	6.33	6.27	6.22	6.17	-1.4%
Net Coke Imports	0.20	0.20	0.19	0.19	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.17	0.17	-2.3%
Steam Coal	0.66	0.65	0.65	0.64	0.64	0.64	0.63	0.63	0.62	0.61	0.61	0.60	0.60	0.60	-1.0%
Coal Subtotal	7.94	7.83	7.74	7.65	7.57	7.48	7.40	7.32	7.25	7.18	7.11	7.05	6.99	6.94	-1.4%
Purchased Electricity	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.77	2.77	2.77	2.78	2.79	2.79	0.0%
Total	16.09	15.95	15.82	15.71	15.61	15.52	15.42	15.33	15.25	15.17	15.10	15.03	14.96	14.91	-0.9%
Carbon Dioxide Emissions 3/ (million metric tons)	123.2	123.4	123.2	122.8	122.6	122.6	122.7	123.1	123.5	124.2	125.0	125.7	126.4	126.7	0.0%
Combined Heat and Power 4/															
Generating Capacity (gigawatts)															
Petroleum	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	N/A
Natural Gas	0.33	0.34	0.34	0.35	0.36	0.37	0.38	0.38	0.39	0.40	0.40	0.41	0.41	0.42	1.9%
Coal	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	N/A
Other 5/	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	N/A
Total	1.50	1.51	1.52	1.53	1.54	1.54	1.55	1.56	1.56	1.57	1.58	1.58	1.59	1.59	0.4%
Net Generation (billion kilowatthours)															
Petroleum	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Natural Gas	1.15	1.21	1.28	1.34	1.40	1.46	1.52	1.57	1.62	1.67	1.72	1.77	1.81	1.85	4.4%
Coal	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	1.61	N/A
Other 5/	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	N/A
Total	7.80	7.86	7.93	7.99	8.05	8.11	8.17	8.22	8.27	8.32	8.37	8.41	8.45	8.49	0.6%
Disposition															
Sales to the Grid	0.76	0.77	0.77	0.78	0.78	0.79	0.80	0.80	0.81	0.81	0.82	0.82	0.82	0.83	0.6%
Generation for Own Use	7.04	7.10	7.15	7.21	7.27	7.32	7.37	7.42	7.47	7.51	7.55	7.59	7.63	7.67	0.6%

Table 30. Iron and Steel Industries Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power.

2/ Includes petroleum coke, lubricants, and miscellaneous petroleum products.

3/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

4/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

5/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 31. Aluminum Industry Energy Consumption

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments (billion 2000 dollars)	28.75	29.82	29.95	30.41	31.30	31.86	32.06	32.50	33.11	33.53	33.25	33.30	33.61	34.12
Energy Consumption (trillion Btu) 1/														
Distillate Oil	1.1	1.0	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Liquefied Petroleum Gas	1.0	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Petroleum Coke	40.5	39.9	39.2	38.4	37.7	36.9	36.3	35.6	35.0	34.4	33.8	33.2	32.6	32.1
Other Petroleum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Subtotal	42.6	41.8	41.2	40.3	39.6	38.8	38.1	37.5	36.8	36.2	35.6	35.0	34.4	33.9
Natural Gas	126.2	132.2	130.8	131.3	133.3	134.1	133.8	134.3	135.3	135.7	133.9	133.2	133.3	134.1
Steam Coal	31.0	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7
Purchased Electricity	183.3	182.4	179.9	177.5	175.8	173.7	171.5	169.5	167.8	166.0	163.5	161.3	159.4	157.8
Total	383.1	388.1	383.5	380.8	380.3	378.3	375.1	372.9	371.7	369.7	364.6	361.2	358.9	357.4
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)														
Distillate Oil	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Liquefied Petroleum Gas	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02
Petroleum Coke	1.41	1.34	1.31	1.26	1.20	1.16	1.13	1.10	1.06	1.03	1.02	1.00	0.97	0.94
Other Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Petroleum Subtotal	1.48	1.40	1.37	1.32	1.26	1.22	1.19	1.15	1.11	1.08	1.07	1.05	1.02	0.99
Natural Gas	4.39	4.43	4.37	4.32	4.26	4.21	4.17	4.13	4.09	4.05	4.03	4.00	3.97	3.93
Steam Coal	1.08	1.06	1.06	1.04	1.01	0.99	0.99	0.97	0.96	0.94	0.95	0.95	0.94	0.93
Purchased Electricity	6.37	6.11	6.01	5.84	5.62	5.45	5.35	5.21	5.07	4.95	4.92	4.84	4.74	4.63
Total	13.33	13.01	12.81	12.52	12.15	11.88	11.70	11.47	11.22	11.03	10.97	10.85	10.68	10.47
Carbon Dioxide Emissions 2/ (million metric tons)	46.7	46.5	46.1	45.3	44.8	44.5	44.1	43.6	43.1	42.8	42.0	41.3	40.7	40.3
Combined Heat and Power 3/ Generating Capacity (gigawatts)														
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Coal	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Other 4/	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34
Total	0.70	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.72
Net Generation (billion kilowatthours)														
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas	0.00	0.16	0.16	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.23	0.24	0.26	0.27
Coal	2.73	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67
Other 4/	1.98	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47
Total	4.71	4.30	4.30	4.30	4.31	4.32	4.33	4.34	4.35	4.36	4.37	4.39	4.40	4.41
Disposition														
Sales to the Grid	1.78	1.47	1.47	1.47	1.47	1.48	1.48	1.48	1.49	1.49	1.49	1.50	1.50	1.51
Generation for Own Use	2.93	2.83	2.83	2.83	2.84	2.84	2.85	2.86	2.86	2.87	2.88	2.89	2.90	2.90



Table 31. Aluminum Industry Energy Consumption

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments (billion 2000 dollars)	34.63	34.88	34.80	34.83	34.78	34.93	35.12	35.20	35.32	35.78	36.06	36.44	36.79	36.89	0.8%
Energy Consumption (trillion Btu) 1/															
Distillate Oil	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	0.1%
Liquefied Petroleum Gas	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	-0.3%
Petroleum Coke	31.5	31.0	30.6	30.2	29.7	29.2	28.7	28.2	27.7	27.2	26.8	26.4	26.1	25.7	-1.7%
Other Petroleum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	33.3	32.8	32.5	32.0	31.5	31.1	30.6	30.1	29.6	29.1	28.7	28.3	28.0	27.6	-1.6%
Natural Gas	134.8	134.7	133.6	133.1	132.5	132.7	133.1	133.0	133.1	134.2	134.8	135.7	136.4	136.3	0.1%
Steam Coal	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	31.7	N/A
Purchased Electricity	156.2	154.4	152.3	150.3	148.2	146.3	144.5	142.7	141.1	139.9	138.5	137.4	136.2	134.8	-1.2%
Total	356.0	353.6	350.0	347.0	343.9	341.7	339.8	337.4	335.4	334.8	333.7	333.1	332.3	330.4	-0.6%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)															
Distillate Oil	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.7%
Liquefied Petroleum Gas	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-1.1%
Petroleum Coke	0.91	0.89	0.88	0.87	0.85	0.84	0.82	0.80	0.79	0.76	0.74	0.72	0.71	0.70	-2.5%
Other Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Petroleum Subtotal	0.96	0.94	0.93	0.92	0.91	0.89	0.87	0.85	0.84	0.81	0.79	0.78	0.76	0.75	-2.4%
Natural Gas	3.89	3.86	3.84	3.82	3.81	3.80	3.79	3.78	3.77	3.75	3.74	3.72	3.71	3.70	-0.7%
Steam Coal	0.91	0.91	0.91	0.91	0.91	0.91	0.90	0.90	0.90	0.89	0.88	0.87	0.86	0.86	-0.8%
Purchased Electricity	4.51	4.43	4.38	4.31	4.26	4.19	4.11	4.05	3.99	3.91	3.84	3.77	3.70	3.65	-2.0%
Total	10.28	10.14	10.06	9.96	9.89	9.78	9.67	9.59	9.50	9.36	9.25	9.14	9.03	8.96	-1.4%
Carbon Dioxide Emissions 2/ (million metric tons)	39.9	39.5	39.1	38.6	38.2	37.9	37.6	37.2	37.0	36.8	36.7	36.5	36.4	36.1	-1.0%
Combined Heat and Power 3/ Generating Capacity (gigawatts)															
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Natural Gas	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Coal	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	N/A
Other 4/	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	N/A
Total	0.72	0.72	0.72	0.72	0.72	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.2%
Net Generation (billion kilowatthours)															
Petroleum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Natural Gas	0.28	0.29	0.30	0.31	0.32	0.33	0.34	0.35	0.36	0.36	0.37	0.38	0.38	0.39	3.5%
Coal	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	2.67	N/A
Other 4/	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47	N/A
Total	4.42	4.43	4.44	4.45	4.46	4.47	4.48	4.49	4.50	4.51	4.51	4.52	4.53	4.53	0.2%
Disposition															
Sales to the Grid	1.51	1.51	1.52	1.52	1.52	1.53	1.53	1.53	1.54	1.54	1.54	1.54	1.54	1.55	0.2%
Generation for Own Use	2.91	2.92	2.93	2.93	2.94	2.95	2.95	2.96	2.96	2.97	2.97	2.98	2.98	2.99	0.2%

Table 31. Aluminum Industry Energy Consumption

1/ Fuel consumption includes consumption for combined heat and power.

2/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

3/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

4/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 32. Other Industrial Sector Energy Consumption  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Agriculture</b>														
Distillate Oil	458.6	443.5	446.9	444.9	443.0	442.6	443.4	443.6	441.8	439.0	436.8	435.1	433.8	433.2
Liquefied Petroleum Gas	77.7	75.1	75.5	75.1	74.8	74.7	74.9	74.9	74.6	74.2	73.8	73.5	73.3	73.2
Motor Gasoline	205.0	198.4	199.8	199.0	198.2	198.0	198.5	198.7	197.9	196.7	195.8	195.1	194.5	194.3
Other Petroleum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Subtotal	741.3	717.0	722.3	719.0	716.0	715.3	716.7	717.2	714.4	709.9	706.3	703.7	701.6	700.7
Natural Gas	89.9	88.0	89.0	89.2	89.3	89.5	90.1	90.5	90.7	90.7	90.8	91.0	91.2	91.7
Steam Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Renewables	19.1	18.8	19.1	19.3	19.5	19.7	20.0	20.3	20.5	20.6	20.8	21.0	21.1	21.4
Purchased Electricity	122.2	118.8	120.3	120.4	120.5	121.1	121.9	122.7	122.9	122.8	122.9	123.1	123.4	123.9
Total	972.5	942.6	950.7	947.9	945.3	945.6	948.8	950.8	948.4	944.0	940.8	938.7	937.4	937.7
Value of Shipments (billion 2000 dollars)	247.99	240.82	245.11	246.29	248.11	250.96	254.72	258.20	260.12	261.08	262.42	264.26	266.53	269.28
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	3.92	3.91	3.88	3.85	3.81	3.77	3.72	3.68	3.65	3.62	3.58	3.55	3.52	3.48
Carbon Dioxide Emissions 1/ (million metric tons)	80.5	77.9	78.6	78.2	77.9	78.0	78.4	78.5	78.1	77.8	77.5	77.2	76.9	76.8
<b>Construction</b>														
Distillate Oil	466.1	483.8	494.9	498.3	498.1	501.1	499.3	502.1	505.7	507.7	510.9	516.8	524.0	531.2
Liquefied Petroleum Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Motor Gasoline	84.1	86.5	90.9	90.7	89.9	89.6	88.4	88.1	87.9	87.5	87.3	87.6	88.1	88.5
Asphalt and Road Oil	1252.7	1287.9	1309.0	1305.0	1292.5	1288.6	1272.9	1269.7	1268.5	1263.8	1262.1	1267.3	1275.6	1284.0
Petroleum Subtotal	1802.9	1858.2	1894.7	1894.1	1880.5	1879.3	1860.6	1859.9	1862.0	1859.0	1860.4	1871.7	1887.7	1903.7
Natural Gas	193.6	202.0	206.3	208.4	208.9	210.9	210.7	212.6	214.9	216.6	218.7	222.1	226.1	230.1
Purchased Electricity	115.1	120.1	123.4	124.7	125.1	126.3	126.2	127.4	128.8	129.8	131.1	133.1	135.5	137.9
Total	2111.6	2180.3	2224.4	2227.2	2214.5	2216.4	2197.5	2199.9	2205.7	2205.4	2210.2	2226.9	2249.3	2271.7
Value of Shipments (billion 2000 dollars)	950.74	1000.54	1040.79	1058.33	1066.69	1082.78	1086.58	1101.86	1119.26	1132.97	1149.50	1173.33	1200.63	1228.09
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	2.22	2.18	2.14	2.10	2.08	2.05	2.02	2.00	1.97	1.95	1.92	1.90	1.87	1.85
Carbon Dioxide Emissions 1/ (million metric tons)	71.8	74.4	76.5	76.9	76.7	77.3	77.1	77.5	77.9	78.4	78.8	79.7	80.6	81.7
<b>Mining</b>														
Residual Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Distillate Oil	131.1	133.1	136.9	139.8	141.2	141.7	142.5	142.3	142.0	141.9	141.7	141.0	140.8	141.6
Motor Gasoline	15.4	15.6	15.8	16.1	16.0	16.1	16.2	16.2	16.2	16.2	16.2	16.2	16.3	16.4
Other Petroleum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Subtotal	146.6	148.8	152.7	155.9	157.2	157.9	158.7	158.5	158.2	158.1	157.9	157.2	157.1	158.0
Natural Gas	966.1	991.4	995.8	1004.4	995.5	1004.9	1011.5	1011.5	1014.8	1017.1	1024.1	1026.6	1033.9	1048.8
Lease and Plant Fuel	1162.0	1143.3	1143.4	1132.8	1113.0	1123.6	1121.5	1118.1	1132.6	1143.7	1166.6	1174.2	1219.4	1265.8
Steam Coal	10.7	10.9	11.5	11.8	12.0	12.1	12.2	12.2	12.2	12.2	12.2	12.1	12.1	12.2
Renewables	1.9	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Purchased Electricity excluding Oil Shale	237.7	242.2	247.5	253.5	255.0	256.7	258.0	257.9	258.3	258.8	259.6	259.4	260.2	262.9

Table 32. Other Industrial Sector Energy Consumption  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Purchased Electricity for Oil Shale	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2525.0	2538.6	2552.8	2560.2	2534.7	2557.0	2563.9	2560.1	2578.1	2591.8	2622.4	2631.5	2684.8	2749.8
Value of Shipments (billion 2000 dollars)	193.82	197.44	199.84	203.97	204.46	207.98	211.04	212.23	213.96	215.57	218.10	219.43	221.89	226.34
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	13.03	12.86	12.77	12.55	12.40	12.29	12.15	12.06	12.05	12.02	12.02	11.99	12.10	12.15
Carbon Dioxide Emissions 1/ (million metric tons)	107.9	109.8	111.5	113.0	112.6	113.5	114.3	114.1	113.9	114.3	114.5	114.1	114.3	115.4
Metal-Based Durables Consumption														
Residual Oil	7.9	6.9	6.8	6.2	6.7	6.6	6.5	6.6	6.4	6.3	6.5	6.4	6.3	6.3
Distillate Oil	9.8	8.5	9.9	8.6	8.7	8.5	8.5	8.5	8.0	8.1	8.3	8.3	8.0	8.1
Liquefied Petroleum Gas	6.6	6.8	7.1	6.1	7.4	7.4	7.4	7.5	7.3	7.4	7.6	7.7	7.7	7.6
Petroleum Coke	69.3	72.5	73.8	75.0	76.2	77.5	78.8	80.0	81.3	82.7	84.1	85.7	87.3	88.9
Petroleum Subtotal	93.5	94.7	97.6	95.8	98.9	100.1	101.3	102.6	103.0	104.5	106.5	108.1	109.3	110.8
Natural Gas	580.0	611.1	606.2	624.6	638.6	653.3	668.6	679.0	690.2	700.6	708.0	721.2	735.0	746.5
Steam Coal	40.4	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Renewables	40.8	44.8	46.1	47.5	48.9	50.4	51.8	53.0	54.4	55.8	57.1	58.7	60.2	61.8
Purchased Electricity	588.7	617.5	628.4	639.0	650.9	665.5	678.7	689.7	700.3	711.4	720.9	733.6	745.3	756.9
Total	1343.4	1392.9	1403.2	1431.8	1462.3	1494.2	1525.3	1549.3	1573.0	1597.3	1617.5	1646.6	1674.9	1701.0
Value of Shipments (billion 2000 dollars)	1704.89	1841.02	1925.52	1992.32	2053.67	2116.72	2176.90	2231.54	2294.79	2362.61	2426.50	2499.04	2570.55	2642.39
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	0.79	0.76	0.73	0.72	0.71	0.71	0.70	0.69	0.69	0.68	0.67	0.66	0.65	0.64
Carbon Dioxide Emissions 1/ (million metric tons)	151.8	156.5	158.7	160.5	162.8	166.6	170.4	172.6	174.0	177.0	178.5	180.6	182.4	184.4
Other Manufacturing Consumption														
Residual Oil	52.5	47.7	51.1	42.8	42.4	40.2	38.3	39.5	35.9	35.5	38.0	35.9	35.6	35.3
Distillate Oil	67.6	55.1	66.6	54.5	51.8	49.6	48.9	48.3	45.0	44.9	45.8	45.6	43.8	43.7
Liquefied Petroleum Gas	20.6	21.6	22.0	17.5	28.0	28.1	26.1	24.6	23.6	23.9	23.9	24.0	24.3	25.8
Petroleum Subtotal	140.8	124.4	139.8	114.8	122.2	117.9	113.3	112.5	104.5	104.3	107.6	105.5	103.7	104.8
Natural Gas	1047.3	1075.2	1028.0	1058.6	1064.4	1074.5	1088.9	1103.3	1128.1	1143.2	1153.3	1171.6	1193.5	1210.9
Metallurgical Coal	21.1	21.3	20.9	20.8	20.8	20.7	20.7	20.7	20.8	20.8	20.9	21.0	21.0	21.1
Steam Coal	202.6	209.0	207.7	207.4	207.4	207.1	206.8	206.8	207.1	207.2	207.3	207.4	207.6	207.6
Renewables	235.0	244.0	242.3	245.4	250.1	253.7	258.1	263.5	270.1	276.3	282.2	288.5	295.3	301.8
Purchased Electricity	795.7	816.6	808.6	807.7	812.6	816.3	820.9	829.7	841.5	851.5	860.1	869.1	879.1	888.5
Total	2442.4	2490.4	2447.3	2454.8	2477.5	2490.1	2508.6	2536.5	2572.1	2603.4	2631.4	2663.0	2700.2	2734.8
Value of Shipments (billion 2000 dollars)	1162.99	1202.52	1192.68	1206.54	1227.84	1243.25	1262.19	1286.32	1315.80	1343.18	1369.32	1396.44	1426.23	1454.52
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	2.10	2.07	2.05	2.03	2.02	2.00	1.99	1.97	1.95	1.94	1.92	1.91	1.89	1.88
Carbon Dioxide Emissions 1/ (million metric tons)	238.1	241.5	238.9	237.2	237.7	238.9	240.7	242.5	244.0	247.1	248.5	249.8	251.3	253.2

Table 32. Other Industrial Sector Energy Consumption  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Agriculture, Mining, Construction, Metals Based Durables, and Other Manufacturing														
Combined Heat and Power 2/ Generating Capacity (gigawatts)														
Petroleum	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Natural Gas	0.57	0.56	0.72	0.81	0.91	1.01	1.13	1.24	1.35	1.46	1.58	1.72	1.89	2.07
Coal	0.64	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Other 3/	0.46	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Total	1.87	1.77	1.93	2.03	2.12	2.23	2.34	2.45	2.56	2.67	2.79	2.93	3.10	3.28
Net Generation (billion kilowatthours)														
Petroleum	0.17	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Natural Gas	0.89	0.81	1.84	2.54	3.27	4.04	4.90	5.75	6.56	7.38	8.29	9.32	10.57	11.94
Coal	1.71	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87
Other 3/	1.78	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Total	4.56	4.87	5.90	6.61	7.33	8.11	8.96	9.82	10.62	11.45	12.36	13.39	14.64	16.00
Disposition														
Sales to the Grid	1.33	1.42	1.64	2.00	2.36	2.75	3.18	3.62	4.02	4.44	4.90	5.42	6.05	6.73
Generation for Own Use	3.22	3.45	4.26	4.61	4.97	5.35	5.78	6.20	6.60	7.01	7.46	7.97	8.59	9.27

Table 32. Other Industrial Sector Energy Consumption  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Agriculture</b>															
Distillate Oil	432.6	432.1	431.2	430.3	429.2	428.3	427.6	426.9	426.9	428.6	430.2	431.5	432.8	434.1	-0.1%
Liquefied Petroleum Gas	73.1	72.9	72.8	72.8	72.8	73.0	73.1	73.3	73.5	73.7	73.9	73.9	73.9	73.9	-0.1%
Motor Gasoline	194.1	193.9	193.5	193.6	194.1	194.7	195.3	196.0	196.8	197.5	198.3	198.8	199.4	199.9	0.0%
Other Petroleum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	699.7	698.9	697.6	696.6	696.2	695.9	696.0	696.2	697.2	699.8	702.4	704.3	706.1	707.9	0.0%
Natural Gas	92.1	92.6	93.1	93.5	94.2	95.1	96.0	96.9	97.8	98.8	99.7	100.7	101.5	102.5	0.6%
Steam Coal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Renewables	21.6	21.9	22.1	22.4	22.6	22.8	23.1	23.3	23.6	23.9	24.1	24.4	24.6	24.9	1.1%
Purchased Electricity	124.4	125.0	125.5	125.9	126.3	126.7	127.2	127.8	128.5	129.2	130.0	130.8	131.5	132.2	0.4%
Total	937.9	938.4	938.3	938.4	939.3	940.5	942.2	944.2	947.1	951.7	956.3	960.1	963.7	967.5	0.1%
Value of Shipments (billion 2000 dollars)	271.89	274.46	276.80	279.01	281.12	283.32	285.70	288.17	290.79	293.38	295.90	298.17	300.39	302.56	0.9%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	3.45	3.42	3.39	3.36	3.34	3.32	3.30	3.28	3.26	3.24	3.23	3.22	3.21	3.20	-0.8%
Carbon Dioxide Emissions 1/ (million metric tons)	76.8	76.9	76.9	76.9	76.9	77.0	77.2	77.4	77.7	78.1	78.5	78.9	79.3	79.6	0.1%
<b>Construction</b>															
Distillate Oil	535.4	539.3	542.3	546.2	548.6	551.8	555.4	561.4	570.2	580.8	588.8	593.9	601.2	611.0	0.9%
Liquefied Petroleum Gas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Motor Gasoline	88.5	88.3	88.0	87.9	87.9	87.9	88.0	88.5	89.3	90.4	91.0	91.2	91.6	92.5	0.3%
Asphalt and Road Oil	1285.4	1288.1	1297.4	1299.2	1298.2	1322.5	1326.5	1336.5	1352.3	1375.4	1392.9	1403.5	1419.1	1440.7	0.4%
Petroleum Subtotal	1909.3	1915.7	1927.6	1933.3	1934.7	1962.2	1969.9	1986.4	2011.8	2046.6	2072.7	2088.6	2111.9	2144.2	0.6%
Natural Gas	232.7	235.2	237.3	240.0	242.5	245.5	248.7	253.2	258.8	264.6	269.1	272.2	276.3	281.8	1.3%
Purchased Electricity	139.5	141.0	142.2	143.7	144.8	146.1	147.6	149.7	152.7	155.7	158.0	159.6	161.7	164.7	1.2%
Total	2281.5	2292.0	2307.2	2317.0	2322.0	2353.9	2366.2	2389.3	2423.4	2466.8	2499.8	2520.4	2550.0	2590.6	0.7%
Value of Shipments (billion 2000 dollars)	1247.59	1266.14	1282.09	1300.71	1315.21	1331.96	1349.85	1374.91	1407.39	1440.79	1466.74	1484.09	1507.77	1539.29	1.7%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	1.83	1.81	1.80	1.78	1.77	1.77	1.75	1.74	1.72	1.71	1.70	1.70	1.69	1.68	-1.0%
Carbon Dioxide Emissions 1/ (million metric tons)	82.4	83.0	83.5	84.2	84.7	85.3	86.1	87.2	88.8	90.5	91.8	92.7	94.0	95.6	1.0%
<b>Mining</b>															
Residual Oil	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0%
Distillate Oil	141.8	142.2	142.2	142.9	143.4	143.9	144.4	145.2	146.2	147.8	149.0	150.3	151.7	152.6	0.5%
Motor Gasoline	16.4	16.4	16.4	16.4	16.3	16.3	16.4	16.4	16.3	16.4	16.4	16.4	16.4	16.4	0.2%
Other Petroleum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	158.3	158.6	158.5	159.3	159.7	160.2	160.8	161.6	162.5	164.2	165.4	166.7	168.1	169.0	0.5%
Natural Gas	1049.2	1047.4	1044.0	1036.5	1030.3	1025.5	1024.3	1018.7	1011.7	1010.4	1004.2	1000.9	996.0	993.4	0.0%
Lease and Plant Fuel	1279.1	1291.1	1292.3	1283.0	1274.8	1266.7	1263.2	1255.7	1240.8	1234.5	1226.7	1218.4	1210.9	1206.5	0.2%
Steam Coal	12.3	12.4	12.4	12.6	12.7	12.9	13.0	13.2	13.3	13.5	13.7	13.8	14.0	14.1	1.0%
Renewables	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	-0.3%
Purchased Electricity excluding Oil Shale	264.1	264.9	265.2	265.5	265.2	265.0	265.3	265.6	266.2	267.6	268.0	268.5	269.0	269.2	0.4%

Table 32. Other Industrial Sector Energy Consumption  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Purchased Electricity for Oil Shale	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total	2764.9	2776.4	2774.5	2758.9	2744.7	2732.3	2728.5	2716.7	2696.6	2692.1	2679.8	2670.3	2659.8	2654.0	0.2%
Value of Shipments (billion 2000 dollars)	227.56	228.42	228.82	228.78	228.38	228.01	228.35	227.99	227.38	227.89	227.30	227.30	227.06	227.00	0.5%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	12.15	12.15	12.13	12.06	12.02	11.98	11.95	11.92	11.86	11.81	11.79	11.75	11.71	11.69	-0.4%
Carbon Dioxide Emissions 1/ (million metric tons)	115.5	115.5	115.4	115.1	114.7	114.5	114.6	114.5	114.4	114.8	114.8	114.9	115.0	115.0	0.2%
Metal-Based Durables Consumption															
Residual Oil	6.4	6.6	6.7	6.6	6.8	6.9	7.0	7.0	7.2	7.3	7.4	7.6	7.7	7.8	0.5%
Distillate Oil	8.3	8.5	8.8	8.7	9.0	9.2	9.4	9.6	9.9	10.0	10.3	10.5	11.0	11.3	1.1%
Liquefied Petroleum Gas	7.8	7.9	8.0	8.0	8.1	8.2	8.4	8.5	8.7	8.9	9.0	8.9	9.1	9.4	1.3%
Petroleum Coke	90.7	92.7	94.7	96.3	98.2	100.2	102.3	104.6	107.1	110.0	113.0	116.0	119.1	122.5	2.0%
Petroleum Subtotal	113.1	115.6	118.3	119.6	122.1	124.6	127.1	129.6	132.8	136.3	139.7	143.0	146.9	151.0	1.8%
Natural Gas	759.1	770.2	778.4	788.7	799.3	811.6	825.0	838.5	853.3	869.6	886.2	902.5	918.1	934.4	1.6%
Steam Coal	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.1	25.1	25.1	25.1	0.0%
Renewables	63.5	65.3	66.8	68.3	70.0	71.8	73.7	75.7	77.9	80.2	82.5	84.9	87.3	89.9	2.7%
Purchased Electricity	770.7	784.4	794.8	804.6	816.1	826.9	840.5	854.7	870.5	887.9	905.8	923.4	941.2	960.1	1.7%
Total	1731.5	1760.5	1783.3	1806.3	1832.6	1860.0	1891.3	1923.6	1959.6	1999.0	2039.3	2078.9	2118.6	2160.5	1.7%
Value of Shipments (billion 2000 dollars)	2726.47	2810.01	2880.67	2951.82	3031.17	3114.55	3200.98	3290.59	3388.34	3492.37	3599.26	3705.53	3815.79	3934.93	3.0%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	0.64	0.63	0.62	0.61	0.60	0.60	0.59	0.58	0.58	0.57	0.57	0.56	0.56	0.55	-1.2%
Carbon Dioxide Emissions 1/ (million metric tons)	187.3	190.4	192.8	195.0	197.8	200.6	203.9	207.7	211.8	216.0	220.8	225.4	230.1	234.8	1.6%
Other Manufacturing Consumption															
Residual Oil	36.2	38.4	40.0	39.0	41.4	43.3	44.3	44.6	46.5	48.0	49.1	50.6	52.2	53.4	0.4%
Distillate Oil	44.3	45.0	46.5	45.9	47.1	48.0	48.3	49.2	50.4	50.9	51.8	52.5	54.5	55.5	0.0%
Liquefied Petroleum Gas	27.4	27.6	27.4	27.3	26.5	26.2	26.6	26.4	26.9	27.5	28.1	27.6	28.0	29.8	1.2%
Petroleum Subtotal	107.8	111.0	113.9	112.3	114.9	117.5	119.2	120.2	123.7	126.4	129.1	130.7	134.8	138.8	0.4%
Natural Gas	1227.8	1245.1	1261.8	1285.4	1307.3	1331.5	1356.8	1383.7	1410.4	1439.8	1468.9	1497.9	1524.7	1551.2	1.4%
Metallurgical Coal	21.2	21.3	21.4	21.5	21.6	21.6	21.7	21.9	22.1	22.4	22.6	22.8	23.1	23.3	0.4%
Steam Coal	207.8	208.0	208.2	208.3	208.4	208.6	208.8	209.0	209.4	210.1	210.8	211.6	212.4	213.2	0.1%
Renewables	308.8	316.2	323.3	330.3	337.7	345.5	353.5	361.8	370.9	380.5	390.1	399.5	409.3	419.3	2.1%
Purchased Electricity	898.8	910.4	920.2	929.4	939.4	950.0	961.1	972.9	985.2	1000.1	1014.7	1028.9	1043.7	1058.2	1.0%
Total	2772.2	2812.1	2848.6	2887.1	2929.4	2974.8	3021.2	3069.5	3121.7	3179.2	3236.2	3291.4	3348.0	3404.0	1.2%
Value of Shipments (billion 2000 dollars)	1484.49	1516.77	1546.60	1576.24	1607.68	1640.38	1673.65	1708.42	1746.35	1786.62	1826.69	1865.49	1905.90	1946.79	1.9%
Energy Consumption per Unit of Output (thousand Btu per 2000 dollar shipments)	1.87	1.85	1.84	1.83	1.82	1.81	1.81	1.80	1.79	1.78	1.77	1.76	1.76	1.75	-0.6%
Carbon Dioxide Emissions 1/ (million metric tons)	255.7	258.8	261.7	264.2	267.5	270.9	274.5	278.6	282.8	287.4	292.4	297.2	302.1	306.7	0.9%

Table 32. Other Industrial Sector Energy Consumption  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Agriculture, Mining, Construction, Metals Based Durables, and Other Manufacturing															
Combined Heat and Power 2/ Generating Capacity (gigawatts)															
Petroleum	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	N/A
Natural Gas	2.27	2.46	2.66	2.88	3.10	3.32	3.53	3.74	3.95	4.16	4.37	4.57	4.77	4.97	8.8%
Coal	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	N/A
Other 3/	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	N/A
Total	3.48	3.67	3.88	4.09	4.31	4.53	4.74	4.95	5.17	5.37	5.58	5.79	5.99	6.18	4.9%
Net Generation (billion kilowatthours)															
Petroleum	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	N/A
Natural Gas	13.36	14.80	16.29	17.87	19.47	21.08	22.65	24.18	25.74	27.26	28.77	30.26	31.71	33.13	15.4%
Coal	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	N/A
Other 3/	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	N/A
Total	17.43	18.87	20.35	21.93	23.54	25.15	26.71	28.25	29.81	31.32	32.84	34.33	35.77	37.19	8.1%
Disposition															
Sales to the Grid	7.45	8.18	8.92	9.72	10.52	11.33	12.12	12.89	13.67	14.43	15.19	15.94	16.66	17.38	10.1%
Generation for Own Use	9.98	10.69	11.43	12.21	13.01	13.81	14.59	15.36	16.13	16.89	17.64	18.39	19.11	19.81	7.0%



Table 32. Other Industrial Sector Energy Consumption  
(trillion Btu)

1/ Includes emissions attributable to the fuels consumed to generate the purchased electricity.

2/ Includes industrial-owned generators not classified as combined heat and power, such as standby generators.

3/ Includes wood and other biomass, waste heat, municipal solid waste, and renewable sources.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Source: 2003 and 2004 nonutility and CHP summer capacity, net generation, fuel use, and thermal output: Energy Information Administration (EIA), Form EIA-860: "Annual Electric Generator Report," 2002 (preliminary). Other 2003 and 2004 data based on: EIA, Manufacturing Energy Consumption Survey, 1998. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 33. Transportation Sector Energy Use by Mode and Type  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Energy Use by Mode</b>														
<b>Highway</b>														
Light-Duty Vehicles	15901.8	16210.4	16277.3	16399.3	16746.4	17041.2	17366.8	17709.9	17989.6	18248.2	18491.8	18750.9	19001.7	19242.7
Automobiles	9030.1	8973.7	8861.9	8837.3	8920	8985.4	9037.9	9064	9074.7	9075.7	9074.5	9080.7	9085.1	9091.6
Light Trucks	6845.8	7211	7389.9	7536.6	7800.7	8030	8303	8619.9	8888.9	9146.5	9391.2	9644.1	9890.5	10125
Motorcycles	25.9	25.8	25.5	25.4	25.6	25.8	25.9	26	26	26	26	26	26	26.1
Commercial Light Trucks 1/	588.7	610.7	619.5	626.9	634.4	642.7	649.8	657.6	666.3	674.7	682.7	692	701.7	711.3
Buses	262.6	265.3	263.1	264.6	267.6	271.1	275	279.1	281.4	283.2	284.5	285.5	285.9	286.2
Transit	91.2	92.2	91.4	91.9	93	94.2	95.6	97	97.8	98.4	98.9	99.2	99.4	99.4
Intercity	47.4	47.9	47.5	47.8	48.3	48.9	49.7	50.4	50.8	51.1	51.4	51.5	51.6	51.7
School	123.9	125.2	124.2	124.9	126.3	128	129.8	131.7	132.8	133.7	134.3	134.7	135	135.1
Freight Trucks 2/	4504.1	4695.8	4770.2	4903.7	5048.8	5163.5	5286.4	5415.6	5541.7	5652.3	5745.8	5833.5	5919.3	6005.4
Medium (1000-26000 pounds)	731.5	748.6	745	748.6	759.6	768.5	782.1	798.4	817.6	835.8	853.1	871.8	892	912.8
Large (> 26000 pounds)	3772.6	3947.2	4025.2	4155.1	4289.2	4395	4504.3	4617.2	4724.2	4816.4	4892.6	4961.7	5027.3	5092.5
<b>Non-Highway</b>														
Air 3/	2756.4	2823.1	2813.8	2883.4	3001.2	3086.1	3185.1	3317.1	3442.5	3511.6	3572.6	3628.7	3679.7	3737.6
General Aviation	159.8	164	165.4	164.9	171.6	175.4	180	186.2	192	195.2	198.1	200.7	203.1	205.8
Domestic Air Carriers	1520.8	1530.4	1495.8	1486.9	1493.7	1526.9	1561.1	1609	1648.3	1655	1658.2	1662.9	1663.6	1663
International Air Carriers	490.5	515.6	551.5	590.5	623.5	659.1	695	730.3	762.9	775.2	786	792.6	800.2	809.1
Freight Carriers	585.2	613.1	601.1	641.1	712.4	724.6	749	791.7	839.2	886.1	930.4	972.4	1012.8	1059.7
Water 4/	952.3	1010	1061.7	1067.9	1060.9	1054.4	1048.7	1041.3	1046.3	1051	1056.5	1060.7	1066.2	1073
Freight	788.9	844.7	894.2	899.5	892.1	885	879	871.2	875.5	879.5	884.2	887.7	892.3	898.3
Domestic Shipping	281	295.7	303.9	308.3	310.2	312.3	315.5	317.1	320.6	323.8	327.7	330.4	334.1	339.3
International Shipping	507.8	549	590.3	591.1	581.9	572.7	563.5	554.1	554.9	555.7	556.5	557.3	558.1	559
Recreational Boats	163.4	165.3	167.4	168.4	168.8	169.3	169.8	170.1	170.8	171.5	172.2	173.1	173.9	174.8
Rail	646.2	664.2	667.4	682.1	696.8	706.7	720.3	729.3	742.5	750.8	756.3	761.9	768.1	780.4
Freight	513.2	530	533.9	547.9	561.4	569.9	581.8	588.9	600.8	607.8	612.2	616.4	621.3	632.3
Passenger	133	134.2	133.5	134.1	135.4	136.8	138.6	140.4	141.7	143	144.2	145.5	146.8	148
Intercity	41.6	42	41.7	41.9	42.3	42.8	43.3	43.9	44.3	44.7	45.1	45.5	45.9	46.3
Transit	49.6	50	49.9	50.1	50.5	51.1	51.7	52.3	52.8	53.3	53.7	54.2	54.7	55.2
Commuter	41.8	42.2	41.9	42.1	42.5	43	43.6	44.2	44.6	44.9	45.3	45.7	46.1	46.5
Lubricants	150	146	144	146	146.7	147.3	147.8	148.2	148.8	149.4	149.9	150.4	150.9	151.4
Pipeline Fuel Natural Gas	685.6	686.4	720.9	700.7	680.3	673.9	663.2	647.3	655.9	668.8	681	687	735.4	780.8
<b>Military Use</b>														
Aviation	538.6	562.9	581.1	594.7	599.7	602.2	604.1	605.8	609.2	612.6	615.8	619.2	622.7	626.6
Residual Fuel Use	20.2	21	23.2	23.8	23.6	23.3	22.9	22.6	22.7	22.8	22.9	23.1	23.2	23.4
Distillate Fuel Use	113.5	121.9	124.2	127.1	128.6	129.6	130.4	131.2	131.9	132.7	133.4	134.1	134.9	135.7
<b>Total</b>	<b>27119.9</b>	<b>27817.8</b>	<b>28066.5</b>	<b>28420.1</b>	<b>29034.9</b>	<b>29541.9</b>	<b>30100.6</b>	<b>30705</b>	<b>31279</b>	<b>31758.1</b>	<b>32193.2</b>	<b>32627</b>	<b>33089.8</b>	<b>33554.4</b>

Table 33. Transportation Sector Energy Use by Mode and Type  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Energy Use by Type														
Motor Gasoline	16624	16933	16987.7	17101.5	17429.8	17704.9	18009.2	18330.6	18594.1	18836.1	19062.9	19306	19542.5	19765.8
Distillate (diesel)	5666	5914	5997	6162.1	6345.7	6496.8	6660.7	6824.6	6985.6	7125.4	7246.1	7360.9	7475.8	7599.6
Jet Fuel (kerosene & naphtha)	3265	3355	3361.9	3449.1	3570.8	3658.4	3759.5	3893.3	4022.2	4094.8	4159.1	4218.6	4273.1	4335
Residual Oil	571	611	662	664.6	654.3	644	633.8	623.1	624.9	626.7	628.6	630.2	632.1	634.4
Aviation Gasoline	30	31	33	29	30.1	29.9	29.7	29.6	29.5	29.4	29.4	29.3	29.2	29.2
Liquefied Petroleum Gas	23	30	42.7	44.9	49	52.5	56	61.1	64.5	67.8	70.9	73.7	74.3	76.8
Lubricants	150	146	144	146	146.7	147.3	147.8	148.2	148.8	149.4	149.9	150.4	150.9	151.4
Petroleum Subtotal	26329	27020	27228.4	27597.1	28226.4	28733.8	29296.8	29910.5	30469.6	30929.6	31346.8	31769.1	32178	32592.2
Methanol	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ethanol	1.1	1.1	1.7	1.9	2.1	2.2	2.4	2.5	2.7	3.1	3.3	3.5	3.7	3.9
Electricity	83.7	84.8	85.1	85.6	86.4	87.4	88.5	89.7	90.6	91.5	92.4	93.4	94.3	95.1
Compressed Natural Gas	20.5	25.3	30.5	34.7	39.6	44.6	49.7	54.9	60.1	65	69.5	73.9	78	81.9
Liquid Hydrogen	0	0	0	0	0	0	0	0	0.1	0.1	0.2	0.2	0.3	0.4
Pipeline Fuel Natural Gas	685.6	686.4	720.9	700.7	680.3	673.9	663.2	647.3	655.9	668.8	681	687	735.4	780.8
Total Consumption	27119.9	27817.8	28066.5	28420.1	29034.9	29541.9	30100.6	30705	31279	31758.1	32193.2	32627	33089.8	33554.4

Table 33. Transportation Sector Energy Use by Mode and Type  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Energy Use by Mode</b>															
<b>Highway</b>															
Light-Duty Vehicles	19503.6	19782.2	20045.1	20298.7	20543.5	20788	21041	21298.2	21564.4	21840.2	22124.3	22406.4	22694.9	22982.5	1.40%
Automobiles	9110.2	9139.3	9164.2	9188.9	9213.7	9238.1	9290.3	9342.7	9398.1	9457.5	9519.3	9580	9643.6	9706.6	0.30%
Light Trucks	10367.3	10616.7	10854.7	11083.5	11303.3	11523.5	11724.2	11928.8	12139.5	12355.7	12577.8	12799	13023.8	13248.2	2.40%
Motorcycles	26.1	26.2	26.2	26.3	26.4	26.4	26.6	26.7	26.9	27	27.2	27.4	27.5	27.7	0.30%
Commercial Light Trucks 1/	721.6	731.9	740.8	749.6	758.6	768	777.7	788.3	800	812.5	825	837.1	850	864	1.30%
Buses	286.5	286.8	287.2	287.7	288.4	289	289.8	290.8	291.4	292.2	293.3	294.2	295.4	296.5	0.40%
Transit	99.5	99.6	99.8	100	100.2	100.4	100.7	101	101.3	101.5	101.9	102.2	102.6	103	0.40%
Intercity	51.7	51.8	51.8	51.9	52.1	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.3	53.5	0.40%
School	135.2	135.3	135.5	135.8	136.1	136.4	136.8	137.2	137.6	137.9	138.4	138.9	139.4	140	0.40%
Freight Trucks 2/	6100.2	6197.6	6283.5	6370.2	6465.6	6565.5	6671.6	6784.9	6898.4	7025	7157.6	7287.8	7424.4	7566.3	1.90%
Medium (1000-26000 pounds)	935.4	959.1	981.9	1005.9	1031.2	1058	1085.5	1113.6	1140.9	1169.6	1198.8	1224.8	1251.7	1279.2	2.10%
Large (> 26000 pounds)	5164.8	5238.6	5301.6	5364.4	5434.4	5507.5	5586.1	5671.3	5757.4	5855.4	5958.8	6063	6172.7	6287.1	1.80%
<b>Non-Highway</b>															
Air 3/	3805.8	3860.8	3907.8	3919.1	3931.7	3943.9	3957	3969.9	3984.8	4003.3	4026.6	4057.1	4097	4146.7	1.50%
General Aviation	209	211.6	213.8	214.3	214.9	215.5	216.1	216.7	217.4	218.3	219.4	220.8	222.7	225.1	1.20%
Domestic Air Carriers	1660.6	1656.7	1650.6	1622.6	1594.5	1567.2	1541.1	1515.6	1491.6	1470.3	1451.3	1435.4	1423.2	1414.7	-0.30%
International Air Carriers	819.7	832.5	850	859.9	870.4	881	891.5	901.3	910.9	920.4	930	940.2	951.6	964.2	2.40%
Freight Carriers	1116.5	1160	1193.3	1222.3	1251.9	1280.2	1308.3	1336.3	1364.9	1394.4	1425.9	1460.6	1499.5	1542.7	3.60%
Water 4/	1077.9	1082.8	1086.5	1089.6	1092.7	1095.8	1099.5	1102.5	1105.6	1109.8	1113.2	1117	1120.5	1124.3	0.40%
Freight	902.2	906.1	908.9	911	913.2	915.5	918.3	920.5	922.7	926	928.5	931.5	934.2	937.1	0.40%
Domestic Shipping	342.3	345.4	347.4	348.8	350.2	351.8	353.8	355.2	356.6	359.1	360.8	363	364.9	367.1	0.80%
International Shipping	559.9	560.7	561.5	562.2	563	563.8	564.5	565.3	566.1	566.9	567.7	568.5	569.3	570.1	0.10%
Recreational Boats	175.7	176.7	177.6	178.6	179.4	180.3	181.2	182	182.9	183.8	184.6	185.5	186.4	187.2	0.50%
Rail	790.2	799.5	808.7	824.5	838.1	852.5	866.2	881.5	896.1	912.4	928.5	943.7	958.4	970.6	1.50%
Freight	640.8	648.8	656.7	671.3	683.7	696.8	709.3	723.3	736.6	751.7	766.6	780.4	793.9	804.9	1.60%
Passenger	149.4	150.7	152	153.2	154.5	155.7	156.9	158.2	159.4	160.7	162	163.2	164.5	165.7	0.80%
Intercity	46.7	47.1	47.6	47.9	48.3	48.7	49.1	49.5	49.9	50.3	50.7	51.1	51.4	51.8	0.80%
Transit	55.7	56.2	56.7	57.1	57.6	58.1	58.5	59	59.4	59.9	60.4	60.9	61.3	61.8	0.80%
Commuter	47	47.4	47.8	48.2	48.6	48.9	49.3	49.7	50.1	50.5	50.9	51.3	51.7	52.1	0.80%
Lubricants	152	152.6	153.2	153.8	154.5	155.1	155.8	156.5	157.3	158.1	158.9	159.6	160.4	161.1	0.40%
Pipeline Fuel Natural Gas	791.1	802.4	805	802.3	800.6	798	797	795.4	790.8	787.8	784.3	782	778.4	777.4	0.50%
<b>Military Use</b>															
Aviation	630.8	634.8	638.6	642.1	645.4	648.6	651.6	654.5	657.3	660	662.6	665.1	667.6	670	0.70%
Residual Fuel Use	23.5	23.7	23.8	23.9	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	25	0.70%
Distillate Fuel Use	136.7	137.6	138.4	139.2	139.9	140.6	141.3	142	142.6	143.2	143.8	144.3	144.9	145.4	0.70%
<b>Total</b>	<b>34019.8</b>	<b>34492.5</b>	<b>34918.6</b>	<b>35300.8</b>	<b>35682.9</b>	<b>36069.3</b>	<b>36472.9</b>	<b>36888.9</b>	<b>37313.2</b>	<b>37769.2</b>	<b>38242.7</b>	<b>38719.2</b>	<b>39216.7</b>	<b>39729.9</b>	<b>1.40%</b>

Table 33. Transportation Sector Energy Use by Mode and Type  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
<b>Energy Use by Type</b>															
Motor Gasoline	20007.5	20264.6	20501.9	20726.8	20938	21147.7	21365.3	21584.8	21811.1	22045.7	22284.9	22519.5	22755.5	22989.8	1.20%
Distillate (diesel)	7730.5	7866	7992.5	8129.1	8275.5	8431.3	8594.1	8768.6	8945.7	9141	9344.9	9548.6	9763.7	9983.9	2.00%
Jet Fuel (kerosene & naphtha)	4407.4	4466.4	4517.2	4532.1	4548	4563.4	4579.6	4595.3	4613.1	4634.3	4660.2	4693.2	4735.6	4787.7	1.40%
Residual Oil	636.2	638	639.4	640.6	641.9	643.1	644.5	645.7	647	648.5	649.8	651.2	652.6	654	0.30%
Aviation Gasoline	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29	29	29	29	29	29	29	-0.30%
Liquefied Petroleum Gas	79.4	82	84.3	86.6	91.1	93.3	95.4	97.3	99.2	101	102.8	104.5	106.1	107.8	5.00%
Lubricants	152	152.6	153.2	153.8	154.5	155.1	155.8	156.5	157.3	158.1	158.9	159.6	160.4	161.1	0.40%
Petroleum Subtotal	33042.2	33498.8	33917.8	34298.2	34678	35062.9	35463.7	35877.3	36302.4	36757.6	37230.5	37705.6	38202.9	38713.4	1.40%
Methanol	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-11.50%
Ethanol	4.1	4.3	4.4	4.7	4.9	5	5.2	5.3	5.4	5.4	5.6	5.6	5.7	5.8	6.40%
Electricity	96.1	97	97.9	98.8	99.6	100.4	101.3	102.2	103	103.9	104.8	105.7	106.6	107.5	0.90%
Compressed Natural Gas	85.7	89.3	92.5	95.5	98.3	101	103.7	106.3	108.9	111.6	114.3	116.8	119.3	121.9	6.20%
Liquid Hydrogen	0.5	0.8	1.1	1.3	1.6	1.8	2.1	2.4	2.6	2.9	3.2	3.5	3.8	4	N/A
Pipeline Fuel Natural Gas	791.1	802.4	805	802.3	800.6	798	797	795.4	790.8	787.8	784.3	782	778.4	777.4	0.50%
<b>Total Consumption</b>	<b>34019.8</b>	<b>34492.5</b>	<b>34918.6</b>	<b>35300.8</b>	<b>35682.9</b>	<b>36069.3</b>	<b>36472.9</b>	<b>36888.9</b>	<b>37313.2</b>	<b>37769.2</b>	<b>38242.7</b>	<b>38719.2</b>	<b>39216.7</b>	<b>39729.9</b>	<b>1.40%</b>

Table 33. Transportation Sector Energy Use by Mode and Type  
(trillion Btu)

1/ Commercial light trucks from 8,500 to 10,000 pounds.

2/ Does not include commercial bus and military use.

3/ Does not include military jet fuel use.

4/ Does not include military residual oil.

Btu = British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 values derived using: Energy Information Administration (EIA), Fuel Oil and Kerosene Sales 2003, DOE/EIA-0535(2003) ( Washington, DC, November 2004); EIA, State Energy Data Report 2001, DOE/EIA-0214(2001) (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); Department of Defense, Defense Fuel Supply Center; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Light-Duty Vehicle</b>														
Motor Gasoline	15622.82	15907.10	15955.14	16065.22	16389.00	16659.45	16958.92	17273.85	17527.50	17759.60	17976.75	18208.12	18432.10	18642.83
Ethanol	1.10	1.15	1.69	1.90	2.08	2.22	2.40	2.50	2.74	3.09	3.30	3.48	3.73	3.87
Compressed Natural Gas	17.75	21.06	24.20	25.92	27.95	29.82	31.69	33.56	35.45	37.18	38.77	40.27	41.64	42.95
Liquefied Petroleum Gas	14.03	20.97	33.29	34.93	38.19	41.01	43.74	48.04	50.80	53.55	56.13	58.52	58.71	60.75
Electricity	2.54	3.08	3.50	3.68	3.81	3.91	4.02	4.14	4.28	4.43	4.57	4.70	4.82	4.93
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43
Distillate (diesel)	243.58	257.07	259.49	267.64	285.32	304.77	325.96	347.76	368.82	390.25	412.08	435.57	460.36	486.88
Total	15901.83	16210.44	16277.33	16399.31	16746.36	17041.18	17366.76	17709.90	17989.65	18248.21	18491.75	18750.86	19001.67	19242.65
<b>Commercial Light Trucks Gasoline 1/</b>														
	588.72	610.71	619.50	626.87	634.37	642.68	649.84	657.55	666.32	674.70	682.69	692.04	701.74	711.32
<b>Freight Trucks 2/</b>														
Motor Gasoline	248.57	249.39	245.19	240.50	237.13	232.97	230.15	228.57	229.01	229.79	230.76	232.25	234.22	236.40
Distillate (diesel)	4243.72	4433.07	4509.33	4644.38	4789.20	4904.31	5025.91	5152.66	5274.41	5380.44	5469.54	5552.43	5633.08	5713.92
Compressed Natural Gas	2.79	4.26	6.27	8.81	11.69	14.77	18.02	21.32	24.64	27.79	30.77	33.61	36.36	38.98
Liquefied Petroleum Gas	8.98	9.08	9.40	10.00	10.76	11.48	12.28	13.01	13.68	14.24	14.72	15.17	15.61	16.07
Total	4504.05	4695.80	4770.19	4903.70	5048.79	5163.53	5286.35	5415.57	5541.74	5652.26	5745.78	5833.46	5919.27	6005.37
<b>Freight Rail 3/</b>														
Distillate (diesel)	513.20	530.05	533.90	547.95	561.41	569.89	581.76	588.92	600.82	607.79	612.16	616.38	621.33	632.32
Total	513.20	530.05	533.90	547.95	561.41	569.89	581.76	588.92	600.82	607.79	612.16	616.38	621.33	632.32
<b>Domestic Shipping</b>														
Distillate (diesel)	202.73	215.30	216.25	219.37	221.97	224.79	228.41	230.90	233.49	235.80	238.64	240.57	243.32	247.09
Residual Oil	78.28	80.38	87.70	88.96	88.21	87.52	87.09	86.18	87.15	88.01	89.07	89.79	90.82	92.23
Motor Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	281.01	295.67	303.94	308.33	310.19	312.30	315.49	317.08	320.63	323.81	327.71	330.35	334.14	339.32
<b>International Shipping</b>														
Distillate (diesel)	35.32	39.40	39.22	39.28	39.40	39.53	39.65	39.77	39.83	39.89	39.95	40.00	40.06	40.12
Residual Oil	472.53	509.64	551.08	551.85	542.51	533.21	523.81	514.34	515.08	515.83	516.57	517.31	518.07	518.83
Total	507.85	549.04	590.30	591.13	581.91	572.74	563.46	554.11	554.91	555.72	556.51	557.32	558.14	558.95
<b>Air Transportation</b>														
Jet Fuel	2726.39	2792.09	2780.81	2854.38	2971.16	3056.20	3155.39	3287.44	3412.98	3482.21	3543.26	3599.36	3650.44	3708.41
Aviation Gasoline	30.00	31.00	33.00	29.00	30.09	29.90	29.75	29.62	29.51	29.42	29.35	29.29	29.24	29.20
Total	2756.39	2823.09	2813.81	2883.38	3001.25	3086.11	3185.14	3317.06	3442.49	3511.64	3572.61	3628.65	3679.68	3737.61
<b>Miscellaneous Transportation</b>														
<b>Military Use</b>														
Jet Fuel	538.61	562.91	581.13	594.68	599.68	602.18	604.12	605.81	609.24	612.60	615.83	619.24	622.68	626.56
Residual Fuel	20.20	20.98	23.22	23.76	23.56	23.25	22.92	22.58	22.70	22.83	22.95	23.08	23.21	23.36
Distillate	113.47	121.89	124.20	127.12	128.61	129.58	130.42	131.21	131.95	132.68	133.39	134.14	134.90	135.75
Total	672.28	705.77	728.55	745.57	751.85	755.01	757.46	759.60	763.89	768.11	772.17	776.46	780.78	785.66

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Bus Transportation</b>														
Transit Bus (motor gasoline)	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22	0.22
Transit Bus (diesel)	91.05	91.98	91.22	91.74	92.77	94.00	95.36	96.75	97.56	98.20	98.65	98.97	99.13	99.22
Intercity Bus (diesel)	47.41	47.89	47.50	47.77	48.31	48.95	49.65	50.38	50.80	51.13	51.37	51.54	51.62	51.67
School Bus (motor gasoline)	0.27	0.27	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30
School Bus (diesel)	123.67	124.94	123.92	124.62	126.02	127.68	129.53	131.43	132.52	133.39	134.01	134.44	134.66	134.78
Total	262.60	265.29	263.12	264.61	267.58	271.11	275.04	279.06	281.39	283.23	284.54	285.47	285.93	286.18
<b>Rail Transportation</b>														
Intercity Rail (electricity)	15.72	15.83	15.80	15.87	16.00	16.17	16.36	16.57	16.73	16.87	17.02	17.17	17.32	17.47
Intercity Rail (diesel)	25.86	26.14	25.92	26.04	26.30	26.61	26.97	27.36	27.61	27.85	28.09	28.34	28.60	28.84
Transit Rail (electricity)	49.64	50.00	49.89	50.12	50.54	51.07	51.68	52.34	52.83	53.29	53.74	54.23	54.72	55.18
Commuter Rail (electricity)	15.79	15.91	15.88	15.95	16.08	16.25	16.44	16.65	16.81	16.96	17.10	17.26	17.41	17.56
Commuter Rail (diesel)	25.99	26.27	26.05	26.17	26.43	26.75	27.11	27.50	27.75	27.99	28.23	28.49	28.74	28.98
Total	132.99	134.16	133.54	134.13	135.36	136.85	138.57	140.42	141.73	142.96	144.18	145.49	146.78	148.03
<b>Recreation Boats</b>														
Lubricants	150.00	146.00	144.00	146.00	146.72	147.27	147.75	148.18	148.80	149.36	149.89	150.42	150.91	151.41
Pipeline Fuel Natural Gas	685.59	686.41	720.91	700.72	680.31	673.86	663.21	647.35	655.85	668.83	680.96	686.99	735.45	780.82
Total Miscellaneous	2066.89	2102.96	2157.55	2159.44	2150.64	2153.44	2151.81	2144.76	2162.46	2183.98	2203.98	2217.90	2273.79	2326.88
<b>Total Consumption</b>	<b>27119.94</b>	<b>27817.77</b>	<b>28066.52</b>	<b>28420.12</b>	<b>29034.91</b>	<b>29541.88</b>	<b>30100.60</b>	<b>30704.96</b>	<b>31279.02</b>	<b>31758.12</b>	<b>32193.21</b>	<b>32626.96</b>	<b>33089.76</b>	<b>33554.43</b>



Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Light-Duty Vehicle</b>															
Motor Gasoline	18870.50	19113.13	19337.49	19549.06	19746.10	19940.89	20142.89	20345.59	20553.60	20768.62	20988.03	21203.09	21418.51	21630.85	1.2%
Ethanol	4.11	4.26	4.39	4.74	4.88	5.02	5.17	5.29	5.39	5.42	5.64	5.59	5.71	5.81	6.4%
Compressed Natural Gas	44.22	45.47	46.65	47.81	48.91	49.99	51.00	52.00	53.01	54.02	55.05	56.06	57.08	58.08	4.0%
Liquefied Petroleum Gas	62.83	64.89	66.79	68.67	72.81	74.67	76.42	78.11	79.76	81.34	82.88	84.39	85.85	87.29	5.6%
Electricity	5.05	5.16	5.27	5.36	5.45	5.55	5.64	5.75	5.86	5.98	6.10	6.21	6.33	6.44	2.9%
Liquid Hydrogen	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A
Distillate (diesel)	516.35	548.45	583.49	621.75	663.72	710.08	757.82	809.07	864.18	921.89	983.35	1047.52	1117.62	1190.02	6.1%
Total	19503.60	19782.16	20045.13	20298.69	20543.45	20788.01	21041.02	21298.18	21564.44	21840.19	22124.27	22406.36	22694.87	22982.54	1.4%
<b>Commercial Light Trucks Gasoline 1/</b>															
	721.60	731.88	740.84	749.62	758.62	767.95	777.65	788.28	800.02	812.55	825.01	837.09	849.95	863.96	1.3%
<b>Freight Trucks 2/</b>															
Motor Gasoline	239.15	242.32	245.46	249.05	253.27	258.00	263.04	268.36	274.09	280.28	286.68	293.24	300.12	307.29	0.8%
Distillate (diesel)	5802.95	5894.36	5974.66	6055.57	6144.61	6237.83	6336.97	6443.00	6548.91	6667.52	6791.78	6913.74	7041.71	7174.79	1.9%
Compressed Natural Gas	41.50	43.84	45.84	47.66	49.37	51.04	52.68	54.32	55.91	57.56	59.20	60.74	62.26	63.77	11.0%
Liquefied Petroleum Gas	16.59	17.10	17.55	17.95	18.32	18.65	18.95	19.23	19.44	19.67	19.94	20.12	20.30	20.47	3.2%
Total	6100.19	6197.62	6283.52	6370.23	6465.57	6565.52	6671.64	6784.91	6898.36	7025.03	7157.60	7287.84	7424.38	7566.32	1.9%
<b>Freight Rail 3/</b>															
Distillate (diesel)	640.85	648.80	656.70	671.27	683.65	696.84	709.29	723.32	736.64	751.74	766.58	780.45	793.90	804.85	1.6%
Total	640.85	648.80	656.70	671.27	683.65	696.84	709.29	723.32	736.64	751.74	766.58	780.45	793.90	804.85	1.6%
<b>Domestic Shipping</b>															
Distillate (diesel)	249.26	251.49	252.96	253.97	255.02	256.14	257.62	258.63	259.67	261.50	262.74	264.32	265.68	267.26	0.8%
Residual Oil	93.04	93.87	94.42	94.80	95.19	95.61	96.17	96.55	96.94	97.62	98.09	98.68	99.20	99.79	0.8%
Motor Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	342.30	345.35	347.38	348.77	350.21	351.75	353.78	355.17	356.61	359.12	360.83	363.00	364.88	367.05	0.8%
<b>International Shipping</b>															
Distillate (diesel)	40.19	40.25	40.30	40.36	40.41	40.46	40.52	40.57	40.63	40.68	40.74	40.79	40.85	40.91	0.1%
Residual Oil	519.67	520.48	521.19	521.89	522.60	523.31	524.03	524.76	525.49	526.23	526.97	527.71	528.44	529.18	0.1%
Total	559.85	560.72	561.50	562.24	563.01	563.78	564.55	565.33	566.12	566.92	567.71	568.50	569.29	570.08	0.1%
<b>Air Transportation</b>															
Jet Fuel	3776.62	3831.64	3878.68	3890.02	3902.59	3914.81	3927.97	3940.82	3955.79	3974.29	3997.60	4028.08	4068.02	4117.71	1.5%
Aviation Gasoline	29.16	29.14	29.11	29.09	29.08	29.06	29.05	29.04	29.04	29.03	29.02	29.02	29.02	29.01	-0.3%
Total	3805.78	3860.78	3907.79	3919.11	3931.66	3943.87	3957.02	3969.86	3984.82	4003.32	4026.63	4057.10	4097.04	4146.72	1.5%
<b>Miscellaneous Transportation</b>															
<b>Military Use</b>															
Jet Fuel	630.79	634.80	638.56	642.10	645.42	648.58	651.62	654.50	657.29	659.99	662.59	665.12	667.60	670.03	0.7%
Residual Fuel	23.52	23.67	23.81	23.95	24.07	24.20	24.31	24.43	24.54	24.64	24.74	24.84	24.94	25.03	0.7%
Distillate	136.68	137.56	138.39	139.18	139.92	140.63	141.31	141.95	142.58	143.18	143.76	144.33	144.88	145.42	0.7%
Total	790.98	796.02	800.76	805.22	809.41	813.41	817.24	820.88	824.40	827.81	831.09	834.29	837.41	840.47	0.7%

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Bus Transportation</b>															
Transit Bus (motor gasoline)	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.5%
Transit Bus (diesel)	99.32	99.42	99.57	99.74	99.98	100.20	100.48	100.82	101.04	101.32	101.67	102.01	102.41	102.81	0.4%
Intercity Bus (diesel)	51.72	51.77	51.85	51.94	52.06	52.18	52.32	52.50	52.61	52.76	52.94	53.12	53.33	53.54	0.4%
School Bus (motor gasoline)	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.5%
School Bus (diesel)	134.91	135.05	135.25	135.49	135.81	136.11	136.49	136.95	137.25	137.63	138.11	138.57	139.11	139.66	0.4%
Total	286.46	286.75	287.18	287.69	288.38	289.01	289.81	290.79	291.43	292.25	293.25	294.24	295.38	296.54	0.4%
<b>Rail Transportation</b>															
Intercity Rail (electricity)	17.63	17.79	17.94	18.09	18.23	18.38	18.53	18.67	18.82	18.97	19.12	19.27	19.42	19.57	0.8%
Intercity Rail (diesel)	29.10	29.36	29.61	29.85	30.09	30.32	30.56	30.80	31.04	31.29	31.54	31.78	32.02	32.26	0.8%
Transit Rail (electricity)	55.68	56.19	56.67	57.13	57.59	58.05	58.51	58.98	59.45	59.92	60.40	60.87	61.34	61.80	0.8%
Commuter Rail (electricity)	17.72	17.88	18.03	18.18	18.33	18.47	18.62	18.77	18.92	19.07	19.22	19.37	19.52	19.66	0.8%
Commuter Rail (diesel)	29.24	29.50	29.76	30.00	30.24	30.47	30.71	30.95	31.20	31.44	31.69	31.94	32.18	32.42	0.8%
Total	149.37	150.72	152.02	153.25	154.48	155.70	156.93	158.17	159.43	160.69	161.97	163.23	164.48	165.71	0.8%
<b>Recreation Boats</b>															
Lubricants	175.73	176.72	177.64	178.55	179.43	180.30	181.16	182.02	182.89	183.77	184.65	185.51	186.36	187.19	0.5%
Pipeline Fuel Natural Gas	151.99	152.62	153.22	153.82	154.46	155.13	155.82	156.53	157.28	158.07	158.86	159.62	160.39	161.15	0.4%
Total Miscellaneous	791.08	802.36	804.96	802.32	800.59	797.99	797.05	795.42	790.76	787.78	784.29	781.98	778.39	777.36	0.5%
Total Miscellaneous	2345.60	2365.19	2375.78	2380.84	2386.75	2391.53	2398.00	2403.82	2406.20	2410.37	2414.11	2418.87	2422.40	2428.42	0.6%
Total Consumption	34019.77	34492.51	34918.64	35300.78	35682.94	36069.26	36472.95	36888.86	37313.20	37769.23	38242.74	38719.21	39216.72	39729.94	1.4%

Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode  
(trillion Btu)

1/ Commercial trucks from 8,500 to 10,000 pounds.

2/ Does not include military distillate. Does not include commercial buses.

3/ Does not include passenger rail.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 compressed natural gas volumes: Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Other 2004 values derived using: EIA, Fuel Oil and Kerosene Sales 2003, DOE/EIA-0535(2003) (Washington, DC, November 2004), EIA, State Energy Data Report 2001, DOE/EIA-0214(2001) (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); Department of Defense, Defense Fuel Supply Center; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 35. Light-Duty Vehicle Energy Consumption by Technology Type and Fuel Type  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Light-Duty Consumption by Technology Type</b>														
<b>Conventional Vehicles 1/</b>														
Gasoline ICE Vehicles	15373.31	15605.59	15595.65	15632.70	15856.24	16019.99	16211.77	16417.93	16567.08	16696.99	16814.52	16947.47	17071.88	17186.22
TDI Diesel ICE	243.58	257.07	259.49	267.64	285.32	304.77	325.96	347.76	368.82	390.25	412.08	435.57	460.36	486.88
<b>Alternative-Fuel Vehicles</b>														
<b>Alcohol Fuel Technology</b>														
Methanol-Flex Fuel ICE	0.50	0.46	0.38	0.36	0.34	0.32	0.31	0.29	0.27	0.25	0.22	0.20	0.19	0.17
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	297.62	364.88	425.84	477.17	553.34	627.50	701.83	775.70	845.08	910.54	972.08	1031.30	1086.37	1137.46
Ethanol ICE	0.29	0.32	0.35	0.39	0.43	0.47	0.52	0.56	0.61	0.65	0.70	0.74	0.79	0.84
Total Alcohol	298.41	365.66	426.57	477.92	554.11	628.30	702.65	776.55	845.95	911.44	973.00	1032.25	1087.34	1138.46
<b>Natural Gas Technology</b>														
Compressed Natural Gas ICE	0.20	0.22	0.23	0.25	0.27	0.29	0.30	0.32	0.34	0.36	0.37	0.39	0.40	0.41
Compressed Natural Gas Bi-fuel	25.34	30.17	34.79	37.27	40.16	42.82	45.47	48.13	50.84	53.32	55.60	57.76	59.74	61.61
Liquefied Petroleum Gas ICE	0.25	0.29	0.32	0.34	0.39	0.46	0.57	0.68	0.80	0.94	1.07	1.21	1.37	1.63
Liquefied Petroleum Gas Bi-fuel	56.10	70.03	110.31	120.45	130.64	139.91	148.76	157.51	166.30	175.03	183.21	190.74	197.43	203.60
Total Natural Gas Technology	81.90	100.70	145.65	158.31	171.45	183.47	195.09	206.64	218.28	229.64	240.25	250.09	258.94	267.26
<b>Electric Technology</b>														
Electric Vehicle	2.54	3.08	3.50	3.68	3.81	3.91	4.02	4.14	4.28	4.43	4.57	4.70	4.82	4.93
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.29	0.55	0.87	1.20	1.51
Electric-Gasoline Hybrid	4.64	8.52	18.22	34.16	50.06	74.56	99.86	127.76	157.78	189.12	221.66	255.67	294.42	335.24
Total Electricity	7.18	11.60	21.72	37.84	53.87	78.47	103.87	131.95	162.15	193.83	226.78	261.24	300.44	341.68
<b>Fuel Cell Technology</b>														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43
Total Fuel Cell	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43
<b>Light-Duty Consumption by Fuel Type 1/</b>														
Motor Gasoline	15622.82	15907.10	15955.14	16065.22	16389.00	16659.45	16958.92	17273.85	17527.50	17759.60	17976.75	18208.12	18432.10	18642.83
Distillate (diesel)	243.58	257.07	259.49	267.64	285.32	304.77	325.96	347.76	368.82	390.25	412.08	435.57	460.36	486.88
Methanol	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol	1.10	1.15	1.69	1.90	2.08	2.22	2.40	2.50	2.74	3.09	3.30	3.48	3.73	3.87
Compressed Natural Gas	17.75	21.06	24.20	25.92	27.95	29.82	31.69	33.56	35.45	37.18	38.77	40.27	41.64	42.95
Liquefied Petroleum Gas	14.03	20.97	33.29	34.93	38.19	41.01	43.74	48.04	50.80	53.55	56.13	58.52	58.71	60.75
Electricity	2.54	3.08	3.50	3.68	3.81	3.91	4.02	4.14	4.28	4.43	4.57	4.70	4.82	4.93
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.16	0.20	0.31	0.43

Table 35. Light-Duty Vehicle Energy Consumption by Technology Type and Fuel Type  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Light-Duty Consumption by Technology Type</b>															
<b>Conventional Vehicles 1/</b>															
Gasoline ICE Vehicles	17317.86	17464.38	17595.56	17716.71	17826.52	17934.22	18050.17	18167.22	18289.38	18417.88	18550.20	18677.98	18805.49	18929.23	0.7%
TDI Diesel ICE	516.35	548.45	583.49	621.75	663.72	710.08	757.82	809.07	864.18	921.89	983.35	1047.52	1117.62	1190.02	6.1%
<b>Alternative-Fuel Vehicles</b>															
<b>Alcohol Fuel Technology</b>															
Methanol-Flex Fuel ICE	0.15	0.13	0.12	0.13	0.11	0.10	0.09	0.08	0.07	0.06	0.06	0.05	0.04	0.04	-9.1%
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol-Flex Fuel ICE	1186.53	1233.74	1276.87	1316.27	1352.33	1385.63	1416.34	1445.21	1472.62	1498.94	1524.12	1547.57	1569.81	1590.76	5.8%
Ethanol ICE	0.89	0.94	0.99	1.04	1.09	1.13	1.19	1.24	1.29	1.34	1.39	1.44	1.49	1.53	6.2%
Total Alcohol	1187.56	1234.81	1277.98	1317.43	1353.53	1386.87	1417.62	1446.53	1473.98	1500.34	1525.57	1549.06	1571.33	1592.33	5.8%
<b>Natural Gas Technology</b>															
Compressed Natural Gas ICE	0.44	0.45	0.47	0.49	0.51	0.52	0.54	0.56	0.57	0.59	0.60	0.62	0.64	0.65	4.3%
Compressed Natural Gas Bi-fuel	63.42	65.23	66.92	68.56	70.14	71.68	73.13	74.56	76.01	77.47	78.94	80.39	81.85	83.29	4.0%
Liquefied Petroleum Gas ICE	1.99	2.35	2.67	3.00	3.26	3.49	3.70	3.88	4.04	4.19	4.34	4.48	4.60	4.73	11.4%
Liquefied Petroleum Gas Bi-fuel	209.58	215.44	220.93	226.33	231.75	237.23	242.39	247.48	252.51	257.33	262.03	266.64	271.17	275.61	5.4%
Total Natural Gas Technology	275.43	283.48	290.99	298.38	305.66	312.92	319.77	326.48	333.14	339.58	345.91	352.13	358.25	364.28	5.1%
<b>Electric Technology</b>															
Electric Vehicle	5.05	5.16	5.27	5.36	5.45	5.55	5.64	5.75	5.86	5.98	6.10	6.21	6.33	6.44	2.9%
Electric-Diesel Hybrid	1.89	2.25	2.59	2.96	3.30	3.63	3.92	4.18	4.41	4.60	4.75	4.87	4.97	5.02	N/A
Electric-Gasoline Hybrid	378.07	423.26	469.96	518.16	567.70	618.77	671.65	726.21	782.71	841.34	902.13	964.69	1029.40	1096.18	20.5%
Total Electricity	385.00	430.66	477.82	526.48	576.46	627.94	681.21	736.14	792.98	851.92	912.98	975.77	1040.70	1107.64	19.2%
<b>Fuel Cell Technology</b>															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A
Total Fuel Cell	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A
<b>Light-Duty Consumption by Fuel Type 1/</b>															
Motor Gasoline	18870.50	19113.13	19337.49	19549.06	19746.10	19940.89	20142.89	20345.59	20553.60	20768.62	20988.03	21203.09	21418.51	21630.85	1.2%
Distillate (diesel)	516.35	548.45	583.49	621.75	663.72	710.08	757.82	809.07	864.18	921.89	983.35	1047.52	1117.62	1190.02	6.1%
Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-11.5%
Ethanol	4.11	4.26	4.39	4.74	4.88	5.02	5.17	5.29	5.39	5.42	5.64	5.59	5.71	5.81	6.4%
Compressed Natural Gas	44.22	45.47	46.65	47.81	48.91	49.99	51.00	52.00	53.01	54.02	55.05	56.06	57.08	58.08	4.0%
Liquefied Petroleum Gas	62.83	64.89	66.79	68.67	72.81	74.67	76.42	78.11	79.76	81.34	82.88	84.39	85.85	87.29	5.6%
Electricity	5.05	5.16	5.27	5.36	5.45	5.55	5.64	5.75	5.86	5.98	6.10	6.21	6.33	6.44	2.9%
Liquid Hydrogen	0.54	0.80	1.05	1.30	1.57	1.82	2.08	2.37	2.65	2.93	3.21	3.49	3.77	4.04	N/A

Table 35. Light-Duty Vehicle Energy Consumption by Technology Type and Fuel Type  
(trillion Btu)

1/ Includes personal vehicles and fleet vehicles. Includes both cars and trucks.

Btu = British thermal unit.

ICE = Internal combustion engine.

N/A = Not applicable.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 36. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	398.5	401.4	415.1	435.6	430.5	420.2	413.1	401.1	401.0	397.6	391.8	385.7	380.9	379.0
TDI Diesel ICE	2.1	1.3	1.5	1.5	2.2	2.1	2.0	1.9	2.0	2.0	2.1	2.2	2.2	2.4
Total Conventional	400.6	402.6	416.5	437.1	432.6	422.3	415.1	403.0	402.9	399.6	393.9	387.9	383.1	381.4
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	21.0	21.2	22.3	23.0	26.2	26.4	25.9	25.5	25.6	25.3	24.9	24.3	23.9	23.8
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Electric Vehicle	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.4	0.4	0.4
Electric-Gasoline Hybrid	2.6	4.9	6.5	10.9	9.7	13.4	13.6	16.1	17.9	18.9	19.6	20.4	21.8	23.0
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	2.4	2.4	2.5	2.7	2.7	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.4	2.4
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.4
Total Alternatives	26.8	29.3	32.1	37.5	39.4	43.3	43.0	45.1	47.0	47.9	48.4	48.6	49.8	50.8
Percent Alternative Car Sales	6.26	6.79	7.16	7.90	8.34	9.31	9.38	10.06	10.45	10.70	10.94	11.13	11.51	11.76
Total New Car Sales	427.4	432.0	448.7	474.6	472.0	465.7	458.1	448.1	450.0	447.5	442.3	436.4	433.0	432.2
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	367.8	373.0	356.3	318.3	319.8	324.3	337.0	350.2	353.8	357.7	359.7	362.3	360.5	360.5
TDI Diesel ICE	18.4	17.2	15.0	15.0	20.3	21.1	22.6	23.6	24.7	25.7	26.6	28.1	28.6	30.7
Total Conventional	386.2	390.1	371.2	333.3	340.1	345.4	359.6	373.8	378.5	383.3	386.2	390.3	389.1	391.2

Table 36. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	20.6	21.0	22.6	20.3	33.7	34.3	36.0	37.6	37.9	38.3	38.5	38.7	38.4	38.4
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric-Gasoline Hybrid	0.0	0.0	3.7	5.8	6.2	11.8	12.2	12.7	13.9	14.9	15.8	16.9	21.1	23.1
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.6	1.6	1.6	1.4	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.8	1.8	1.8
Liquefied Petroleum Gas ICE	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	5.3	5.4	5.2	4.7	5.0	5.1	5.4	5.6	5.7	5.7	5.8	5.9	5.9	5.9
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.0	0.1	0.1
Total Alternatives	27.8	28.3	33.4	32.5	46.6	53.0	55.5	57.8	59.5	61.1	62.1	63.5	67.6	69.5
Percent Alternative Light Truck Sales	6.71	6.76	8.26	8.89	12.05	13.31	13.36	13.40	13.58	13.75	13.85	13.99	14.80	15.09
Total New Truck Sales	414.0	418.4	404.6	365.8	386.7	398.4	415.1	431.6	437.9	444.4	448.3	453.8	456.7	460.7
Percent Total Alternative Sales	6.48	6.77	7.68	8.33	10.01	11.15	11.27	11.70	11.99	12.22	12.40	12.59	13.20	13.48
EPACT Legislative Alternative Sales	13.83	13.98	13.79	13.08	13.56	13.79	14.13	14.44	14.61	14.75	14.80	14.88	14.92	15.01
ZEVP Legislative Alternative Sales	0.00	0.00	9.20	9.36	9.40	10.47	13.76	14.94	16.29	24.21	24.10	23.97	45.26	44.85
Total Vehicles Sales	841.4	850.4	853.3	840.4	858.7	864.1	873.2	879.7	887.9	891.9	890.6	890.3	889.7	892.9



Table 36. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	377.4	376.1	374.7	374.7	374.6	375.2	375.7	375.8	375.6	376.2	375.8	375.1	374.6	374.3	-0.3%
TDI Diesel ICE	2.5	2.7	2.8	3.1	3.4	3.7	3.8	4.1	4.5	4.7	4.9	5.1	5.6	5.8	6.1%
Total Conventional	379.9	378.8	377.6	377.7	378.0	378.9	379.6	379.9	380.1	380.8	380.7	380.3	380.1	380.1	-0.2%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	23.6	23.5	23.4	23.3	23.3	23.4	23.4	23.4	23.4	23.5	23.5	23.4	23.4	23.4	0.4%
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.9%
Electric Vehicle	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2%
Electric-Diesel Hybrid	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N/A
Electric-Gasoline Hybrid	24.2	25.6	26.9	28.2	29.4	30.7	32.1	33.5	34.9	36.4	37.9	39.4	41.0	42.7	8.7%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8%
Compressed Natural Gas Bi-fuel	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.2%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.4	0.8	0.8	0.7	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	N/A
Total Alternatives	51.8	53.5	54.7	55.9	57.1	58.5	59.9	61.4	62.7	64.3	65.8	67.3	68.9	70.5	3.4%
Percent Alternative Car Sales	12.01	12.39	12.66	12.89	13.13	13.37	13.63	13.91	14.17	14.45	14.74	15.04	15.34	15.65	3.3%
Total New Car Sales	431.7	432.3	432.3	433.6	435.2	437.4	439.4	441.3	442.9	445.1	446.6	447.6	449.0	450.7	0.2%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	363.5	366.3	367.9	367.8	368.5	370.5	375.2	377.8	378.3	382.8	385.7	387.0	386.9	388.4	0.2%
TDI Diesel ICE	32.6	35.2	37.1	40.0	44.4	47.9	48.7	52.0	57.1	58.3	61.0	63.5	68.8	71.5	5.6%
Total Conventional	396.1	401.4	405.0	407.8	413.0	418.4	423.9	429.8	435.4	441.1	446.7	450.5	455.7	459.9	0.6%

Table 36. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	38.7	39.0	39.2	39.2	39.3	39.5	40.1	40.5	40.6	41.2	41.6	41.8	41.9	42.1	2.7%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.1%
Electric-Diesel Hybrid	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N/A
Electric-Gasoline Hybrid	24.3	25.8	27.3	28.8	30.3	32.0	33.9	35.7	37.6	39.8	41.9	44.0	46.2	48.5	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.2%
Compressed Natural Gas Bi-fuel	1.8	1.9	1.9	1.9	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	1.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-7.0%
Liquefied Petroleum Gas Bi-fuel	6.0	6.1	6.2	6.3	6.3	6.4	6.5	6.7	6.8	6.9	7.0	7.1	7.1	7.2	1.1%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.1	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.7	N/A
<b>Total Alternatives</b>	<b>71.3</b>	<b>73.5</b>	<b>75.1</b>	<b>76.8</b>	<b>78.6</b>	<b>80.7</b>	<b>83.2</b>	<b>85.7</b>	<b>87.9</b>	<b>90.8</b>	<b>93.6</b>	<b>96.0</b>	<b>98.4</b>	<b>101.1</b>	<b>5.0%</b>
<b>Percent Alternative Light Truck Sales</b>	<b>15.26</b>	<b>15.47</b>	<b>15.65</b>	<b>15.86</b>	<b>16.00</b>	<b>16.16</b>	<b>16.41</b>	<b>16.63</b>	<b>16.79</b>	<b>17.07</b>	<b>17.32</b>	<b>17.57</b>	<b>17.76</b>	<b>18.02</b>	<b>3.8%</b>
<b>Total New Truck Sales</b>	<b>467.4</b>	<b>474.9</b>	<b>480.2</b>	<b>484.6</b>	<b>491.6</b>	<b>499.1</b>	<b>507.2</b>	<b>515.5</b>	<b>523.3</b>	<b>531.8</b>	<b>540.2</b>	<b>546.5</b>	<b>554.1</b>	<b>560.9</b>	<b>1.1%</b>
<b>Percent Total Alternative Sales</b>	<b>13.70</b>	<b>14.00</b>	<b>14.23</b>	<b>14.46</b>	<b>14.65</b>	<b>14.86</b>	<b>15.12</b>	<b>15.38</b>	<b>15.59</b>	<b>15.88</b>	<b>16.15</b>	<b>16.43</b>	<b>16.67</b>	<b>16.96</b>	<b>3.6%</b>
EPACT Legislative Alternative Sales	15.16	15.35	15.48	15.60	15.78	15.98	16.20	16.42	16.62	16.85	17.06	17.22	17.42	17.60	0.9%
ZEVP Legislative Alternative Sales	44.50	68.42	68.60	68.58	72.52	72.45	72.33	81.08	81.02	82.26	86.81	87.80	88.94	90.49	N/A
<b>Total Vehicles Sales</b>	<b>899.1</b>	<b>907.2</b>	<b>912.5</b>	<b>918.2</b>	<b>926.8</b>	<b>936.5</b>	<b>946.6</b>	<b>956.8</b>	<b>966.2</b>	<b>977.0</b>	<b>986.8</b>	<b>994.1</b>	<b>1003.1</b>	<b>1011.6</b>	<b>0.7%</b>

Table 36. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
New England

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 37. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1106.2	1108.7	1141.5	1193.3	1176.5	1144.9	1121.8	1085.3	1081.1	1068.1	1049.1	1029.1	1013.2	1004.9
TDI Diesel ICE	6.3	3.7	4.3	4.4	5.9	5.7	5.5	5.2	5.3	5.5	5.7	5.8	6.0	6.4
Total Conventional	1112.4	1112.4	1145.8	1197.7	1182.4	1150.6	1127.2	1090.5	1086.4	1073.6	1054.7	1034.9	1019.2	1011.2
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	58.2	58.5	61.2	63.0	71.5	72.0	70.3	69.0	69.0	68.1	66.6	65.0	63.7	63.0
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.7	1.0	1.1	1.1	1.0
Electric-Gasoline Hybrid	7.3	13.5	17.8	29.8	26.3	36.4	36.8	43.5	48.3	50.6	52.5	54.2	57.9	60.9
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.7	1.8	1.9	2.0	2.0	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	6.7	6.7	6.9	7.3	7.3	7.1	7.0	6.8	6.8	6.8	6.7	6.6	6.5	6.4
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.6	0.6
Total Alternatives	74.3	81.0	88.3	102.7	107.5	118.0	116.6	121.9	126.7	128.5	129.2	129.3	132.0	134.2
Percent Alternative Car Sales	6.26	6.78	7.16	7.90	8.33	9.30	9.37	10.05	10.44	10.69	10.91	11.11	11.46	11.71
Total New Car Sales	1186.7	1193.4	1234.2	1300.4	1290.0	1268.6	1243.8	1212.4	1213.1	1202.1	1184.0	1164.3	1151.1	1145.4
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1017.6	1026.4	975.8	868.0	874.5	883.4	915.2	947.5	953.2	960.3	961.9	965.5	957.7	954.3
TDI Diesel ICE	55.2	52.0	45.8	45.6	55.0	57.6	61.4	64.0	67.5	70.0	72.3	76.0	77.3	82.8
Total Conventional	1072.9	1078.4	1021.6	913.6	929.5	941.1	976.6	1011.5	1020.7	1030.3	1034.2	1041.6	1035.0	1037.1

Table 37. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	56.8	57.6	61.9	55.4	92.1	93.4	97.8	101.8	102.1	102.8	102.9	103.2	102.0	101.5
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Electric-Gasoline Hybrid	0.0	0.0	10.3	15.9	16.9	32.1	33.0	34.2	37.4	39.9	42.2	45.0	56.1	61.0
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	4.5	4.5	4.3	3.9	4.1	4.2	4.4	4.5	4.6	4.7	4.7	4.7	4.7	4.8
Liquefied Petroleum Gas ICE	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Liquefied Petroleum Gas Bi-fuel	14.8	14.9	14.4	12.9	13.6	14.0	14.5	15.1	15.2	15.4	15.5	15.6	15.7	15.8
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.1	0.1	0.2	0.2
Total Alternatives	76.7	77.6	91.4	88.7	127.2	144.3	150.4	156.3	160.0	163.6	166.0	169.1	179.3	183.9
Percent Alternative Light Truck Sales	6.67	6.72	8.21	8.85	12.04	13.30	13.34	13.38	13.55	13.71	13.83	13.97	14.77	15.06
Total New Truck Sales	1149.5	1156.0	1113.1	1002.3	1056.7	1085.4	1127.0	1167.8	1180.7	1193.9	1200.2	1210.7	1214.3	1221.0
Percent Total Alternative Sales	6.46	6.75	7.66	8.31	10.00	11.14	11.26	11.69	11.98	12.19	12.38	12.57	13.16	13.44
EPACT Legislative Alternative Sales	38.40	38.62	37.94	35.84	37.07	37.57	38.36	39.07	39.39	39.62	39.61	39.69	39.66	39.77
ZEVP Legislative Alternative Sales	0.00	0.00	13.39	13.94	13.88	13.89	18.68	20.64	22.98	34.73	37.47	37.19	70.14	69.43
Total Vehicles Sales	2336.3	2349.4	2347.2	2302.7	2346.7	2353.9	2370.8	2380.2	2393.7	2396.0	2384.2	2375.0	2365.4	2366.4

Table 37. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Middle Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	997.5	991.4	984.9	981.5	978.8	977.4	976.3	974.1	971.2	970.3	966.9	962.6	958.7	955.4	-0.6%
TDI Diesel ICE	6.7	7.2	7.5	8.2	9.1	9.9	10.1	10.8	11.9	12.2	12.9	13.6	14.7	15.4	5.6%
Total Conventional	1004.1	998.6	992.5	989.8	987.9	987.2	986.5	985.0	983.1	982.6	979.8	976.2	973.3	970.8	-0.5%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.1%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	62.4	61.9	61.4	61.1	60.9	60.8	60.8	60.7	60.5	60.5	60.4	60.1	59.9	59.7	0.1%
Ethanol ICE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.7%
Electric Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	-0.1%
Electric-Diesel Hybrid	1.0	0.9	0.9	0.8	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.4	N/A
Electric-Gasoline Hybrid	63.8	67.3	70.6	73.6	76.7	79.9	83.3	86.7	90.1	93.8	97.4	101.0	104.8	108.9	8.4%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5%
Compressed Natural Gas Bi-fuel	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.5	6.5	6.5	6.5	6.5	-0.1%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.6	1.2	1.2	1.1	1.2	1.1	1.1	1.3	1.2	1.2	1.2	1.2	1.2	1.2	N/A
Total Alternatives	136.5	140.0	142.7	145.4	148.2	151.4	154.6	158.0	161.2	164.8	168.3	171.6	175.2	179.1	3.1%
Percent Alternative Car Sales	11.96	12.30	12.57	12.81	13.05	13.29	13.55	13.83	14.08	14.37	14.66	14.95	15.25	15.57	3.2%
Total New Car Sales	1140.6	1138.7	1135.2	1135.2	1136.1	1138.6	1141.0	1143.0	1144.3	1147.4	1148.1	1147.8	1148.5	1149.9	-0.1%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	959.4	963.6	964.9	960.8	960.3	962.4	972.2	976.3	975.0	984.1	988.5	988.9	985.7	986.1	-0.2%
TDI Diesel ICE	87.5	94.5	99.5	107.5	118.7	127.8	129.6	138.0	151.2	153.9	161.2	167.9	181.5	188.9	5.1%
Total Conventional	1046.9	1058.1	1064.4	1068.3	1078.9	1090.2	1101.7	1114.3	1126.2	1138.1	1149.7	1156.8	1167.2	1175.0	0.3%

Table 37. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Middle Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	102.0	102.6	102.7	102.3	102.4	102.6	103.7	104.5	104.6	105.9	106.6	106.8	106.6	106.9	2.4%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8%
Electric-Diesel Hybrid	0.2	0.2	0.2	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	N/A
Electric-Gasoline Hybrid	64.1	67.8	71.4	75.2	78.9	83.0	87.7	92.3	96.8	102.1	107.4	112.6	117.8	123.3	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6%
Compressed Natural Gas Bi-fuel	4.8	4.9	4.9	4.9	5.0	5.1	5.1	5.2	5.3	5.3	5.4	5.5	5.5	5.6	0.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.8%
Liquefied Petroleum Gas Bi-fuel	15.9	16.1	16.3	16.4	16.6	16.8	17.0	17.2	17.4	17.7	17.9	18.1	18.3	18.5	0.8%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.2	0.5	0.5	0.5	0.6	0.6	0.6	0.8	0.8	0.8	0.9	0.9	1.0	1.0	N/A
Total Alternatives	188.0	192.8	196.6	200.4	204.5	209.1	215.1	220.9	225.9	232.8	239.2	244.8	250.1	256.2	4.7%
Percent Alternative Light Truck Sales	15.22	15.41	15.59	15.79	15.93	16.09	16.34	16.55	16.71	16.98	17.22	17.46	17.65	17.90	3.8%
Total New Truck Sales	1234.8	1250.8	1261.0	1268.7	1283.4	1299.2	1316.9	1335.2	1352.1	1370.9	1389.0	1401.6	1417.3	1431.2	0.8%
Percent Total Alternative Sales	13.66	13.93	14.16	14.38	14.58	14.78	15.04	15.29	15.51	15.79	16.06	16.33	16.58	16.86	3.6%
EPACT Legislative Alternative Sales	40.06	40.43	40.65	40.84	41.20	41.61	42.06	42.52	42.94	43.42	43.87	44.17	44.56	44.91	0.6%
ZEVP Legislative Alternative Sales	68.80	105.64	105.82	105.73	111.70	111.49	111.20	124.50	124.29	126.06	132.89	134.29	135.90	138.16	N/A
Total Vehicles Sales	2375.4	2389.5	2396.2	2403.9	2419.5	2437.8	2457.9	2478.2	2496.4	2518.3	2537.1	2549.4	2565.8	2581.0	0.4%

Table 37. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Middle Atlantic

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 38. Light-Duty Vehicle Sales by Technology Type  
(thousands)

East North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1188.2	1195.3	1230.5	1285.9	1262.6	1226.8	1200.9	1161.1	1155.7	1141.3	1120.9	1099.4	1082.7	1073.6
TDI Diesel ICE	6.2	3.7	4.2	4.3	6.4	6.2	5.9	5.6	5.8	6.0	6.2	6.4	6.5	7.0
Total Conventional	1194.4	1199.0	1234.7	1290.1	1269.0	1233.0	1206.8	1166.7	1161.5	1147.3	1127.1	1105.7	1089.3	1080.6
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	62.5	63.1	66.0	68.0	76.7	77.1	75.3	73.8	73.8	72.7	71.1	69.4	68.0	67.3
Ethanol ICE	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.8	1.0	1.2	1.1	1.1
Electric-Gasoline Hybrid	7.6	14.2	18.7	31.3	27.8	38.5	38.9	46.0	51.0	53.5	55.4	57.3	61.2	64.3
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.9	1.9	2.0	2.1	2.1	2.1	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	7.2	7.2	7.5	7.9	7.8	7.6	7.5	7.3	7.3	7.2	7.1	7.0	6.9	6.9
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	79.6	86.9	94.7	109.8	115.1	125.9	124.3	129.9	134.9	136.7	137.2	137.3	139.7	142.0
Percent Alternative Car Sales	6.25	6.76	7.12	7.85	8.31	9.26	9.34	10.01	10.40	10.65	10.85	11.05	11.37	11.61
Total New Car Sales	1274.0	1285.9	1329.4	1400.0	1384.1	1358.9	1331.1	1296.6	1296.3	1284.0	1264.2	1243.1	1229.0	1222.5
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1098.2	1111.8	1057.1	940.4	938.2	946.1	979.4	1012.8	1017.6	1024.9	1026.0	1029.8	1021.6	1017.5
TDI Diesel ICE	53.1	49.6	43.3	43.2	59.4	62.6	66.5	69.7	73.9	76.6	79.1	83.1	84.5	90.7
Total Conventional	1151.3	1161.5	1100.3	983.6	997.6	1008.7	1045.9	1082.5	1091.5	1101.5	1105.1	1112.9	1106.1	1108.2

Table 38. Light-Duty Vehicle Sales by Technology Type  
(thousands)

East North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	61.5	62.6	67.2	60.1	98.8	100.1	104.7	108.8	109.0	109.7	109.8	110.1	108.8	108.2
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Electric-Gasoline Hybrid	0.0	0.0	10.8	16.6	17.8	33.8	34.8	36.0	39.4	42.0	44.5	47.4	59.1	64.2
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	4.8	4.8	4.7	4.2	4.4	4.5	4.7	4.9	4.9	5.0	5.0	5.0	5.1	5.1
Liquefied Petroleum Gas ICE	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	15.9	16.1	15.5	13.9	14.6	15.0	15.6	16.1	16.3	16.5	16.5	16.7	16.7	16.8
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	82.8	84.1	98.6	95.4	136.2	154.0	160.3	166.4	170.2	173.8	176.4	179.8	190.3	195.1
Percent Alternative Light Truck Sales	6.71	6.75	8.23	8.84	12.01	13.25	13.29	13.33	13.49	13.63	13.77	13.91	14.68	14.97
Total New Truck Sales	1234.1	1245.6	1199.0	1079.1	1133.8	1162.7	1206.1	1248.9	1261.7	1275.2	1281.6	1292.6	1296.4	1303.2
Percent Total Alternative Sales	6.48	6.76	7.65	8.28	9.98	11.10	11.22	11.64	11.93	12.13	12.32	12.50	13.07	13.34
EPACT Legislative Alternative Sales	41.23	41.61	40.87	38.58	39.77	40.25	41.06	41.79	42.10	42.31	42.29	42.37	42.34	42.45
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Vehicles Sales	2508.1	2531.4	2528.4	2479.1	2517.8	2521.6	2537.3	2545.5	2558.0	2559.2	2545.8	2535.7	2525.3	2525.8

Table 38. Light-Duty Vehicle Sales by Technology Type  
(thousands)

East North Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	1065.4	1059.0	1051.6	1047.3	1044.1	1042.2	1040.3	1037.6	1034.0	1032.1	1027.9	1022.6	1017.7	1013.5	-0.6%
TDI Diesel ICE	7.3	7.9	8.2	9.0	9.7	10.5	11.1	11.8	12.9	13.6	14.4	15.1	16.4	17.3	6.1%
Total Conventional	1072.7	1066.9	1059.8	1056.3	1053.8	1052.6	1051.4	1049.5	1046.9	1045.7	1042.3	1037.7	1034.2	1030.8	-0.6%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.2%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	66.6	66.1	65.5	65.1	64.9	64.8	64.7	64.6	64.3	64.3	64.1	63.8	63.5	63.3	0.0%
Ethanol ICE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	3.8%
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-0.2%
Electric-Diesel Hybrid	1.0	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5	0.5	N/A
Electric-Gasoline Hybrid	67.4	71.1	74.6	77.7	80.9	84.3	87.8	91.3	94.9	98.7	102.4	106.2	110.1	114.3	8.3%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4%
Compressed Natural Gas Bi-fuel	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.9	1.9	1.8	1.8	1.9	-0.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	-0.2%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	144.4	147.4	150.2	153.0	155.9	159.2	162.5	165.9	169.2	173.0	176.4	179.8	183.5	187.4	3.0%
Percent Alternative Car Sales	11.86	12.14	12.41	12.65	12.89	13.13	13.39	13.65	13.91	14.19	14.48	14.77	15.07	15.38	3.2%
Total New Car Sales	1217.1	1214.3	1210.0	1209.3	1209.7	1211.8	1213.9	1215.4	1216.1	1218.7	1218.8	1217.5	1217.6	1218.2	-0.2%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	1022.5	1026.1	1027.2	1021.5	1024.2	1026.3	1032.0	1035.9	1034.7	1039.4	1043.1	1042.2	1036.6	1035.7	-0.3%
TDI Diesel ICE	95.8	103.9	109.0	118.4	126.1	135.4	142.1	151.2	164.5	172.5	180.6	188.4	204.6	213.2	5.8%
Total Conventional	1118.3	1130.0	1136.2	1139.9	1150.3	1161.7	1174.2	1187.1	1199.2	1211.8	1223.7	1230.6	1241.3	1249.0	0.3%

Table 38. Light-Duty Vehicle Sales by Technology Type  
(thousands)

East North Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	108.7	109.2	109.3	108.7	109.1	109.4	110.1	110.8	111.0	111.8	112.4	112.5	112.1	112.2	2.3%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.8%
Electric-Diesel Hybrid	0.2	0.2	0.2	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	N/A
Electric-Gasoline Hybrid	67.6	71.5	75.2	79.2	83.2	87.5	92.1	96.9	101.7	107.0	112.5	117.7	122.9	128.6	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	3.6%
Compressed Natural Gas Bi-fuel	5.1	5.2	5.2	5.3	5.3	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.9	5.9	0.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.0%
Liquefied Petroleum Gas Bi-fuel	17.0	17.2	17.3	17.4	17.6	17.8	18.1	18.3	18.5	18.8	19.0	19.2	19.4	19.6	0.8%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	199.3	204.0	207.9	211.6	216.3	221.1	226.8	232.6	237.8	244.2	250.7	256.2	261.3	267.3	4.5%
Percent Alternative Light Truck Sales	15.13	15.29	15.47	15.66	15.83	15.99	16.19	16.38	16.55	16.77	17.00	17.23	17.39	17.63	3.8%
Total New Truck Sales	1317.7	1333.9	1344.1	1351.5	1366.6	1382.8	1400.9	1419.7	1437.0	1456.0	1474.4	1486.7	1502.5	1516.2	0.8%
Percent Total Alternative Sales	13.56	13.79	14.02	14.24	14.45	14.66	14.89	15.12	15.34	15.60	15.86	16.12	16.35	16.63	3.5%
EPACT Legislative Alternative Sales	42.75	43.12	43.33	43.50	43.87	44.28	44.74	45.21	45.64	46.12	46.57	46.86	47.24	47.58	0.5%
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	2534.7	2548.2	2554.1	2560.8	2576.3	2594.6	2614.8	2635.1	2653.0	2674.7	2693.2	2704.3	2720.1	2734.4	0.3%

Table 38. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
East North Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 39. Light-Duty Vehicle Sales by Technology Type  
(thousands)

West North Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	502.3	504.9	519.4	543.1	540.9	529.3	520.5	505.0	504.0	499.1	491.5	483.4	477.3	474.5
TDI Diesel ICE	3.2	1.9	2.3	2.3	2.6	2.6	2.5	2.4	2.5	2.5	2.6	2.7	2.8	3.0
Total Conventional	505.5	506.8	521.6	545.4	543.6	531.9	523.0	507.4	506.5	501.6	494.1	486.1	480.1	477.5
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	26.4	26.6	27.8	28.7	32.9	33.3	32.6	32.1	32.2	31.8	31.2	30.5	30.0	29.7
Ethanol ICE	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.5	0.5	0.5
Electric-Gasoline Hybrid	3.3	6.2	8.1	13.6	11.8	16.5	16.7	19.9	22.1	23.2	24.1	25.0	26.8	28.2
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.8	0.8	0.8
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	3.0	3.1	3.2	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.1	3.1	3.0	3.0
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	33.8	36.9	40.2	46.8	49.2	54.2	53.7	56.3	58.6	59.6	60.0	60.2	61.4	62.5
Percent Alternative Car Sales	6.26	6.79	7.16	7.90	8.30	9.25	9.32	9.99	10.38	10.62	10.82	11.02	11.34	11.58
Total New Car Sales	539.2	543.7	561.9	592.2	592.7	586.0	576.7	563.7	565.1	561.3	554.1	546.3	541.5	540.0
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	459.0	463.9	440.2	391.3	402.9	409.1	425.6	441.6	445.0	449.4	451.2	454.1	451.6	451.0
TDI Diesel ICE	28.8	27.8	25.2	25.0	24.3	25.9	27.5	29.0	30.8	32.0	33.2	35.0	35.7	38.5
Total Conventional	487.8	491.6	465.4	416.3	427.1	435.0	453.1	470.6	475.8	481.4	484.4	489.0	487.3	489.5

Table 39. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
West North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	25.5	25.9	27.9	25.0	42.4	43.3	45.5	47.4	47.7	48.1	48.3	48.5	48.1	48.0
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric-Gasoline Hybrid	0.0	0.0	4.7	7.2	7.5	14.5	14.9	15.5	17.1	18.2	19.4	20.7	25.8	28.2
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	2.0	2.1	2.0	1.8	1.9	2.0	2.0	2.1	2.1	2.2	2.2	2.2	2.2	2.2
Liquefied Petroleum Gas ICE	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	6.7	6.8	6.5	5.9	6.3	6.5	6.7	7.0	7.1	7.2	7.2	7.3	7.4	7.4
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	34.6	35.1	41.4	40.2	58.4	66.5	69.5	72.4	74.2	76.0	77.3	79.0	83.8	86.1
Percent Alternative Light Truck Sales	6.62	6.66	8.17	8.80	12.03	13.26	13.30	13.33	13.49	13.63	13.77	13.91	14.68	14.96
Total New Truck Sales	522.3	526.7	506.7	456.5	485.6	501.4	522.6	543.0	550.0	557.4	561.7	568.0	571.2	575.6
Percent Total Alternative Sales	6.44	6.72	7.64	8.29	9.98	11.09	11.21	11.63	11.92	12.12	12.31	12.49	13.05	13.33
EPACT Legislative Alternative Sales	17.45	17.60	17.27	16.32	17.03	17.36	17.79	18.17	18.35	18.50	18.54	18.62	18.65	18.75
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Vehicles Sales	1061.6	1070.4	1068.6	1048.7	1078.3	1087.5	1099.3	1106.6	1115.2	1118.7	1115.8	1114.3	1112.6	1115.7

Table 39. Light-Duty Vehicle Sales by Technology Type  
(thousands)

West North Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	472.0	470.4	468.3	467.7	467.6	467.9	468.4	468.5	468.1	468.5	467.9	466.7	465.8	465.1	-0.3%
TDI Diesel ICE	3.1	3.4	3.6	3.9	4.2	4.6	4.8	5.2	5.7	6.0	6.4	6.7	7.3	7.7	5.5%
Total Conventional	475.2	473.8	471.9	471.6	471.8	472.5	473.2	473.7	473.8	474.6	474.3	473.5	473.1	472.8	-0.3%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	29.5	29.3	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.2	29.2	29.1	29.1	29.0	0.3%
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	3.9%
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1%
Electric-Diesel Hybrid	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	N/A
Electric-Gasoline Hybrid	29.7	31.4	33.0	34.5	36.0	37.6	39.3	41.0	42.7	44.5	46.3	48.2	50.1	52.1	8.5%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9%
Compressed Natural Gas Bi-fuel	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.2%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	3.0	3.0	3.0	3.0	3.0	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.1%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	63.7	65.2	66.7	68.1	69.6	71.2	72.9	74.6	76.3	78.2	80.0	81.8	83.6	85.7	3.3%
Percent Alternative Car Sales	11.83	12.10	12.38	12.62	12.85	13.10	13.35	13.61	13.87	14.15	14.44	14.73	15.02	15.34	3.2%
Total New Car Sales	538.9	539.0	538.5	539.7	541.3	543.7	546.1	548.3	550.1	552.8	554.3	555.2	556.7	558.4	0.1%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	454.4	457.3	458.9	457.8	460.2	462.5	466.3	469.4	470.3	473.7	476.7	477.7	476.5	477.3	0.1%
TDI Diesel ICE	40.8	44.3	46.8	51.0	54.5	58.7	61.9	66.1	72.2	76.0	79.8	83.5	91.0	95.2	4.9%
Total Conventional	495.2	501.6	505.7	508.7	514.7	521.2	528.3	535.5	542.4	549.6	556.6	561.2	567.5	572.5	0.6%



Table 39. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
West North Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	48.3	48.7	48.8	48.7	49.0	49.3	49.7	50.2	50.4	50.9	51.4	51.5	51.5	51.7	2.7%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	1.1%
Electric-Diesel Hybrid	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	N/A
Electric-Gasoline Hybrid	29.7	31.5	33.3	35.1	37.0	39.0	41.2	43.5	45.8	48.3	50.9	53.4	56.0	58.7	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.0%
Compressed Natural Gas Bi-fuel	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.5	2.5	2.6	2.6	2.6	2.7	2.7	1.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-3.3%
Liquefied Petroleum Gas Bi-fuel	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.3	8.4	8.5	8.7	8.7	8.9	9.0	1.1%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Total Alternatives</b>	<b>88.2</b>	<b>90.5</b>	<b>92.5</b>	<b>94.4</b>	<b>96.8</b>	<b>99.2</b>	<b>102.0</b>	<b>104.9</b>	<b>107.6</b>	<b>110.8</b>	<b>114.0</b>	<b>116.8</b>	<b>119.5</b>	<b>122.6</b>	<b>4.9%</b>
Percent Alternative Light Truck Sales	15.12	15.29	15.46	15.66	15.83	15.99	16.19	16.38	16.55	16.77	17.00	17.23	17.39	17.63	3.8%
Total New Truck Sales	583.4	592.1	598.2	603.1	611.5	620.4	630.3	640.5	650.0	660.4	670.6	678.0	687.0	695.1	1.1%
Percent Total Alternative Sales	13.54	13.77	14.00	14.22	14.43	14.64	14.87	15.11	15.32	15.58	15.84	16.10	16.33	16.61	3.5%
EPACT Legislative Alternative Sales	18.93	19.14	19.28	19.41	19.63	19.87	20.13	20.40	20.64	20.92	21.18	21.37	21.60	21.81	0.8%
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Vehicles Sales</b>	<b>1122.3</b>	<b>1131.2</b>	<b>1136.8</b>	<b>1142.8</b>	<b>1152.8</b>	<b>1164.2</b>	<b>1176.4</b>	<b>1188.8</b>	<b>1200.1</b>	<b>1213.2</b>	<b>1224.9</b>	<b>1233.2</b>	<b>1243.7</b>	<b>1253.5</b>	<b>0.6%</b>

Table 39. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
West North Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 40. Light-Duty Vehicle Sales by Technology Type  
(thousands)

South Atlantic	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1411.6	1431.3	1486.7	1569.3	1565.9	1540.7	1525.8	1492.1	1501.6	1499.2	1488.9	1476.9	1471.2	1475.9
TDI Diesel ICE	7.8	4.7	5.6	5.7	7.4	7.3	7.1	6.8	7.2	7.5	7.8	8.1	8.5	9.1
Total Conventional	1419.4	1436.1	1492.3	1575.0	1573.3	1547.9	1532.9	1498.9	1508.8	1506.6	1496.7	1485.0	1479.7	1485.0
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	74.2	75.5	79.7	82.9	95.1	96.9	95.7	94.9	95.9	95.5	94.5	93.2	92.4	92.5
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.0	1.3	1.6	1.5	1.4
Electric-Gasoline Hybrid	9.0	17.0	22.5	38.1	33.9	47.6	48.8	58.4	65.5	69.5	72.9	76.1	82.3	87.5
Compressed Natural Gas ICE	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compressed Natural Gas Bi-fuel	2.2	2.3	2.4	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	8.5	8.7	9.0	9.6	9.7	9.6	9.5	9.4	9.5	9.5	9.4	9.4	9.4	9.5
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	94.6	104.0	114.4	134.0	142.1	157.4	157.3	166.1	174.4	178.8	181.4	183.6	188.9	194.2
Percent Alternative Car Sales	6.25	6.75	7.12	7.84	8.28	9.23	9.31	9.98	10.36	10.61	10.81	11.00	11.32	11.56
Total New Car Sales	1514.0	1540.1	1606.7	1709.0	1715.3	1705.3	1690.2	1665.0	1683.2	1685.4	1678.1	1668.6	1668.5	1679.2
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1300.0	1326.2	1271.5	1142.0	1169.4	1193.9	1250.1	1307.1	1327.9	1351.7	1368.4	1389.1	1393.9	1405.1
TDI Diesel ICE	68.6	65.4	58.9	59.3	66.8	71.9	77.8	82.9	89.3	94.0	98.4	104.8	107.9	117.1
Total Conventional	1368.6	1391.6	1330.3	1201.3	1236.2	1265.8	1327.9	1390.0	1417.1	1445.8	1466.8	1493.8	1501.8	1522.2

Table 40. Light-Duty Vehicle Sales by Technology Type  
(thousands)

South Atlantic	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	72.6	74.5	80.7	73.0	123.1	126.3	133.6	140.4	142.2	144.7	146.4	148.4	148.4	149.5
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Electric-Gasoline Hybrid	0.0	0.0	12.9	20.2	21.6	41.8	43.6	45.7	50.6	54.5	58.4	62.9	79.4	87.4
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	5.7	5.8	5.6	5.1	5.5	5.7	6.0	6.2	6.4	6.5	6.6	6.8	6.9	7.0
Liquefied Petroleum Gas ICE	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	18.9	19.2	18.7	17.0	18.1	18.8	19.8	20.7	21.1	21.6	21.9	22.4	22.7	23.1
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	98.0	100.3	118.7	115.9	169.0	193.3	203.6	213.8	221.1	228.1	234.2	241.3	258.3	267.8
Percent Alternative Light Truck Sales	6.68	6.72	8.19	8.80	12.02	13.25	13.29	13.33	13.50	13.63	13.77	13.91	14.67	14.96
Total New Truck Sales	1466.6	1491.9	1449.0	1317.3	1405.1	1459.0	1531.4	1603.8	1638.2	1673.9	1701.1	1735.2	1760.1	1790.0
Percent Total Alternative Sales	6.46	6.74	7.63	8.26	9.97	11.08	11.20	11.62	11.91	12.11	12.30	12.48	13.04	13.32
EPACT Legislative Alternative Sales	48.99	49.84	49.39	47.10	49.29	50.51	52.13	53.66	54.66	55.54	56.14	56.88	57.48	58.31
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Vehicles Sales	2980.6	3032.0	3055.7	3026.3	3120.4	3164.4	3221.6	3268.8	3321.4	3359.3	3379.1	3403.8	3428.6	3469.3

Table 40. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
South Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	1482.5	1491.9	1499.9	1512.3	1526.8	1543.3	1560.4	1576.7	1592.2	1610.4	1624.8	1637.9	1651.8	1666.5	0.6%
TDI Diesel ICE	9.7	10.5	11.2	12.4	13.5	14.9	15.9	17.2	18.7	19.9	21.3	22.7	24.7	26.3	6.8%
Total Conventional	1492.2	1502.4	1511.0	1524.8	1540.4	1558.2	1576.3	1593.9	1610.9	1630.4	1646.2	1660.6	1676.5	1692.9	0.6%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	92.7	93.1	93.4	94.1	94.9	95.9	97.0	98.1	99.1	100.3	101.3	102.2	103.1	104.1	1.2%
Ethanol ICE	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	4.9%
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	1.0%
Electric-Diesel Hybrid	1.4	1.3	1.3	1.2	1.2	1.1	1.1	1.0	1.0	0.9	0.9	0.8	0.8	0.7	N/A
Electric-Gasoline Hybrid	92.9	99.1	105.3	111.2	117.2	123.7	130.5	137.5	144.8	152.6	160.5	168.5	177.0	186.2	9.6%
Compressed Natural Gas ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	2.2%
Compressed Natural Gas Bi-fuel	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.9	2.9	2.9	3.0	3.0	1.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	9.5	9.6	9.7	9.8	9.9	10.1	10.2	10.4	10.5	10.7	10.8	11.0	11.1	11.3	1.0%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	199.8	206.5	213.1	219.8	226.8	234.5	242.5	250.7	259.1	268.4	277.4	286.3	296.0	306.3	4.2%
Percent Alternative Car Sales	11.81	12.09	12.36	12.60	12.83	13.08	13.33	13.59	13.86	14.13	14.42	14.71	15.01	15.32	3.2%
Total New Car Sales	1692.0	1709.0	1724.1	1744.5	1767.1	1792.7	1818.8	1844.7	1870.0	1898.7	1923.5	1946.9	1972.5	1999.1	1.0%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	1429.4	1452.9	1472.5	1482.9	1505.7	1528.3	1556.7	1583.2	1607.5	1637.3	1664.7	1686.8	1703.8	1725.7	1.0%
TDI Diesel ICE	125.4	137.5	146.5	161.5	174.5	190.1	202.5	218.4	235.6	249.6	265.6	279.7	305.1	321.8	6.3%
Total Conventional	1554.8	1590.3	1619.0	1644.4	1680.2	1718.4	1759.2	1801.6	1843.1	1887.0	1930.3	1966.5	2009.0	2047.5	1.5%

Table 40. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
South Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	152.0	154.6	156.7	157.8	160.4	162.9	166.0	169.3	172.3	176.0	179.4	182.0	184.1	186.8	3.6%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	2.0%
Electric-Diesel Hybrid	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	N/A
Electric-Gasoline Hybrid	93.1	99.7	106.2	113.3	120.6	128.4	137.1	146.1	155.6	165.9	176.7	187.4	198.6	210.5	N/A
Compressed Natural Gas ICE	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.4%
Compressed Natural Gas Bi-fuel	7.1	7.3	7.5	7.6	7.8	8.0	8.2	8.4	8.6	8.8	9.1	9.3	9.5	9.7	2.0%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-1.9%
Liquefied Petroleum Gas Bi-fuel	23.6	24.2	24.7	25.2	25.8	26.4	27.1	27.8	28.5	29.3	30.0	30.7	31.4	32.1	2.0%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	277.0	287.0	296.2	305.3	316.0	327.1	339.8	353.1	366.5	381.5	396.7	410.9	425.1	440.8	5.9%
Percent Alternative Light Truck Sales	15.12	15.29	15.47	15.66	15.83	15.99	16.19	16.39	16.59	16.82	17.05	17.28	17.47	17.71	3.8%
Total New Truck Sales	1831.8	1877.3	1915.2	1949.7	1996.2	2045.6	2099.0	2154.8	2209.6	2268.5	2327.0	2377.4	2434.1	2488.3	2.0%
Percent Total Alternative Sales	13.53	13.76	13.99	14.21	14.42	14.63	14.86	15.10	15.34	15.59	15.86	16.12	16.36	16.65	3.5%
EPACT Legislative Alternative Sales	59.43	60.69	61.74	62.76	64.09	65.51	67.04	68.62	70.18	71.86	73.50	74.93	76.53	78.08	1.7%
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	3523.8	3586.3	3639.3	3694.2	3763.3	3838.2	3917.7	3999.4	4079.6	4167.2	4250.6	4324.3	4406.6	4487.4	1.5%

Table 40. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
South Atlantic

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 41. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	421.4	424.3	436.9	457.3	453.3	442.9	435.3	422.4	421.9	418.1	412.1	405.7	401.1	399.4
TDI Diesel ICE	2.5	1.5	1.8	1.8	2.2	2.2	2.1	2.0	2.1	2.1	2.2	2.3	2.4	2.5
Total Conventional	423.9	425.8	438.7	459.1	455.5	445.0	437.4	424.4	424.0	420.2	414.3	408.0	403.5	401.9
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	22.2	22.4	23.4	24.2	27.5	27.8	27.3	26.9	26.9	26.6	26.1	25.6	25.2	25.0
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Electric Vehicle	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3	0.4	0.4	0.4	0.4
Electric-Gasoline Hybrid	2.7	5.1	6.7	11.2	9.9	13.8	14.0	16.6	18.5	19.4	20.2	21.0	22.5	23.8
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	2.5	2.6	2.7	2.8	2.8	2.8	2.7	2.7	2.7	2.6	2.6	2.6	2.6	2.6
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	28.3	30.9	33.7	39.2	41.2	45.3	44.9	47.1	49.1	49.9	50.3	50.5	51.6	52.6
Percent Alternative Car Sales	6.25	6.77	7.13	7.86	8.29	9.24	9.31	9.99	10.38	10.62	10.82	11.02	11.33	11.58
Total New Car Sales	452.1	456.7	472.4	498.2	496.7	490.3	482.4	471.5	473.0	470.1	464.6	458.5	455.1	454.5
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	386.6	391.5	372.0	331.1	337.8	342.4	355.9	369.2	372.2	376.1	378.0	380.8	379.2	379.3
TDI Diesel ICE	22.2	21.3	19.2	19.2	20.2	21.5	23.1	24.5	26.1	27.2	28.2	29.8	30.4	32.8
Total Conventional	408.8	412.8	391.2	350.3	358.0	364.0	379.0	393.7	398.3	403.3	406.2	410.5	409.6	412.1



Table 41. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	21.6	22.0	23.6	21.1	35.6	36.2	38.0	39.7	39.9	40.3	40.4	40.7	40.4	40.4
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric-Gasoline Hybrid	0.0	0.0	3.8	6.0	6.3	12.1	12.5	13.0	14.3	15.3	16.2	17.3	21.7	23.7
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.7	1.7	1.7	1.5	1.6	1.6	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	5.7	5.7	5.5	5.0	5.2	5.4	5.6	5.9	5.9	6.0	6.1	6.2	6.2	6.3
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	29.1	29.6	34.8	33.7	48.9	55.5	58.1	60.5	62.1	63.6	64.8	66.3	70.4	72.5
Percent Alternative Light Truck Sales	6.65	6.69	8.17	8.79	12.02	13.24	13.28	13.32	13.48	13.62	13.76	13.90	14.67	14.95
Total New Truck Sales	438.0	442.4	426.0	384.0	406.8	419.5	437.0	454.2	460.4	466.9	471.0	476.8	480.1	484.5
Percent Total Alternative Sales	6.45	6.73	7.62	8.26	9.97	11.08	11.20	11.62	11.91	12.11	12.30	12.49	13.04	13.32
EPACT Legislative Alternative Sales	14.63	14.78	14.52	13.73	14.27	14.52	14.88	15.20	15.36	15.49	15.54	15.63	15.68	15.78
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Vehicles Sales	890.1	899.2	898.4	882.3	903.5	909.8	919.4	925.7	933.4	937.1	935.5	935.4	935.1	939.1

Table 41. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
East South Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	398.0	397.3	396.3	396.5	397.1	398.2	399.3	400.2	400.7	401.9	402.2	402.0	402.0	402.2	-0.2%
TDI Diesel ICE	2.7	2.9	3.0	3.3	3.6	3.9	4.2	4.5	4.8	5.1	5.4	5.7	6.2	6.5	5.8%
Total Conventional	400.7	400.2	399.3	399.8	400.7	402.1	403.5	404.6	405.6	407.0	407.6	407.7	408.2	408.8	-0.2%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	24.9	24.8	24.7	24.7	24.7	24.7	24.8	24.9	24.9	25.0	25.1	25.1	25.1	25.1	0.4%
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	4.0%
Electric Vehicle	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2%
Electric-Diesel Hybrid	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	N/A
Electric-Gasoline Hybrid	25.0	26.5	27.9	29.2	30.6	32.0	33.5	35.0	36.6	38.2	39.8	41.5	43.2	45.1	8.7%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5%
Compressed Natural Gas Bi-fuel	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.7	2.7	0.2%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	53.7	55.1	56.4	57.7	59.1	60.6	62.2	63.8	65.3	67.1	68.8	70.4	72.2	74.1	3.4%
Percent Alternative Car Sales	11.83	12.10	12.38	12.61	12.85	13.10	13.35	13.61	13.87	14.15	14.44	14.73	15.03	15.34	3.2%
Total New Car Sales	454.4	455.3	455.7	457.6	459.8	462.7	465.6	468.4	470.9	474.1	476.4	478.1	480.4	482.8	0.2%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	382.8	385.9	388.0	387.7	390.5	393.1	397.1	400.5	403.2	407.1	410.6	412.3	412.9	414.6	0.2%
TDI Diesel ICE	34.8	37.9	40.0	43.6	46.7	50.5	53.3	57.0	61.0	64.2	67.6	70.8	76.5	80.0	5.2%
Total Conventional	417.6	423.8	428.0	431.3	437.3	443.6	450.5	457.6	464.2	471.3	478.2	483.1	489.4	494.7	0.7%

Table 41. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
East South Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	40.7	41.1	41.3	41.3	41.6	41.9	42.3	42.8	43.2	43.8	44.2	44.5	44.6	44.9	2.8%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	1.2%
Electric-Diesel Hybrid	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	N/A
Electric-Gasoline Hybrid	25.1	26.6	28.1	29.8	31.4	33.2	35.2	37.2	39.2	41.5	43.8	46.1	48.4	50.9	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8%
Compressed Natural Gas Bi-fuel	1.9	1.9	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.2	2.3	2.3	2.3	1.2%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-2.4%
Liquefied Petroleum Gas Bi-fuel	6.3	6.5	6.5	6.6	6.7	6.8	6.9	7.1	7.2	7.3	7.4	7.5	7.6	7.8	1.2%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	74.4	76.4	78.2	80.0	82.2	84.4	86.9	89.6	92.2	95.2	98.1	100.8	103.4	106.3	5.0%
Percent Alternative Light Truck Sales	15.11	15.28	15.45	15.65	15.82	15.98	16.17	16.37	16.57	16.80	17.03	17.26	17.44	17.69	3.8%
Total New Truck Sales	492.0	500.2	506.2	511.4	519.4	528.0	537.4	547.1	556.4	566.5	576.3	583.9	592.8	601.0	1.2%
Percent Total Alternative Sales	13.53	13.76	14.00	14.22	14.42	14.63	14.86	15.10	15.33	15.59	15.86	16.12	16.36	16.64	3.5%
EPACT Legislative Alternative Sales	15.96	16.17	16.32	16.46	16.68	16.91	17.16	17.42	17.67	17.94	18.20	18.40	18.64	18.86	0.9%
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	946.4	955.5	962.0	968.9	979.2	990.7	1003.0	1015.5	1027.3	1040.6	1052.7	1062.0	1073.2	1083.8	0.7%

Table 41. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
East South Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 42. Light-Duty Vehicle Sales by Technology Type  
(thousands)

West South Central	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	819.3	830.5	860.7	906.3	895.8	877.4	866.0	844.4	847.7	844.3	836.7	828.1	823.2	824.2
TDI Diesel ICE	4.3	2.6	3.0	3.1	4.7	4.6	4.4	4.2	4.4	4.6	4.8	5.0	5.2	5.6
Total Conventional	823.6	833.2	863.7	909.4	900.5	882.0	870.4	848.7	852.1	848.9	841.5	833.1	828.4	829.8
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	43.1	43.8	46.2	47.9	54.4	55.2	54.3	53.7	54.1	53.8	53.1	52.3	51.7	51.6
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Electric Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.6	0.8	0.9	0.9	0.9
Electric-Gasoline Hybrid	5.2	9.8	12.9	21.8	19.6	27.3	27.9	33.3	37.2	39.4	41.2	42.9	46.3	49.1
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.3	1.3	1.4	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	4.9	5.0	5.2	5.6	5.5	5.5	5.4	5.3	5.4	5.3	5.3	5.3	5.3	5.3
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	54.9	60.3	66.1	77.2	81.5	89.9	89.5	94.3	98.7	101.0	102.2	103.3	106.0	108.8
Percent Alternative Car Sales	6.24	6.75	7.11	7.82	8.30	9.25	9.32	10.00	10.38	10.63	10.83	11.03	11.35	11.59
Total New Car Sales	878.4	893.4	929.8	986.6	982.0	971.8	959.9	942.9	950.8	949.9	943.7	936.4	934.4	938.6
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	756.6	771.8	738.3	661.8	664.1	674.9	704.4	734.7	744.4	755.9	763.4	773.1	774.0	778.2
TDI Diesel ICE	37.3	35.3	31.5	31.5	43.9	46.8	50.1	52.9	56.6	59.4	62.0	65.7	67.5	73.1
Total Conventional	793.9	807.0	769.7	693.4	708.1	721.7	754.5	787.6	801.0	815.3	825.4	838.8	841.5	851.4

Table 42. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
West South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	42.3	43.4	46.9	42.3	69.9	71.4	75.3	79.0	79.8	80.9	81.7	82.6	82.4	82.8
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric-Gasoline Hybrid	0.0	0.0	7.4	11.6	12.5	24.0	24.9	26.0	28.7	30.9	33.0	35.4	44.6	49.0
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	3.3	3.4	3.3	3.0	3.1	3.2	3.4	3.5	3.6	3.7	3.7	3.8	3.8	3.9
Liquefied Petroleum Gas ICE	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0
Liquefied Petroleum Gas Bi-fuel	11.0	11.2	10.8	9.8	10.4	10.7	11.2	11.7	11.9	12.2	12.3	12.6	12.7	12.9
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	57.0	58.4	68.8	67.0	96.4	109.8	115.2	120.7	124.4	128.1	131.2	134.9	144.1	149.1
Percent Alternative Light Truck Sales	6.70	6.75	8.21	8.82	11.98	13.20	13.25	13.29	13.45	13.58	13.72	13.86	14.62	14.90
Total New Truck Sales	850.9	865.4	838.6	760.4	804.4	831.5	869.7	908.2	925.4	943.4	956.6	973.7	985.6	1000.5
Percent Total Alternative Sales	6.47	6.75	7.63	8.26	9.95	11.07	11.19	11.61	11.89	12.10	12.28	12.47	13.03	13.30
EPACT Legislative Alternative Sales	28.43	28.91	28.58	27.19	28.22	28.78	29.61	30.39	30.88	31.30	31.57	31.92	32.19	32.59
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Vehicles Sales	1729.3	1758.9	1768.4	1747.0	1786.4	1803.3	1829.6	1851.2	1876.2	1893.3	1900.3	1910.1	1920.0	1939.1

Table 42. Light-Duty Vehicle Sales by Technology Type  
(thousands)

West South Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	826.3	830.1	833.3	839.2	846.2	854.3	862.7	870.8	878.4	887.4	894.6	900.8	907.5	914.8	0.4%
TDI Diesel ICE	5.9	6.4	6.8	7.5	8.2	9.0	9.6	10.4	11.3	12.0	12.9	13.7	14.9	15.9	7.2%
Total Conventional	832.2	836.5	840.1	846.7	854.4	863.3	872.3	881.2	889.7	899.5	907.4	914.5	922.5	930.7	0.4%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	51.6	51.8	51.9	52.2	52.6	53.1	53.6	54.2	54.6	55.3	55.8	56.2	56.6	57.1	1.0%
Ethanol ICE	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	4.8%
Electric Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.8%
Electric-Diesel Hybrid	0.8	0.8	0.8	0.7	0.7	0.7	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.4	N/A
Electric-Gasoline Hybrid	52.1	55.5	58.8	62.0	65.3	68.8	72.5	76.4	80.3	84.6	88.8	93.2	97.9	102.8	9.5%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4%
Compressed Natural Gas Bi-fuel	1.4	1.4	1.5	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.7	0.9%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	5.3	5.4	5.4	5.5	5.5	5.6	5.7	5.7	5.8	5.9	6.0	6.0	6.1	6.2	0.8%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	111.7	115.3	118.8	122.3	126.1	130.2	134.5	139.0	143.4	148.4	153.3	158.1	163.3	168.8	4.0%
Percent Alternative Car Sales	11.84	12.11	12.39	12.62	12.86	13.11	13.36	13.62	13.88	14.16	14.45	14.74	15.04	15.35	3.2%
Total New Car Sales	943.9	951.8	958.9	969.1	980.5	993.5	1006.8	1020.1	1033.1	1047.9	1060.7	1072.6	1085.7	1099.5	0.8%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	789.9	801.0	810.3	814.7	825.8	836.7	850.8	863.8	875.5	890.1	904.0	914.2	921.5	932.0	0.7%
TDI Diesel ICE	78.1	85.4	90.8	99.6	107.4	116.7	124.2	133.7	144.1	152.8	162.0	170.9	186.2	196.2	6.8%
Total Conventional	868.0	886.4	901.1	914.3	933.2	953.4	974.9	997.5	1019.6	1042.9	1066.0	1085.1	1107.7	1128.1	1.3%

Table 42. Light-Duty Vehicle Sales by Technology Type  
(thousands)

West South Central	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	84.0	85.3	86.2	86.7	88.0	89.2	90.8	92.4	93.9	95.7	97.5	98.7	99.6	101.0	3.3%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	1.8%
Electric-Diesel Hybrid	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	N/A
Electric-Gasoline Hybrid	52.0	55.6	59.1	63.0	66.9	71.2	75.9	80.8	85.9	91.4	97.3	103.1	109.1	115.5	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.9%
Compressed Natural Gas Bi-fuel	4.0	4.1	4.2	4.2	4.3	4.4	4.5	4.6	4.8	4.9	5.0	5.1	5.2	5.3	1.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9%
Liquefied Petroleum Gas Bi-fuel	13.2	13.5	13.7	14.0	14.3	14.6	15.0	15.4	15.7	16.2	16.6	16.9	17.3	17.7	1.8%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	153.9	159.1	164.0	168.8	174.4	180.3	187.0	194.1	201.2	209.1	217.2	224.7	232.1	240.4	5.6%
Percent Alternative Light Truck Sales	15.06	15.22	15.39	15.58	15.75	15.90	16.10	16.29	16.48	16.70	16.93	17.15	17.33	17.56	3.7%
Total New Truck Sales	1021.9	1045.5	1065.1	1083.0	1107.6	1133.7	1162.0	1191.6	1220.7	1252.0	1283.2	1309.8	1339.8	1368.5	1.8%
Percent Total Alternative Sales	13.51	13.74	13.97	14.19	14.39	14.60	14.83	15.06	15.29	15.55	15.80	16.07	16.30	16.58	3.5%
EPACT Legislative Alternative Sales	33.15	33.80	34.34	34.86	35.56	36.31	37.11	37.95	38.77	39.66	40.53	41.28	42.12	42.94	1.5%
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	1965.8	1997.3	2024.0	2052.1	2088.0	2127.1	2168.8	2211.7	2253.8	2299.9	2343.9	2382.4	2425.5	2468.0	1.3%



Table 42. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
West South Central

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 43. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Mountain

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	474.5	486.5	507.4	536.9	526.6	512.5	505.4	495.9	499.0	499.9	497.6	495.1	492.6	495.9
TDI Diesel ICE	2.4	1.4	1.6	1.7	3.0	3.0	2.8	2.7	2.8	2.9	3.0	3.1	3.3	3.6
Total Conventional	476.9	487.9	509.1	538.6	529.6	515.5	508.2	498.6	501.8	502.7	500.6	498.3	495.9	499.4
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	25.0	25.7	27.2	28.4	32.0	32.2	31.7	31.5	31.9	31.8	31.6	31.2	30.9	31.1
Ethanol ICE	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.4	0.5	0.6	0.6	0.6
Electric-Gasoline Hybrid	3.0	5.8	7.7	13.1	12.1	16.9	17.2	20.3	22.9	24.2	25.4	26.5	28.9	30.6
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	2.9	2.9	3.1	3.3	3.3	3.2	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.2
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	31.8	35.4	39.1	45.9	48.5	53.5	53.2	56.1	59.1	60.7	61.8	62.7	64.7	66.6
Percent Alternative Car Sales	6.25	6.76	7.13	7.85	8.39	9.40	9.47	10.12	10.54	10.77	10.98	11.17	11.53	11.76
Total New Car Sales	508.7	523.3	548.1	584.5	578.1	569.0	561.4	554.7	560.9	563.5	562.4	560.9	560.6	566.0
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	439.4	453.6	437.0	393.9	387.4	390.3	407.1	428.8	435.1	445.3	451.3	460.0	459.9	465.0
TDI Diesel ICE	20.1	18.9	16.5	16.6	29.3	31.7	33.7	34.3	37.0	37.9	40.1	41.9	44.3	47.7
Total Conventional	459.6	472.5	453.5	410.5	416.7	422.0	440.8	463.0	472.1	483.2	491.5	502.0	504.1	512.7

Table 43. Light-Duty Vehicle Sales by Technology Type  
(thousands)

Mountain	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	24.6	25.6	27.8	25.2	40.8	41.3	43.5	46.1	46.6	47.7	48.3	49.2	49.0	49.5
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric-Gasoline Hybrid	0.0	0.0	4.4	7.0	7.8	15.0	15.5	16.0	17.8	19.1	20.5	22.0	28.0	30.6
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	1.9	2.0	1.9	1.8	1.9	1.9	2.0	2.1	2.1	2.2	2.2	2.3	2.3	2.4
Liquefied Petroleum Gas ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	6.4	6.5	6.4	5.8	6.1	6.3	6.6	6.9	7.0	7.2	7.4	7.5	7.6	7.8
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Alternatives	33.2	34.4	40.8	40.0	56.9	64.8	67.9	71.3	73.9	76.5	78.6	81.3	87.2	90.6
Percent Alternative Light Truck Sales	6.74	6.78	8.26	8.88	12.01	13.31	13.34	13.35	13.53	13.66	13.79	13.94	14.75	15.02
Total New Truck Sales	492.7	506.9	494.3	450.5	473.5	486.8	508.7	534.3	545.9	559.6	570.1	583.3	591.3	603.3
Percent Total Alternative Sales	6.49	6.77	7.66	8.30	10.02	11.20	11.31	11.70	12.02	12.21	12.40	12.58	13.19	13.44
EPACT Legislative Alternative Sales	16.46	16.94	16.85	16.11	16.61	16.85	17.31	17.88	18.22	18.57	18.81	19.12	19.31	19.65
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Vehicles Sales	1001.4	1030.3	1042.5	1035.0	1051.6	1055.8	1070.0	1089.1	1106.9	1123.1	1132.5	1144.2	1151.9	1169.3

Table 43. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Mountain

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	497.8	502.1	506.4	512.4	517.7	524.4	531.2	538.4	545.6	552.5	558.6	563.8	569.0	574.8	0.6%
TDI Diesel ICE	3.8	4.1	4.4	4.8	5.3	5.8	6.2	6.7	7.3	7.9	8.4	9.0	9.8	10.4	7.9%
Total Conventional	501.6	506.2	510.8	517.2	523.0	530.2	537.4	545.2	552.8	560.4	567.1	572.8	578.8	585.2	0.7%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	31.1	31.3	31.5	31.9	32.2	32.6	33.0	33.5	33.9	34.4	34.8	35.2	35.5	35.9	1.3%
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	5.4%
Electric Vehicle	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.1%
Electric-Diesel Hybrid	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	N/A
Electric-Gasoline Hybrid	32.6	34.8	37.0	39.1	41.3	43.6	46.1	48.6	51.2	54.1	57.0	59.9	63.1	66.4	9.8%
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6%
Compressed Natural Gas Bi-fuel	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.3%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	3.2	3.2	3.3	3.3	3.4	3.4	3.5	3.6	3.6	3.7	3.7	3.8	3.8	3.9	1.1%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	68.7	71.1	73.5	76.0	78.6	81.4	84.4	87.4	90.5	94.0	97.3	100.6	104.2	108.0	4.4%
Percent Alternative Car Sales	12.04	12.31	12.57	12.81	13.07	13.31	13.57	13.81	14.07	14.36	14.64	14.94	15.26	15.58	3.3%
Total New Car Sales	570.3	577.3	584.3	593.2	601.6	611.6	621.8	632.5	643.3	654.3	664.3	673.4	683.0	693.1	1.1%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	471.9	480.6	488.9	493.8	500.8	509.1	519.4	530.0	540.3	549.5	559.8	566.6	572.7	580.4	1.0%
TDI Diesel ICE	51.6	56.3	59.5	65.1	71.0	77.0	81.8	87.7	93.8	100.8	107.0	113.8	123.0	129.7	7.7%
Total Conventional	523.6	536.9	548.4	558.9	571.8	586.1	601.2	617.7	634.0	650.3	666.8	680.4	695.7	710.1	1.6%

Table 43. Light-Duty Vehicle Sales by Technology Type  
(thousands)

Mountain	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	50.2	51.2	52.0	52.6	53.4	54.3	55.4	56.7	58.0	59.1	60.4	61.2	62.0	62.9	3.5%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	2.1%
Electric-Diesel Hybrid	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	N/A
Electric-Gasoline Hybrid	32.8	35.0	37.3	39.8	42.5	45.2	48.3	51.5	54.8	58.6	62.4	66.3	70.4	74.7	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	10.8%
Compressed Natural Gas Bi-fuel	2.4	2.5	2.5	2.6	2.7	2.7	2.8	2.9	3.0	3.1	3.1	3.2	3.3	3.4	2.1%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-5.1%
Liquefied Petroleum Gas Bi-fuel	8.0	8.2	8.4	8.6	8.8	9.0	9.3	9.5	9.8	10.1	10.4	10.6	10.9	11.1	2.1%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Alternatives	93.8	97.3	100.7	104.1	107.8	111.8	116.4	121.2	126.2	131.4	136.9	141.9	147.1	152.7	5.9%
Percent Alternative Light Truck Sales	15.19	15.34	15.51	15.70	15.87	16.02	16.22	16.40	16.60	16.81	17.03	17.25	17.45	17.70	3.8%
Total New Truck Sales	617.4	634.2	649.0	663.0	679.6	697.9	717.6	738.9	760.2	781.8	803.7	822.3	842.8	862.7	2.1%
Percent Total Alternative Sales	13.68	13.90	14.12	14.33	14.55	14.75	14.99	15.21	15.44	15.69	15.95	16.21	16.47	16.75	3.5%
EPACT Legislative Alternative Sales	20.03	20.50	20.92	21.34	21.82	22.35	22.92	23.53	24.14	24.76	25.38	25.92	26.50	27.07	1.8%
ZEVP Legislative Alternative Sales	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	1187.6	1211.5	1233.3	1256.1	1281.3	1309.6	1339.3	1371.4	1403.5	1436.1	1468.0	1495.8	1525.8	1555.9	1.6%

Table 43. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Mountain

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 44. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1214.8	1226.1	1269.6	1335.7	1334.2	1300.4	1281.9	1253.0	1254.6	1248.6	1236.1	1224.4	1210.8	1213.3
TDI Diesel ICE	8.5	5.1	6.2	6.3	8.1	8.8	8.0	6.9	7.6	7.7	7.7	7.6	8.6	8.8
Total Conventional	1223.3	1231.2	1275.8	1342.0	1342.3	1309.3	1289.9	1259.9	1262.2	1256.3	1243.8	1232.0	1219.4	1222.0
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	63.9	64.7	68.0	70.5	81.0	81.7	80.3	79.7	80.1	79.5	78.4	77.3	76.1	76.1
Ethanol ICE	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	1.0	1.3	1.4	1.5	1.4
Electric-Gasoline Hybrid	8.3	15.7	20.8	34.9	30.5	43.1	43.7	51.5	57.8	60.9	63.5	65.9	71.2	75.1
Compressed Natural Gas ICE	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compressed Natural Gas Bi-fuel	1.9	2.0	2.2	2.3	2.3	2.3	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	7.3	7.4	7.7	8.2	8.2	8.1	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.4	1.2	1.2
Total Alternatives	82.0	90.3	99.3	116.7	122.7	135.9	134.9	142.1	149.0	152.2	154.4	155.7	160.6	164.4
Percent Alternative Car Sales	6.28	6.83	7.22	8.00	8.38	9.41	9.47	10.14	10.56	10.81	11.04	11.22	11.63	11.86
Total New Car Sales	1305.2	1321.5	1375.1	1458.7	1465.0	1445.2	1424.9	1402.0	1411.1	1408.5	1398.2	1387.8	1380.0	1386.5
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	1103.4	1119.5	1069.5	955.8	976.2	974.9	1020.6	1078.8	1084.3	1101.8	1116.9	1137.2	1122.3	1135.0
TDI Diesel ICE	77.8	75.9	69.4	69.3	80.4	98.3	98.3	90.1	102.6	104.2	103.2	102.5	116.8	117.4
Total Conventional	1181.2	1195.4	1138.9	1025.1	1056.6	1073.1	1118.9	1168.9	1186.8	1206.0	1220.2	1239.8	1239.1	1252.4

Table 44. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	61.2	62.4	67.7	60.9	102.9	103.3	109.3	116.0	116.3	118.1	119.6	121.6	119.7	120.9
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Electric-Gasoline Hybrid	0.0	0.0	12.0	18.7	19.5	38.0	39.1	40.5	44.8	47.9	51.2	54.8	68.8	74.9
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compressed Natural Gas Bi-fuel	4.9	5.0	4.9	4.4	4.7	4.9	5.1	5.3	5.4	5.5	5.6	5.7	5.7	5.8
Liquefied Petroleum Gas ICE	0.1	0.2	0.1	0.1	0.3	0.7	1.2	1.5	1.6	1.9	1.8	1.9	2.4	3.7
Liquefied Petroleum Gas Bi-fuel	16.3	16.5	16.0	14.5	15.5	16.0	16.7	17.4	17.7	18.1	18.3	18.6	18.8	19.1
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3	0.7	0.2	0.2	0.5	0.5
Total Alternatives	83.1	84.7	101.2	99.2	143.5	163.4	172.1	181.6	186.6	192.8	197.2	203.4	216.5	225.6
Percent Alternative Light Truck Sales	6.58	6.62	8.16	8.82	11.96	13.21	13.33	13.44	13.59	13.78	13.91	14.09	14.88	15.26
Total New Truck Sales	1264.3	1280.1	1240.2	1124.3	1200.1	1236.5	1291.0	1350.5	1373.4	1398.9	1417.4	1443.1	1455.7	1478.0
Percent Total Alternative Sales	6.43	6.73	7.67	8.36	9.99	11.16	11.30	11.76	12.05	12.29	12.49	12.69	13.30	13.61
EPACT Legislative Alternative Sales	42.24	42.76	42.27	40.20	42.10	42.80	43.95	45.19	45.82	46.42	46.78	47.31	47.54	48.14
ZEVP Legislative Alternative Sales	0.00	0.00	38.20	38.86	39.04	39.32	48.96	50.69	53.00	75.86	78.01	77.66	146.70	145.41
Total Vehicles Sales	2569.6	2601.5	2615.3	2582.9	2665.1	2681.7	2715.9	2752.5	2784.6	2807.3	2815.6	2830.9	2835.6	2864.4



Table 44. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Pacific

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	1211.9	1215.6	1218.8	1227.0	1233.5	1242.3	1251.6	1261.1	1270.9	1281.7	1289.5	1296.3	1304.2	1313.0	0.3%
TDI Diesel ICE	9.5	9.4	11.0	11.5	12.7	14.2	15.4	16.3	16.5	17.5	19.1	20.5	21.6	22.6	5.9%
Total Conventional	1221.5	1225.0	1229.8	1238.5	1246.2	1256.4	1267.0	1277.4	1287.4	1299.2	1308.6	1316.8	1325.8	1335.6	0.3%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	75.8	76.0	76.0	76.5	76.8	77.3	78.0	78.6	79.2	80.0	80.5	81.0	81.5	82.1	0.9%
Ethanol ICE	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	4.5%
Electric Vehicle	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.7%
Electric-Diesel Hybrid	1.3	1.2	1.2	1.1	1.1	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	N/A
Electric-Gasoline Hybrid	79.6	84.5	89.2	93.9	98.7	103.8	109.1	114.5	120.3	126.4	132.5	138.7	145.4	152.5	9.1%
Compressed Natural Gas ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1.3%
Compressed Natural Gas Bi-fuel	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.4	2.5	0.8%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	7.8	7.9	7.9	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.7	8.8	8.9	0.7%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	1.2	2.6	2.5	2.4	2.5	2.4	2.3	2.7	2.5	2.5	2.6	2.6	2.6	2.5	N/A
Total Alternatives	168.7	175.0	179.8	184.8	190.2	195.8	201.7	208.2	214.5	221.5	228.3	235.0	242.3	250.1	4.0%
Percent Alternative Car Sales	12.14	12.50	12.75	12.99	13.24	13.48	13.73	14.02	14.28	14.57	14.85	15.14	15.45	15.77	3.3%
Total New Car Sales	1390.2	1400.1	1409.6	1423.3	1436.4	1452.3	1468.7	1485.6	1501.9	1520.7	1536.9	1551.8	1568.1	1585.7	0.7%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	1142.2	1169.7	1168.9	1182.3	1192.2	1200.8	1214.4	1234.4	1262.4	1282.2	1294.1	1304.7	1320.0	1337.1	0.7%
TDI Diesel ICE	129.9	125.6	149.9	153.1	168.2	186.9	202.2	212.2	211.6	222.4	242.1	256.8	270.0	278.9	5.1%
Total Conventional	1272.1	1295.3	1318.8	1335.4	1360.4	1387.7	1416.6	1446.6	1474.0	1504.6	1536.1	1561.5	1590.0	1616.0	1.2%

Table 44. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Pacific

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	121.7	124.7	124.6	126.1	127.3	128.3	129.8	132.4	135.6	138.1	139.8	141.1	143.0	145.1	3.3%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	1.7%
Electric-Diesel Hybrid	0.3	0.3	0.3	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	N/A
Electric-Gasoline Hybrid	79.6	85.0	89.4	95.3	101.1	107.1	113.6	120.8	128.9	137.0	145.1	153.3	162.4	171.9	N/A
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-11.2%
Compressed Natural Gas Bi-fuel	5.9	6.0	6.1	6.2	6.4	6.5	6.6	6.8	7.0	7.1	7.3	7.4	7.6	7.7	1.7%
Liquefied Petroleum Gas ICE	4.9	5.1	4.5	4.8	4.1	3.7	3.9	3.6	3.5	3.6	3.9	3.9	3.9	4.1	13.1%
Liquefied Petroleum Gas Bi-fuel	19.4	19.9	20.2	20.5	20.9	21.4	21.9	22.4	22.9	23.4	24.0	24.5	25.0	25.5	1.7%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.5	1.1	1.1	1.1	1.3	1.3	1.3	1.6	1.7	1.8	1.9	2.0	2.1	2.2	N/A
Total Alternatives	233.0	242.7	247.0	255.3	262.2	269.5	278.4	288.8	300.7	312.3	323.1	333.4	345.1	357.7	5.7%
Percent Alternative Light Truck Sales	15.48	15.78	15.78	16.05	16.16	16.26	16.43	16.64	16.94	17.19	17.38	17.59	17.83	18.12	4.0%
Total New Truck Sales	1505.0	1538.0	1565.8	1590.7	1622.6	1657.2	1695.0	1735.3	1774.7	1816.9	1859.3	1894.9	1935.1	1973.7	1.7%
Percent Total Alternative Sales	13.87	14.22	14.34	14.60	14.79	14.96	15.18	15.43	15.72	15.99	16.24	16.49	16.77	17.08	3.6%
EPACT Legislative Alternative Sales	48.83	49.72	50.48	51.20	52.09	53.07	54.14	55.26	56.36	57.55	58.72	59.72	60.84	61.93	1.4%
ZEVP Legislative Alternative Sales	144.35	222.05	222.71	222.69	235.56	235.42	235.12	263.64	263.56	267.67	282.60	285.90	289.71	294.84	N/A
Total Vehicles Sales	2895.2	2938.1	2975.4	3013.9	3059.0	3109.4	3163.8	3220.9	3276.7	3337.6	3396.2	3446.7	3503.2	3559.4	1.2%

Table 44. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
Pacific

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 45. Light-Duty Vehicle Sales by Technology Type  
(thousands)

United States	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Car Sales 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	7536.7	7609.1	7867.8	8263.3	8186.2	7995.2	7870.8	7660.4	7666.5	7616.1	7524.6	7427.8	7353.0	7340.6
TDI Diesel ICE	43.2	26.0	30.6	31.1	42.5	42.3	40.3	37.7	39.6	40.8	42.1	43.2	45.5	48.3
Total Conventional	7579.9	7635.1	7898.3	8294.5	8228.8	8037.5	7911.1	7698.1	7706.1	7656.9	7566.7	7471.1	7398.6	7388.8
<b>Alternative-Fuel Vehicles</b>														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	396.3	401.5	421.9	436.6	497.3	502.6	493.4	487.1	489.6	485.3	477.4	468.8	461.9	459.9
Ethanol ICE	0.6	0.6	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.1	1.1	1.2	1.2	1.3
Electric Vehicle	2.4	2.4	2.5	2.7	2.7	2.6	2.6	2.6	2.6	2.6	2.5	2.5	2.5	2.5
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.2	5.2	7.0	8.2	7.9	7.6
Electric-Gasoline Hybrid	49.1	92.1	121.8	204.9	181.6	253.5	257.7	305.5	341.3	359.5	374.9	389.3	418.9	442.5
Compressed Natural Gas ICE	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Compressed Natural Gas Bi-fuel	11.9	12.1	12.9	13.8	13.7	13.5	13.3	13.0	13.1	13.0	12.9	12.7	12.7	12.7
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Liquefied Petroleum Gas Bi-fuel	45.5	46.0	47.9	50.7	50.5	49.9	49.1	48.2	48.4	48.3	47.8	47.3	47.0	47.1
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.8	2.1	2.2
Total Alternatives	506.0	555.0	608.0	709.7	747.1	823.3	817.4	858.9	897.5	915.2	924.8	931.2	954.5	976.1
Percent Alternative Car Sales	6.26	6.78	7.15	7.88	8.32	9.29	9.36	10.04	10.43	10.68	10.89	11.08	11.43	11.67
Total New Car Sales	8085.9	8190.0	8506.3	9004.2	8975.8	8860.9	8728.4	8557.0	8603.6	8572.1	8491.6	8402.2	8353.1	8364.9
<b>New Light Truck Sales 2/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	6928.6	7037.6	6717.6	6002.6	6070.3	6139.2	6395.3	6670.6	6733.3	6823.1	6876.9	6951.7	6920.7	6946.0
TDI Diesel ICE	381.6	363.3	324.7	324.8	399.6	437.5	461.0	471.0	508.5	527.0	543.0	567.0	593.0	630.9
Total Conventional	7310.2	7400.9	7042.3	6327.4	6469.8	6576.7	6856.3	7141.6	7241.8	7350.1	7419.9	7518.7	7513.7	7576.8

Table 45. Light-Duty Vehicle Sales by Technology Type  
(thousands)

United States	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	386.8	395.1	426.3	383.4	639.2	649.6	683.6	716.8	721.4	730.7	735.9	743.1	737.3	739.2
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Electric Vehicle	3.3	3.3	3.2	2.9	3.1	3.2	3.3	3.5	3.5	3.6	3.6	3.7	3.7	3.7
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4
Electric-Gasoline Hybrid	0.0	0.0	70.1	109.1	116.2	223.1	230.3	239.6	263.8	282.6	301.2	322.4	404.5	442.1
Compressed Natural Gas ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
Compressed Natural Gas Bi-fuel	30.5	30.9	30.0	27.1	28.7	29.6	30.9	32.2	32.7	33.2	33.6	34.1	34.4	34.8
Liquefied Petroleum Gas ICE	0.6	0.7	0.7	0.5	0.8	1.2	1.6	1.8	1.9	2.2	2.1	2.2	2.7	3.9
Liquefied Petroleum Gas Bi-fuel	101.1	102.4	99.0	89.5	94.9	97.8	102.0	106.3	108.0	109.8	111.1	112.7	113.7	115.1
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.5	1.2	0.3	0.3	0.9	0.8
Total Alternatives	522.3	532.4	629.3	612.7	883.0	1004.6	1052.3	1100.8	1132.0	1163.5	1188.0	1218.6	1297.6	1340.2
Percent Alternative Light Truck Sales	6.67	6.71	8.20	8.83	12.01	13.25	13.31	13.36	13.52	13.67	13.80	13.95	14.73	15.03
Total New Truck Sales	7832.5	7933.4	7671.6	6940.1	7352.8	7581.3	7908.6	8242.3	8373.8	8513.6	8607.9	8737.4	8811.3	8917.0
Percent Total Alternative Sales	6.46	6.74	7.65	8.29	9.98	11.12	11.24	11.67	11.95	12.17	12.36	12.54	13.12	13.40
EPACT Legislative Alternative Sales	261.67	265.04	261.49	248.16	257.92	262.45	269.21	275.79	279.39	282.50	284.07	286.42	287.78	290.45
ZEVP Legislative Alternative Sales	0.00	0.00	60.78	62.16	62.33	63.68	81.40	86.27	92.27	134.80	139.58	138.82	262.10	259.69
Total Vehicles Sales	15918.4	16123.4	16177.9	15944.3	16328.6	16442.2	16637.1	16799.3	16977.4	17085.8	17099.5	17139.6	17164.4	17281.9

Table 45. Light-Duty Vehicle Sales by Technology Type  
(thousands)

United States	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Car Sales 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	7328.8	7333.9	7334.3	7358.6	7386.5	7425.1	7466.0	7503.1	7536.7	7581.1	7608.3	7627.9	7651.2	7679.7	0.0%
TDI Diesel ICE	51.2	54.5	58.6	63.8	69.7	76.4	81.1	87.1	93.6	99.1	105.8	112.2	121.3	128.0	6.3%
Total Conventional	7380.0	7388.4	7392.9	7422.4	7456.2	7501.6	7547.1	7590.3	7630.3	7680.1	7714.1	7740.0	7772.5	7807.7	0.1%
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	458.1	457.8	456.8	457.9	459.4	461.7	464.5	467.1	469.1	472.6	474.7	476.0	477.7	479.8	0.7%
Ethanol ICE	1.3	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.8	4.4%
Electric Vehicle	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.8	0.5%
Electric-Diesel Hybrid	7.3	6.8	6.6	6.3	6.0	5.8	5.4	5.1	4.8	4.5	4.2	3.9	3.9	3.6	N/A
Electric-Gasoline Hybrid	467.4	495.7	523.3	549.3	576.0	604.5	634.1	664.5	695.7	729.4	762.6	796.6	832.6	870.9	9.0%
Compressed Natural Gas ICE	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	1.8%
Compressed Natural Gas Bi-fuel	12.7	12.8	12.8	13.0	13.0	13.2	13.3	13.4	13.5	13.7	13.8	13.9	14.0	14.1	0.6%
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Liquefied Petroleum Gas Bi-fuel	47.2	47.4	47.6	47.9	48.2	48.7	49.1	49.5	49.9	50.4	50.8	51.2	51.6	52.0	0.5%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	2.2	4.6	4.5	4.3	4.5	4.3	4.2	4.8	4.5	4.5	4.6	4.6	4.5	4.5	N/A
Total Alternatives	999.1	1029.3	1055.8	1083.0	1111.6	1142.7	1175.2	1209.0	1242.2	1279.7	1315.5	1351.0	1389.1	1429.9	3.7%
Percent Alternative Car Sales	11.92	12.23	12.50	12.73	12.97	13.22	13.47	13.74	14.00	14.28	14.57	14.86	15.16	15.48	3.2%
Total New Car Sales	8379.0	8417.7	8448.6	8505.4	8567.8	8644.3	8722.3	8799.3	8872.5	8959.8	9029.6	9091.0	9161.6	9237.6	0.5%
<b>New Light Truck Sales 2/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	7016.1	7103.3	7147.6	7169.1	7228.3	7289.8	7384.1	7471.4	7547.1	7646.3	7727.2	7780.5	7816.8	7877.3	0.4%
TDI Diesel ICE	676.4	720.5	779.1	839.8	911.5	991.0	1046.4	1116.2	1191.1	1250.5	1327.0	1395.2	1506.7	1575.4	5.8%
Total Conventional	7692.5	7823.8	7926.7	8009.0	8139.8	8280.8	8430.5	8587.6	8738.1	8896.7	9054.2	9175.7	9323.4	9452.7	0.9%

Table 45. Light-Duty Vehicle Sales by Technology Type  
(thousands)

United States	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Alternative-Fuel Vehicles</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	746.4	756.4	760.9	763.4	770.5	777.4	788.0	799.6	809.8	822.6	833.3	840.1	845.4	853.6	3.0%
Ethanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Electric Vehicle	3.8	3.9	3.9	4.0	4.1	4.1	4.2	4.3	4.4	4.5	4.6	4.6	4.7	4.8	1.4%
Electric-Diesel Hybrid	1.7	1.6	1.6	2.8	2.7	2.7	2.6	2.5	2.4	2.3	2.3	2.2	2.1	2.0	N/A
Electric-Gasoline Hybrid	468.3	498.5	527.2	559.6	592.0	626.6	665.0	704.8	746.2	791.5	838.1	883.9	931.7	982.7	N/A
Compressed Natural Gas ICE	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	4.8%
Compressed Natural Gas Bi-fuel	35.4	36.1	36.6	37.1	37.8	38.5	39.3	40.1	40.9	41.8	42.6	43.3	44.1	44.9	1.4%
Liquefied Petroleum Gas ICE	5.2	5.3	4.8	5.0	4.3	4.0	4.1	3.8	3.7	3.8	4.1	4.1	4.1	4.3	7.5%
Liquefied Petroleum Gas Bi-fuel	117.1	119.3	121.1	122.7	124.9	127.3	129.9	132.6	135.3	138.1	140.9	143.2	145.9	148.3	1.4%
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.9	2.0	2.0	2.0	2.2	2.3	2.4	2.8	3.0	3.1	3.4	3.6	3.7	3.9	N/A
<b>Total Alternatives</b>	<b>1378.9</b>	<b>1423.2</b>	<b>1458.2</b>	<b>1496.7</b>	<b>1538.8</b>	<b>1583.1</b>	<b>1635.7</b>	<b>1691.0</b>	<b>1746.0</b>	<b>1808.0</b>	<b>1869.5</b>	<b>1925.4</b>	<b>1982.1</b>	<b>2044.9</b>	<b>5.3%</b>
<b>Percent Alternative Light Truck Sales</b>	<b>15.20</b>	<b>15.39</b>	<b>15.54</b>	<b>15.75</b>	<b>15.90</b>	<b>16.05</b>	<b>16.25</b>	<b>16.45</b>	<b>16.65</b>	<b>16.89</b>	<b>17.11</b>	<b>17.34</b>	<b>17.53</b>	<b>17.79</b>	<b>3.8%</b>
<b>Total New Truck Sales</b>	<b>9071.4</b>	<b>9247.0</b>	<b>9384.9</b>	<b>9505.7</b>	<b>9678.5</b>	<b>9863.9</b>	<b>10066.1</b>	<b>10278.6</b>	<b>10484.1</b>	<b>10704.8</b>	<b>10923.7</b>	<b>11101.1</b>	<b>11305.5</b>	<b>11497.6</b>	<b>1.4%</b>
<b>Percent Total Alternative Sales</b>	<b>13.63</b>	<b>13.88</b>	<b>14.10</b>	<b>14.32</b>	<b>14.53</b>	<b>14.73</b>	<b>14.96</b>	<b>15.20</b>	<b>15.44</b>	<b>15.70</b>	<b>15.96</b>	<b>16.23</b>	<b>16.47</b>	<b>16.76</b>	<b>3.6%</b>
EPACT Legislative Alternative Sales	294.32	298.92	302.54	305.97	310.72	315.89	321.49	327.33	332.96	339.09	345.02	349.86	355.45	360.78	1.2%
ZEVP Legislative Alternative Sales	257.65	396.11	397.12	397.00	419.78	419.36	418.64	469.22	468.88	475.98	502.30	507.99	514.55	523.49	N/A
<b>Total Vehicles Sales</b>	<b>17450.4</b>	<b>17664.7</b>	<b>17833.6</b>	<b>18011.1</b>	<b>18246.3</b>	<b>18508.1</b>	<b>18788.4</b>	<b>19077.9</b>	<b>19356.7</b>	<b>19664.6</b>	<b>19953.3</b>	<b>20192.1</b>	<b>20467.2</b>	<b>20735.2</b>	<b>1.0%</b>

Table 45. Light-Duty Vehicle Sales by Technology Type  
(thousands)  
United States

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

EPACT = Energy Policy Act of 1992.

ZEVP = Zero emission vehicles from the low emission vehicle program.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: California Air Resources Board (CARB), "Proposed Regulations for Low-Emission Vehicles and Clean Fuels, Staff Report"; CARB, "Proposed Amendments to California Exhaust and Evaporative Emission Standards and Test Procedures for Passenger, Light-Duty Trucks and Medium-Duty Vehicles - LEVII and Proposed Amendments to California Motor Vehicle Certification: Assembly-Line and In-Use Test Requirements - CAP 2000," (El Monte, CA, September 1998); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 46. Light-Duty Vehicle Stock by Technology Type  
(millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Light-Duty Car Stock 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	127.13	127.67	128.32	129.27	130.15	130.78	131.24	131.46	131.66	131.79	131.81	131.72	131.55	131.35
TDI Diesel ICE	0.53	0.51	0.50	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.58	0.59	0.61	0.63
Total Conventional	127.66	128.18	128.82	129.77	130.66	131.30	131.77	131.99	132.21	132.35	132.39	132.31	132.15	131.98
<b>Alternative-Fuel Vehicles</b>														
<b>Alcohol Fuel Technology</b>														
Methanol-Flex Fuel ICE	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	1.74	2.12	2.51	2.91	3.36	3.79	4.20	4.59	4.96	5.31	5.62	5.90	6.16	6.39
Ethanol ICE	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
<b>Natural Gas Technology</b>														
Compressed Natural Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	0.05	0.06	0.07	0.08	0.09	0.11	0.12	0.13	0.13	0.14	0.15	0.16	0.16	0.17
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	0.15	0.19	0.24	0.28	0.33	0.37	0.41	0.44	0.48	0.51	0.54	0.57	0.59	0.61
<b>Electric Technology</b>														
Electric Vehicle	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.04
Electric-Gasoline Hybrid	0.11	0.20	0.32	0.52	0.71	0.96	1.21	1.51	1.84	2.18	2.52	2.87	3.24	3.62
<b>Fuel Cell Technology</b>														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Total Alternatives	2.07	2.60	3.17	3.83	4.52	5.26	5.98	6.71	7.46	8.19	8.90	9.58	10.24	10.89
<b>Total Car Stock</b>	<b>129.72</b>	<b>130.78</b>	<b>131.99</b>	<b>133.60</b>	<b>135.18</b>	<b>136.56</b>	<b>137.75</b>	<b>138.70</b>	<b>139.66</b>	<b>140.54</b>	<b>141.28</b>	<b>141.89</b>	<b>142.39</b>	<b>142.87</b>
<b>Light-Duty Truck Stock 1/</b>														
<b>Conventional Vehicles</b>														
Gasoline ICE Vehicles	71.24	74.89	78.12	80.57	82.96	85.26	87.68	90.22	92.69	95.10	97.42	99.67	101.73	103.67
TDI Diesel ICE	2.95	3.21	3.42	3.62	3.89	4.19	4.50	4.80	5.14	5.47	5.81	6.16	6.52	6.90
Total Conventional	74.18	78.09	81.53	84.19	86.85	89.45	92.18	95.03	97.83	100.58	103.24	105.83	108.25	110.57

Table 46. Light-Duty Vehicle Stock by Technology Type  
(millions)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	1.63	2.01	2.41	2.77	3.36	3.95	4.56	5.19	5.80	6.40	6.97	7.52	8.04	8.53
Ethanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Technology														
Compressed Natural Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	0.14	0.17	0.20	0.22	0.25	0.27	0.30	0.32	0.34	0.37	0.39	0.41	0.43	0.45
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02
Liquefied Petroleum Gas Bi-fuel	0.38	0.48	0.57	0.66	0.74	0.83	0.91	0.99	1.08	1.16	1.23	1.30	1.37	1.44
Electric Technology														
Electric Vehicle	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.07	0.18	0.30	0.52	0.75	0.99	1.24	1.52	1.80	2.10	2.48	2.88
Fuel Cell Technology														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Alternatives	2.17	2.68	3.28	3.85	4.67	5.60	6.55	7.53	8.51	9.49	10.45	11.40	12.38	13.36
Total Truck Stock	76.35	80.77	84.81	88.04	91.52	95.05	98.73	102.56	106.34	110.07	113.69	117.23	120.63	123.93
Total Vehicle Stock	206.08	211.55	216.80	221.65	226.70	231.61	236.48	241.26	246.00	250.61	254.97	259.12	263.03	266.80

Table 46. Light-Duty Vehicle Stock by Technology Type  
(millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Light-Duty Car Stock 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	131.14	130.93	130.72	130.52	130.36	130.23	130.13	130.07	130.04	130.07	130.13	130.21	130.33	130.49	0.1%
TDI Diesel ICE	0.65	0.68	0.70	0.74	0.77	0.82	0.86	0.91	0.97	1.03	1.09	1.16	1.24	1.32	3.7%
Total Conventional	131.79	131.61	131.42	131.26	131.13	131.04	130.99	130.98	131.01	131.10	131.22	131.38	131.57	131.80	0.1%
<b>Alternative-Fuel Vehicles</b>															
<b>Alcohol Fuel Technology</b>															
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-9.6%
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol-Flex Fuel ICE	6.59	6.77	6.93	7.08	7.20	7.32	7.42	7.51	7.59	7.67	7.74	7.80	7.86	7.91	5.2%
Ethanol ICE	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	6.7%
<b>Natural Gas Technology</b>															
Compressed Natural Gas ICE	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	3.3%
Compressed Natural Gas Bi-fuel	0.17	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	5.1%
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	0.63	0.65	0.67	0.68	0.70	0.71	0.72	0.73	0.74	0.75	0.76	0.76	0.77	0.78	5.5%
<b>Electric Technology</b>															
Electric Vehicle	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	4.4%
Electric-Diesel Hybrid	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	N/A
Electric-Gasoline Hybrid	4.01	4.41	4.82	5.23	5.66	6.09	6.53	6.98	7.44	7.90	8.38	8.87	9.37	9.88	16.2%
<b>Fuel Cell Technology</b>															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06	N/A
Total Alternatives	11.51	12.13	12.74	13.33	13.90	14.47	15.04	15.60	16.16	16.72	17.28	17.85	18.42	19.00	8.0%
<b>Total Car Stock</b>	<b>143.31</b>	<b>143.74</b>	<b>144.16</b>	<b>144.58</b>	<b>145.04</b>	<b>145.52</b>	<b>146.03</b>	<b>146.58</b>	<b>147.17</b>	<b>147.82</b>	<b>148.50</b>	<b>149.22</b>	<b>149.99</b>	<b>150.80</b>	<b>0.5%</b>
<b>Light-Duty Truck Stock 1/</b>															
<b>Conventional Vehicles</b>															
Gasoline ICE Vehicles	105.54	107.34	109.05	110.65	112.18	113.63	115.06	116.46	117.85	119.23	120.60	121.94	123.22	124.48	2.0%
TDI Diesel ICE	7.31	7.74	8.21	8.72	9.29	9.91	10.57	11.27	12.02	12.81	13.64	14.51	15.45	16.43	6.5%
Total Conventional	112.84	115.08	117.26	119.37	121.46	123.54	125.63	127.74	129.87	132.04	134.24	136.45	138.68	140.91	2.3%

Table 46. Light-Duty Vehicle Stock by Technology Type  
(millions)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-7.4%
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol-Flex Fuel ICE	8.99	9.43	9.83	10.21	10.57	10.90	11.21	11.50	11.78	12.05	12.30	12.54	12.76	12.98	7.4%
Ethanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Natural Gas Technology															
Compressed Natural Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.7%
Compressed Natural Gas Bi-fuel	0.46	0.48	0.50	0.51	0.52	0.54	0.55	0.57	0.58	0.59	0.61	0.62	0.63	0.65	5.2%
Liquefied Petroleum Gas ICE	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	11.6%
Liquefied Petroleum Gas Bi-fuel	1.50	1.56	1.61	1.66	1.71	1.76	1.81	1.85	1.90	1.95	1.99	2.03	2.08	2.12	5.9%
Electric Technology															
Electric Vehicle	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	5.9%
Electric-Diesel Hybrid	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	N/A
Electric-Gasoline Hybrid	3.29	3.72	4.17	4.63	5.10	5.59	6.10	6.62	7.16	7.72	8.30	8.90	9.52	10.16	N/A
Fuel Cell Technology															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	N/A
Total Alternatives	14.32	15.28	16.21	17.13	18.03	18.92	19.81	20.70	21.58	22.48	23.38	24.28	25.19	26.11	9.2%
Total Truck Stock	127.16	130.36	133.48	136.51	139.50	142.47	145.44	148.43	151.45	154.52	157.62	160.73	163.87	167.02	2.8%
Total Vehicle Stock	270.47	274.10	277.63	281.09	284.54	287.98	291.47	295.02	298.63	302.33	306.12	309.95	313.85	317.83	1.6%

Table 46. Light-Duty Vehicle Stock by Technology Type  
(millions)

1/ Includes personal and fleet vehicles.

ICE = Internal combustion engine.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type  
(miles per gallon gasoline equivalent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Automobiles 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	28.92	29.04	29.15	29.21	29.47	29.75	30.53	31.12	31.45	31.54	31.58	31.68	31.77	31.86
TDI Diesel ICE	42.40	40.45	40.49	39.96	39.02	38.93	39.46	40.02	40.36	40.41	40.36	40.33	40.35	40.38
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	28.21	28.32	28.37	28.53	28.81	29.05	29.77	30.34	30.60	30.70	30.75	30.87	30.96	31.05
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	29.55	29.70	29.89	29.98	29.47	29.51	30.20	30.76	31.14	31.24	31.29	31.40	31.53	31.66
Ethanol ICE	28.75	28.86	28.90	29.03	29.31	29.55	30.27	30.87	31.12	31.22	31.27	31.39	31.50	31.59
Natural Gas Technology														
Compressed Natural Gas ICE	29.32	29.39	29.42	29.16	29.19	29.37	29.90	30.35	30.66	30.74	30.78	30.87	30.96	31.06
Compressed Natural Gas Bi-fuel	31.60	31.78	29.01	28.95	29.00	29.17	29.84	30.35	30.64	30.74	30.78	30.88	31.00	31.11
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	0.00	0.00	28.16	27.96	27.94	28.15	28.82	29.43	29.79	29.93	29.98	30.10	30.25	30.39
Electric Technology														
Electric Vehicle	31.45	34.62	38.10	42.43	48.12	47.72	47.92	48.14	48.13	48.09	48.04	48.00	47.97	47.94
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.81	53.64	49.13	48.60	47.86	47.69	47.57
Electric-Gasoline Hybrid	45.38	45.59	42.70	42.10	41.48	41.31	41.08	41.25	41.66	41.69	41.66	41.66	41.72	41.75
Fuel Cell Technology														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	39.55	39.85	40.14	40.20	40.16	40.12	40.08	40.04	40.01
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	58.49	57.73	57.12	56.59	57.03	57.33	57.29	57.24	51.33	51.29	51.25	50.54
Average New Car MPG	29.40	29.30	29.34	29.47	29.67	30.00	30.77	31.40	31.77	31.88	31.95	32.06	32.19	32.30
Light-Duty Trucks 1/														
Conventional Vehicles														
Gasoline ICE Vehicles	21.33	21.48	21.71	21.82	21.95	22.01	22.40	22.76	22.99	23.13	23.20	23.31	23.42	23.55
TDI Diesel ICE	26.38	26.48	27.64	27.47	27.43	27.37	27.77	28.23	28.48	28.57	28.62	28.66	28.72	28.79
Alternative-Fuel Vehicles														
Alcohol Fuel Technology														
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol-Flex Fuel ICE	19.61	19.76	20.68	20.87	21.81	21.83	22.19	22.58	22.86	23.00	23.09	23.22	23.35	23.50
Ethanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Natural Gas Technology														
Compressed Natural Gas ICE	26.74	26.78	26.85	26.72	27.01	27.01	27.46	27.87	28.07	28.15	28.18	28.24	28.26	28.30
Compressed Natural Gas Bi-fuel	20.54	20.64	20.81	20.85	20.89	20.95	21.31	21.70	21.89	22.01	22.07	22.13	22.23	22.33
Liquefied Petroleum Gas ICE	26.00	26.07	26.35	26.35	26.09	25.57	25.54	25.84	26.04	25.95	26.10	26.15	25.81	25.31
Liquefied Petroleum Gas Bi-fuel	20.93	21.08	21.36	21.42	21.53	21.53	21.86	22.21	22.43	22.54	22.60	22.68	22.78	22.89

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type  
(miles per gallon gasoline equivalent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electric Technology														
Electric Vehicle	24.43	26.88	29.89	33.02	37.79	37.64	38.13	38.43	38.43	38.36	38.30	38.24	38.17	38.11
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.01	41.84
Electric-Gasoline Hybrid	0.00	0.00	27.86	27.34	27.12	30.03	30.34	30.74	30.87	30.88	30.81	30.80	31.75	31.97
Fuel Cell Technology														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	35.95	35.97	36.44	36.38	36.32
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	43.12	42.23	42.15	41.98	42.52	42.86	42.86	42.78	42.71	42.61	42.53	42.46
Average New Truck MPG	21.60	21.50	21.89	22.04	22.24	22.41	22.80	23.17	23.44	23.59	23.67	23.80	23.99	24.16
Fleet Average Stock Car MPG 2/	22.37	22.49	22.58	22.68	22.62	22.71	22.83	22.96	23.11	23.26	23.43	23.62	23.81	24.00
Fleet Average Stock Truck MPG 2/	17.32	17.39	17.45	17.51	17.44	17.49	17.56	17.65	17.74	17.83	17.93	18.04	18.15	18.26
Fleet Average Stock Vehicle MPG 2/	20.19	20.23	20.25	20.29	20.20	20.23	20.29	20.36	20.43	20.52	20.61	20.72	20.83	20.94

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type  
(miles per gallon gasoline equivalent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Automobiles 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	31.94	32.01	32.09	32.18	32.33	32.49	32.62	32.73	32.81	32.89	32.94	32.98	33.00	33.02	0.5%
TDI Diesel ICE	40.38	40.39	40.42	40.45	40.52	40.62	40.70	40.77	40.83	40.87	40.89	40.88	40.89	40.88	0.0%
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	31.15	31.24	31.34	31.42	31.58	31.75	31.87	31.98	32.09	32.14	32.19	32.22	32.25	32.27	0.5%
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol-Flex Fuel ICE	31.77	31.89	32.00	32.11	32.28	32.46	32.61	32.72	32.82	32.90	32.96	33.01	33.03	33.07	0.4%
Ethanol ICE	31.68	31.77	31.87	31.96	32.12	32.29	32.42	32.53	32.65	32.72	32.78	32.82	32.85	32.88	0.5%
Natural Gas Technology															
Compressed Natural Gas ICE	31.13	31.21	31.27	31.34	31.49	31.62	31.76	31.86	31.91	31.98	32.04	32.09	32.13	32.15	0.3%
Compressed Natural Gas Bi-fuel	31.19	31.26	31.32	31.39	31.53	31.67	31.80	31.88	31.94	32.00	32.05	32.05	32.06	32.06	0.0%
Liquefied Petroleum Gas ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	30.53	30.64	30.74	30.85	31.01	31.17	31.31	31.41	31.48	31.55	31.61	31.64	31.65	31.67	N/A
Electric Technology															
Electric Vehicle	47.91	47.88	47.86	47.83	47.87	47.93	47.98	48.01	48.05	48.08	48.11	48.13	48.15	48.17	1.3%
Electric-Diesel Hybrid	47.44	47.33	47.27	47.24	47.26	47.30	47.35	47.40	47.44	47.47	47.50	47.51	47.52	47.52	N/A
Electric-Gasoline Hybrid	41.78	41.83	41.88	41.91	41.97	42.05	42.13	42.19	42.25	42.29	42.31	42.32	42.32	42.31	-0.3%
Fuel Cell Technology															
Fuel Cell Gasoline	39.98	39.97	39.96	39.94	39.97	40.01	40.03	40.07	40.10	40.14	40.18	40.20	40.22	40.24	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	50.50	50.47	50.44	50.41	50.39	50.39	50.40	50.42	50.43	50.45	50.46	50.46	50.47	50.47	N/A
Average New Car MPG	32.40	32.50	32.61	32.72	32.90	33.08	33.24	33.36	33.47	33.57	33.65	33.71	33.77	33.82	0.6%
Light-Duty Trucks 1/															
Conventional Vehicles															
Gasoline ICE Vehicles	23.67	23.83	23.97	24.12	24.32	24.50	24.66	24.79	24.92	25.04	25.12	25.18	25.23	25.27	0.6%
TDI Diesel ICE	28.85	28.97	29.02	29.11	29.26	29.40	29.56	29.65	29.76	29.86	29.92	29.96	29.98	30.02	0.5%
Alternative-Fuel Vehicles															
Alcohol Fuel Technology															
Methanol-Flex Fuel ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol-Flex Fuel ICE	23.65	23.80	23.97	24.13	24.34	24.54	24.73	24.86	24.98	25.10	25.18	25.24	25.30	25.34	1.0%
Ethanol ICE	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Natural Gas Technology															
Compressed Natural Gas ICE	28.38	28.50	28.61	28.72	28.89	29.06	29.22	29.33	29.43	29.53	29.63	29.69	29.71	29.73	0.4%
Compressed Natural Gas Bi-fuel	22.41	22.53	22.62	22.72	22.86	22.97	23.09	23.16	23.25	23.33	23.36	23.38	23.39	23.40	0.5%
Liquefied Petroleum Gas ICE	25.05	25.18	25.49	25.57	26.01	26.33	26.46	26.74	26.92	27.04	27.07	27.17	27.24	27.20	0.2%
Liquefied Petroleum Gas Bi-fuel	22.99	23.12	23.24	23.36	23.52	23.67	23.80	23.91	24.02	24.12	24.18	24.21	24.24	24.27	0.5%



Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type  
(miles per gallon gasoline equivalent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Technology</b>															
Electric Vehicle	38.05	38.00	37.95	37.90	37.93	37.96	38.00	38.03	38.06	38.09	38.12	38.14	38.16	38.18	1.4%
Electric-Diesel Hybrid	35.04	34.85	34.70	37.48	37.44	37.43	37.45	37.48	37.53	37.60	37.65	37.72	37.77	37.83	N/A
Electric-Gasoline Hybrid	31.98	31.99	32.04	32.12	32.23	32.36	32.48	32.58	32.66	32.75	32.80	32.83	32.86	32.87	N/A
<b>Fuel Cell Technology</b>															
Fuel Cell Gasoline	36.26	36.20	36.15	36.11	36.14	36.17	36.21	36.24	36.27	36.30	36.32	36.35	36.37	36.39	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	42.39	42.33	42.27	42.21	42.24	42.28	42.31	42.34	41.84	41.82	41.79	41.75	41.71	41.67	N/A
<b>Average New Truck MPG</b>	24.32	24.49	24.67	24.85	25.09	25.31	25.50	25.66	25.83	25.98	26.09	26.18	26.28	26.36	0.8%
<b>Fleet Average Stock Car MPG 2/</b>	24.19	24.37	24.57	24.75	24.96	25.16	25.29	25.42	25.55	25.68	25.80	25.91	26.03	26.13	0.6%
<b>Fleet Average Stock Truck MPG 2/</b>	18.37	18.47	18.58	18.68	18.79	18.90	19.05	19.20	19.34	19.48	19.62	19.76	19.89	20.01	0.5%
<b>Fleet Average Stock Vehicle MPG 2/</b>	21.05	21.16	21.27	21.38	21.49	21.62	21.73	21.86	21.98	22.09	22.20	22.31	22.41	22.51	0.4%

Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type  
(miles per gallon gasoline equivalent)

1/ Fuel efficiencies are EPA rated. Includes personal and fleet vehicles.

2/ Stock values are on-road efficiencies. Includes personal vehicles, fleet vehicles, and freight light trucks.

MPG = Miles per Gallon.

ICE = Internal combustion engine.

Sources: 2003 and 2004 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration, Mid-Model Year Fuel Economy Reports from Auto Manufacturers, 2000; Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 48. Light-Duty Vehicle Miles Traveled by Technology Type  
(billion miles, unless otherwise noted)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Conventional Vehicles 1/</b>														
Gasoline ICE Vehicles	2491.0	2511.7	2483.4	2493.1	2522.1	2557.7	2600.7	2647.5	2680.0	2710.4	2740.9	2775.1	2807.7	2839.2
TDI Diesel ICE	42.1	44.5	45.5	47.2	50.2	53.7	57.6	61.6	65.6	69.7	73.9	78.3	83.0	88.1
<b>Alternative-Fuel Vehicles</b>														
<b>Alcohol Fuel Technology</b>														
Methanol-Flex Fuel ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ethanol-Flex Fuel ICE	45.0	55.1	64.0	72.2	83.9	95.8	107.8	120.1	131.5	142.5	153.0	163.2	172.8	181.9
Ethanol ICE	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2
<b>Natural Gas Technology</b>														
Compressed Natural Gas ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Compressed Natural Gas Bi-fuel	3.6	4.3	5.0	5.4	5.8	6.2	6.7	7.1	7.5	7.9	8.3	8.6	8.9	9.2
Liquefied Petroleum Gas ICE	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.3
Liquefied Petroleum Gas Bi-fuel	10.5	13.3	15.9	17.4	18.9	20.4	21.8	23.3	24.8	26.2	27.5	28.7	29.9	31.0
<b>Electric Technology</b>														
Electric Vehicle	0.5	0.6	0.7	0.7	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	1.2
Electric-Diesel Hybrid	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.3	0.4	0.5
Electric-Gasoline Hybrid	1.3	2.4	4.5	8.1	11.4	16.8	22.5	28.8	35.6	42.6	50.0	57.7	66.6	76.0
<b>Fuel Cell Technology</b>														
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fuel Cell Hydrogen	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
<b>VMT Equation Components</b>														
Total VMT (billion miles)	2594.2	2632.1	2619.2	2644.4	2693.3	2751.7	2818.2	2889.6	2946.4	3000.8	3055.2	3113.6	3171.2	3227.7
VMT/Driving Population (thousand miles)	13.2	13.2	13.0	13.0	13.1	13.2	13.4	13.6	13.8	13.9	14.1	14.2	14.4	14.5
Driving Population (million)	226.5	229.1	231.7	234.4	237.0	239.5	241.8	244.1	246.3	248.5	250.5	252.5	254.5	256.6
<b>Price Effects</b>														
Motor Gasoline Price (1987 dollars / million Btu)	8.93	10.29	12.48	12.65	12.19	11.96	11.56	11.08	11.11	11.05	11.00	10.92	10.96	11.04
Fleet Miles per Gallon	20.27	20.27	20.28	20.31	20.20	20.24	20.29	20.35	20.42	20.50	20.60	20.71	20.83	20.94
Real Cost of Driving per Mile (1987 cents)	7.525	8.673	10.518	10.642	10.308	10.099	9.731	9.305	9.293	9.205	9.119	9.005	8.993	9.009
Point Price Elasticity	-0.065	-0.075	-0.092	-0.094	-0.090	-0.087	-0.083	-0.078	-0.077	-0.076	-0.074	-0.073	-0.072	-0.071
<b>Income Effects</b>														
Disposable Income (billion 1987 dollars)	6731.8	6959.9	7106.0	7385.3	7613.9	7880.5	8131.0	8366.8	8568.3	8793.3	9038.8	9319.0	9615.1	9913.8
Point Income Elasticity	605.881	618.393	634.488	653.128	661.112	669.748	674.730	677.153	680.087	685.300	691.868	699.948	709.080	718.307
<b>Demographic Driving Population Effect</b>														
Percentage Female Driving Population	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Point Demographic Elasticity	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465

Table 48. Light-Duty Vehicle Miles Traveled by Technology Type  
(billion miles, unless otherwise noted)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Conventional Vehicles 1/</b>															
Gasoline ICE Vehicles	2874.3	2910.9	2946.2	2979.2	3012.5	3045.5	3079.1	3113.5	3148.1	3183.2	3218.6	3253.0	3286.7	3319.0	1.1%
TDI Diesel ICE	93.6	99.6	106.2	113.4	121.3	130.1	139.4	149.4	160.3	171.7	183.8	196.5	210.3	224.7	6.4%
<b>Alternative-Fuel Vehicles</b>															
<b>Alcohol Fuel Technology</b>															
Methanol-Flex Fuel ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-9.8%
Methanol ICE	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Ethanol-Flex Fuel ICE	190.7	199.2	207.2	214.6	221.6	228.3	234.6	240.7	246.5	252.2	257.6	262.7	267.6	272.1	6.3%
Ethanol ICE	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	6.9%
<b>Natural Gas Technology</b>															
Compressed Natural Gas ICE	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	4.8%
Compressed Natural Gas Bi-fuel	9.5	9.9	10.1	10.4	10.7	11.0	11.2	11.5	11.8	12.0	12.3	12.5	12.8	13.1	4.3%
Liquefied Petroleum Gas ICE	0.3	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	11.8%
Liquefied Petroleum Gas Bi-fuel	32.1	33.2	34.2	35.2	36.1	37.1	38.0	38.9	39.8	40.7	41.7	42.6	43.4	44.3	4.7%
<b>Electric Technology</b>															
Electric Vehicle	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.7	4.3%
Electric-Diesel Hybrid	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	1.3	1.3	1.3	1.4	1.4	1.4	N/A
Electric-Gasoline Hybrid	85.9	96.3	107.1	118.2	129.7	141.6	154.0	166.8	180.1	193.8	208.1	222.8	238.0	253.7	19.7%
<b>Fuel Cell Technology</b>															
Fuel Cell Gasoline	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Methanol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Fuel Cell Hydrogen	0.2	0.2	0.3	0.4	0.5	0.5	0.6	0.7	0.8	0.9	1.0	1.0	1.1	1.2	N/A
<b>VMT Equation Components</b>															
Total VMT (billion miles)	3288.7	3351.9	3414.2	3474.3	3535.6	3597.5	3660.5	3725.2	3791.2	3858.4	3927.1	3995.3	4064.2	4132.4	1.8%
VMT/Driving Population (thousand miles)	14.7	14.8	15.0	15.1	15.2	15.4	15.5	15.7	15.8	15.9	16.1	16.2	16.4	16.5	0.9%
Driving Population (million)	258.8	260.9	263.1	265.3	267.5	269.7	271.9	274.2	276.6	278.9	281.3	283.7	286.1	288.5	0.9%
<b>Price Effects</b>															
Motor Gasoline Price (1987 dollars / million Btu)	11.10	11.18	11.28	11.42	11.49	11.57	11.63	11.68	11.73	11.79	11.83	11.90	11.95	12.02	0.6%
Fleet Miles per Gallon	21.07	21.18	21.30	21.41	21.54	21.67	21.79	21.91	22.04	22.15	22.27	22.38	22.49	22.59	0.4%
Real Cost of Driving per Mile (1987 cents)	9.006	9.023	9.045	9.110	9.117	9.124	9.119	9.104	9.097	9.096	9.079	9.086	9.082	9.090	0.2%
Point Price Elasticity	-0.070	-0.070	-0.069	-0.069	-0.069	-0.068	-0.067	-0.067	-0.066	-0.065	-0.065	-0.064	-0.064	-0.063	-0.7%
<b>Income Effects</b>															
Disposable Income (billion 1987 dollars)	10262.9	10637.1	10993.2	11353.8	11710.9	12069.5	12434.0	12810.9	13201.3	13605.7	14017.0	14431.1	14851.1	15270.5	3.1%
Point Income Elasticity	729.797	742.161	753.014	764.243	774.622	784.615	794.394	804.251	814.320	824.662	834.733	844.710	854.569	864.197	1.3%
<b>Demographic Driving Population Effect</b>															
Percentage Female Driving Population	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	N/A
Point Demographic Elasticity	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	0.465	N/A

Table 48. Light-Duty Vehicle Miles Traveled by Technology Type  
(billion miles, unless otherwise noted)

1/ Includes personal and fleet vehicles. Includes both cars and light trucks.

VMT = Vehicle miles traveled.

ICE = Internal combustion engine.

MmBtu = Million British thermal units.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Oak Ridge National Laboratory, Transportation Energy Data Book: 24 and Annual (Oak Ridge, TN, December 2004); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); and Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Personal Vehicles</b>														
<b>EPA Rated New Vehicle Fuel Efficiency</b>														
<b>Conventional Cars (MPG)</b>														
Minicompact	25.426	25.594	25.670	26.313	26.872	27.390	28.285	28.941	29.191	29.332	29.382	29.459	29.543	29.620
Subcompact	28.743	28.823	28.779	29.050	29.461	29.847	30.744	31.410	31.722	31.843	31.916	32.053	32.180	32.310
Compact	31.616	31.800	31.925	32.315	32.629	32.903	33.839	34.501	34.832	34.911	34.923	34.972	35.026	35.088
Midsized	27.661	27.779	27.841	28.043	28.316	28.560	29.266	29.823	30.082	30.184	30.233	30.341	30.421	30.512
Large	26.465	26.501	26.459	26.396	26.480	26.634	27.208	27.679	27.935	28.043	28.094	28.218	28.331	28.433
Two Seater	25.038	25.106	25.087	25.121	25.301	25.622	26.167	26.609	26.882	27.008	27.088	27.206	27.316	27.386
Average New Car	28.999	29.121	29.250	29.275	29.523	29.807	30.588	31.176	31.524	31.612	31.653	31.742	31.839	31.927
Average New Car On-Road MPG	22.069	22.274	22.448	22.543	22.647	22.916	23.559	24.050	24.352	24.458	24.551	24.694	24.844	24.987
<b>Conventional Light Trucks</b>														
Small Pickup	24.447	24.705	25.054	25.365	25.568	25.644	26.090	26.518	26.765	26.908	27.020	27.157	27.308	27.449
Large Pickup	18.905	19.053	19.331	19.409	19.522	19.550	19.816	20.148	20.356	20.485	20.561	20.653	20.772	20.887
Small Van	24.703	24.799	25.006	25.089	25.225	25.217	25.601	25.944	26.166	26.265	26.318	26.386	26.506	26.635
Large Van	25.672	25.841	26.145	26.172	26.297	26.266	26.706	27.059	27.298	27.378	27.403	27.484	27.575	27.687
Small Utility	22.738	22.904	23.212	23.434	23.741	23.890	24.470	24.950	25.207	25.346	25.429	25.574	25.737	25.899
Large Utility	19.020	19.165	19.395	19.449	19.521	19.648	20.006	20.341	20.571	20.710	20.790	20.885	21.003	21.120
Average New Light Truck	21.304	21.458	21.690	21.801	21.933	21.986	22.382	22.750	22.981	23.116	23.193	23.304	23.410	23.536
Average New LT On-Road MPG	17.601	17.727	17.889	17.950	17.900	17.894	18.157	18.393	18.512	18.558	18.575	18.626	18.675	18.738
<b>Degradation Factors 1/</b>														
Cars	0.761	0.765	0.767	0.770	0.767	0.769	0.770	0.771	0.772	0.774	0.776	0.778	0.780	0.783
Light Trucks	0.826	0.826	0.825	0.823	0.816	0.814	0.811	0.809	0.806	0.803	0.801	0.799	0.798	0.796
<b>New Fuel Efficiency by Size Class 2/</b>														
<b>Alternative-Fuel Cars</b>														
Minicompact	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact	0.000	0.000	58.488	57.732	57.121	56.594	57.034	31.082	35.684	36.545	36.847	37.244	37.823	38.287
Compact	34.477	36.174	34.935	36.412	36.144	37.333	37.721	38.769	39.392	39.641	39.842	40.058	40.373	40.586
Midsized	27.938	28.052	30.541	31.674	31.632	32.470	32.935	33.843	34.232	34.483	34.655	34.797	35.019	35.155
Large	28.560	28.588	27.146	26.901	26.384	26.245	29.412	30.806	31.268	31.539	31.722	32.002	32.335	32.638
Two Seater	36.023	36.054	35.879	35.611	35.436	35.365	35.915	36.440	36.586	36.608	36.579	36.579	36.589	36.613
Average New Alternative Cars	31.114	32.319	32.600	33.644	32.457	33.171	33.734	34.641	35.308	35.584	35.785	35.999	36.337	36.570

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Alternative-Fuel Light Trucks</b>														
Small Pickup	24.700	24.973	25.342	25.638	25.810	25.870	26.307	26.735	26.984	27.128	27.240	27.406	27.551	27.690
Large Pickup	19.094	19.239	19.510	20.976	21.332	21.185	21.263	21.436	21.762	21.973	22.141	22.339	22.595	22.782
Small Van	24.952	25.052	25.266	25.340	25.463	25.455	25.842	31.001	31.810	31.989	32.121	32.252	32.504	32.666
Large Van	26.627	26.753	26.184	25.776	25.734	25.728	26.171	26.680	27.060	27.173	27.223	27.371	31.760	32.641
Small Utility	24.433	26.879	43.116	42.231	23.387	25.997	26.396	26.774	27.248	27.514	27.656	27.913	28.247	28.503
Large Utility	19.211	19.358	21.330	21.697	21.636	21.647	21.933	22.236	22.565	22.762	22.900	23.068	23.277	23.455
Average New Alt. Light Trucks	19.390	19.539	21.398	22.060	22.550	23.624	23.963	24.355	24.740	24.954	25.084	25.279	26.005	26.332
<b>Fleet Vehicles</b>														
<b>EPA Rated New Vehicle Fuel Efficiency</b>														
Cars	28.638	28.753	28.755	28.963	29.197	29.459	30.228	30.822	31.108	31.214	31.264	31.373	31.469	31.570
Light Trucks	21.331	21.482	21.821	21.898	22.015	22.065	22.422	22.775	23.003	23.126	23.196	23.287	23.406	23.526
<b>Average On-Road MPG</b>														
Cars	21.525	21.766	21.978	22.146	22.174	22.360	22.667	23.045	23.434	23.808	24.076	24.265	24.415	24.560
Light Trucks	16.912	17.154	17.530	17.705	17.685	17.757	17.860	17.971	18.084	18.197	18.324	18.425	18.492	18.541
<b>New Vehicle Sales Shares (%)</b>														
<b>Conventional Cars</b>														
Minicompact	1.538	1.538	1.625	1.384	1.319	1.339	1.318	1.309	1.361	1.350	1.350	1.346	1.360	1.364
Subcompact	8.945	8.937	9.274	8.031	7.748	7.847	7.779	7.747	8.053	7.989	7.992	7.968	8.040	8.062
Compact	42.579	42.637	43.656	39.836	38.780	39.226	38.874	38.711	39.697	39.537	39.550	39.505	39.757	39.821
Midsize	32.438	32.374	31.608	34.479	35.264	34.955	35.191	35.314	34.612	34.738	34.722	34.754	34.574	34.524
Large	12.964	12.978	12.310	14.685	15.297	15.046	15.249	15.331	14.702	14.811	14.810	14.851	14.696	14.655
Two Seater	1.536	1.536	1.528	1.586	1.592	1.586	1.588	1.588	1.575	1.576	1.575	1.576	1.573	1.573
<b>Conventional Light Trucks</b>														
Small Pickup	5.392	5.358	5.200	5.592	5.946	5.895	5.987	6.017	5.867	5.905	5.902	5.915	5.874	5.863
Large Pickup	25.125	25.017	25.196	24.509	24.691	24.702	24.785	24.785	24.941	24.926	24.924	24.893	24.901	24.918
Small Van	5.185	5.203	5.386	4.602	4.521	4.590	4.554	4.529	4.682	4.660	4.665	4.657	4.695	4.705
Large Van	11.415	11.333	11.448	10.674	11.032	11.090	11.167	11.193	11.271	11.281	11.281	11.254	11.260	11.264
Small Utility	28.634	28.728	28.489	29.724	29.385	29.323	29.235	29.230	29.038	29.045	29.040	29.070	29.045	29.031
Large Utility	24.250	24.361	24.281	24.899	24.425	24.401	24.271	24.245	24.202	24.185	24.187	24.211	24.226	24.221
<b>New Vehicle Average Horsepower</b>														
<b>Conventional Cars</b>														
Minicompact	246.596	246.882	247.863	253.089	258.106	262.960	263.918	265.754	267.657	269.409	270.710	271.930	273.112	274.210
Subcompact	175.981	176.253	177.356	182.553	185.799	188.830	189.183	189.687	190.474	191.201	191.913	192.677	193.361	194.000
Compact	138.162	138.633	137.411	144.623	149.445	153.284	155.356	157.376	158.663	160.462	162.304	164.377	166.233	167.943
Midsize	185.057	185.296	184.331	191.251	197.372	202.683	206.167	208.527	210.384	212.438	214.447	216.716	218.544	220.283
Large	205.625	205.237	204.277	209.758	215.776	221.361	223.748	225.655	227.164	229.239	231.263	233.633	235.795	237.690
Two Seater	253.952	253.677	252.677	260.838	269.046	276.648	281.540	285.931	288.990	291.761	294.318	297.181	299.649	301.604
Average New Car	168.949	169.178	167.733	176.655	182.646	187.009	189.733	191.871	192.733	194.699	196.532	198.648	200.276	201.887
<b>Conventional Light Trucks</b>														
Small Pickup	151.559	153.154	151.484	160.976	168.249	173.463	176.881	179.731	181.490	183.793	186.136	188.759	191.249	193.508
Large Pickup	215.602	216.632	213.355	224.311	235.879	244.929	251.359	257.381	260.023	263.442	266.752	270.422	273.810	276.684
Small Van	181.285	181.416	178.386	188.645	195.682	200.748	204.001	207.181	209.227	211.575	213.914	216.515	218.978	221.297
Large Van	196.004	196.770	193.524	203.406	212.987	219.464	223.815	228.139	230.363	233.208	236.034	239.254	242.163	244.990
Small Utility	187.500	188.482	186.201	195.237	201.275	205.760	207.788	210.116	211.720	213.478	215.150	217.021	218.816	220.392
Large Utility	230.299	231.261	226.690	238.397	247.809	255.656	261.233	265.526	267.532	270.603	273.699	277.117	280.247	282.904
Average New Light Truck	203.650	204.624	201.486	211.762	220.261	226.996	231.326	235.321	237.486	240.132	242.758	245.671	248.409	250.797

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>New Vehicle Average Weight</b>														
<b>Conventional Cars</b>														
Minicompact	3487.738	3489.350	3529.081	3546.904	3560.527	3572.926	3524.456	3494.203	3495.154	3498.844	3503.261	3506.860	3509.388	3512.182
Subcompact	2961.943	2964.650	2999.589	3038.833	3071.329	3099.924	3076.028	3060.067	3062.159	3064.882	3068.092	3070.789	3072.972	3075.129
Compact	2852.337	2855.881	2890.291	2926.695	2953.927	2977.044	2949.051	2930.309	2926.228	2928.423	2931.499	2934.209	2936.448	2938.617
Midsized	3320.914	3324.373	3364.079	3402.913	3436.552	3467.494	3441.977	3414.168	3411.361	3414.441	3418.058	3420.930	3422.994	3425.154
Large	3608.386	3612.278	3655.557	3704.219	3751.608	3790.803	3762.698	3734.985	3729.267	3733.004	3736.828	3740.515	3744.123	3747.189
Two Seater	3151.498	3154.330	3191.563	3232.854	3269.162	3296.317	3282.757	3267.747	3268.434	3271.276	3274.748	3277.545	3279.680	3281.307
Average New Car	3126.522	3129.764	3159.368	3227.515	3268.252	3293.611	3269.352	3247.335	3236.282	3240.426	3243.755	3247.112	3247.530	3249.307
<b>Conventional Light Trucks</b>														
Small Pickup	3714.207	3721.975	3729.313	3827.498	3875.081	3915.708	3895.776	3875.288	3875.975	3882.718	3889.014	3894.459	3899.944	3905.502
Large Pickup	5048.500	5058.658	5068.231	5197.162	5255.169	5307.081	5287.430	5268.164	5269.116	5280.322	5290.042	5298.979	5307.867	5316.615
Small Van	4237.275	4244.671	4251.362	4356.932	4400.446	4434.689	4407.281	4388.221	4390.099	4398.135	4405.836	4412.367	4418.541	4425.409
Large Van	4637.782	4646.192	4653.871	4769.765	4830.072	4881.356	4859.436	4846.016	4843.686	4853.122	4862.170	4870.778	4876.577	4884.345
Small Utility	4056.603	4063.349	4068.895	4154.171	4162.610	4179.386	4126.272	4093.546	4093.241	4100.791	4107.688	4114.404	4121.225	4127.916
Large Utility	5235.709	5244.287	5250.647	5370.958	5420.313	5459.708	5431.067	5400.005	5391.323	5399.219	5408.979	5417.952	5426.843	5435.683
Average New Light Truck	4648.995	4657.232	4666.770	4769.544	4806.861	4844.380	4811.627	4785.865	4786.407	4794.667	4803.241	4810.877	4819.011	4827.020
<b>Average Weight for the Stock</b>														
Conventional Cars	3156	3152	3151	3154	3160	3167	3173	3178	3183	3189	3194	3199	3204	3208
Conventional Light Trucks	4177	4229	4277	4326	4376	4425	4468	4505	4539	4571	4600	4626	4650	4671



Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Personal Vehicles</b>															
<b>EPA Rated New Vehicle Fuel Efficiency</b>															
<b>Conventional Cars (MPG)</b>															
Minicompact	29.692	29.759	29.842	29.926	30.070	30.216	30.312	30.421	30.528	30.581	30.601	30.608	30.621	30.634	0.7%
Subcompact	32.423	32.543	32.674	32.781	32.984	33.184	33.373	33.506	33.638	33.715	33.787	33.839	33.890	33.931	0.6%
Compact	35.129	35.177	35.243	35.311	35.462	35.603	35.743	35.825	35.917	35.994	36.046	36.048	36.066	36.085	0.5%
Midsized	30.600	30.684	30.766	30.841	30.994	31.143	31.257	31.365	31.433	31.501	31.545	31.573	31.600	31.624	0.5%
Large	28.521	28.594	28.674	28.766	28.924	29.088	29.255	29.365	29.427	29.517	29.605	29.677	29.697	29.719	0.4%
Two Seater	27.463	27.544	27.627	27.726	27.889	28.034	28.169	28.276	28.389	28.465	28.504	28.536	28.570	28.596	0.5%
Average New Car	31.997	32.069	32.150	32.235	32.386	32.540	32.677	32.778	32.860	32.938	32.992	33.025	33.046	33.071	0.5%
Average New Car On-Road MPG	25.123	25.250	25.392	25.530	25.732	25.935	26.047	26.136	26.205	26.266	26.310	26.340	26.360	26.384	0.7%
<b>Conventional Light Trucks</b>															
Small Pickup	27.594	27.757	27.919	28.049	28.237	28.403	28.611	28.754	28.851	28.952	29.037	29.095	29.127	29.151	0.6%
Large Pickup	20.997	21.133	21.261	21.392	21.557	21.703	21.826	21.940	22.066	22.182	22.249	22.293	22.328	22.355	0.6%
Small Van	26.766	26.925	27.030	27.165	27.365	27.564	27.760	27.868	28.025	28.162	28.238	28.282	28.333	28.379	0.5%
Large Van	27.810	27.971	28.122	28.242	28.433	28.633	28.829	28.992	29.126	29.275	29.381	29.438	29.493	29.545	0.5%
Small Utility	26.035	26.194	26.346	26.509	26.741	26.954	27.182	27.318	27.474	27.570	27.638	27.697	27.759	27.806	0.7%
Large Utility	21.237	21.380	21.528	21.678	21.864	22.032	22.152	22.268	22.372	22.480	22.563	22.621	22.670	22.708	0.7%
Average New Light Truck	23.665	23.816	23.966	24.113	24.312	24.495	24.659	24.790	24.923	25.038	25.119	25.176	25.234	25.274	0.6%
Average New LT On-Road MPG	18.809	18.888	18.972	19.048	19.172	19.282	19.414	19.522	19.630	19.720	19.784	19.832	19.880	19.914	0.4%
<b>Degradation Factors 1/</b>															
Cars	0.785	0.787	0.790	0.792	0.795	0.797	0.797	0.797	0.797	0.797	0.797	0.798	0.798	0.798	0.2%
Light Trucks	0.795	0.793	0.792	0.790	0.789	0.787	0.787	0.788	0.788	0.788	0.788	0.788	0.788	0.788	-0.2%
<b>New Fuel Efficiency by Size Class 2/</b>															
<b>Alternative-Fuel Cars</b>															
Minicompact	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact	38.760	39.207	39.651	40.070	40.514	40.912	41.258	41.558	41.846	42.099	42.294	42.461	42.630	42.789	N/A
Compact	40.786	40.988	41.183	41.315	41.514	41.704	41.892	42.044	42.191	42.319	42.432	42.510	42.597	42.675	0.6%
Midsized	35.299	35.500	35.647	35.785	35.987	36.186	36.361	36.534	36.691	36.810	36.915	37.003	37.091	37.169	1.1%
Large	32.894	33.172	33.430	33.665	33.969	34.268	34.540	34.758	34.945	35.141	35.324	35.484	35.624	35.742	0.9%
Two Seater	36.638	36.671	36.712	36.762	36.850	36.969	37.092	37.190	37.283	37.344	37.364	37.382	37.406	37.422	0.1%
Average New Alternative Cars	36.784	37.035	37.252	37.431	37.654	37.882	38.089	38.270	38.441	38.589	38.716	38.827	38.928	39.024	0.7%

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Alternative-Fuel Light Trucks</b>															
Small Pickup	27.839	28.008	28.175	32.010	32.216	32.412	32.619	32.873	33.154	33.437	33.706	33.973	34.224	34.467	1.2%
Large Pickup	22.970	23.173	23.386	23.598	23.851	24.106	24.335	24.517	24.702	24.878	25.029	25.145	25.266	25.368	1.1%
Small Van	32.821	32.997	33.167	33.360	33.616	33.862	34.105	34.291	34.494	34.683	34.852	34.963	35.090	35.207	1.3%
Large Van	32.823	33.023	33.227	33.420	33.674	33.937	34.186	34.418	34.641	34.861	35.045	35.222	35.369	35.477	1.1%
Small Utility	28.752	29.006	29.272	29.524	29.834	30.142	30.428	30.653	30.886	31.073	31.229	31.371	31.516	31.640	0.6%
Large Utility	23.651	23.851	24.055	24.254	24.496	24.734	24.964	25.141	25.305	25.488	25.634	25.747	25.860	25.963	1.1%
Average New Alt. Light Trucks	26.543	26.762	26.995	27.252	27.527	27.803	28.058	28.262	28.462	28.650	28.808	28.940	29.078	29.187	1.6%
<b>Fleet Vehicles</b>															
<b>EPA Rated New Vehicle Fuel Efficiency</b>															
Cars	31.660	31.748	31.842	31.928	32.095	32.258	32.403	32.512	32.599	32.674	32.733	32.768	32.797	32.823	0.5%
Light Trucks	23.646	23.793	23.927	24.064	24.247	24.418	24.570	24.688	24.812	24.930	25.007	25.056	25.100	25.135	0.6%
<b>Average On-Road MPG</b>															
Cars	24.717	24.860	25.012	25.154	25.322	25.503	25.618	25.740	25.845	25.927	25.995	26.050	26.092	26.127	0.7%
Light Trucks	18.593	18.647	18.714	18.779	18.860	18.948	19.072	19.198	19.318	19.425	19.518	19.598	19.664	19.718	0.5%
<b>New Vehicle Sales Shares (%)</b>															
<b>Conventional Cars</b>															
Minicompact	1.360	1.361	1.363	1.369	1.363	1.363	1.361	1.359	1.360	1.361	1.358	1.361	1.359	1.361	-0.5%
Subcompact	8.043	8.051	8.064	8.095	8.062	8.062	8.053	8.050	8.051	8.059	8.047	8.064	8.055	8.065	-0.4%
Compact	39.789	39.823	39.840	39.931	39.805	39.809	39.766	39.748	39.750	39.764	39.726	39.786	39.744	39.767	-0.3%
Midsize	34.543	34.517	34.512	34.450	34.544	34.545	34.579	34.583	34.585	34.575	34.605	34.562	34.588	34.572	0.3%
Large	14.693	14.677	14.650	14.586	14.656	14.650	14.669	14.689	14.683	14.671	14.693	14.657	14.683	14.664	0.5%
Two Seater	1.571	1.571	1.570	1.569	1.571	1.571	1.571	1.571	1.570	1.570	1.571	1.570	1.570	1.570	0.1%
<b>Conventional Light Trucks</b>															
Small Pickup	5.868	5.863	5.863	5.848	5.859	5.863	5.866	5.876	5.879	5.877	5.886	5.880	5.889	5.887	0.4%
Large Pickup	24.891	24.887	24.912	24.926	24.939	24.953	24.961	24.974	24.978	24.984	24.986	24.994	24.998	25.005	0.0%
Small Van	4.700	4.705	4.709	4.720	4.699	4.698	4.693	4.696	4.693	4.698	4.695	4.705	4.699	4.703	-0.4%
Large Van	11.246	11.240	11.257	11.272	11.267	11.267	11.271	11.281	11.287	11.289	11.304	11.322	11.319	11.324	0.0%
Small Utility	29.056	29.059	29.038	29.015	29.024	29.016	29.012	28.997	28.988	28.985	28.974	28.955	28.955	28.947	0.0%
Large Utility	24.238	24.245	24.221	24.218	24.212	24.203	24.198	24.176	24.175	24.167	24.156	24.144	24.138	24.133	0.0%
<b>New Vehicle Average Horsepower</b>															
<b>Conventional Cars</b>															
Minicompact	275.358	276.428	277.380	278.132	278.672	279.147	279.657	280.065	280.497	280.494	280.546	280.549	280.560	280.529	0.5%
Subcompact	194.575	195.137	195.643	196.125	196.403	196.610	196.788	197.001	197.162	197.303	197.407	197.484	197.536	197.585	0.4%
Compact	169.728	171.458	172.997	174.393	175.717	176.722	177.685	178.622	179.451	180.192	180.835	181.383	181.914	182.364	1.1%
Midsize	222.229	224.038	225.470	226.695	227.825	228.715	229.575	230.332	230.987	231.562	231.951	232.305	232.656	232.969	0.9%
Large	239.683	241.388	242.973	244.551	245.911	247.133	248.359	249.301	250.122	250.881	251.554	252.212	252.530	252.852	0.8%
Two Seater	303.903	306.053	307.787	309.450	310.875	311.996	313.131	314.155	315.081	315.765	316.079	316.540	317.079	317.481	0.9%
Average New Car	203.685	205.320	206.724	207.943	209.199	210.123	211.050	211.874	212.582	213.196	213.727	214.134	214.555	214.881	0.9%
<b>Conventional Light Trucks</b>															
Small Pickup	196.045	198.579	200.909	202.838	204.585	206.168	207.935	209.285	210.428	211.369	212.238	212.800	213.205	213.409	1.3%
Large Pickup	279.497	282.285	284.773	287.057	288.878	290.667	292.345	293.015	292.969	292.946	292.964	292.964	292.960	292.954	1.2%
Small Van	223.831	226.334	228.291	230.310	231.898	233.171	234.375	235.383	236.476	237.324	238.067	238.330	238.689	238.961	1.1%
Large Van	248.076	251.133	253.934	256.086	258.017	259.757	261.211	262.473	263.744	264.810	265.647	265.838	266.154	266.367	1.2%
Small Utility	221.905	223.073	223.886	224.607	224.884	225.074	225.217	225.350	225.377	225.357	225.421	225.404	225.361	225.331	0.7%
Large Utility	285.532	287.997	290.266	292.380	293.983	295.464	296.714	297.812	298.277	298.873	298.758	298.611	298.445	298.283	1.0%
Average New Light Truck	253.179	255.421	257.375	259.131	260.447	261.658	262.746	263.482	263.857	264.204	264.377	264.410	264.429	264.432	1.0%

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>New Vehicle Average Weight</b>															
<b>Conventional Cars</b>															
Minicompact	3514.756	3517.790	3520.747	3523.125	3520.739	3517.301	3514.129	3511.766	3509.472	3508.474	3507.873	3507.513	3507.004	3506.614	0.0%
Subcompact	3076.924	3078.406	3079.735	3081.342	3078.779	3075.887	3073.709	3072.031	3070.066	3068.600	3067.039	3066.131	3065.068	3064.192	0.1%
Compact	2940.451	2942.000	2943.398	2944.905	2942.441	2939.680	2937.364	2935.731	2933.896	2932.473	2931.100	2930.426	2929.552	2928.826	0.1%
Midsized	3427.220	3429.375	3431.303	3433.676	3431.665	3429.117	3426.794	3424.761	3422.526	3420.764	3419.153	3418.225	3417.149	3416.268	0.1%
Large	3749.667	3751.153	3752.329	3754.155	3750.909	3747.598	3745.022	3741.656	3738.356	3735.020	3731.610	3729.688	3727.698	3725.956	0.1%
Two Seater	3283.460	3285.407	3287.167	3288.963	3286.252	3282.308	3279.041	3276.422	3273.711	3271.701	3269.767	3268.601	3267.232	3266.099	0.1%
Average New Car	3251.672	3253.200	3254.555	3255.683	3254.198	3251.356	3249.279	3247.387	3245.139	3243.174	3241.699	3240.274	3239.463	3238.314	0.1%
<b>Conventional Light Trucks</b>															
Small Pickup	3910.979	3916.183	3921.333	3926.542	3924.666	3922.909	3921.160	3920.147	3919.199	3918.071	3917.736	3917.509	3917.324	3917.026	0.2%
Large Pickup	5325.279	5333.646	5341.715	5349.003	5346.153	5343.241	5339.818	5337.671	5335.393	5333.717	5333.238	5332.740	5332.177	5331.675	0.2%
Small Van	4432.137	4438.357	4444.918	4450.674	4447.568	4442.941	4437.300	4433.688	4429.835	4426.238	4422.810	4419.784	4416.780	4414.005	0.2%
Large Van	4892.114	4899.805	4908.666	4916.387	4914.047	4909.992	4905.443	4902.407	4899.545	4896.703	4893.604	4890.559	4887.723	4884.859	0.2%
Small Utility	4134.299	4140.284	4145.669	4150.609	4147.280	4143.739	4139.814	4136.762	4133.694	4129.874	4127.118	4124.691	4122.179	4120.125	0.1%
Large Utility	5444.647	5453.486	5462.182	5470.062	5467.013	5463.487	5457.366	5453.214	5448.871	5444.828	5441.699	5438.547	5435.060	5431.673	0.1%
Average New Light Truck	4834.473	4841.925	4849.327	4856.243	4853.257	4849.918	4845.592	4842.532	4839.533	4836.465	4834.225	4832.258	4830.000	4828.060	0.1%
<b>Average Weight for the Stock</b>															
Conventional Cars	3212	3217	3221	3224	3228	3230	3233	3235	3237	3238	3239	3240	3240	3241	0.1%
Conventional Light Trucks	4691	4709	4725	4745	4757	4768	4777	4785	4793	4799	4805	4809	4813	4816	0.5%

Table 49. Summary of New Light-Duty Vehicle Size Class Attributes

1/ Conversion factor used to convert Environmental Protection Agency rated to "on road" miles per gallon.

2/ Environmental Protection Agency rated miles per gallon.

Sources: 2003 and 2004 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration, Mid-Year Fuel Economy Reports from Auto Manufacturers, 2000; Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the U.S. Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis (Oak Ridge, TN, March 1992); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 50. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology  
(trillion Btu)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cars 1/</b>														
Conventional Gasoline	737.12	722.51	695.28	693.80	709.60	714.93	706.90	684.23	665.10	648.39	636.31	627.92	619.13	611.53
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol														
Flex	0.26	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	30.95	38.88	41.64	42.56	43.53	44.15	44.19	43.44	42.60	41.59	40.71	40.03	39.43	38.90
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	4.40	5.34	6.25	6.83	7.05	7.22	7.33	7.28	7.15	6.99	6.84	6.71	6.61	6.53
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	0.00	0.00	25.89	27.89	28.38	28.63	28.67	28.28	27.74	27.07	26.44	25.91	25.48	25.15
Electric	1.00	1.15	1.20	1.11	1.04	0.98	0.92	0.88	0.85	0.84	0.83	0.82	0.81	0.81
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Fleet Cars</b>	<b>773.72</b>	<b>768.02</b>	<b>770.28</b>	<b>772.19</b>	<b>789.61</b>	<b>795.92</b>	<b>788.01</b>	<b>764.12</b>	<b>743.45</b>	<b>724.88</b>	<b>711.13</b>	<b>701.39</b>	<b>691.46</b>	<b>682.91</b>
<b>Light Trucks 1/</b>														
Conventional Gasoline	683.09	633.79	570.63	548.10	543.49	537.58	533.97	537.38	552.18	564.33	573.86	581.70	587.12	592.58
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol														
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	37.77	50.20	61.78	62.60	61.51	60.43	59.56	59.68	61.07	62.48	63.54	64.40	64.99	65.56
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	17.84	20.79	23.55	22.62	22.57	22.42	22.32	22.49	23.10	23.61	24.00	24.33	24.58	24.82
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	51.37	63.83	75.72	74.45	73.82	73.11	72.66	73.14	75.15	76.88	78.23	79.34	80.11	80.90
Electric	1.35	1.68	1.95	1.95	1.82	1.68	1.56	1.49	1.48	1.51	1.55	1.58	1.61	1.63
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Fleet Light Trucks</b>	<b>791.43</b>	<b>770.28</b>	<b>733.64</b>	<b>709.71</b>	<b>703.22</b>	<b>695.20</b>	<b>690.07</b>	<b>694.17</b>	<b>712.98</b>	<b>728.80</b>	<b>741.18</b>	<b>751.35</b>	<b>758.40</b>	<b>765.49</b>
<b>Total Fleet Vehicles</b>	<b>1565.15</b>	<b>1538.30</b>	<b>1503.92</b>	<b>1481.90</b>	<b>1492.83</b>	<b>1491.12</b>	<b>1478.08</b>	<b>1458.29</b>	<b>1456.43</b>	<b>1453.68</b>	<b>1452.31</b>	<b>1452.74</b>	<b>1449.86</b>	<b>1448.40</b>
<b>Commercial Light Trucks 2/</b>	<b>588.72</b>	<b>610.71</b>	<b>619.50</b>	<b>626.87</b>	<b>634.37</b>	<b>642.68</b>	<b>649.84</b>	<b>657.55</b>	<b>666.32</b>	<b>674.70</b>	<b>682.69</b>	<b>692.04</b>	<b>701.74</b>	<b>711.32</b>

Table 50. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology  
(trillion Btu)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cars 1/</b>															
Conventional Gasoline	605.44	602.11	600.01	599.04	598.28	597.87	599.81	601.89	604.55	607.88	611.37	614.85	618.55	622.28	-0.6%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol															
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.7%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol															
Flex	38.43	38.11	37.87	37.73	37.62	37.54	37.61	37.71	37.85	38.03	38.23	38.44	38.66	38.89	0.0%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	6.46	6.41	6.37	6.36	6.35	6.34	6.37	6.39	6.42	6.46	6.49	6.53	6.58	6.62	0.8%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	24.85	24.62	24.46	24.37	24.30	24.26	24.32	24.40	24.50	24.63	24.76	24.90	25.05	25.21	N/A
Electric	0.80	0.80	0.80	0.80	0.80	0.80	0.81	0.81	0.82	0.82	0.83	0.84	0.84	0.85	-1.2%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Cars</b>	<b>675.98</b>	<b>672.05</b>	<b>669.51</b>	<b>668.30</b>	<b>667.34</b>	<b>666.82</b>	<b>668.91</b>	<b>671.20</b>	<b>674.14</b>	<b>677.82</b>	<b>681.69</b>	<b>685.56</b>	<b>689.68</b>	<b>693.84</b>	<b>-0.4%</b>
<b>Light Trucks 1/</b>															
Conventional Gasoline	598.23	604.86	611.23	618.16	625.34	632.70	639.18	646.47	654.87	664.23	674.36	684.55	695.02	705.67	0.4%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol															
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol															
Flex	66.15	66.85	67.52	68.25	69.01	69.80	70.49	71.26	72.14	73.13	74.22	75.32	76.46	77.62	1.7%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	25.08	25.38	25.68	26.00	26.34	26.70	27.01	27.36	27.76	28.20	28.67	29.15	29.64	30.14	1.4%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	81.72	82.67	83.58	84.58	85.62	86.70	87.65	88.70	89.91	91.25	92.69	94.15	95.65	97.18	1.6%
Electric	1.66	1.69	1.72	1.75	1.78	1.81	1.84	1.88	1.91	1.95	1.98	2.02	2.06	2.09	0.9%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Light Trucks</b>	<b>772.83</b>	<b>781.44</b>	<b>789.73</b>	<b>798.74</b>	<b>808.10</b>	<b>817.71</b>	<b>826.17</b>	<b>835.67</b>	<b>846.58</b>	<b>858.76</b>	<b>871.93</b>	<b>885.20</b>	<b>898.82</b>	<b>912.70</b>	<b>0.7%</b>
<b>Total Fleet Vehicles</b>	<b>1448.81</b>	<b>1453.49</b>	<b>1459.25</b>	<b>1467.04</b>	<b>1475.44</b>	<b>1484.53</b>	<b>1495.09</b>	<b>1506.88</b>	<b>1520.72</b>	<b>1536.58</b>	<b>1553.62</b>	<b>1570.76</b>	<b>1588.50</b>	<b>1606.55</b>	<b>0.2%</b>
<b>Commercial Light Trucks 2/</b>	<b>721.60</b>	<b>731.88</b>	<b>740.84</b>	<b>749.62</b>	<b>758.62</b>	<b>767.95</b>	<b>777.65</b>	<b>788.28</b>	<b>800.02</b>	<b>812.55</b>	<b>825.01</b>	<b>837.09</b>	<b>849.95</b>	<b>863.96</b>	<b>1.3%</b>

Table 50. Transportation Fleet Car and Truck Fuel Consumption by Type and Technology  
(trillion Btu)

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

N/A = Not Applicable.

Sources: 2003 and 2004 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, prepared for the Energy Information Administration (EIA) (April 23, 1997); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 51. Transportation Fleet Car and Truck Sales by Type and Technology  
(thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cars 1/</b>														
Conventional Gasoline	1448.86	1467.52	1524.19	1613.41	1608.32	1587.73	1563.99	1533.27	1541.63	1535.99	1521.55	1505.54	1496.74	1498.86
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol														
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	81.29	82.34	85.51	90.52	90.23	89.08	87.75	86.02	86.49	86.18	85.37	84.47	83.97	84.09
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	11.79	11.94	12.40	13.12	13.08	12.92	12.72	12.47	12.54	12.49	12.38	12.25	12.18	12.19
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	45.46	46.04	47.82	50.62	50.46	49.81	49.07	48.10	48.37	48.19	47.74	47.23	46.96	47.03
Electric	2.41	2.44	2.54	2.68	2.68	2.64	2.60	2.55	2.56	2.55	2.53	2.50	2.49	2.49
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Fleet Cars</b>	<b>1589.80</b>	<b>1610.28</b>	<b>1672.46</b>	<b>1770.36</b>	<b>1764.78</b>	<b>1742.17</b>	<b>1716.14</b>	<b>1682.42</b>	<b>1691.59</b>	<b>1685.41</b>	<b>1669.57</b>	<b>1652.00</b>	<b>1642.34</b>	<b>1644.66</b>
<b>Light Trucks 1/</b>														
Conventional Gasoline	784.50	794.61	768.38	695.12	736.45	759.34	792.13	825.55	838.72	852.72	862.17	875.13	882.54	893.13
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol														
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	82.51	83.57	80.81	73.11	77.46	79.86	83.31	86.83	88.21	89.68	90.68	92.04	92.82	93.93
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	30.34	30.73	29.72	26.88	28.48	29.37	30.63	31.93	32.44	32.98	33.34	33.84	34.13	34.54
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	101.04	102.35	98.97	89.53	94.85	97.80	102.03	106.33	108.03	109.83	111.05	112.72	113.67	115.03
Electric	3.28	3.32	3.21	2.91	3.08	3.17	3.31	3.45	3.51	3.56	3.60	3.66	3.69	3.73
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Fleet Light Trucks</b>	<b>1001.67</b>	<b>1014.58</b>	<b>981.09</b>	<b>887.55</b>	<b>940.32</b>	<b>969.55</b>	<b>1011.41</b>	<b>1054.09</b>	<b>1070.90</b>	<b>1088.78</b>	<b>1100.84</b>	<b>1117.39</b>	<b>1126.85</b>	<b>1140.37</b>
<b>Total Fleet Vehicles</b>	<b>2591.47</b>	<b>2624.86</b>	<b>2653.55</b>	<b>2657.91</b>	<b>2705.10</b>	<b>2711.72</b>	<b>2727.55</b>	<b>2736.51</b>	<b>2762.49</b>	<b>2774.18</b>	<b>2770.41</b>	<b>2769.39</b>	<b>2769.18</b>	<b>2785.03</b>
<b>Commercial Light Trucks 2/</b>	<b>605.77</b>	<b>657.11</b>	<b>668.39</b>	<b>666.76</b>	<b>697.77</b>	<b>702.65</b>	<b>729.83</b>	<b>725.78</b>	<b>736.87</b>	<b>724.45</b>	<b>721.77</b>	<b>729.96</b>	<b>743.76</b>	<b>760.37</b>



Table 51. Transportation Fleet Car and Truck Sales by Type and Technology  
(thousands)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cars 1/</b>															
Conventional Gasoline	1501.38	1508.31	1513.86	1524.04	1535.20	1548.91	1562.89	1576.70	1589.82	1605.45	1617.96	1628.96	1641.62	1655.22	0.5%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol															
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol															
Flex	84.23	84.62	84.93	85.51	86.13	86.90	87.69	88.46	89.20	90.07	90.78	91.39	92.10	92.87	0.5%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	12.21	12.27	12.31	12.40	12.49	12.60	12.71	12.83	12.93	13.06	13.16	13.25	13.35	13.46	0.5%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	47.10	47.32	47.50	47.82	48.17	48.60	49.03	49.47	49.88	50.37	50.76	51.11	51.50	51.93	0.5%
Electric	2.50	2.51	2.52	2.53	2.55	2.58	2.60	2.62	2.64	2.67	2.69	2.71	2.73	2.75	0.5%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Cars</b>	<b>1647.44</b>	<b>1655.04</b>	<b>1661.12</b>	<b>1672.29</b>	<b>1684.54</b>	<b>1699.59</b>	<b>1714.92</b>	<b>1730.08</b>	<b>1744.47</b>	<b>1761.63</b>	<b>1775.35</b>	<b>1787.43</b>	<b>1801.31</b>	<b>1816.24</b>	<b>0.5%</b>
<b>Light Trucks 1/</b>															
Conventional Gasoline	908.59	926.18	939.99	952.09	969.40	987.96	1008.22	1029.50	1050.09	1072.19	1094.11	1111.88	1132.36	1151.60	1.4%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol															
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.4%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol															
Flex	95.56	97.41	98.86	100.13	101.96	103.91	106.04	108.28	110.44	112.77	115.07	116.94	119.09	121.12	1.4%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	35.14	35.82	36.35	36.82	37.49	38.21	38.99	39.81	40.61	41.47	42.31	43.00	43.79	44.54	1.4%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	117.03	119.29	121.07	122.63	124.86	127.25	129.86	132.60	135.25	138.10	140.92	143.21	145.85	148.33	1.4%
Electric	3.80	3.87	3.93	3.98	4.05	4.13	4.21	4.30	4.39	4.48	4.57	4.65	4.73	4.81	1.4%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Light Trucks</b>	<b>1160.11</b>	<b>1182.57</b>	<b>1200.21</b>	<b>1215.65</b>	<b>1237.76</b>	<b>1261.46</b>	<b>1287.32</b>	<b>1314.49</b>	<b>1340.78</b>	<b>1369.00</b>	<b>1396.99</b>	<b>1419.68</b>	<b>1445.83</b>	<b>1470.40</b>	<b>1.4%</b>
<b>Total Fleet Vehicles</b>	<b>2807.54</b>	<b>2837.61</b>	<b>2861.33</b>	<b>2887.94</b>	<b>2922.30</b>	<b>2961.04</b>	<b>3002.24</b>	<b>3044.57</b>	<b>3085.25</b>	<b>3130.63</b>	<b>3172.34</b>	<b>3207.11</b>	<b>3247.14</b>	<b>3286.63</b>	<b>0.9%</b>
<b>Commercial Light Trucks 2/</b>	<b>772.57</b>	<b>784.29</b>	<b>791.27</b>	<b>800.00</b>	<b>809.91</b>	<b>821.91</b>	<b>834.14</b>	<b>847.11</b>	<b>859.45</b>	<b>873.12</b>	<b>885.95</b>	<b>896.53</b>	<b>908.77</b>	<b>920.65</b>	<b>1.3%</b>

Table 51. Transportation Fleet Car and Truck Sales by Type and Technology  
(thousands)

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

N/A = Not Applicable.

Sources: 2003 and 2004 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, prepared for the Energy Information Administration (EIA) (April 23, 1997); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 52. Transportation Fleet Car and Truck Stock by Type and Technology  
(thousands)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
<b>Cars 1/</b>																
Conventional Gasoline	6277.98	6152.62	5905.51	5941.61	6092.20	6204.64	6239.83	6165.60	6102.23	6052.56	6011.33	5981.65	5938.11	5902.69	5883.49	5886.09
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol																
Flex	2.42	1.11	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol																
Flex	268.70	337.03	359.58	371.00	377.78	384.13	387.32	385.01	381.72	378.50	375.62	373.30	370.85	368.78	367.39	367.17
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	41.20	50.27	57.69	62.26	62.95	63.72	64.40	64.45	64.17	63.63	63.09	62.61	62.20	61.90	61.64	61.53
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	145.38	187.00	216.66	233.58	236.45	239.56	242.03	241.92	240.67	238.63	236.65	234.91	233.38	232.22	231.26	230.89
Electric	9.48	11.13	12.07	11.89	12.05	12.24	12.37	12.34	12.25	12.14	12.04	11.96	11.89	11.82	11.77	11.76
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell																
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Fleet Cars</b>	<b>6745.17</b>	<b>6739.16</b>	<b>6551.59</b>	<b>6620.35</b>	<b>6781.44</b>	<b>6904.30</b>	<b>6945.95</b>	<b>6869.31</b>	<b>6801.04</b>	<b>6745.46</b>	<b>6698.73</b>	<b>6664.43</b>	<b>6616.43</b>	<b>6577.41</b>	<b>6555.56</b>	<b>6557.44</b>
<b>Light Trucks 1/</b>																
Conventional Gasoline	4581.91	4271.54	3895.60	3779.79	3743.13	3720.83	3723.55	3781.95	3913.42	4029.98	4130.78	4213.48	4271.90	4325.83	4381.62	4444.96
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol																
Flex	0.07	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol																
Flex	251.80	332.29	408.30	418.14	413.43	411.36	411.62	417.07	429.77	442.98	454.22	463.71	470.56	476.57	482.77	489.69
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	116.16	135.96	154.38	149.65	148.22	147.35	147.35	149.48	154.63	159.27	163.30	166.61	168.95	171.09	173.29	175.79
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	341.40	424.73	503.48	500.80	495.90	493.04	493.08	500.10	517.02	532.58	546.06	557.21	565.08	572.25	579.64	587.99
Electric	10.99	13.82	16.48	17.06	16.85	16.77	16.79	16.99	17.46	18.01	18.47	18.86	19.15	19.40	19.65	19.93
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell																
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total Fleet Light Trucks</b>	<b>5302.33</b>	<b>5178.38</b>	<b>4978.24</b>	<b>4865.44</b>	<b>4817.53</b>	<b>4789.35</b>	<b>4792.39</b>	<b>4865.58</b>	<b>5032.30</b>	<b>5182.82</b>	<b>5312.83</b>	<b>5419.88</b>	<b>5495.65</b>	<b>5565.15</b>	<b>5636.98</b>	<b>5718.36</b>
<b>Total Fleet Vehicles</b>	<b>12047.50</b>	<b>11917.54</b>	<b>11529.83</b>	<b>11485.79</b>	<b>11598.96</b>	<b>11693.65</b>	<b>11738.34</b>	<b>11734.89</b>	<b>11833.34</b>	<b>11928.27</b>	<b>12011.56</b>	<b>12084.31</b>	<b>12112.08</b>	<b>12142.55</b>	<b>12192.54</b>	<b>12275.80</b>
<b>Commercial Light Trucks 2/</b>	<b>5940.07</b>	<b>6223.38</b>	<b>6547.10</b>	<b>6877.97</b>	<b>7234.47</b>	<b>7580.84</b>	<b>7931.76</b>	<b>8250.05</b>	<b>8547.34</b>	<b>8798.56</b>	<b>9015.08</b>	<b>9210.36</b>	<b>9392.36</b>	<b>9565.98</b>	<b>9729.31</b>	<b>9883.73</b>

Table 52. Transportation Fleet Car and Truck Stock by Type and Technology  
(thousands)

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cars 1/</b>													
Conventional Gasoline	5902.35	5927.04	5960.09	6000.06	6047.97	6099.54	6152.90	6208.31	6262.29	6313.46	6364.04	6413.01	0.2%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol													
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.0%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol													
Flex	367.85	369.25	371.17	373.56	376.40	379.52	382.79	386.23	389.60	392.81	395.97	399.08	0.7%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	61.57	61.75	62.05	62.42	62.87	63.36	63.90	64.46	65.03	65.57	66.10	66.63	1.1%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	231.08	231.82	232.94	234.36	236.06	237.95	239.96	242.09	244.21	246.24	248.24	250.22	1.1%
Electric	11.77	11.82	11.87	11.95	12.04	12.13	12.24	12.35	12.46	12.56	12.66	12.76	0.5%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell													
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Cars</b>	<b>6574.63</b>	<b>6601.68</b>	<b>6638.12</b>	<b>6682.36</b>	<b>6735.33</b>	<b>6792.51</b>	<b>6851.79</b>	<b>6913.44</b>	<b>6973.58</b>	<b>7030.64</b>	<b>7087.02</b>	<b>7141.71</b>	<b>0.2%</b>
<b>Light Trucks 1/</b>													
Conventional Gasoline	4509.73	4578.18	4653.26	4731.89	4813.67	4902.47	4999.08	5100.80	5205.84	5308.47	5410.42	5510.90	1.0%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol													
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-8.2%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol													
Flex	496.80	504.23	512.43	521.10	530.13	539.82	550.34	561.49	573.03	584.35	595.61	606.72	2.3%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	178.34	181.04	184.01	187.12	190.35	193.85	197.66	201.68	205.83	209.89	213.93	217.91	1.8%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	596.52	605.53	615.45	625.86	636.66	648.35	661.07	674.51	688.39	701.98	715.48	728.80	2.1%
Electric	20.22	20.52	20.85	21.21	21.57	21.97	22.39	22.84	23.31	23.77	24.23	24.69	2.3%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell													
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Light Trucks</b>	<b>5801.61</b>	<b>5889.50</b>	<b>5986.00</b>	<b>6087.18</b>	<b>6192.39</b>	<b>6306.45</b>	<b>6430.54</b>	<b>6561.32</b>	<b>6696.40</b>	<b>6828.47</b>	<b>6959.69</b>	<b>7089.01</b>	<b>1.2%</b>
<b>Total Fleet Vehicles</b>	<b>12376.25</b>	<b>12491.18</b>	<b>12624.12</b>	<b>12769.53</b>	<b>12927.72</b>	<b>13098.96</b>	<b>13282.33</b>	<b>13474.77</b>	<b>13669.98</b>	<b>13859.10</b>	<b>14046.70</b>	<b>14230.72</b>	<b>0.7%</b>
<b>Commercial Light Trucks 2/</b>	<b>10026.70</b>	<b>10161.20</b>	<b>10290.51</b>	<b>10418.94</b>	<b>10548.23</b>	<b>10680.55</b>	<b>10816.36</b>	<b>10957.66</b>	<b>11104.11</b>	<b>11253.41</b>	<b>11406.86</b>	<b>11563.42</b>	<b>2.4%</b>

Table 52. Transportation Fleet Car and Truck Stock by Type and Technology  
(thousands)

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2002 (Washington, DC, November 2003); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, (April 23, 1997); Energy Information Administration (EIA), Describing Current and Potential Markets for Alternative-Fuel Vehicles, DOE/EIA-0604(96) (Washington, DC, March 1996); EIA, Alternatives to Traditional Transportation Fuels 2004, <http://www.eia.doe.gov/fuelrenewable.html>; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 53. Transportation Fleet Car and Truck Vehicle Miles Traveled by Type and Technology  
(billion miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cars 1/</b>														
Conventional Gasoline	128.10	126.09	121.43	122.14	125.46	127.86	128.59	126.95	125.56	124.38	123.41	122.70	121.70	120.90
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol														
Flex	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	5.48	6.91	7.39	7.63	7.78	7.92	7.98	7.93	7.85	7.78	7.71	7.66	7.60	7.55
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	0.84	1.03	1.19	1.28	1.30	1.31	1.33	1.33	1.32	1.31	1.30	1.28	1.27	1.27
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	2.97	3.83	4.46	4.80	4.87	4.94	4.99	4.98	4.95	4.90	4.86	4.82	4.78	4.76
Electric	0.19	0.23	0.25	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.24	0.24
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Fleet Cars	137.64	138.11	134.72	136.09	139.65	142.28	143.14	141.44	139.94	138.62	137.52	136.71	135.60	134.72
<b>Light Trucks 1/</b>														
Conventional Gasoline	93.49	87.54	80.10	77.70	77.08	76.68	76.73	77.87	80.52	82.82	84.80	86.43	87.55	88.60
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Methanol														
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ethanol														
Flex	5.14	6.81	8.40	8.60	8.51	8.48	8.48	8.59	8.84	9.10	9.33	9.51	9.64	9.76
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas Bi-fuel	2.37	2.79	3.17	3.08	3.05	3.04	3.04	3.08	3.18	3.27	3.35	3.42	3.46	3.50
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Petroleum Gas Bi-fuel	6.97	8.70	10.35	10.29	10.21	10.16	10.16	10.30	10.64	10.94	11.21	11.43	11.58	11.72
Electric	0.22	0.28	0.34	0.35	0.35	0.35	0.35	0.35	0.36	0.37	0.38	0.39	0.39	0.40
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell														
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Fleet Light Truck	108.19	106.13	102.37	100.01	99.21	98.70	98.76	100.19	103.55	106.51	109.07	111.18	112.63	113.99
Total Fleet Vehicles	245.83	244.24	237.09	236.10	238.86	240.98	241.90	241.63	243.49	245.13	246.60	247.88	248.23	248.70
Commercial Light Trucks 2/	65.78	68.73	70.19	71.47	72.74	74.05	75.35	76.79	78.40	79.97	81.49	83.18	84.92	86.67

Table 53. Transportation Fleet Car and Truck Vehicle Miles Traveled by Type and Technology  
(billion miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cars 1/</b>															
Conventional Gasoline	120.45	120.46	120.76	121.23	121.87	122.65	123.60	124.62	125.67	126.76	127.82	128.81	129.80	130.75	0.1%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol															
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-21.0%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol															
Flex	7.52	7.51	7.53	7.55	7.59	7.64	7.69	7.75	7.82	7.89	7.95	8.01	8.08	8.14	0.6%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	1.26	1.26	1.26	1.26	1.27	1.28	1.28	1.29	1.31	1.32	1.33	1.34	1.35	1.36	1.1%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	4.73	4.73	4.73	4.74	4.76	4.79	4.82	4.86	4.90	4.94	4.98	5.02	5.06	5.10	1.1%
Electric	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.5%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Cars</b>	<b>134.21</b>	<b>134.20</b>	<b>134.51</b>	<b>135.03</b>	<b>135.73</b>	<b>136.60</b>	<b>137.64</b>	<b>138.77</b>	<b>139.95</b>	<b>141.16</b>	<b>142.34</b>	<b>143.45</b>	<b>144.54</b>	<b>145.61</b>	<b>0.2%</b>
<b>Light Trucks 1/</b>															
Conventional Gasoline	89.70	90.97	92.26	93.64	95.15	96.73	98.37	100.16	102.10	104.15	106.25	108.31	110.35	112.36	1.0%
Distillate	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Methanol															
Flex	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-8.2%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Ethanol															
Flex	9.88	10.02	10.16	10.31	10.48	10.65	10.83	11.03	11.24	11.46	11.70	11.92	12.15	12.37	2.3%
Neat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compressed Natural Gas Bi-fuel	3.55	3.60	3.65	3.70	3.76	3.83	3.89	3.96	4.04	4.12	4.20	4.28	4.36	4.44	1.8%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas Bi-fuel	11.87	12.03	12.20	12.39	12.58	12.79	13.01	13.25	13.50	13.77	14.05	14.32	14.59	14.86	2.1%
Electric	0.40	0.41	0.41	0.42	0.43	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.49	0.50	2.2%
Electric-Diesel Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electric-Gasoline Hybrid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell															
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Fleet Light Truck</b>	<b>115.40</b>	<b>117.03</b>	<b>118.69</b>	<b>120.46</b>	<b>122.40</b>	<b>124.43</b>	<b>126.55</b>	<b>128.84</b>	<b>131.34</b>	<b>133.97</b>	<b>136.68</b>	<b>139.32</b>	<b>141.95</b>	<b>144.53</b>	<b>1.2%</b>
<b>Total Fleet Vehicles</b>	<b>249.61</b>	<b>251.22</b>	<b>253.20</b>	<b>255.49</b>	<b>258.13</b>	<b>261.03</b>	<b>264.19</b>	<b>267.62</b>	<b>271.29</b>	<b>275.13</b>	<b>279.01</b>	<b>282.77</b>	<b>286.49</b>	<b>290.14</b>	<b>0.7%</b>
<b>Commercial Light Trucks 2/</b>															
	88.51	90.36	92.06	93.75	95.50	97.31	99.19	101.19	103.33	105.58	107.81	109.97	112.20	114.56	2.0%

Table 53. Transportation Fleet Car and Truck Vehicle Miles Traveled by Type and Technology  
(billion miles)

1/ Includes all fleets of 10 or more.

2/ Commercial trucks from 8,500 to 10,000 pounds.

ICE = Internal combustion engine.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Oak Ridge National Laboratory, "Fleet Vehicles in the United States: Composition, Operating Characteristics, and Fueling Practices," prepared for the Department of Energy, Office of Transportation Technologies, and Office of Policy, Planning, and Analysis (Oak Ridge, TN, March 1992); Bobit Publishing Company, Fleet Fact Book, various issues (Redondo Beach, California); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Development of the Light Commercial Truck Model, Final Report, Subtask 19-2, (April 23, 1997); and Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 54. Air Travel Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cost (1987 dollars per million Btu)	4.5	6.1	8.5	8.7	7.1	7.0	6.7	6.5	6.6	6.6	6.5	6.6	6.6	6.7
Yield-domestic (ticket price) 1/	10.9	10.4	11.0	10.8	10.1	9.8	9.4	9.1	8.8	8.5	8.2	7.9	7.7	7.4
Yield-international (1996 dollars) 1/	9.0	9.2	9.1	8.8	8.3	8.0	7.8	7.5	7.2	7.0	6.8	6.5	6.3	6.1
Travel Demand (billion miles)														
Revenue Passenger Miles, Domestic	465.4	493.3	491.5	495.2	503.5	520.9	538.9	561.8	582.7	594.4	605.7	618.1	629.9	641.3
Load Factor, Domestic 2/	0.73	0.75	0.75	0.75	0.75	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.78
Revenue Passenger Miles, International	155.1	174.3	189.7	205.4	219.1	233.9	249.1	264.1	278.8	287.2	295.4	302.5	310.4	318.9
Load Factor, International 2/	0.75	0.78	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Revenue Ton Miles, Freight (billion)	27.4	29.4	29.3	31.6	35.4	36.4	37.9	40.4	43.2	46.2	49.2	52.2	55.2	58.6
Seat Miles Demanded (billion)														
Narrow Body Aircraft	919.4	980.3	990.1	1015.3	1046.3	1091.7	1138.6	1192.4	1240.5	1266.3	1291.0	1315.6	1340.2	1365.0
Wide Body Aircraft	564.1	600.7	597.7	605.4	618.9	642.4	666.8	697.0	723.3	737.8	751.6	766.4	780.7	794.6
Regional Jets	261.2	296.2	308.5	324.0	337.7	355.0	372.7	390.4	405.9	413.6	420.8	426.6	433.2	439.3
Aircraft Sales	94.1	83.4	83.9	85.9	89.7	94.3	99.2	105.0	111.3	115.0	118.6	122.6	126.4	131.1
Narrow Body Aircraft	98.0	125.0	205.0	211.5	214.3	214.5	210.4	201.5	194.0	195.0	197.1	200.9	205.6	211.6
Wide Body Aircraft	30.0	18.0	53.3	55.5	56.7	57.3	56.6	54.7	53.1	53.9	54.9	56.4	58.2	60.4
Regional Jets	303.0	286.0	151.7	156.0	157.6	157.3	153.7	146.8	140.9	141.2	142.2	144.5	147.4	151.2
Total Aircraft Sales	431.0	429.0	410.1	423.0	428.5	429.1	420.7	402.9	388.1	390.0	394.3	401.7	411.3	423.2
Aircraft Stock														
Narrow Body Aircraft	4894.0	4822.0	5063.8	5132.4	5206.3	5282.9	5358.0	5426.6	5489.3	5554.0	5619.5	5687.1	5761.1	5844.5
Wide Body Aircraft	1394.0	1381.0	1387.3	1400.8	1412.8	1422.8	1429.6	1432.4	1433.3	1435.3	1439.5	1445.7	1454.6	1466.7
Regional Jets	1586.0	1843.0	1435.9	1585.3	1735.3	1883.9	2027.9	2163.8	2292.4	2419.9	2547.6	2676.0	2805.4	2936.3
Total Aircraft Stock	7874.0	8046.0	7887.0	8118.5	8354.3	8589.6	8815.6	9022.7	9215.0	9409.2	9606.7	9808.8	10021.0	10247.5
Aircraft Active Stock														
Narrow Body Aircraft	4065.0	3876.0	3830.4	3846.9	3895.7	4000.8	4109.1	4248.1	4363.4	4411.9	4456.1	4497.2	4514.5	4533.4
Wide Body Aircraft	1090.0	712.0	735.8	766.4	792.4	826.4	860.6	894.4	922.8	932.9	941.9	947.7	955.0	961.3
Regional Jets	1530.0	1200.0	1307.4	1423.6	1537.6	1645.7	1744.0	1828.5	1899.7	1962.7	2017.9	2065.8	2107.0	2142.2
Total Active Stock	6685.0	5788.0	5873.5	6037.0	6225.8	6473.0	6713.7	6971.0	7185.9	7307.4	7415.8	7510.8	7576.5	7637.0
Aircraft Parked Stock														
Narrow Body Aircraft	829.0	577.0	61.9	121.9	161.4	165.0	158.6	112.8	63.4	60.0	30.6	0.0	0.0	0.0
Wide Body Aircraft	304.0	237.0	121.4	102.5	89.5	75.5	60.1	49.0	41.8	51.2	65.1	77.6	94.8	118.3
Regional Jets	56.0	90.0	128.6	161.6	197.6	238.2	283.9	335.3	392.7	457.2	529.7	610.2	698.4	794.1
Total Parked Stock	1189.0	904.0	311.9	386.1	448.5	478.6	502.6	497.0	497.9	568.4	625.5	687.7	793.2	912.4
Aircraft Cargo Stock														
Narrow Body Aircraft	537.0	549.0	1171.4	1163.6	1149.1	1117.1	1090.4	1065.7	1062.6	1082.1	1132.9	1189.9	1246.6	1311.1
Wide Body Aircraft	430.0	424.0	530.2	531.8	530.9	520.9	508.9	489.0	468.6	451.3	432.5	420.4	404.7	387.0
Total Cargo Stock	967.0	973.0	1701.6	1695.5	1680.0	1638.0	1599.2	1554.8	1531.2	1533.4	1565.4	1610.3	1651.3	1698.1

Table 54. Air Travel Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Advanced Technology Penetration</b>														
Ultra-high Bypass	0.00	0.00	0.00	0.00	0.00	0.22	0.32	0.43	0.62	0.77	0.87	0.93	0.97	0.98
Propfan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Thermodynamics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hybrid Laminar Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Advanced Aerodynamics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Weight Reducing Materials	0.00	0.00	0.01	0.02	0.04	0.08	0.14	0.25	0.40	0.57	0.73	0.85	0.92	0.96
<b>New Aircraft Efficiency 3/</b>														
Narrow Body Aircraft	64.5	64.9	64.9	65.0	65.2	67.0	68.2	70.0	72.8	75.4	77.5	79.1	80.0	80.5
Wide Body Aircraft	62.9	63.2	63.3	63.4	63.6	65.4	66.6	68.4	71.1	73.7	75.8	77.3	78.2	78.8
Regional Jets	42.5	42.7	42.8	42.9	43.0	44.2	45.0	46.2	48.0	49.7	51.1	52.1	52.7	53.1
Average Aircraft	62.5	63.4	63.4	63.4	63.4	65.0	66.0	67.5	70.0	73.0	75.0	77.0	78.0	78.5
<b>Aircraft Stock Efficiency 3/</b>														
Narrow Body Aircraft	57.6	57.9	58.6	59.3	59.9	60.5	61.0	61.5	62.1	62.8	63.6	64.5	65.5	66.5
Wide Body Aircraft	56.3	56.4	57.8	58.4	59.0	59.7	60.3	60.9	61.6	62.6	63.7	64.8	66.0	67.2
Regional Jets	41.5	41.7	41.6	41.8	41.9	42.1	42.4	42.7	43.0	43.5	44.0	44.5	45.1	45.7
Average Aircraft	55.3	55.5	56.4	57.0	57.5	58.0	58.5	59.0	59.6	60.3	61.1	62.0	63.0	63.9
<b>Fuel Consumption (trillion Btu)</b>														
<b>Commercial</b>														
Jet Fuel	2726.4	2792.1	2780.8	2854.4	2971.2	3056.2	3155.4	3287.4	3413.0	3482.2	3543.3	3599.4	3650.4	3708.4
Aviation Gasoline	30.0	31.0	33.0	29.0	30.1	29.9	29.7	29.6	29.5	29.4	29.4	29.3	29.2	29.2
<b>Military</b>														
Jet Fuel	538.6	562.9	581.1	594.7	599.7	602.2	604.1	605.8	609.2	612.6	615.8	619.2	622.7	626.6

Table 54. Air Travel Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Fuel Cost (1987 dollars per million Btu)	6.7	6.9	6.9	7.0	7.1	7.2	7.2	7.2	7.3	7.4	7.5	7.6	7.7	7.7	0.9%
Yield-domestic (ticket price) 1/	7.1	6.9	6.6	6.4	6.3	6.3	6.3	6.3	6.3	6.2	6.2	6.2	6.2	6.1	-2.0%
Yield-international (1996 dollars) 1/	5.8	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.5	-1.9%
Travel Demand (billion miles)															
Revenue Passenger Miles, Domestic	652.2	662.4	671.1	671.8	672.2	672.6	673.0	673.6	674.4	675.4	676.8	678.4	680.4	682.8	1.3%
Load Factor, Domestic 2/	0.78	0.78	0.78	0.79	0.79	0.79	0.79	0.80	0.80	0.80	0.81	0.81	0.81	0.81	0.3%
Revenue Passenger Miles, International	328.2	338.6	350.7	360.4	370.6	380.9	391.2	401.5	411.7	421.7	431.6	441.4	450.9	460.2	3.8%
Load Factor, International 2/	0.79	0.79	0.79	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.1%
Revenue Ton Miles, Freight (billion)	62.6	66.0	68.8	71.6	74.4	77.1	79.9	82.8	85.7	88.7	91.8	94.9	98.3	101.7	4.9%
Seat Miles Demanded (billion)															
Narrow Body Aircraft	1390.1	1415.5	1441.0	1451.8	1462.7	1473.7	1484.7	1495.8	1506.9	1518.7	1530.6	1542.6	1554.8	1567.1	1.8%
Wide Body Aircraft	808.2	821.2	833.0	835.4	837.5	839.0	841.1	843.4	845.9	848.6	851.6	854.9	858.6	862.5	1.4%
Regional Jets	447.2	455.9	466.4	472.3	479.6	487.6	495.0	504.3	513.4	522.2	530.9	539.3	547.6	555.5	2.4%
Aircraft Sales	134.8	138.3	141.6	144.2	145.6	147.1	148.5	148.1	147.7	147.8	148.1	148.3	148.7	149.1	2.3%
Narrow Body Aircraft	217.8	222.2	222.7	229.1	235.0	240.8	246.8	253.3	260.3	267.2	273.6	279.0	284.9	290.8	3.3%
Wide Body Aircraft	62.7	64.4	65.1	67.5	69.8	72.1	74.4	77.0	79.7	82.4	85.0	87.4	89.8	93.1	6.5%
Regional Jets	155.2	157.7	157.6	161.6	165.2	168.7	172.4	176.3	180.6	184.8	188.6	191.7	195.0	197.8	-1.4%
Total Aircraft Sales	435.6	444.3	445.4	458.3	470.1	481.6	493.6	506.6	520.5	534.4	547.1	558.1	569.8	581.6	1.2%
Aircraft Stock															
Narrow Body Aircraft	5934.7	6024.7	6110.0	6196.0	6283.3	6372.3	6463.8	6558.5	6656.9	6760.3	6869.2	6981.4	7098.5	7218.1	1.6%
Wide Body Aircraft	1480.7	1495.7	1510.6	1528.1	1549.0	1573.2	1599.9	1630.1	1662.9	1698.0	1734.9	1773.0	1813.1	1855.1	1.1%
Regional Jets	3068.8	3201.2	3330.5	3460.7	3591.1	3721.2	3850.8	3980.0	4108.8	4236.7	4363.2	4487.2	4608.8	4726.8	3.7%
Total Aircraft Stock	10484.2	10721.6	10951.1	11184.8	11423.4	11666.7	11914.6	12168.6	12428.6	12695.0	12967.3	13241.7	13520.4	13800.1	2.1%
Aircraft Active Stock															
Narrow Body Aircraft	4564.3	4603.6	4684.3	4680.6	4660.2	4637.2	4617.6	4599.0	4581.7	4565.7	4551.0	4537.8	4526.1	4515.7	0.6%
Wide Body Aircraft	971.2	982.9	998.1	1007.4	1018.9	1033.7	1051.7	1072.3	1095.1	1120.1	1147.5	1177.4	1209.9	1245.4	2.2%
Regional Jets	2171.7	2194.7	2209.4	2220.9	2230.2	2238.6	2247.9	2259.9	2276.2	2297.5	2323.9	2354.7	2389.7	2427.7	2.7%
Total Active Stock	7707.2	7781.2	7891.9	7908.9	7909.3	7909.5	7917.3	7931.3	7953.0	7983.3	8022.4	8069.9	8125.7	8188.9	1.3%
Aircraft Parked Stock															
Narrow Body Aircraft	0.0	0.0	0.0	117.2	266.9	436.2	606.2	728.4	786.5	828.9	851.7	928.9	1020.0	1114.7	2.6%
Wide Body Aircraft	136.2	148.0	158.9	189.8	223.4	254.8	278.9	296.6	300.8	301.0	306.7	319.7	328.2	332.7	1.3%
Regional Jets	897.1	1006.5	1121.1	1239.8	1360.9	1482.6	1602.9	1720.1	1832.6	1939.2	2039.2	2132.6	2219.1	2299.2	13.3%
Total Parked Stock	1033.3	1154.5	1280.0	1546.8	1851.2	2173.7	2488.0	2745.1	2919.9	3069.1	3197.7	3381.2	3567.3	3746.6	5.6%
Aircraft Cargo Stock															
Narrow Body Aircraft	1370.4	1421.2	1425.6	1398.2	1356.2	1298.9	1240.0	1231.1	1288.7	1365.7	1466.4	1514.7	1552.4	1587.6	4.2%
Wide Body Aircraft	373.2	364.7	353.6	330.9	306.7	284.6	269.3	261.1	267.0	276.9	280.8	275.9	274.9	277.0	-1.6%
Total Cargo Stock	1743.6	1785.9	1779.2	1729.1	1662.9	1583.5	1509.3	1492.1	1555.7	1642.6	1747.2	1790.6	1827.3	1864.6	2.5%

Table 54. Air Travel Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Advanced Technology Penetration</b>															
Ultra-high Bypass	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	26.0%
Propfan	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Thermodynamics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Hybrid Laminar Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Advanced Aerodynamics	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Weight Reducing Materials	0.98	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	22.6%
<b>New Aircraft Efficiency 3/</b>															
Narrow Body Aircraft	80.8	80.9	81.0	81.0	81.0	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.1	81.2	0.9%
Wide Body Aircraft	79.0	79.2	79.3	79.4	79.4	79.4	79.5	79.5	79.5	79.5	79.5	79.5	79.6	79.6	0.9%
Regional Jets	53.2	53.3	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	53.4	0.9%
Average Aircraft	70.3	70.4	70.6	70.6	70.6	70.5	70.5	70.5	70.4	70.4	70.3	70.3	70.2	70.1	0.7%
<b>Aircraft Stock Efficiency 3/</b>															
Narrow Body Aircraft	67.5	68.5	69.3	70.4	71.4	72.5	73.5	74.6	75.7	76.8	77.8	78.8	79.6	80.1	1.3%
Wide Body Aircraft	68.3	69.4	70.4	71.5	72.6	73.6	74.6	75.5	76.3	77.1	77.7	78.3	78.7	79.0	1.3%
Regional Jets	46.3	46.9	47.5	48.1	48.7	49.3	49.9	50.5	51.0	51.5	51.9	52.2	52.5	52.8	0.9%
Average Aircraft	64.8	65.8	66.6	67.6	68.6	69.6	70.5	71.5	72.4	73.4	74.2	75.0	75.6	76.0	1.2%
<b>Fuel Consumption (trillion Btu)</b>															
<b>Commercial</b>															
Jet Fuel	3776.6	3831.6	3878.7	3890.0	3902.6	3914.8	3928.0	3940.8	3955.8	3974.3	3997.6	4028.1	4068.0	4117.7	1.5%
Aviation Gasoline	29.2	29.1	29.1	29.1	29.1	29.1	29.1	29.0	29.0	29.0	29.0	29.0	29.0	29.0	-0.3%
<b>Military</b>															
Jet Fuel	630.8	634.8	638.6	642.1	645.4	648.6	651.6	654.5	657.3	660.0	662.6	665.1	667.6	670.0	0.7%

Table 54. Air Travel Energy Use

1/ Fraction of seats filled.

2/ 1992 cents per passenger mile.

3/ Seat miles per gallon.

Btu = British thermal unit.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Model Maintenance Re-Estimation of the AirTravel Demand Model, Subtask 22-1(a), (September 30, 1997); Federal Aviation Administration (FAA), FAA Aviation Forecasts, Fiscal Years 1998-2009, FAA-APO 98-1, and previous editions; United States Department of Transportation (DOT), Research and Special Programs Administration (RSPA), Fuel Cost and Consumption Tables, annual summaries, 1979-1990; U.S. Department of Transportation, RSPA, Air Carrier Financial Statistics Quarterly, December 1999/1998; U.S. Department of Transportation, RSPA, Air Carrier Statistics Monthly, December 1999/1998 (Washington, DC, 1999); Greene, D.L., "Energy Efficiency Improvement Potential of Commercial Aircraft to 2010," ORNL-6622, 6/1990; Rathi, A. B. Peterson, and D. Greene, Air Transport Energy Use Model, Oak Ridge National Laboratory, April 1991, Draft; Energy Information Administration (EIA), State Energy Data Report 2001, DOE/EIA-0214(2001) (Washington, DC, December 2004); Department of Defense, Defense Energy Support Center, Fact Book: Fiscal Year 1999; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 55. Freight Transportation Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Existing Trucks by Size Class														
Vehicle Miles Traveled (billion miles)														
Medium														
Diesel	33.51	34.76	34.89	35.47	36.39	37.19	38.18	39.27	40.42	41.50	42.51	43.60	44.77	45.98
Gasoline	14.73	14.79	14.51	14.20	13.97	13.70	13.51	13.40	13.42	13.46	13.52	13.60	13.72	13.86
Liquefied Petroleum Gas	0.41	0.40	0.40	0.42	0.44	0.47	0.50	0.53	0.57	0.60	0.62	0.65	0.68	0.70
Compressed Natural Gas	0.09	0.13	0.19	0.26	0.35	0.45	0.56	0.68	0.80	0.92	1.04	1.16	1.28	1.39
Medium Subtotal	48.75	50.07	50.00	50.35	51.16	51.81	52.75	53.88	55.21	56.48	57.70	59.01	60.44	61.92
Heavy														
Diesel	165.58	173.76	177.52	183.41	189.40	194.08	198.92	204.06	209.19	214.00	218.57	223.35	228.42	233.64
Gasoline	1.83	1.89	1.92	1.96	1.98	2.00	2.02	2.05	2.09	2.13	2.17	2.21	2.26	2.32
Liquefied Petroleum Gas	0.06	0.09	0.12	0.15	0.17	0.20	0.22	0.23	0.24	0.25	0.26	0.26	0.26	0.27
Compressed Natural Gas	0.08	0.13	0.19	0.27	0.36	0.45	0.53	0.62	0.70	0.77	0.84	0.89	0.95	1.00
Heavy Subtotal	167.55	175.86	179.75	185.79	191.92	196.72	201.69	206.95	212.22	217.15	221.83	226.72	231.89	237.22
Total Vehicle Miles Traveled	216.30	225.93	229.74	236.13	243.07	248.52	254.44	260.84	267.43	273.63	279.52	285.73	292.34	299.15
Consumption (trillion Btu)														
Medium														
Diesel	505.80	522.53	522.90	530.40	543.42	554.86	569.33	585.32	602.30	618.07	632.83	648.50	665.37	682.80
Gasoline	216.38	216.40	211.76	206.63	202.84	198.43	195.28	193.27	193.06	193.18	193.49	194.25	195.38	196.66
Liquefied Petroleum Gas	7.86	7.57	7.40	7.48	7.78	8.11	8.56	9.04	9.51	9.94	10.32	10.69	11.05	11.43
Compressed Natural Gas	1.41	2.07	2.96	4.11	5.52	7.09	8.83	10.68	12.62	14.53	16.40	18.24	20.07	21.83
Medium Subtotal	731.46	748.57	745.02	748.62	759.55	768.48	782.01	798.30	817.48	835.72	853.04	871.68	891.88	912.72
Heavy														
Diesel	3737.92	3910.54	3986.43	4114.19	4246.24	4350.17	4457.53	4568.50	4673.53	4764.08	4838.75	4906.34	4970.48	5034.30
Gasoline	32.19	32.99	33.43	33.84	34.22	34.40	34.66	35.05	35.65	36.25	36.86	37.53	38.30	39.15
Liquefied Petroleum Gas	1.11	1.51	2.00	2.52	2.99	3.37	3.71	3.98	4.17	4.31	4.40	4.48	4.56	4.65
Compressed Natural Gas	1.38	2.19	3.31	4.70	6.18	7.69	9.19	10.65	12.02	13.26	14.37	15.37	16.29	17.14
Heavy Subtotal	3772.59	3947.23	4025.17	4155.24	4289.63	4395.63	4505.09	4618.17	4725.37	4817.90	4894.38	4963.72	5029.64	5095.24
Medium and Heavy Total														
Diesel	4243.72	4433.07	4509.33	4644.58	4789.66	4905.03	5026.86	5153.83	5275.83	5382.15	5471.58	5554.84	5635.86	5717.10
Gasoline	248.57	249.39	245.19	240.47	237.06	232.83	229.95	228.32	228.71	229.43	230.35	231.78	233.68	235.81
Liquefied Petroleum Gas	8.98	9.08	9.40	10.00	10.76	11.48	12.28	13.01	13.68	14.24	14.72	15.17	15.61	16.07
Compressed Natural Gas	2.79	4.26	6.27	8.81	11.69	14.77	18.02	21.32	24.64	27.79	30.77	33.61	36.36	38.98
Total	4504.05	4695.80	4770.19	4903.87	5049.18	5164.11	5287.10	5416.48	5542.85	5653.62	5747.42	5835.40	5921.51	6007.96

Table 55. Freight Transportation Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Efficiency (gasoline equivalent MPG)														
Medium														
Diesel	8.33	8.36	8.38	8.39	8.40	8.41	8.42	8.42	8.43	8.43	8.43	8.44	8.44	8.44
Gasoline	8.51	8.53	8.56	8.58	8.60	8.62	8.65	8.67	8.69	8.71	8.74	8.76	8.79	8.82
Liquefied Petroleum Gas	6.57	6.68	6.82	6.94	7.06	7.16	7.25	7.33	7.40	7.46	7.51	7.55	7.60	7.64
Compressed Natural Gas	7.80	7.86	7.89	7.90	7.91	7.92	7.93	7.94	7.95	7.96	7.97	7.97	7.98	7.98
Medium Average	8.37	8.39	8.41	8.43	8.44	8.45	8.46	8.47	8.48	8.48	8.49	8.49	8.50	8.51
Heavy														
Diesel	5.54	5.56	5.57	5.58	5.58	5.58	5.58	5.59	5.60	5.62	5.65	5.69	5.75	5.80
Gasoline	7.12	7.16	7.20	7.23	7.25	7.27	7.29	7.31	7.33	7.34	7.36	7.37	7.39	7.40
Liquefied Petroleum Gas	7.11	7.17	7.20	7.22	7.24	7.24	7.25	7.25	7.26	7.26	7.26	7.26	7.26	7.27
Compressed Natural Gas	7.18	7.21	7.24	7.25	7.26	7.26	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27
Heavy Average	5.55	5.57	5.59	5.59	5.60	5.60	5.60	5.60	5.62	5.64	5.67	5.71	5.77	5.82
Average	6.01	6.02	6.02	6.02	6.02	6.02	6.02	6.02	6.03	6.05	6.08	6.12	6.17	6.23
Stock (millions)														
Medium														
Diesel	2.12	2.20	2.28	2.36	2.44	2.51	2.58	2.64	2.70	2.75	2.80	2.85	2.90	2.96
Gasoline	1.97	1.93	1.90	1.87	1.84	1.81	1.78	1.75	1.72	1.70	1.67	1.64	1.62	1.61
Liquefied Petroleum Gas	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06
Compressed Natural Gas	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.07	0.08	0.09
Medium Subtotal	4.14	4.19	4.25	4.30	4.35	4.40	4.45	4.49	4.53	4.56	4.59	4.62	4.67	4.71
Heavy														
Diesel	4.30	4.44	4.61	4.77	4.91	5.04	5.16	5.27	5.36	5.45	5.54	5.63	5.71	5.80
Gasoline	0.34	0.33	0.32	0.31	0.30	0.29	0.29	0.28	0.27	0.27	0.27	0.26	0.26	0.26
Liquefied Petroleum Gas	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Compressed Natural Gas	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05
Heavy Subtotal	4.65	4.78	4.94	5.10	5.23	5.36	5.47	5.58	5.68	5.77	5.86	5.94	6.04	6.13
Total Stock	8.79	8.96	9.18	9.40	9.58	9.75	9.92	10.07	10.21	10.33	10.45	10.57	10.70	10.84
New Trucks by Size Class														
Fuel Efficiency (gasoline equivalent MPG)														
Medium														
Diesel	8.59	8.52	8.51	8.50	8.49	8.48	8.47	8.47	8.46	8.46	8.46	8.46	8.46	8.46
Gasoline	8.97	8.95	8.94	8.94	8.93	8.95	8.97	8.99	9.01	9.03	9.06	9.10	9.14	9.19
Liquefied Petroleum Gas	8.00	7.98	7.97	7.95	7.94	7.95	7.97	7.98	7.99	8.00	8.00	8.00	8.00	8.00
Compressed Natural Gas	7.97	7.95	7.94	7.94	7.93	7.95	7.97	7.98	7.99	8.00	8.00	8.00	8.00	8.00
Medium Average	8.66	8.60	8.59	8.57	8.56	8.55	8.54	8.54	8.54	8.54	8.55	8.55	8.56	8.57
Heavy														
Diesel	5.69	5.65	5.63	5.60	5.60	5.59	5.61	5.64	5.71	5.80	5.92	6.06	6.17	6.23
Gasoline	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Liquefied Petroleum Gas	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28
Compressed Natural Gas	7.27	7.27	7.28	7.28	7.28	7.28	7.28	7.28	7.27	7.27	7.28	7.28	7.28	7.28
Heavy Average	5.71	5.66	5.64	5.62	5.62	5.62	5.63	5.67	5.74	5.82	5.94	6.08	6.19	6.25
Average	6.10	6.02	5.99	5.96	5.97	5.97	5.99	6.03	6.09	6.17	6.28	6.41	6.52	6.57

Table 55. Freight Transportation Energy Use

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Sales (millions)														
Medium														
Diesel	0.12	0.14	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17
Gasoline	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Medium Subtotal	0.18	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.24	0.25
Heavy														
Diesel	0.24	0.31	0.35	0.35	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.33	0.34	0.35
Gasoline	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compressed Natural Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
Heavy Subtotal	0.25	0.32	0.36	0.37	0.35	0.35	0.35	0.34	0.34	0.34	0.34	0.35	0.36	0.36
Total Sales	0.42	0.53	0.59	0.59	0.57	0.57	0.58	0.57	0.57	0.56	0.57	0.58	0.60	0.61
Railroads														
Ton Miles by Rail (billion)	1489.02	1539.44	1552.17	1594.69	1635.60	1662.05	1698.42	1721.13	1757.72	1780.00	1794.67	1808.96	1825.44	1859.71
Fuel Efficiency (ton miles per thousand Btu)	2.90	2.90	2.91	2.91	2.91	2.92	2.92	2.92	2.92	2.93	2.93	2.93	2.94	2.94
Fuel Consumption (trillion Btu)														
Distillate (diesel)	513.20	530.05	533.90	547.95	561.41	569.89	581.76	588.92	600.82	607.79	612.16	616.38	621.33	632.32
Residual Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Domestic Shipping														
Ton Miles Shipping (billion)	597.44	629.23	649.20	659.93	665.19	670.89	678.80	683.13	692.21	700.51	710.40	717.61	727.34	740.13
Fuel Efficiency (ton miles per thousand Btu)	2.13	2.13	2.14	2.14	2.14	2.15	2.15	2.16	2.16	2.17	2.17	2.17	2.18	2.18
Fuel Consumption (trillion Btu)														
Distillate (diesel)	202.73	215.30	216.25	219.37	221.97	224.79	228.41	230.90	233.49	235.80	238.64	240.57	243.32	247.09
Residual Oil	78.28	80.38	87.70	88.96	88.21	87.52	87.09	86.18	87.15	88.01	89.07	89.79	90.82	92.23
Motor Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
International Shipping														
Gross Trade (billion 2000 \$)	2069.78	2278.46	2432.97	2581.23	2749.35	2948.21	3141.66	3336.37	3542.48	3767.37	3999.61	4250.25	4520.91	4810.57
Exports (billion 2000 dollars)	719.75	783.55	840.32	905.13	1007.81	1124.16	1231.96	1340.38	1463.91	1598.44	1737.68	1883.09	2036.57	2213.91
Imports (billion 2000 dollars)	1350.03	1494.91	1592.65	1676.10	1741.54	1824.05	1909.70	1996.00	2078.57	2168.94	2261.93	2367.16	2484.34	2596.66
Fuel Consumption (trillion Btu)														
Distillate (diesel)	35.32	39.40	39.22	39.28	39.40	39.53	39.65	39.77	39.83	39.89	39.95	40.00	40.06	40.12
Residual Oil	472.53	509.64	551.08	551.85	542.51	533.21	523.81	514.34	515.08	515.83	516.57	517.31	518.07	518.83



Table 55. Freight Transportation Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Existing Trucks by Size Class</b>															
<b>Vehicle Miles Traveled (billion miles)</b>															
<b>Medium</b>															
Diesel	47.27	48.63	49.94	51.30	52.74	54.25	55.80	57.38	59.02	60.73	62.46	64.20	65.98	67.78	2.6%
Gasoline	14.02	14.21	14.41	14.63	14.89	15.17	15.48	15.80	16.14	16.50	16.88	17.26	17.66	18.07	0.8%
Liquefied Petroleum Gas	0.73	0.76	0.78	0.81	0.83	0.86	0.88	0.90	0.92	0.93	0.95	0.97	0.98	0.99	3.5%
Compressed Natural Gas	1.50	1.61	1.70	1.80	1.88	1.97	2.06	2.14	2.21	2.29	2.37	2.44	2.51	2.58	12.2%
Medium Subtotal	63.53	65.21	66.83	68.53	70.34	72.25	74.21	76.21	78.29	80.46	82.66	84.86	87.12	89.42	2.3%
<b>Heavy</b>															
Diesel	239.40	245.31	250.55	255.58	260.80	266.27	271.89	277.73	283.99	290.73	297.61	304.41	311.35	318.50	2.4%
Gasoline	2.38	2.45	2.51	2.57	2.64	2.72	2.79	2.87	2.96	3.05	3.14	3.24	3.33	3.44	2.3%
Liquefied Petroleum Gas	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.31	5.0%
Compressed Natural Gas	1.04	1.08	1.11	1.14	1.15	1.17	1.19	1.21	1.24	1.26	1.29	1.31	1.34	1.36	9.6%
Heavy Subtotal	243.10	249.13	254.46	259.58	264.89	270.46	276.17	282.11	288.48	295.33	302.34	309.26	316.32	323.61	2.4%
Total Vehicle Miles Traveled	306.63	314.33	321.29	328.11	335.24	342.71	350.38	358.32	366.77	375.79	385.00	394.12	403.45	413.02	2.3%
<b>Consumption (trillion Btu)</b>															
<b>Medium</b>															
Diesel	701.54	721.15	740.11	759.80	780.42	802.09	824.30	846.98	868.61	891.35	914.35	934.26	954.83	975.76	2.4%
Gasoline	198.34	200.35	202.39	204.86	207.87	211.32	215.03	218.96	223.21	227.80	232.55	237.43	242.58	247.94	0.5%
Liquefied Petroleum Gas	11.83	12.24	12.62	12.97	13.32	13.63	13.93	14.20	14.40	14.60	14.82	14.96	15.09	15.22	2.7%
Compressed Natural Gas	23.56	25.20	26.70	28.13	29.51	30.87	32.18	33.46	34.66	35.87	37.06	38.16	39.26	40.34	12.1%
Medium Subtotal	935.27	958.95	981.82	1005.76	1031.12	1057.92	1085.44	1113.59	1140.88	1169.62	1198.78	1224.82	1251.76	1279.26	2.1%
<b>Heavy</b>															
Diesel	5105.01	5177.26	5239.11	5300.85	5369.83	5441.96	5519.49	5603.48	5688.42	5784.97	5886.96	5989.75	6097.94	6210.91	1.8%
Gasoline	40.15	41.23	42.26	43.31	44.43	45.62	46.86	48.15	49.53	51.02	52.56	54.11	55.73	57.42	2.2%
Liquefied Petroleum Gas	4.76	4.86	4.93	4.98	5.00	5.01	5.02	5.03	5.04	5.07	5.12	5.16	5.20	5.25	4.9%
Compressed Natural Gas	17.94	18.63	19.14	19.52	19.86	20.17	20.50	20.86	21.25	21.69	22.14	22.58	23.00	23.43	9.5%
Heavy Subtotal	5167.86	5241.99	5305.45	5368.67	5439.12	5512.76	5591.86	5677.52	5764.24	5862.75	5966.77	6071.60	6181.88	6297.00	1.8%
<b>Medium and Heavy Total</b>															
Diesel	5806.55	5898.42	5979.22	6060.65	6150.24	6244.05	6343.79	6450.46	6557.03	6676.33	6801.30	6924.01	7052.77	7186.67	1.9%
Gasoline	238.49	241.58	244.65	248.17	252.30	256.94	261.89	267.11	272.74	278.82	285.11	291.55	298.31	305.35	0.8%
Liquefied Petroleum Gas	16.59	17.10	17.55	17.95	18.32	18.65	18.95	19.23	19.44	19.67	19.94	20.12	20.30	20.47	3.2%
Compressed Natural Gas	41.50	43.84	45.84	47.66	49.37	51.04	52.68	54.32	55.91	57.56	59.20	60.74	62.26	63.77	11.0%
Total	6103.13	6200.94	6287.27	6374.43	6470.24	6570.68	6677.31	6791.11	6905.12	7032.37	7165.55	7296.42	7433.63	7576.27	1.9%

Table 55. Freight Transportation Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Fuel Efficiency (gasoline equivalent MPG)</b>															
<b>Medium</b>															
Diesel	8.44	8.44	8.44	8.45	8.46	8.46	8.47	8.48	8.53	8.57	8.62	8.66	8.69	8.72	0.2%
Gasoline	8.85	8.88	8.90	8.93	8.95	8.98	9.00	9.02	9.03	9.05	9.07	9.08	9.09	9.11	0.3%
Liquefied Petroleum Gas	7.67	7.70	7.73	7.76	7.80	7.84	7.89	7.94	7.99	8.03	8.07	8.10	8.13	8.16	0.8%
Compressed Natural Gas	7.99	7.99	7.99	7.99	7.99	7.99	7.99	7.99	8.00	8.00	8.00	8.00	8.00	8.00	0.1%
Medium Average	8.51	8.52	8.53	8.53	8.54	8.55	8.56	8.57	8.61	8.65	8.68	8.72	8.75	8.77	0.2%
<b>Heavy</b>															
Diesel	5.87	5.93	5.98	6.03	6.07	6.12	6.16	6.20	6.24	6.29	6.32	6.36	6.39	6.41	0.6%
Gasoline	7.41	7.42	7.43	7.44	7.44	7.45	7.46	7.46	7.47	7.47	7.47	7.48	7.48	7.48	0.2%
Liquefied Petroleum Gas	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.28	7.28	7.28	7.29	7.30	7.31	7.33	0.1%
Compressed Natural Gas	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.28	7.28	7.28	7.28	7.28	7.28	7.28	0.0%
Heavy Average	5.88	5.94	6.00	6.05	6.09	6.14	6.18	6.21	6.26	6.30	6.34	6.37	6.40	6.43	0.6%
Average	6.28	6.34	6.39	6.44	6.48	6.52	6.56	6.60	6.64	6.68	6.72	6.76	6.79	6.82	0.5%
<b>Stock (millions)</b>															
<b>Medium</b>															
Diesel	3.01	3.06	3.11	3.16	3.20	3.25	3.29	3.34	3.38	3.43	3.48	3.53	3.58	3.62	1.9%
Gasoline	1.59	1.58	1.56	1.55	1.54	1.53	1.53	1.52	1.52	1.52	1.52	1.52	1.53	1.53	-0.9%
Liquefied Petroleum Gas	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.7%
Compressed Natural Gas	0.10	0.11	0.11	0.12	0.13	0.13	0.14	0.15	0.15	0.16	0.16	0.17	0.17	0.17	11.6%
Medium Subtotal	4.76	4.81	4.85	4.89	4.94	4.98	5.03	5.07	5.13	5.18	5.24	5.29	5.35	5.40	1.0%
<b>Heavy</b>															
Diesel	5.89	5.97	6.04	6.10	6.16	6.21	6.26	6.31	6.36	6.42	6.48	6.53	6.58	6.64	1.6%
Gasoline	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.28	0.28	-0.6%
Liquefied Petroleum Gas	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	5.8%
Compressed Natural Gas	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	11.1%
Heavy Subtotal	6.22	6.31	6.38	6.45	6.50	6.56	6.61	6.67	6.73	6.79	6.85	6.91	6.96	7.02	1.5%
Total Stock	10.98	11.12	11.24	11.34	11.44	11.54	11.64	11.74	11.85	11.97	12.08	12.20	12.31	12.43	1.3%
<b>New Trucks by Size Class</b>															
<b>Fuel Efficiency (gasoline equivalent MPG)</b>															
<b>Medium</b>															
Diesel	8.46	8.46	8.46	8.46	8.56	8.56	8.56	8.56	9.05	9.04	9.05	9.05	9.05	9.05	0.2%
Gasoline	9.24	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	0.1%
Liquefied Petroleum Gas	8.00	8.00	8.00	8.00	8.27	8.27	8.48	8.48	8.48	8.48	8.48	8.48	8.48	8.48	0.2%
Compressed Natural Gas	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	0.0%
Medium Average	8.57	8.58	8.58	8.58	8.66	8.66	8.66	8.66	9.04	9.03	9.04	9.04	9.04	9.04	0.2%
<b>Heavy</b>															
Diesel	6.30	6.36	6.37	6.38	6.39	6.46	6.48	6.49	6.61	6.61	6.61	6.61	6.61	6.63	0.6%
Gasoline	7.50	7.50	7.50	7.50	7.50	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	0.0%
Liquefied Petroleum Gas	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.33	7.38	7.38	7.38	0.1%
Compressed Natural Gas	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	0.0%
Heavy Average	6.32	6.38	6.38	6.39	6.41	6.48	6.49	6.51	6.62	6.63	6.63	6.63	6.63	6.64	0.6%
Average	6.64	6.69	6.70	6.71	6.73	6.80	6.81	6.82	6.95	6.95	6.95	6.98	6.98	7.00	0.6%

Table 55. Freight Transportation Energy Use

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Sales (millions)															
Medium															
Diesel	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20	1.2%
Gasoline	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.8%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.0%
Compressed Natural Gas	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5.6%
Medium Subtotal	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.27	0.27	0.28	0.28	0.28	0.28	1.2%
Heavy															
Diesel	0.35	0.35	0.34	0.34	0.34	0.34	0.34	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.7%
Gasoline	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	1.7%
Liquefied Petroleum Gas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.8%
Compressed Natural Gas	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.5%
Heavy Subtotal	0.37	0.37	0.36	0.36	0.36	0.36	0.36	0.37	0.38	0.38	0.38	0.38	0.39	0.39	0.8%
Total Sales	0.62	0.62	0.61	0.61	0.61	0.61	0.62	0.63	0.64	0.65	0.66	0.66	0.67	0.68	0.9%
Railroads															
Ton Miles by Rail (billion)	1886.78	1912.25	1937.61	1982.73	2021.48	2062.70	2101.82	2145.71	2187.60	2234.87	2281.44	2325.24	2367.88	2403.15	1.7%
Fuel Efficiency (ton miles per thousand Btu)	2.94	2.95	2.95	2.95	2.95	2.96	2.96	2.96	2.97	2.97	2.97	2.97	2.98	2.98	0.1%
Fuel Consumption (trillion Btu)															
Distillate (diesel)	640.85	648.80	656.70	671.27	683.65	696.84	709.29	723.32	736.64	751.74	766.58	780.45	793.90	804.85	1.6%
Residual Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electricity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Domestic Shipping															
Ton Miles Shipping (billion)	748.18	756.41	762.43	767.07	771.85	776.85	782.96	787.67	792.48	799.73	805.21	811.72	817.64	824.20	1.0%
Fuel Efficiency (ton miles per thousand Btu)	2.19	2.19	2.20	2.20	2.21	2.21	2.21	2.22	2.22	2.23	2.23	2.24	2.24	2.25	0.2%
Fuel Consumption (trillion Btu)															
Distillate (diesel)	249.26	251.49	252.96	253.97	255.02	256.14	257.62	258.63	259.67	261.50	262.74	264.32	265.68	267.26	0.8%
Residual Oil	93.04	93.87	94.42	94.80	95.19	95.61	96.17	96.55	96.94	97.62	98.09	98.68	99.20	99.79	0.8%
Motor Gasoline	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
International Shipping															
Gross Trade (billion 2000 \$)	5154.37	5504.75	5832.19	6167.19	6529.97	6914.25	7321.42	7758.86	8227.10	8724.78	9254.94	9810.78	10401.59	11031.78	6.3%
Exports (billion 2000 dollars)	2424.12	2618.86	2798.97	2985.74	3185.53	3395.19	3617.22	3855.28	4110.80	4384.41	4675.87	4988.04	5321.99	5678.73	7.9%
Imports (billion 2000 dollars)	2730.25	2885.88	3033.21	3181.45	3344.44	3519.07	3704.20	3903.58	4116.30	4340.36	4579.07	4822.74	5079.59	5353.04	5.0%
Fuel Consumption (trillion Btu)															
Distillate (diesel)	40.19	40.25	40.30	40.36	40.41	40.46	40.52	40.57	40.63	40.68	40.74	40.79	40.85	40.91	0.1%
Residual Oil	519.67	520.48	521.19	521.89	522.60	523.31	524.03	524.76	525.49	526.23	526.97	527.71	528.44	529.18	0.1%

Table 55. Freight Transportation Energy Use

MPG = Miles per gallon.

Btu = British thermal unit.

N/A = Not applicable.

Sources: 2003 and 2004 derived using: Oak Ridge National Laboratory, Transportation Energy Data Book: Edition 24 and Annual (Oak Ridge, TN, December 2004); United States Department of Transportation, 1989 Carload Waybill Statistics Traffic and Revenue by Commodity Classes, September 1991 and prior issues; Reebie Associates, TRANSEARCH Database, (Greenwich, Connecticut, 1989); Army Corps of Engineers, Waterborne Commerce of the United States, (New Orleans), 1991 and prior issues; U.S. Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EC97TV (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 2003 (Washington, DC, December 2004); and Energy Information Administration (EIA), AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.







Table 56. Technology Market Penetration in Light-Duty Vehicles  
(percent)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
4-Valve/4-Cylinder	30.15	30.37	31.67	31.20	30.80	30.73	30.38	30.02	30.16	29.94	29.76	29.53	29.41	29.26
4-Valve/6-Cylinder	16.48	17.37	18.27	23.01	25.28	25.47	25.66	25.70	25.61	25.64	25.65	25.66	25.65	25.65
4-Valve/8-Cylinder	6.33	6.93	7.39	10.51	12.14	12.34	12.44	12.52	12.44	12.48	12.51	12.56	12.56	12.59
5-Valve/6-Cylinder	1.34	1.34	1.38	1.45	1.45	1.42	1.41	1.39	1.37	1.36	1.34	1.33	1.31	1.30
VVT-4 Cylinder	13.04	15.66	18.45	24.30	26.95	27.70	28.91	28.83	28.94	28.68	28.44	28.14	27.92	27.62
VVT-6 Cylinder	2.38	2.88	3.41	5.38	6.73	7.50	9.50	11.99	12.47	12.49	12.50	12.52	12.52	12.52
VVT-8 Cylinder	0.78	1.24	1.63	2.81	3.95	4.58	6.16	8.21	8.34	8.31	8.28	8.23	8.19	8.16
VVL-4 Cylinder	4.31	4.64	5.18	7.59	8.45	8.74	9.19	9.56	9.68	9.55	9.42	9.25	9.01	8.78
VVL-6 Cylinder	0.90	1.42	1.94	3.44	4.53	4.96	5.33	5.74	5.91	5.94	5.94	5.96	5.92	5.88
VVL-8 Cylinder	0.62	0.73	0.85	1.06	1.13	1.17	1.26	1.41	1.52	1.59	1.63	1.69	1.78	1.90
Camless Valve Actuation-4cyl	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.16	0.27	0.40	0.54	0.70	0.94
Camless Valve Actuation-6cyl	0.00	0.00	0.00	0.00	0.00	0.01	0.07	0.15	0.26	0.40	0.55	0.74	1.00	1.29
Camless Valve Actuation-8cyl	0.00	0.00	0.00	0.00	0.01	0.06	0.13	0.22	0.33	0.44	0.57	0.74	0.90	1.04
Cylinder Deactivation	0.00	0.02	0.11	0.29	0.56	0.99	1.57	2.23	2.71	2.92	2.97	3.18	3.45	3.72
Turbocharging/Supercharging	0.33	0.56	0.79	1.26	1.55	1.71	1.91	2.11	2.22	2.30	2.35	2.40	2.43	2.45
Engine Friction Reduction I	68.75	71.20	72.79	67.83	61.03	52.49	41.42	32.73	27.67	23.74	20.91	17.37	13.91	11.08
Engine Friction Reduction II	13.28	16.24	19.15	30.91	38.97	47.47	58.32	66.07	69.42	71.17	72.03	72.47	72.68	72.20
Engine Friction Reduction III	0.00	0.00	0.00	0.00	0.00	0.03	0.26	1.20	2.91	5.08	7.06	10.16	13.41	16.66
Engine Friction Reduction IV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06
Stoichiometric GDI/4-Cylinder	0.00	0.00	0.00	0.01	0.08	0.21	0.45	0.83	1.25	1.63	2.06	2.54	3.16	3.69
Stoichiometric GDI/6-Cylinder	0.00	0.00	0.00	0.01	0.07	0.17	0.31	0.51	0.73	0.96	1.25	1.59	1.97	2.31
Lean Burn GDI	0.00	0.00	0.00	0.02	0.10	0.26	0.55	1.00	1.42	1.76	2.04	2.53	3.09	3.59
5W-30 Engine Oil	44.65	44.63	44.34	47.29	54.07	59.95	62.85	59.30	54.15	50.69	49.17	46.25	43.27	40.31
5W-20 Engine Oil	0.08	0.37	1.17	4.46	11.76	20.71	30.25	38.43	44.20	47.98	49.55	52.60	55.79	58.98
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electric Power Steering	0.00	0.01	0.07	0.19	0.36	0.61	0.97	1.38	1.73	1.97	2.15	2.39	2.62	2.81
Improved Alternator	0.00	0.00	0.03	0.16	0.45	0.94	1.91	3.23	4.31	4.84	4.99	5.49	5.99	6.50
Improved Oil/Water Pump	3.35	4.88	7.04	15.42	25.91	35.19	46.03	54.69	58.89	60.92	61.73	62.73	63.60	64.31
Electric Oil/Water Pump	0.00	0.00	0.00	0.00	0.01	0.10	0.28	0.60	1.05	1.54	1.98	2.55	3.16	3.81
Tires II	57.39	57.61	58.75	69.38	78.06	82.83	82.53	75.82	70.14	66.17	63.51	59.08	55.15	51.07
Tires III	0.00	0.00	0.07	0.48	2.48	7.40	15.75	23.73	29.86	33.83	36.49	40.92	44.77	48.56
Tires IV	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.37
Front Wheel Drive	50.69	50.72	52.13	50.76	50.15	49.78	49.24	48.72	48.75	48.45	48.17	47.82	47.58	47.34
Four Wheel Drive Improvements	0.46	0.71	1.00	1.74	2.98	4.47	6.74	9.10	9.42	9.47	9.52	9.58	9.63	9.68
42V-Launch Assist and Regen	0.00	0.00	0.00	0.02	0.09	0.21	0.37	0.59	0.82	1.04	1.25	1.43	1.64	1.82
42V-Engine Off at Idle	0.00	0.00	0.02	0.09	0.21	0.37	0.59	0.82	1.04	1.25	1.43	1.64	1.82	2.00
Tier 2 Emissions Technology	0.00	0.00	0.00	33.33	66.67	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Increased Size/Weight	15.00	20.00	25.00	30.00	35.00	40.00	45.00	50.00	55.00	60.00	65.00	70.00	75.00	80.00
Variable Compression Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.09



Table 56. Technology Market Penetration in Light-Duty Vehicles  
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Car</b>															
Unit Body Construction	95.10	95.10	95.11	95.14	95.11	95.11	95.11	95.10	95.10	95.11	95.10	95.11	95.10	95.11	0.0%
Material Substitution II	68.07	67.85	67.65	67.34	66.95	66.43	65.84	65.41	64.96	64.63	64.33	64.17	63.96	63.78	0.9%
Material Substitution III	23.92	23.92	23.93	23.93	23.93	23.93	23.93	23.92	23.93	23.93	23.93	23.93	23.93	23.93	12.6%
Material Substitution IV	4.89	5.26	5.63	5.88	6.19	6.53	6.75	6.89	7.03	7.15	7.25	7.31	7.40	7.48	N/A
Material Substitution V	0.54	0.84	1.16	1.51	1.89	2.30	2.74	3.10	3.46	3.74	4.00	4.14	4.30	4.43	N/A
Drag Reduction II	9.26	8.66	8.10	7.48	6.69	6.19	5.45	4.97	4.52	4.25	4.12	4.13	4.04	3.98	-9.6%
Drag Reduction III	46.13	44.91	43.71	42.69	41.38	39.77	38.57	38.14	37.92	37.61	37.45	37.45	37.43	37.41	10.8%
Drag Reduction IV	37.55	37.73	37.73	37.74	37.97	38.34	38.72	38.95	39.23	39.46	39.60	39.59	39.64	39.67	16.4%
Drag Reduction V	7.07	8.70	10.47	12.10	13.97	15.70	17.26	17.94	18.32	18.68	18.83	18.83	18.89	18.93	N/A
Roll-Over Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Side Impact Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Advanced Low Loss Torque Converter	73.69	73.68	73.67	73.64	73.84	74.16	74.42	74.51	74.64	74.73	74.77	74.74	74.75	74.74	5.7%
Early Torque Converter Lockup	63.07	63.96	63.98	64.02	64.31	64.68	64.98	65.11	65.26	65.38	65.43	65.41	65.43	65.44	14.8%
Aggressive Shift Logic	26.63	26.63	26.62	26.61	26.63	26.62	26.63	26.63	26.63	26.63	26.63	26.63	26.63	26.63	7.4%
4-Speed Automatic	54.52	54.45	54.22	54.07	54.06	53.95	53.87	53.83	53.77	53.70	53.69	53.65	53.62	53.57	-0.9%
5-Speed Automatic	10.48	10.48	10.48	10.47	10.48	10.50	10.51	10.52	10.53	10.53	10.53	10.53	10.53	10.53	0.7%
6-Speed Automatic	2.91	2.95	3.16	3.23	3.28	3.33	3.36	3.38	3.40	3.42	3.43	3.43	3.43	3.44	22.6%
6-Speed Manual	5.89	5.90	5.90	5.90	5.90	5.92	5.93	5.93	5.94	5.95	5.95	5.95	5.95	5.95	5.4%
CVT	4.69	4.71	4.72	4.73	4.77	4.82	4.86	4.89	4.92	4.95	4.98	5.00	5.03	5.07	9.5%
Automated Manual Trans	10.31	10.32	10.33	10.35	10.32	10.32	10.31	10.31	10.31	10.31	10.30	10.32	10.31	10.31	N/A
Roller Cam	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	99.18	0.1%
OHC/AdvOHV-4 Cylinder	1.85	1.86	1.86	1.87	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	1.86	-1.9%
OHC/AdvOHV-6 Cylinder	2.44	2.44	2.43	2.42	2.44	2.43	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.44	-2.0%
OHC/AdvOHV-8 Cylinder	2.52	2.52	2.52	2.51	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	0.2%
4-Valve/4-Cylinder	51.89	51.91	51.93	51.99	51.91	51.92	51.89	51.88	51.88	51.89	51.87	51.91	51.88	51.90	-0.1%
4-Valve/6-Cylinder	24.37	24.36	24.36	24.33	24.36	24.36	24.37	24.38	24.38	24.38	24.37	24.38	24.38	24.37	0.4%
4-Valve/8-Cylinder	8.70	8.70	8.69	8.68	8.70	8.69	8.70	8.70	8.70	8.70	8.70	8.69	8.70	8.70	0.6%
5-Valve/6-Cylinder	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	0.2%
VVT-4 Cylinder	48.32	48.04	47.82	47.65	47.40	47.22	47.08	46.70	46.54	46.48	46.41	46.41	46.35	46.33	2.4%
VVT-6 Cylinder	9.67	9.65	9.64	9.64	9.65	9.68	9.70	9.72	9.74	9.75	9.76	9.75	9.76	9.76	3.5%
VVT-8 Cylinder	3.39	3.33	3.26	3.18	3.15	3.08	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.05	3.3%
VVL-4 Cylinder	14.26	14.27	14.17	14.01	13.63	13.35	13.18	12.98	12.91	12.91	12.91	12.91	12.91	12.91	1.5%
VVL-6 Cylinder	4.93	4.92	4.91	4.90	4.82	4.75	4.67	4.63	4.61	4.60	4.59	4.59	4.57	4.56	4.7%
VVL-8 Cylinder	1.77	1.77	1.77	1.77	1.77	1.78	1.78	1.79	1.79	1.79	1.79	1.79	1.79	1.79	0.9%
Camless Valve Actuation-4cyl	2.21	2.60	2.91	3.23	3.49	3.75	3.92	4.40	4.62	4.72	4.78	4.82	4.87	4.92	N/A
Camless Valve Actuation-6cyl	2.32	2.58	2.85	3.05	3.26	3.40	3.74	3.88	3.94	3.98	4.01	4.03	4.06	4.08	N/A
Camless Valve Actuation-8cyl	1.65	1.76	1.86	1.97	2.03	2.15	2.22	2.24	2.25	2.26	2.27	2.27	2.28	2.28	N/A
Cylinder Deactivation	2.77	2.85	2.93	3.01	3.05	3.08	3.11	3.12	3.13	3.14	3.15	3.15	3.15	3.15	21.1%
Turbocharging/Supercharging	2.77	2.77	2.77	2.77	2.77	2.77	2.78	2.78	2.78	2.78	2.78	2.78	2.78	2.78	6.3%
Engine Friction Reduction I	12.69	11.15	9.84	8.77	7.20	6.01	4.82	4.00	3.36	2.94	2.94	2.94	2.94	2.94	-11.6%
Engine Friction Reduction II	69.92	69.61	68.31	66.98	65.34	63.63	61.70	59.49	57.23	55.35	53.82	52.76	51.97	51.43	3.4%
Engine Friction Reduction III	17.14	18.48	20.33	21.69	23.58	24.86	26.12	27.12	27.79	28.21	28.44	28.45	28.61	28.73	N/A
Engine Friction Reduction IV	0.26	0.76	1.52	2.56	3.88	5.49	7.36	9.39	11.61	13.50	14.79	15.84	16.48	16.90	N/A
Stoichiometric GDI/4-Cylinder	5.27	5.65	6.03	6.31	7.47	8.17	8.60	8.87	9.08	9.21	9.33	9.40	9.52	9.62	N/A

Table 56. Technology Market Penetration in Light-Duty Vehicles  
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Stoichiometric GDI/6-Cylinder	3.47	3.71	3.95	4.10	4.60	4.86	4.99	5.06	5.14	5.20	5.25	5.27	5.32	5.36	N/A
Lean Burn GDI	5.33	5.64	5.96	6.14	6.45	6.73	6.88	6.95	7.03	7.08	7.11	7.12	7.14	7.17	N/A
5W-30 Engine Oil	46.86	46.12	45.46	45.34	45.11	44.82	44.44	44.20	43.93	43.74	43.63	43.64	43.59	43.51	0.3%
5W-20 Engine Oil	51.83	52.87	53.80	54.05	54.49	55.06	55.56	55.80	56.07	56.26	56.37	56.36	56.41	56.46	21.6%
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	N/A
Electric Power Steering	3.62	3.72	3.82	3.93	4.00	4.07	4.13	4.16	4.20	4.24	4.26	4.27	4.30	4.32	22.4%
Improved Alternator	5.41	5.72	5.86	6.03	6.21	6.34	6.44	6.49	6.54	6.58	6.61	6.60	6.62	6.63	N/A
Improved Oil/Water Pump	55.25	55.25	55.25	55.23	55.33	55.59	55.97	56.16	56.41	56.59	56.69	56.68	56.73	56.77	12.9%
Electric Oil/Water Pump	4.13	4.60	4.96	5.35	5.64	5.98	6.28	6.43	6.56	6.67	6.75	6.80	6.88	6.95	N/A
Tires II	54.23	50.42	47.30	43.38	38.58	33.35	28.78	25.02	22.08	18.95	16.22	14.55	13.53	12.52	-5.7%
Tires III	44.62	47.08	48.22	49.52	50.98	52.14	53.06	53.36	53.69	53.90	54.00	53.92	53.62	53.31	N/A
Tires IV	1.15	2.49	4.48	7.10	10.43	14.52	18.17	21.62	24.22	27.15	29.77	31.53	32.85	34.17	N/A
Front Wheel Drive	82.99	82.99	82.98	82.98	82.98	82.99	82.99	82.99	82.99	82.98	82.99	82.99	82.99	82.98	0.0%
Four Wheel Drive Improvements	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	3.17	7.3%
42V-Launch Assist and Regen	1.99	2.10	2.21	2.26	2.32	2.37	2.39	2.40	2.40	2.41	2.42	2.42	2.42	2.43	N/A
42V-Engine Off at Idle	2.10	2.21	2.26	2.32	2.37	2.39	2.40	2.40	2.41	2.42	2.42	2.42	2.43	2.43	N/A
Tier 2 Emissions Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Increased Size/Weight	85.00	90.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	6.4%
Variable Compression Ratio	0.27	0.44	0.66	0.88	1.11	1.40	1.65	1.91	2.10	2.29	2.41	2.52	2.58	2.72	N/A
Light Truck															
Unit Body Construction	36.02	36.03	36.03	36.04	36.00	35.99	35.97	35.97	35.95	35.96	35.95	35.96	35.94	35.95	1.7%
Material Substitution II	63.51	63.50	63.49	63.47	63.47	63.46	63.46	63.41	63.35	63.29	63.24	63.20	63.16	63.14	2.1%
Material Substitution III	15.55	15.59	15.58	15.58	15.59	15.62	15.68	15.72	15.78	15.81	15.82	15.81	15.82	15.82	15.6%
Material Substitution IV	2.01	2.46	2.94	3.39	3.89	4.38	4.89	5.17	5.48	5.73	5.83	5.88	5.95	6.01	N/A
Material Substitution V	0.00	0.02	0.06	0.14	0.26	0.43	0.62	0.82	1.04	1.26	1.49	1.70	1.92	2.11	N/A
Drag Reduction II	2.39	1.25	0.56	0.28	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-49.0%
Drag Reduction III	56.52	52.91	48.68	45.23	40.93	36.05	32.91	30.83	28.35	27.21	26.70	26.39	25.79	25.25	4.9%
Drag Reduction IV	39.96	43.66	47.19	49.18	51.71	54.14	55.15	55.29	55.49	55.24	54.57	54.19	53.91	53.69	N/A
Drag Reduction V	1.13	2.18	3.58	5.31	7.34	9.82	11.94	13.88	16.16	17.55	18.73	19.41	20.30	21.05	N/A
Roll-Over Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Side Impact Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Advanced Low Loss Torque Converter	76.75	82.54	84.62	87.16	88.76	89.00	89.12	89.12	89.18	89.18	89.18	89.18	89.17	89.18	N/A
Early Torque Converter Lockup	62.01	67.22	72.58	75.04	78.14	80.87	81.43	81.49	81.68	81.74	81.75	81.75	81.77	81.78	N/A
Aggressive Shift Logic	24.76	26.85	28.94	30.16	31.81	33.65	34.35	34.55	34.81	34.91	34.95	34.95	34.98	35.01	N/A
4-Speed Automatic	73.72	72.59	71.45	70.58	70.07	69.76	68.88	68.49	68.36	68.31	68.27	68.28	68.24	68.22	-0.8%
5-Speed Automatic	11.02	11.02	11.02	11.01	11.02	11.02	11.02	11.01	11.01	11.01	11.01	11.01	11.01	11.00	2.1%
6-Speed Automatic	2.70	3.06	3.42	3.76	4.15	4.38	5.06	5.34	5.42	5.44	5.45	5.45	5.45	5.45	N/A
6-Speed Manual	5.22	5.22	5.22	5.22	5.22	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	8.2%
CVT	0.73	0.84	0.94	1.04	1.13	1.21	1.40	1.50	1.54	1.57	1.59	1.61	1.63	1.65	N/A
Automated Manual Trans	4.37	5.05	5.73	6.17	6.18	6.19	6.19	6.20	6.20	6.20	6.21	6.21	6.22	6.21	N/A
Roller Cam	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	99.97	0.5%
OHC/AdvOHV-4 Cylinder	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-46.3%
OHC/AdvOHV-6 Cylinder	29.01	29.01	29.01	29.02	28.99	28.98	28.97	28.97	28.97	28.97	28.97	28.98	28.97	28.97	-1.6%
OHC/AdvOHV-8 Cylinder	18.81	18.81	18.81	18.82	18.83	18.83	18.84	18.83	18.84	18.84	18.84	18.84	18.84	18.84	-1.5%
4-Valve/4-Cylinder	9.41	9.40	9.40	9.39	9.40	9.40	9.40	9.41	9.41	9.41	9.42	9.41	9.42	9.41	1.0%
4-Valve/6-Cylinder	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.78	26.79	26.78	26.79	2.9%
4-Valve/8-Cylinder	16.00	15.99	15.99	15.99	16.00	16.00	16.00	16.00	16.00	16.00	16.00	15.99	15.99	15.99	3.6%
5-Valve/6-Cylinder	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
VVT-4 Cylinder	9.14	8.95	8.74	8.49	8.17	7.84	7.50	7.20	6.87	6.56	6.27	6.19	6.02	5.94	0.0%
VVT-6 Cylinder	14.97	14.91	14.82	14.66	14.49	14.31	14.12	13.94	13.75	13.64	13.41	13.33	13.29	13.26	8.0%
VVT-8 Cylinder	12.23	12.14	12.06	11.97	11.89	11.79	11.70	11.60	11.55	11.43	11.38	11.37	11.36	11.35	9.1%
VVL-4 Cylinder	3.46	3.24	3.10	2.99	2.87	2.74	2.41	2.26	2.13	2.05	1.99	1.95	1.82	1.69	5.7%
VVL-6 Cylinder	6.56	6.42	6.29	6.25	6.25	6.25	6.25	6.25	6.23	6.23	6.15	6.03	5.94	5.88	5.5%
VVL-8 Cylinder	2.27	2.52	2.77	2.89	3.05	3.19	3.23	3.24	3.25	3.26	3.26	3.26	3.26	3.26	N/A

Table 56. Technology Market Penetration in Light-Duty Vehicles  
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Camless Valve Actuation-4cyl	0.27	0.46	0.67	0.90	1.23	1.56	1.90	2.21	2.55	2.85	3.15	3.22	3.40	3.47	N/A
Camless Valve Actuation-6cyl	0.97	1.29	1.71	2.10	2.53	2.94	3.37	3.76	4.16	4.38	4.92	5.13	5.22	5.27	N/A
Camless Valve Actuation-8cyl	0.77	1.00	1.21	1.43	1.66	1.90	2.14	2.38	2.51	2.82	2.96	2.99	3.02	3.04	N/A
Cylinder Deactivation	5.08	5.27	5.47	5.66	5.75	5.85	5.92	5.95	5.98	5.99	5.99	5.99	5.99	5.99	23.6%
Turbocharging/Supercharging	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.19	5.5%
Engine Friction Reduction I	6.16	3.69	2.49	1.62	0.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-47.9%
Engine Friction Reduction II	71.34	68.34	64.57	59.33	52.49	44.09	34.88	28.14	23.09	17.55	15.67	14.75	13.59	12.78	0.7%
Engine Friction Reduction III	22.25	27.15	31.06	35.23	40.47	45.66	50.51	52.72	54.80	56.50	55.21	53.63	52.01	51.23	N/A
Engine Friction Reduction IV	0.26	0.81	1.89	3.82	6.65	10.24	14.60	19.14	22.11	25.95	29.12	31.61	34.40	35.99	N/A
Stoichiometric GDI/4-Cylinder	3.31	3.49	3.59	3.61	3.60	3.58	3.95	4.03	3.99	3.90	3.78	3.80	3.89	3.97	N/A
Stoichiometric GDI/6-Cylinder	2.13	2.66	3.17	3.59	4.01	4.42	4.85	5.07	5.84	6.23	6.35	6.44	6.54	6.62	N/A
Lean Burn GDI	3.13	3.86	4.59	5.23	5.90	6.37	6.65	6.69	7.16	7.31	7.19	7.22	7.31	7.38	N/A
5W-30 Engine Oil	32.73	30.62	29.01	28.85	28.54	28.06	27.72	27.65	27.48	27.44	27.44	27.44	27.44	27.40	-2.2%
5W-20 Engine Oil	67.27	69.38	70.99	71.15	71.46	71.94	72.28	72.35	72.52	72.56	72.56	72.56	72.56	72.56	22.4%
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	N/A
Electric Power Steering	2.43	2.63	2.73	2.85	2.97	3.04	3.09	3.11	3.15	3.17	3.19	3.20	3.22	3.24	N/A
Improved Alternator	8.31	9.02	9.36	9.77	10.21	10.47	10.66	10.72	10.81	10.85	10.86	10.86	10.87	10.88	N/A
Improved Oil/Water Pump	72.52	72.52	72.52	72.52	72.52	72.52	72.52	72.52	72.54	72.55	72.54	72.54	72.54	72.54	9.2%
Electric Oil/Water Pump	4.73	5.56	6.44	7.34	8.39	9.23	10.08	10.78	11.23	11.54	11.76	11.90	12.11	12.30	N/A
Tires II	40.46	34.06	28.76	21.69	14.25	9.92	5.77	4.03	2.30	1.09	0.31	0.00	0.00	0.00	-49.0%
Tires III	58.24	62.66	64.45	66.69	68.74	67.54	66.15	63.21	60.11	56.33	52.70	48.87	46.64	44.53	N/A
Tires IV	1.31	3.28	6.78	11.61	17.02	22.54	28.08	32.77	37.58	42.57	46.99	51.13	53.36	55.47	N/A
Front Wheel Drive	16.09	16.10	16.12	16.16	16.09	16.09	16.07	16.08	16.07	16.09	16.08	16.11	16.09	16.10	-0.4%
Four Wheel Drive Improvements	15.38	15.37	15.37	15.37	15.38	15.38	15.38	15.38	15.38	15.38	15.38	15.37	15.38	15.37	11.4%
42V-Launch Assist and Regen	2.00	2.17	2.34	2.42	2.51	2.59	2.61	2.63	2.63	2.64	2.65	2.65	2.65	2.66	N/A
42V-Engine Off at Idle	2.17	2.34	2.42	2.51	2.59	2.61	2.63	2.63	2.64	2.65	2.65	2.65	2.66	2.66	N/A
Tier 2 Emissions Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Increased Size/Weight	85.00	90.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	6.4%
Variable Compression Ratio	0.15	0.26	0.41	0.57	0.74	0.96	1.15	1.34	1.51	1.67	1.81	1.94	2.00	2.11	N/A
<b>Light-Duty Vehicle Total</b>															
Unit Body Construction	63.32	63.04	62.79	62.58	62.32	62.09	61.85	61.62	61.39	61.18	60.95	60.75	60.54	60.35	0.1%
Material Substitution II	65.62	65.49	65.37	65.21	65.02	64.77	64.50	64.28	64.05	63.86	63.70	63.60	63.49	63.40	1.4%
Material Substitution III	19.42	19.40	19.36	19.33	19.30	19.28	19.29	19.28	19.28	19.27	19.24	19.21	19.19	19.16	13.3%
Material Substitution IV	3.34	3.74	4.16	4.51	4.91	5.33	5.70	5.92	6.15	6.34	6.43	6.48	6.55	6.61	N/A
Material Substitution V	0.25	0.39	0.56	0.76	0.99	1.26	1.55	1.81	2.08	2.32	2.55	2.72	2.91	3.07	N/A
Drag Reduction II	5.56	4.64	3.97	3.51	2.99	2.73	2.39	2.16	1.95	1.81	1.74	1.73	1.68	1.64	-12.4%
Drag Reduction III	51.71	49.25	46.43	44.09	41.13	37.69	35.39	34.00	32.47	31.65	31.24	31.03	30.63	30.27	7.2%
Drag Reduction IV	38.85	40.95	42.90	44.04	45.59	47.16	47.96	48.20	48.50	48.51	48.24	48.07	47.98	47.91	20.3%
Drag Reduction V	3.88	5.16	6.70	8.36	10.29	12.41	14.27	15.64	17.09	18.03	18.77	19.17	19.72	20.18	N/A
Roll-Over Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Side Impact Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A
Advanced Low Loss Torque Converter	75.33	78.49	79.66	81.09	82.12	82.45	82.68	82.78	82.93	83.02	83.09	83.13	83.18	83.22	8.9%
Early Torque Converter Lockup	62.50	65.73	68.68	70.09	71.98	73.72	74.23	74.38	74.62	74.76	74.85	74.90	74.97	75.04	18.4%
Aggressive Shift Logic	25.63	26.74	27.89	28.56	29.50	30.55	30.97	31.11	31.29	31.38	31.44	31.46	31.51	31.55	10.9%
4-Speed Automatic	64.85	64.29	63.65	63.17	62.94	62.78	62.31	62.13	62.08	62.08	62.11	62.14	62.16	62.18	-0.8%
5-Speed Automatic	10.77	10.78	10.77	10.77	10.78	10.79	10.80	10.80	10.80	10.81	10.81	10.81	10.81	10.81	1.3%
6-Speed Automatic	2.80	3.01	3.30	3.53	3.76	3.91	4.32	4.49	4.55	4.58	4.59	4.60	4.61	4.62	27.2%
6-Speed Manual	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.53	5.54	5.53	5.53	5.53	5.53	5.53	6.4%
CVT	2.56	2.61	2.65	2.70	2.75	2.80	2.92	2.97	3.00	3.02	3.03	3.03	3.04	3.06	10.3%
Automated Manual Trans	7.12	7.46	7.81	8.05	8.03	8.01	7.99	7.97	7.97	7.95	7.93	7.93	7.92	7.91	N/A
Roller Cam	99.61	99.61	99.61	99.62	99.62	99.62	99.63	99.63	99.63	99.63	99.64	99.64	99.64	99.65	0.3%
OHC/AdvOHV-4 Cylinder	0.86	0.85	0.84	0.84	0.83	0.82	0.81	0.81	0.80	0.79	0.78	0.78	0.77	0.77	-4.3%
OHC/AdvOHV-6 Cylinder	16.73	16.86	16.97	17.07	17.17	17.26	17.36	17.46	17.56	17.66	17.76	17.85	17.94	18.02	-1.0%
OHC/AdvOHV-8 Cylinder	11.28	11.36	11.43	11.49	11.57	11.63	11.70	11.76	11.82	11.88	11.94	12.00	12.05	12.11	-0.8%

Table 56. Technology Market Penetration in Light-Duty Vehicles  
(percent)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030	
4-Valve/4-Cylinder	29.04	28.84	28.66	28.52	28.33	28.17	28.00	27.83	27.68	27.52	27.36	27.22	27.07	26.94	-0.5%	
4-Valve/6-Cylinder	25.67	25.67	25.68	25.68	25.70	25.71	25.73	25.74	25.75	25.75	25.77	25.77	25.78	25.79	1.5%	
4-Valve/8-Cylinder	12.63	12.66	12.69	12.71	12.75	12.78	12.81	12.83	12.86	12.89	12.92	12.93	12.96	12.98	2.4%	
5-Valve/6-Cylinder	1.29	1.28	1.26	1.25	1.24	1.23	1.22	1.21	1.20	1.19	1.18	1.17	1.16	1.15	-0.6%	
VVT-4 Cylinder	27.25	26.82	26.44	26.08	25.63	25.23	24.82	24.33	23.93	23.58	23.23	23.05	22.78	22.60	1.4%	
VVT-6 Cylinder	12.52	12.51	12.47	12.40	12.33	12.27	12.19	12.11	12.02	11.98	11.87	11.83	11.82	11.82	5.6%	
VVT-8 Cylinder	8.15	8.11	8.07	8.02	8.00	7.95	7.92	7.89	7.90	7.87	7.87	7.88	7.91	7.93	7.4%	
VVL-4 Cylinder	8.45	8.28	8.11	7.94	7.66	7.42	7.12	6.91	6.77	6.68	6.61	6.55	6.43	6.32	1.2%	
VVL-6 Cylinder	5.81	5.74	5.67	5.64	5.61	5.59	5.56	5.55	5.54	5.53	5.49	5.42	5.37	5.34	5.2%	
VVL-8 Cylinder	2.04	2.18	2.32	2.39	2.48	2.57	2.60	2.61	2.62	2.63	2.64	2.64	2.65	2.65	5.1%	
Camless Valve Actuation-4cyl	1.17	1.44	1.68	1.95	2.24	2.53	2.78	3.16	3.44	3.65	3.84	3.89	4.01	4.07	N/A	
Camless Valve Actuation-6cyl	1.59	1.88	2.22	2.53	2.86	3.14	3.53	3.81	4.07	4.21	4.53	4.67	4.74	4.78	N/A	
Camless Valve Actuation-8cyl	1.18	1.35	1.50	1.67	1.82	2.01	2.18	2.32	2.40	2.58	2.67	2.69	2.71	2.73	N/A	
Cylinder Deactivation	4.01	4.16	4.32	4.47	4.55	4.63	4.69	4.72	4.76	4.78	4.79	4.80	4.81	4.82	22.8%	
Turbocharging/Supercharging	2.46	2.45	2.45	2.45	2.45	2.45	2.44	2.44	2.44	2.44	2.44	2.44	2.44	2.43	2.43	5.8%
Engine Friction Reduction I	9.18	7.10	5.82	4.83	3.42	2.65	2.11	1.74	1.45	1.25	1.24	1.23	1.22	1.21	-14.5%	
Engine Friction Reduction II	70.68	68.92	66.27	62.77	58.21	52.72	46.62	41.74	37.77	33.67	31.79	30.68	29.55	28.72	2.2%	
Engine Friction Reduction III	19.89	23.19	26.20	29.15	32.95	36.48	39.84	41.62	43.19	44.44	43.90	43.08	42.28	41.95	N/A	
Engine Friction Reduction IV	0.26	0.79	1.72	3.25	5.42	8.15	11.43	14.91	17.60	20.64	23.06	25.00	26.95	28.11	N/A	
Stoichiometric GDI/4-Cylinder	4.22	4.48	4.69	4.82	5.33	5.61	5.98	6.13	6.18	6.16	6.12	6.15	6.23	6.30	N/A	
Stoichiometric GDI/6-Cylinder	2.75	3.14	3.52	3.82	4.27	4.61	4.91	5.06	5.54	5.79	5.89	5.95	6.03	6.10	N/A	
Lean Burn GDI	4.15	4.68	5.21	5.64	6.14	6.53	6.76	6.80	7.10	7.21	7.16	7.18	7.24	7.29	N/A	
5W-30 Engine Oil	39.26	37.70	36.46	36.25	35.92	35.46	35.03	34.83	34.55	34.39	34.28	34.23	34.15	34.05	-1.0%	
5W-20 Engine Oil	60.14	61.83	63.20	63.47	63.90	64.49	64.97	65.17	65.45	65.61	65.72	65.77	65.85	65.92	22.1%	
0W-20 Engine Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	N/A	
Electric Power Steering	2.98	3.13	3.22	3.33	3.43	3.49	3.54	3.57	3.60	3.63	3.64	3.65	3.67	3.68	24.9%	
Improved Alternator	6.97	7.51	7.78	8.09	8.43	8.65	8.81	8.89	8.98	9.03	9.06	9.08	9.10	9.13	N/A	
Improved Oil/Water Pump	64.54	64.62	64.69	64.76	64.87	65.05	65.28	65.42	65.60	65.74	65.84	65.89	65.97	66.04	10.5%	
Electric Oil/Water Pump	4.45	5.12	5.77	6.44	7.17	7.80	8.42	8.89	9.22	9.46	9.65	9.76	9.93	10.09	N/A	
Tires II	46.82	41.54	37.16	31.43	25.08	20.26	15.84	13.13	10.81	8.71	7.03	6.10	5.62	5.17	-8.9%	
Tires III	51.94	55.54	57.10	58.98	60.83	60.74	60.42	58.93	57.35	55.30	53.25	50.99	49.54	48.15	N/A	
Tires IV	1.24	2.92	5.74	9.59	14.09	19.00	23.74	27.93	31.84	36.00	39.72	42.91	44.84	46.68	N/A	
Front Wheel Drive	47.00	46.68	46.40	46.17	45.87	45.62	45.36	45.11	44.85	44.61	44.35	44.14	43.90	43.69	-0.6%	
Four Wheel Drive Improvements	9.74	9.79	9.85	9.89	9.94	9.99	10.04	10.08	10.13	10.17	10.22	10.26	10.30	10.34	10.8%	
42V-Launch Assist and Regen	2.00	2.14	2.28	2.35	2.42	2.49	2.51	2.53	2.53	2.54	2.55	2.56	2.56	2.57	N/A	
42V-Engine Off at Idle	2.14	2.28	2.34	2.42	2.49	2.51	2.53	2.53	2.54	2.55	2.56	2.56	2.56	2.57	N/A	
Tier 2 Emissions Technology	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	N/A	
Increased Size/Weight	85.00	90.00	95.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	6.4%	
Variable Compression Ratio	0.20	0.34	0.52	0.71	0.91	1.15	1.37	1.59	1.76	1.94	2.06	2.18	2.24	2.36	N/A	

Table 56. Technology Market Penetration in Light-Duty Vehicles  
(percent)

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Gasoline</b>														
Mini-compact Cars	25.43	25.59	25.67	26.31	26.87	27.39	28.28	28.94	29.19	29.33	29.38	29.46	29.54	29.62
Subcompact Cars	28.74	28.82	28.78	29.05	29.46	29.85	30.74	31.41	31.72	31.84	31.92	32.05	32.18	32.31
Compact Cars	31.62	31.80	31.92	32.32	32.63	32.90	33.84	34.50	34.83	34.91	34.92	34.97	35.03	35.09
Midsized Cars	27.66	27.78	27.84	28.04	28.32	28.56	29.27	29.82	30.08	30.18	30.23	30.34	30.42	30.51
Large Cars	26.47	26.50	26.46	26.40	26.48	26.63	27.21	27.68	27.93	28.04	28.09	28.22	28.33	28.43
Two Seater Cars	25.04	25.11	25.09	25.12	25.30	25.62	26.17	26.61	26.88	27.01	27.09	27.21	27.32	27.39
Small Pickup	24.45	24.71	25.05	25.36	25.57	25.64	26.09	26.52	26.77	26.91	27.02	27.16	27.31	27.45
Large Pickup	18.91	19.05	19.33	19.41	19.52	19.55	19.82	20.15	20.36	20.48	20.56	20.65	20.77	20.89
Small Van	24.70	24.80	25.01	25.09	25.23	25.22	25.60	25.94	26.17	26.27	26.32	26.39	26.51	26.64
Large Van	25.67	25.84	26.14	26.17	26.30	26.27	26.71	27.06	27.30	27.38	27.40	27.48	27.58	27.69
Small Utility	22.74	22.90	23.21	23.43	23.74	23.89	24.47	24.95	25.21	25.35	25.43	25.57	25.74	25.90
Large Utility	19.02	19.16	19.39	19.45	19.52	19.65	20.01	20.34	20.57	20.71	20.79	20.89	21.00	21.12
<b>Turbo Direct Injection Diesel</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	41.32	41.31	41.26	41.19	41.15	41.13	41.13
Compact Cars	42.40	42.52	42.57	42.40	42.22	42.18	42.91	43.59	43.83	43.90	43.83	43.77	43.72	43.68
Midsized Cars	0.00	37.37	37.30	36.98	36.72	36.63	37.17	37.71	37.94	37.96	37.90	37.86	37.86	37.88
Large Cars	0.00	0.00	0.00	0.00	35.18	34.81	35.03	35.45	35.73	35.84	35.84	35.91	35.99	36.07
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	33.77	33.41	33.64	33.99	34.26	34.37	34.42	34.55	34.69	34.79
Large Pickup	25.34	25.51	25.80	25.71	25.80	25.68	25.91	26.11	26.29	26.35	26.37	26.39	26.46	26.54
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.43	34.43	34.41	34.35	34.34	34.37	34.40
Large Van	34.47	34.64	34.94	34.69	34.58	34.53	34.93	35.32	35.60	35.67	35.60	35.57	35.59	35.63
Small Utility	0.00	0.00	31.04	30.56	30.43	30.47	31.03	31.52	31.78	31.85	31.86	31.94	32.03	32.11
Large Utility	25.44	25.55	25.78	25.75	25.73	25.72	26.14	26.45	26.62	26.70	26.71	26.74	26.81	26.90
<b>Methanol</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Methanol Flex</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	28.21	28.32	28.37	28.53	28.81	29.05	29.77	30.34	30.60	30.70	30.75	30.87	30.96	31.05
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Ethanol</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	28.75	28.86	28.90	29.03	29.31	29.55	30.27	30.87	31.12	31.22	31.27	31.39	31.50	31.59
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Ethanol Flex</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.08	31.22	31.34	31.43	31.65	31.93	32.21
Compact Cars	31.92	32.11	32.23	32.60	32.90	33.16	34.09	34.76	35.13	35.21	35.22	35.28	35.34	35.40
Midsized Cars	27.94	28.05	28.10	28.28	28.55	28.80	29.51	30.08	30.34	30.44	30.50	30.61	30.70	30.79
Large Cars	0.00	0.00	0.00	0.00	26.38	26.24	26.70	27.15	27.46	27.63	27.71	27.89	28.08	28.27
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	24.70	24.97	25.34	25.64	25.81	25.87	26.31	26.74	26.98	27.13	27.24	27.41	27.55	27.69
Large Pickup	19.09	19.24	19.51	19.58	19.69	19.73	19.99	20.32	20.53	20.66	20.75	20.85	20.97	21.09
Small Van	24.95	25.05	25.27	25.34	25.46	25.45	25.84	26.19	26.42	26.52	26.57	26.64	26.77	26.90
Large Van	0.00	0.00	26.17	25.76	25.72	25.70	26.14	26.65	27.03	27.15	27.20	27.35	27.48	27.63
Small Utility	0.00	0.00	0.00	0.00	23.39	23.35	23.75	24.28	24.65	24.84	24.94	25.15	25.39	25.60
Large Utility	19.21	19.36	19.60	19.64	19.71	19.83	20.20	20.53	20.77	20.91	20.99	21.10	21.22	21.34
<b>Compressed Natural Gas</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	34.09	34.27	34.38	34.62	34.84	35.07	35.96	36.60	36.95	37.02	37.02	37.06	37.08	37.11
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Cars	28.56	28.59	28.51	28.40	28.42	28.57	29.05	29.47	29.71	29.80	29.83	29.93	30.00	30.09
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	20.31	20.47	20.74	20.81	20.87	20.84	21.12	21.40	21.61	21.72	21.78	21.87	21.96	22.05
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	27.63	27.73	27.98	27.94	28.01	28.01	28.47	28.87	29.08	29.15	29.15	29.20	29.30	29.37
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Compressed Natural Gas Bi-Fuel</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	31.60	31.78	31.89	32.18	32.49	32.76	33.61	34.23	34.52	34.58	34.59	34.62	34.64	34.67
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Cars	0.00	0.00	26.36	26.08	25.96	26.05	26.56	26.98	27.25	27.38	27.44	27.59	27.77	27.93
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	18.49	18.61	18.80	18.85	18.87	18.93	19.25	19.64	19.82	19.94	20.00	20.08	20.17	20.26
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	25.24	25.30	25.39	25.40	25.49	25.52	25.99	26.37	26.59	26.67	26.71	26.75	26.85	26.96
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Liquefied Petroleum Gas</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	19.64	19.79	20.07	20.13	20.23	20.24	20.50	20.82	21.03	21.15	21.22	21.32	21.43	21.54
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	26.68	26.86	27.16	27.14	27.24	27.18	27.62	27.99	28.22	28.30	28.31	28.38	28.47	28.57
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Liquefied Petroleum Gas Bi-Fuel</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	31.72	31.51	31.49	31.82	32.69	33.55	34.02	34.16	34.20	34.28	34.40	34.51
Midsized Cars	0.00	0.00	27.71	27.56	27.59	27.82	28.48	29.06	29.41	29.54	29.60	29.71	29.84	29.96
Large Cars	0.00	0.00	26.36	26.09	25.97	26.07	26.65	27.13	27.44	27.58	27.65	27.81	28.00	28.19
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	18.89	19.05	19.33	19.40	19.51	19.50	19.78	20.12	20.32	20.44	20.51	20.59	20.70	20.80
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	25.63	25.76	26.03	26.03	26.13	26.16	26.63	26.98	27.22	27.30	27.32	27.39	27.48	27.58
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Electric</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two Seater Cars	31.45	34.62	38.10	42.43	48.12	47.72	47.92	48.14	48.13	48.09	48.04	48.00	47.97	47.94
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	24.43	26.88	29.89	33.02	37.79	37.64	38.13	38.43	38.43	38.36	38.30	38.24	38.17	38.11
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel-Electric Hybrid</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.81	53.64	53.30	53.14	53.01	52.93	
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	47.93	47.75	47.56	47.40	47.28
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	44.82	44.70	44.60
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.01	41.84
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Gasoline-Electric Hybrid</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	45.40	45.25	45.13	45.03	44.97	44.94
Compact Cars	45.57	45.74	45.77	45.63	45.28	44.94	45.39	45.82	45.99	45.92	45.82	45.73	45.67	45.64
Midsized Cars	0.00	0.00	40.14	39.70	39.29	38.96	39.31	39.74	39.92	39.90	39.83	39.78	39.76	39.76
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	38.48	38.42	38.46	38.44	38.40	38.38	38.38	38.40
Two Seater Cars	36.02	36.05	35.88	35.61	35.44	35.36	35.92	36.44	36.59	36.61	36.58	36.58	36.59	36.61
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	27.45	27.12	26.93	27.10	27.24	27.37	27.40	27.38	27.42	27.42	27.46
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.90	36.81	36.71	36.58	36.47	36.40	36.38
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.66	39.51
Small Utility	0.00	0.00	0.00	0.00	0.00	33.85	33.73	33.78	33.89	33.92	33.88	33.89	33.91	33.95
Large Utility	0.00	0.00	27.86	27.31	27.12	27.03	27.33	27.67	27.84	27.87	27.85	27.89	27.91	27.95
<b>Fuel Cell Methanol</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Fuel Cell Hydrogen</b>														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	58.49	57.73	57.12	56.59	57.03	57.33	57.29	57.24	57.18	57.13	57.09	57.05
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	51.33	51.28	51.25	51.22
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46.82
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	39.76	39.71	39.64
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	0.00	0.00	43.12	42.23	42.15	41.98	42.52	42.86	42.86	42.78	42.71	42.64	42.57	42.50
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cell Gasoline														
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Cars	0.00	0.00	0.00	0.00	0.00	39.55	39.85	40.14	40.20	40.16	40.12	40.08	40.04	40.01
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	34.09	34.03	33.98	33.93	33.88
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.56	36.50	36.44	36.38	36.32
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Gasoline</b>															
Mini-compact Cars	29.69	29.76	29.84	29.93	30.07	30.22	30.31	30.42	30.53	30.58	30.60	30.61	30.62	30.63	0.7%
Subcompact Cars	32.42	32.54	32.67	32.78	32.98	33.18	33.37	33.51	33.64	33.71	33.79	33.84	33.89	33.93	0.6%
Compact Cars	35.13	35.18	35.24	35.31	35.46	35.60	35.74	35.83	35.92	35.99	36.05	36.05	36.07	36.08	0.5%
Midsized Cars	30.60	30.68	30.77	30.84	30.99	31.14	31.26	31.36	31.43	31.50	31.54	31.57	31.60	31.62	0.5%
Large Cars	28.52	28.59	28.67	28.77	28.92	29.09	29.26	29.37	29.43	29.52	29.60	29.68	29.70	29.72	0.4%
Two Seater Cars	27.46	27.54	27.63	27.73	27.89	28.03	28.17	28.28	28.39	28.46	28.50	28.54	28.57	28.60	0.5%
Small Pickup	27.59	27.76	27.92	28.05	28.24	28.40	28.61	28.75	28.85	28.95	29.04	29.09	29.13	29.15	0.6%
Large Pickup	21.00	21.13	21.26	21.39	21.56	21.70	21.83	21.94	22.07	22.18	22.25	22.29	22.33	22.35	0.6%
Small Van	26.77	26.92	27.03	27.16	27.37	27.56	27.76	27.87	28.02	28.16	28.24	28.28	28.33	28.38	0.5%
Large Van	27.81	27.97	28.12	28.24	28.43	28.63	28.83	28.99	29.13	29.28	29.38	29.44	29.49	29.54	0.5%
Small Utility	26.04	26.19	26.35	26.51	26.74	26.95	27.18	27.32	27.47	27.57	27.64	27.70	27.76	27.81	0.7%
Large Utility	21.24	21.38	21.53	21.68	21.86	22.03	22.15	22.27	22.37	22.48	22.56	22.62	22.67	22.71	0.7%
<b>Turbo Direct Injection Diesel</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	41.14	41.15	41.19	41.24	41.35	41.48	41.59	41.70	41.80	41.87	41.93	41.96	42.00	42.02	N/A
Compact Cars	43.64	43.60	43.58	43.56	43.62	43.69	43.76	43.81	43.86	43.89	43.89	43.87	43.86	43.84	0.1%
Midsized Cars	37.87	37.88	37.89	37.90	37.96	38.04	38.12	38.18	38.24	38.27	38.28	38.28	38.26	38.24	0.1%
Large Cars	36.14	36.22	36.30	36.38	36.52	36.65	36.78	36.87	36.97	37.05	37.12	37.11	37.13	37.15	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	34.86	34.96	35.07	35.14	35.28	35.41	35.53	35.57	35.62	35.67	35.71	35.69	35.70	35.70	N/A
Large Pickup	26.60	26.70	26.73	26.80	26.92	27.04	27.15	27.20	27.27	27.33	27.34	27.36	27.37	27.39	0.3%
Small Van	34.43	34.49	34.56	34.65	34.79	34.94	35.08	35.19	35.31	35.42	35.46	35.51	35.56	35.60	N/A
Large Van	35.64	35.70	35.75	35.82	35.92	36.04	36.17	36.24	36.33	36.43	36.51	36.53	36.56	36.60	0.2%
Small Utility	32.17	32.25	32.32	32.41	32.57	32.74	32.91	33.03	33.17	33.24	33.30	33.35	33.40	33.43	N/A
Large Utility	26.97	27.08	27.14	27.22	27.38	27.53	27.68	27.76	27.86	27.97	28.02	28.03	28.06	28.09	0.4%
<b>Methanol</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Methanol Flex</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Midsized Cars	31.15	31.24	31.34	31.42	31.58	31.75	31.87	31.98	32.09	32.14	32.19	32.22	32.25	32.27	0.5%
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Ethanol</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Midsized Cars	31.68	31.77	31.87	31.96	32.12	32.29	32.42	32.53	32.65	32.72	32.78	32.82	32.85	32.88	0.5%
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Ethanol Flex</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	32.52	32.78	33.05	33.31	33.64	33.91	34.14	34.29	34.46	34.59	34.66	34.70	34.74	34.78	N/A
Compact Cars	35.45	35.50	35.57	35.64	35.80	35.95	36.09	36.18	36.28	36.36	36.41	36.42	36.44	36.46	0.5%
Midsized Cars	30.89	30.98	31.07	31.15	31.31	31.47	31.59	31.70	31.80	31.86	31.90	31.93	31.96	31.98	0.5%
Large Cars	28.45	28.60	28.75	28.88	29.07	29.26	29.44	29.56	29.63	29.72	29.81	29.89	29.91	29.94	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	27.84	28.01	28.17	28.31	28.50	28.68	28.89	29.04	29.15	29.25	29.34	29.42	29.47	29.50	0.6%
Large Pickup	21.22	21.36	21.49	21.63	21.80	21.98	22.13	22.25	22.38	22.49	22.57	22.62	22.65	22.68	0.6%
Small Van	27.04	27.20	27.32	27.46	27.67	27.87	28.07	28.18	28.35	28.49	28.58	28.62	28.68	28.73	0.5%
Large Van	27.80	27.99	28.15	28.29	28.49	28.70	28.90	29.07	29.20	29.35	29.45	29.53	29.57	29.61	N/A
Small Utility	25.80	25.98	26.20	26.38	26.64	26.88	27.12	27.25	27.42	27.52	27.59	27.65	27.72	27.76	N/A
Large Utility	21.47	21.62	21.77	21.93	22.12	22.30	22.46	22.58	22.68	22.81	22.90	22.96	23.01	23.05	0.7%
<b>Compressed Natural Gas</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	37.13	37.14	37.16	37.19	37.30	37.42	37.52	37.60	37.66	37.70	37.73	37.73	37.73	37.72	0.4%
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Cars	30.17	30.25	30.30	30.37	30.52	30.65	30.79	30.89	30.94	31.00	31.07	31.11	31.16	31.17	0.3%
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	22.13	22.23	22.33	22.43	22.57	22.71	22.82	22.90	22.98	23.05	23.11	23.14	23.15	23.17	0.5%
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	29.43	29.55	29.66	29.78	29.95	30.14	30.31	30.43	30.53	30.64	30.74	30.80	30.82	30.85	0.4%
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Compressed Natural Gas Bi-Fuel</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	34.68	34.68	34.71	34.74	34.86	34.97	35.08	35.13	35.20	35.24	35.27	35.24	35.23	35.22	0.4%
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Cars	28.07	28.18	28.27	28.37	28.52	28.67	28.83	28.93	28.97	29.05	29.12	29.14	29.16	29.17	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	20.34	20.44	20.54	20.63	20.76	20.85	20.95	21.01	21.09	21.14	21.17	21.18	21.19	21.20	0.5%
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	27.06	27.20	27.28	27.38	27.55	27.72	27.90	27.99	28.12	28.24	28.30	28.32	28.34	28.37	0.4%
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Liquefied Petroleum Gas</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	21.65	21.77	21.90	22.02	22.18	22.34	22.46	22.58	22.69	22.79	22.88	22.93	22.96	22.99	0.6%
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	28.68	28.83	28.97	29.09	29.29	29.49	29.67	29.83	29.94	30.08	30.22	30.31	30.35	30.38	0.5%
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Liquefied Petroleum Gas Bi-Fuel</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	34.61	34.68	34.76	34.85	35.01	35.15	35.29	35.38	35.48	35.56	35.61	35.61	35.62	35.63	N/A
Midsized Cars	30.10	30.20	30.31	30.42	30.57	30.72	30.84	30.94	31.01	31.06	31.10	31.13	31.15	31.16	N/A
Large Cars	28.35	28.48	28.59	28.71	28.88	29.05	29.22	29.32	29.38	29.47	29.56	29.62	29.63	29.65	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	20.90	21.02	21.14	21.26	21.41	21.54	21.65	21.74	21.84	21.93	21.98	22.01	22.03	22.05	0.6%
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	27.69	27.84	27.98	28.08	28.26	28.45	28.63	28.78	28.91	29.04	29.14	29.17	29.21	29.26	0.5%
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Electric</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Two Seater Cars	47.91	47.88	47.86	47.83	47.87	47.93	47.98	48.01	48.05	48.08	48.11	48.13	48.15	48.17	1.3%
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	38.05	38.00	37.95	37.90	37.93	37.96	38.00	38.03	38.06	38.09	38.12	38.14	38.16	38.18	1.4%
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel-Electric Hybrid</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	52.84	52.76	52.70	52.66	52.67	52.70	52.73	52.75	52.76	52.76	52.75	52.73	52.71	52.69	N/A
Midsized Cars	47.16	47.07	47.01	46.98	46.99	47.02	47.05	47.08	47.10	47.12	47.12	47.11	47.10	47.09	N/A
Large Cars	44.50	44.42	44.35	44.31	44.33	44.38	44.45	44.51	44.57	44.62	44.66	44.69	44.71	44.72	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	41.67	41.52	41.41	41.34	41.35	41.38	41.44	41.51	41.59	41.67	41.75	41.81	41.86	41.89	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	0.00	0.00	0.00	41.95	41.86	41.79	41.76	41.75	41.76	41.80	41.85	41.91	41.97	42.03	N/A
Large Utility	33.62	33.48	33.37	33.30	33.30	33.33	33.38	33.45	33.54	33.63	33.69	33.76	33.85	33.91	N/A
<b>Gasoline-Electric Hybrid</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	44.93	44.95	44.98	45.01	45.09	45.19	45.30	45.38	45.46	45.54	45.59	45.62	45.65	45.67	N/A
Compact Cars	45.61	45.58	45.57	45.57	45.62	45.68	45.74	45.79	45.84	45.87	45.88	45.88	45.88	45.87	0.0%
Midsized Cars	39.76	39.77	39.80	39.82	39.89	39.97	40.05	40.11	40.16	40.21	40.22	40.22	40.23	40.21	N/A
Large Cars	38.42	38.45	38.51	38.59	38.73	38.87	38.99	39.07	39.15	39.22	39.27	39.30	39.33	39.32	N/A
Two Seater Cars	36.64	36.67	36.71	36.76	36.85	36.97	37.09	37.19	37.28	37.34	37.36	37.38	37.41	37.42	0.1%
Small Pickup	0.00	0.00	0.00	40.30	40.19	40.09	40.02	39.97	39.95	39.94	39.95	39.94	39.96	39.98	N/A
Large Pickup	27.51	27.56	27.62	27.67	27.80	27.91	28.02	28.07	28.14	28.21	28.26	28.27	28.28	28.29	N/A
Small Van	36.35	36.34	36.36	36.41	36.52	36.64	36.76	36.85	36.94	37.03	37.12	37.14	37.18	37.22	N/A
Large Van	39.35	39.22	39.13	39.07	39.09	39.14	39.21	39.30	39.40	39.50	39.59	39.65	39.72	39.74	N/A
Small Utility	33.99	34.05	34.13	34.19	34.33	34.51	34.67	34.81	34.94	35.06	35.13	35.19	35.25	35.30	N/A
Large Utility	28.01	28.07	28.16	28.23	28.38	28.53	28.68	28.80	28.87	28.98	29.05	29.07	29.11	29.14	N/A
<b>Fuel Cell Methanol</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Fuel Cell Hydrogen</b>															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	57.02	56.99	56.97	56.94	56.98	57.04	57.08	57.11	57.14	57.17	57.20	57.22	57.24	57.25	N/A
Compact Cars	0.00	59.63	59.60	59.57	59.62	59.68	59.73	59.76	59.80	59.83	59.85	59.87	59.89	59.90	N/A
Midsized Cars	51.19	51.16	51.13	51.09	51.12	51.16	51.20	51.23	51.26	51.29	51.31	51.32	51.34	51.35	N/A
Large Cars	46.79	46.77	46.75	46.73	46.77	46.81	46.85	46.89	46.93	46.97	47.01	47.04	47.06	47.09	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	39.58	39.53	39.47	39.42	39.45	39.49	39.54	39.57	39.60	39.64	39.67	39.69	39.72	39.75	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	42.43	42.37	42.32	42.27	42.30	42.34	42.38	42.41	42.44	42.48	42.51	42.53	42.56	42.58	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	32.20	32.22	32.24	32.26	32.28	32.30	N/A

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Fuel Cell Gasoline															
Mini-compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Subcompact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Compact Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Midsized Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Cars	39.98	39.97	39.96	39.94	39.97	40.01	40.03	40.07	40.10	40.14	40.18	40.20	40.22	40.24	N/A
Two Seater Cars	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Large Pickup	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Van	33.83	33.78	33.73	33.69	33.71	33.74	33.79	33.81	33.84	33.87	33.90	33.92	33.94	33.97	N/A
Large Van	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Small Utility	36.26	36.21	36.16	36.12	36.15	36.18	36.22	36.24	36.27	36.30	36.33	36.35	36.37	36.39	N/A
Large Utility	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 57. New Light-Duty Vehicle Fuel Economy  
(miles per gallon)

Sources: 2003 and 2004 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); National Highway Traffic and Safety Administration, Mid-Model Year Fuel Economy Reports from Auto Manufacturers, 2000; and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Gasoline</b>														
Mini-compact Cars	57.1	57.1	57.2	57.6	57.8	58.1	58.2	58.3	58.4	58.5	58.5	58.5	58.6	58.6
Subcompact Cars	20.4	20.4	20.6	20.8	21.0	21.2	21.3	21.4	21.5	21.5	21.6	21.6	21.7	21.7
Compact Cars	20.5	20.5	20.7	21.0	21.2	21.4	21.6	21.7	21.8	21.8	21.9	21.9	22.0	22.0
Midsize Cars	26.9	26.9	27.0	27.3	27.6	27.8	27.9	28.1	28.2	28.2	28.3	28.3	28.4	28.4
Large Cars	34.4	34.4	34.5	34.7	34.9	35.1	35.3	35.4	35.5	35.5	35.6	35.6	35.7	35.7
Two Seater Cars	45.6	45.6	45.7	46.0	46.2	46.4	46.6	46.7	46.8	46.8	46.9	46.9	46.9	47.0
Small Pickup	18.8	18.8	18.8	19.4	19.6	19.8	20.0	20.1	20.2	20.3	20.3	20.4	20.4	20.5
Large Pickup	26.1	26.1	26.1	26.6	26.9	27.1	27.3	27.4	27.5	27.6	27.6	27.7	27.8	27.8
Small Van	27.5	27.5	27.5	28.1	28.3	28.5	28.6	28.7	28.8	28.8	28.9	29.0	29.0	29.1
Large Van	23.6	23.6	23.6	24.1	24.4	24.6	24.7	24.8	24.9	24.9	25.0	25.0	25.1	25.2
Small Utility	28.4	28.4	28.4	29.0	29.2	29.4	29.6	29.7	29.8	29.8	29.9	29.9	30.0	30.1
Large Utility	37.0	37.0	37.0	37.5	37.8	38.0	38.1	38.3	38.4	38.4	38.5	38.5	38.6	38.7
<b>Turbo Direct Injection Diesel</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	23.0	23.0	23.0	23.1	23.1	23.1
Compact Cars	21.7	21.9	21.9	22.2	22.4	22.5	22.7	22.8	22.8	22.9	22.9	22.9	23.0	23.0
Midsize Cars	0.0	29.1	29.0	29.2	29.4	29.5	29.7	29.8	29.8	29.9	29.9	29.9	30.0	30.0
Large Cars	0.0	0.0	0.0	0.0	37.2	37.3	37.3	37.4	37.5	37.5	37.5	37.6	37.6	37.6
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	22.7	22.9	22.9	23.0	23.0	23.1	23.1	23.1	23.1	23.1
Large Pickup	27.6	27.6	27.6	28.2	28.4	28.6	28.7	28.8	28.9	28.9	29.0	29.0	29.1	29.1
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	31.7	31.6	31.6	31.6	31.7	31.7	31.7
Large Van	25.3	25.3	25.5	26.0	26.1	26.3	26.4	26.4	26.5	26.5	26.5	26.5	26.6	26.6
Small Utility	0.0	0.0	30.5	31.0	31.2	31.3	31.5	31.6	31.6	31.7	31.7	31.8	31.8	31.9
Large Utility	38.5	38.5	38.5	39.0	39.2	39.4	39.6	39.7	39.7	39.8	39.8	39.9	39.9	40.0
<b>Methanol</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsize Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Methanol Flex</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsized Cars	29.3	29.4	29.5	29.8	30.0	30.2	30.4	30.5	30.6	30.6	30.7	30.7	30.8	30.8
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Ethanol</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsized Cars	29.2	29.2	29.3	29.6	29.8	30.0	30.2	30.3	30.4	30.4	30.5	30.5	30.6	30.6
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Ethanol Flex</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.3	23.0	23.0	23.1	23.1	23.2	23.3
Compact Cars	21.2	21.2	21.2	21.6	21.8	22.0	22.2	22.4	22.4	22.5	22.5	22.6	22.6	22.7
Midsized Cars	27.3	27.3	27.4	27.7	27.9	28.1	28.3	28.4	28.5	28.6	28.6	28.7	28.7	28.8
Large Cars	0.0	0.0	0.0	0.0	35.8	35.5	35.6	35.8	35.8	35.9	36.0	36.0	36.1	36.1
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	21.5	21.5	21.5	22.1	22.3	22.5	22.7	22.7	22.8	22.9	22.9	23.0	23.0	23.0
Large Pickup	27.0	27.1	27.1	27.7	28.0	28.2	28.3	28.4	28.5	28.5	28.5	28.6	28.7	28.7
Small Van	29.8	29.8	29.8	30.6	30.8	31.0	31.0	31.2	31.2	31.2	31.3	31.3	31.4	31.4
Large Van	0.0	0.0	24.8	24.9	25.0	25.2	25.3	25.4	25.5	25.5	25.5	25.6	25.7	25.7
Small Utility	0.0	0.0	0.0	0.0	29.5	29.7	29.8	30.0	30.1	30.1	30.2	30.2	30.3	30.3
Large Utility	37.3	37.3	37.3	37.9	38.1	38.4	38.5	38.6	38.7	38.8	38.8	38.9	39.0	39.0
<b>Compressed Natural Gas</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	27.0	27.0	27.1	27.4	27.6	27.9	28.0	28.1	28.2	28.3	28.3	28.4	28.4	28.5
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Cars	41.2	41.2	41.3	41.5	41.7	41.9	42.0	42.1	42.2	42.2	42.3	42.3	42.4	42.4
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	32.9	32.9	32.9	33.4	33.7	33.9	34.0	34.2	34.3	34.3	34.4	34.5	34.5	34.6
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	30.4	30.4	30.4	30.9	31.1	31.3	31.5	31.6	31.6	31.7	31.7	31.8	31.9	31.9
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Compressed Natural Gas Bi-Fuel</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	25.8	25.8	25.9	26.2	26.5	26.7	26.8	27.0	27.1	27.1	27.2	27.2	27.3	27.3
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Cars	0.0	0.0	40.3	40.5	40.7	40.8	41.0	41.1	41.2	41.2	41.3	41.3	41.4	41.4
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	32.0	32.0	32.0	32.6	32.8	33.1	33.2	33.4	33.5	33.5	33.6	33.6	33.7	33.8
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	29.5	29.5	29.5	30.0	30.3	30.5	30.6	30.7	30.8	30.8	30.9	30.9	31.0	31.1
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Liquefied Petroleum Gas</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	32.1	32.2	32.2	32.7	33.0	33.2	33.4	33.5	33.6	33.6	33.7	33.8	33.8	33.9
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	29.7	29.7	29.7	30.2	30.5	30.7	30.8	30.9	31.0	31.0	31.1	31.1	31.2	31.2
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Liquefied Petroleum Gas Bi-Fuel</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	25.4	25.6	25.8	26.0	26.2	26.3	26.4	26.5	26.6	26.6	26.7	26.7
Midsized Cars	0.0	0.0	32.0	32.2	32.4	32.6	32.8	33.0	33.1	33.1	33.2	33.3	33.3	33.4
Large Cars	0.0	0.0	39.5	39.7	39.8	40.0	40.1	40.2	40.3	40.4	40.4	40.5	40.5	40.6
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	31.0	31.0	31.0	31.6	31.9	32.1	32.2	32.4	32.5	32.5	32.6	32.7	32.7	32.8
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	28.5	28.5	28.5	29.1	29.3	29.5	29.6	29.8	29.8	29.9	29.9	30.0	30.1	30.1
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Electric</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Two Seater Cars	70.2	70.1	70.8	71.4	72.0	71.8	71.4	71.0	70.6	70.3	70.0	69.7	69.4	69.4
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	55.6	55.5	56.2	57.1	57.8	57.4	56.7	56.2	55.8	55.4	55.0	54.7	54.3	54.3
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel-Electric Hybrid</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.8	27.8	27.7	27.7	27.6	27.6	27.7
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	34.5	33.8	33.8	33.7	33.8
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.8	42.7	42.8
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.3	37.3
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Gasoline-Electric Hybrid</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.1	25.7	25.6	25.5	25.4	25.4
Compact Cars	24.9	23.7	24.0	23.9	24.2	23.9	24.1	24.1	24.0	23.9	23.8	23.7	23.6	23.6
Midsized Cars	0.0	0.0	30.8	30.0	30.1	30.1	30.1	30.1	30.1	30.1	30.0	30.0	30.0	30.0
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	39.4	38.4	38.3	38.2	38.2	38.2	38.1	38.1
Two Seater Cars	52.0	51.3	51.3	51.5	51.5	51.6	51.6	51.7	51.6	51.6	51.6	51.5	51.5	51.5
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	32.9	32.1	32.2	32.3	32.3	32.1	32.0	31.9	31.8	31.6	31.6
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	35.4	34.6	34.5	34.4	34.2	34.2	34.1
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.1	28.4
Small Utility	0.0	0.0	0.0	0.0	0.0	32.9	32.5	32.5	32.4	32.4	32.3	32.3	32.2	32.3
Large Utility	0.0	0.0	42.1	41.8	41.9	41.9	41.9	41.9	41.8	41.7	41.7	41.6	41.5	41.5
<b>Fuel Cell Methanol</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Fuel Cell Hydrogen</b>														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	74.3	72.9	71.4	69.9	67.8	66.0	64.3	62.9	61.4	60.1	58.7	57.4
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	72.7	71.2	69.7	68.3
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78.5
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	81.3	79.4	77.6
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	0.0	0.0	97.8	96.3	93.8	91.5	88.4	85.8	83.6	81.7	79.8	78.0	76.2	74.5
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cell Gasoline														
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Cars	0.0	0.0	0.0	0.0	0.0	117.6	113.4	109.5	106.0	103.0	100.2	97.3	94.6	92.2
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	108.3	105.1	101.8	98.6	95.8
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	104.2	101.1	98.1	95.2	92.5
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average Price														
Cars	25.3	25.3	25.4	26.0	26.4	26.5	26.7	26.9	26.9	26.9	27.0	27.0	27.1	27.1
Trucks	28.9	28.9	29.0	29.6	29.8	30.1	30.2	30.3	30.4	30.5	30.5	30.6	30.7	30.7
Light Duty Vehicles	27.1	27.1	27.1	27.6	27.9	28.2	28.4	28.6	28.6	28.7	28.8	28.8	28.9	29.0

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Gasoline</b>															
Mini-compact Cars	58.7	58.7	58.7	58.8	58.8	58.8	58.8	58.9	58.9	58.9	58.9	58.9	58.9	58.9	0.1%
Subcompact Cars	21.7	21.8	21.8	21.8	21.9	21.9	21.9	21.9	22.0	22.0	22.0	22.0	22.0	22.0	0.3%
Compact Cars	22.1	22.1	22.1	22.2	22.2	22.3	22.3	22.3	22.4	22.4	22.4	22.4	22.4	22.4	0.3%
Midsized Cars	28.5	28.5	28.6	28.6	28.7	28.7	28.7	28.8	28.8	28.8	28.8	28.8	28.8	28.8	0.3%
Large Cars	35.8	35.8	35.9	35.9	36.0	36.0	36.0	36.1	36.1	36.1	36.1	36.2	36.2	36.2	0.2%
Two Seater Cars	47.0	47.0	47.1	47.1	47.2	47.2	47.2	47.3	47.3	47.3	47.3	47.3	47.3	47.3	0.1%
Small Pickup	20.5	20.6	20.6	20.7	20.7	20.8	20.8	20.9	20.9	20.9	20.9	21.0	21.0	21.0	0.4%
Large Pickup	27.9	28.0	28.0	28.1	28.1	28.2	28.2	28.3	28.3	28.3	28.3	28.3	28.3	28.3	0.3%
Small Van	29.1	29.2	29.3	29.3	29.4	29.4	29.5	29.5	29.6	29.6	29.6	29.7	29.7	29.7	0.3%
Large Van	25.2	25.3	25.4	25.4	25.5	25.5	25.6	25.6	25.7	25.7	25.7	25.7	25.8	25.8	0.3%
Small Utility	30.1	30.2	30.2	30.3	30.3	30.4	30.4	30.5	30.5	30.5	30.5	30.5	30.6	30.6	0.3%
Large Utility	38.7	38.8	38.9	38.9	39.0	39.0	39.1	39.1	39.2	39.2	39.2	39.2	39.2	39.3	0.2%
<b>Turbo Direct Injection Diesel</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	23.2	23.2	23.3	23.3	23.3	23.3	23.4	23.4	23.4	23.4	23.4	23.5	23.5	23.5	N/A
Compact Cars	23.0	23.0	23.1	23.1	23.1	23.1	23.1	23.1	23.2	23.2	23.2	23.2	23.2	23.2	0.2%
Midsized Cars	30.0	30.1	30.1	30.1	30.1	30.1	30.2	30.2	30.2	30.2	30.2	30.2	30.2	30.2	0.1%
Large Cars	37.7	37.7	37.7	37.7	37.7	37.7	37.8	37.8	37.8	37.8	37.8	37.8	37.8	37.8	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	23.1	23.2	23.2	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.1	23.0	23.0	N/A
Large Pickup	29.2	29.2	29.3	29.3	29.4	29.4	29.4	29.5	29.5	29.5	29.5	29.6	29.6	29.6	0.3%
Small Van	31.7	31.8	31.8	31.8	31.8	31.8	31.9	31.9	31.9	31.9	31.9	31.9	31.9	31.9	N/A
Large Van	26.6	26.7	26.7	26.7	26.8	26.8	26.8	26.9	26.9	27.0	27.0	27.0	27.0	27.0	0.2%
Small Utility	31.9	32.0	32.0	32.0	32.1	32.1	32.2	32.2	32.2	32.3	32.3	32.3	32.3	32.3	N/A
Large Utility	40.0	40.1	40.1	40.2	40.2	40.3	40.3	40.4	40.4	40.4	40.5	40.5	40.5	40.5	0.2%
<b>Methanol</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Methanol Flex</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Midsized Cars	30.9	30.9	31.0	31.0	31.0	31.1	31.1	31.1	31.2	31.2	31.2	31.2	31.2	31.2	0.2%
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Ethanol</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Midsized Cars	30.7	30.7	30.8	30.8	30.8	30.9	30.9	30.9	30.9	30.9	31.0	31.0	31.0	31.0	0.2%
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Ethanol Flex</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	23.3	23.4	23.5	23.5	23.6	23.6	23.6	23.7	23.7	23.7	23.7	23.7	23.7	23.7	N/A
Compact Cars	22.7	22.8	22.8	22.8	22.9	22.9	22.9	23.0	23.0	23.0	23.0	23.0	23.0	23.0	0.3%
Midsized Cars	28.8	28.9	28.9	28.9	29.0	29.0	29.1	29.1	29.1	29.1	29.1	29.1	29.1	29.2	0.3%
Large Cars	36.2	36.3	36.3	36.4	36.4	36.5	36.5	36.5	36.6	36.6	36.6	36.6	36.6	36.6	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	23.1	23.1	23.2	23.2	23.2	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	23.3	0.3%
Large Pickup	28.8	28.8	28.9	28.9	28.9	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	0.3%
Small Van	31.4	31.5	31.5	31.6	31.6	31.7	31.7	31.7	31.7	31.8	31.8	31.8	31.8	31.8	0.2%
Large Van	25.8	25.9	25.9	26.0	26.0	26.1	26.1	26.2	26.2	26.2	26.3	26.3	26.3	26.3	N/A
Small Utility	30.4	30.5	30.5	30.6	30.6	30.7	30.7	30.8	30.8	30.8	30.8	30.9	30.9	30.9	N/A
Large Utility	39.1	39.1	39.2	39.3	39.3	39.4	39.4	39.4	39.5	39.5	39.5	39.5	39.5	39.6	0.2%
<b>Compressed Natural Gas</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	28.5	28.6	28.6	28.7	28.7	28.8	28.8	28.8	28.9	28.9	28.9	28.9	29.0	29.0	0.3%
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Cars	42.5	42.5	42.6	42.6	42.7	42.7	42.8	42.8	42.8	42.9	42.9	42.9	42.9	42.9	0.2%
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	34.7	34.7	34.8	34.9	34.9	35.0	35.0	35.1	35.1	35.2	35.2	35.2	35.2	35.2	0.3%
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	32.0	32.1	32.1	32.2	32.2	32.3	32.4	32.4	32.5	32.5	32.6	32.6	32.6	32.6	0.3%
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Compressed Natural Gas Bi-Fuel</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	27.4	27.5	27.5	27.6	27.6	27.7	27.7	27.7	27.8	27.8	27.8	27.9	27.9	27.9	0.3%
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Cars	41.5	41.6	41.6	41.7	41.7	41.8	41.8	41.8	41.9	41.9	41.9	41.9	42.0	42.0	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	33.9	33.9	34.0	34.1	34.1	34.2	34.3	34.3	34.3	34.4	34.4	34.4	34.4	34.5	0.3%
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	31.1	31.2	31.3	31.3	31.4	31.5	31.5	31.6	31.6	31.7	31.7	31.8	31.8	31.8	0.3%
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Liquefied Petroleum Gas</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	33.9	34.0	34.1	34.1	34.2	34.2	34.3	34.3	34.3	34.3	34.3	34.3	34.4	34.4	0.3%
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	31.3	31.4	31.4	31.5	31.5	31.6	31.6	31.7	31.7	31.7	31.8	31.8	31.8	31.8	0.3%
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Liquefied Petroleum Gas Bi-Fuel</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	26.8	26.8	26.9	26.9	27.0	27.0	27.1	27.1	27.1	27.2	27.2	27.2	27.2	27.2	N/A
Midsized Cars	33.4	33.5	33.6	33.6	33.7	33.7	33.7	33.8	33.8	33.8	33.8	33.8	33.9	33.9	N/A
Large Cars	40.7	40.7	40.8	40.8	40.9	40.9	41.0	41.0	41.0	41.0	41.1	41.1	41.1	41.1	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	32.9	32.9	33.0	33.1	33.1	33.2	33.2	33.3	33.3	33.4	33.4	33.4	33.4	33.4	0.3%
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	30.2	30.3	30.3	30.4	30.4	30.5	30.6	30.6	30.7	30.7	30.7	30.8	30.8	30.8	0.3%
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Electric</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Two Seater Cars	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.4	69.3	69.3	69.3	69.3	0.0%
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.4	54.3	54.3	54.3	54.3	54.3	-0.1%
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A



Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel-Electric Hybrid</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	27.7	27.7	27.8	27.8	27.8	27.9	27.9	27.9	27.9	28.0	28.0	28.0	28.0	28.0	N/A
Midsized Cars	33.9	34.0	34.0	34.1	34.1	34.2	34.3	34.3	34.4	34.5	34.5	34.6	34.6	34.7	N/A
Large Cars	42.8	42.8	42.8	42.8	42.9	42.9	42.9	43.0	43.0	43.0	43.0	43.0	43.1	43.1	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	37.4	37.4	37.4	37.5	37.5	37.5	37.6	37.6	37.6	37.7	37.7	37.7	37.7	37.7	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	0.0	0.0	0.0	38.5	38.5	38.5	38.5	38.5	38.6	38.6	38.6	38.6	38.6	38.6	N/A
Large Utility	47.2	47.3	47.3	47.3	47.3	47.4	47.4	47.4	47.5	47.5	47.5	47.6	47.6	47.6	N/A
<b>Gasoline-Electric Hybrid</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	25.3	25.3	25.3	25.3	25.2	25.2	25.2	25.1	25.1	25.1	25.0	25.0	24.9	24.9	N/A
Compact Cars	23.6	23.5	23.5	23.5	23.6	23.6	23.6	23.7	23.7	23.7	23.7	23.7	23.7	23.7	0.0%
Midsized Cars	30.1	30.1	30.1	30.2	30.2	30.2	30.2	30.3	30.3	30.3	30.3	30.3	30.3	30.3	N/A
Large Cars	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.0	38.0	N/A
Two Seater Cars	51.6	51.6	51.6	51.6	51.7	51.7	51.7	51.7	51.8	51.8	51.8	51.8	51.8	51.8	0.0%
Small Pickup	0.0	0.0	0.0	27.5	27.5	27.5	27.5	27.5	27.4	27.3	27.2	27.1	27.0	26.9	N/A
Large Pickup	31.6	31.6	31.6	31.6	31.6	31.5	31.5	31.5	31.5	31.4	31.4	31.3	31.3	31.3	N/A
Small Van	34.1	34.1	34.0	34.0	33.9	33.9	33.9	33.8	33.7	33.7	33.6	33.6	33.5	33.4	N/A
Large Van	28.4	28.4	28.4	28.4	28.4	28.4	28.4	28.5	28.5	28.5	28.5	28.5	28.5	28.5	N/A
Small Utility	32.3	32.3	32.4	32.4	32.4	32.5	32.5	32.5	32.6	32.6	32.6	32.6	32.6	32.6	N/A
Large Utility	41.6	41.6	41.6	41.7	41.7	41.8	41.8	41.9	41.9	41.9	42.0	42.0	42.0	42.0	N/A
<b>Fuel Cell Methanol</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Fuel Cell Hydrogen</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	56.3	55.1	54.1	53.0	52.0	51.0	50.1	49.2	48.3	47.5	46.8	46.1	45.4	44.7	N/A
Compact Cars	0.0	55.7	54.7	53.6	52.7	51.7	50.9	50.0	49.2	48.4	47.7	47.0	46.4	45.8	N/A
Midsized Cars	67.0	65.7	64.5	63.3	62.2	61.1	60.1	59.1	58.1	57.2	56.4	55.6	54.9	54.1	N/A
Large Cars	77.1	75.7	74.4	73.1	71.8	70.6	69.5	68.4	67.4	66.4	65.5	64.6	63.8	63.0	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	76.0	74.3	72.8	71.3	69.9	68.4	67.1	65.8	64.5	63.4	62.3	61.3	60.3	59.4	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	73.0	71.5	70.1	68.6	67.3	66.0	64.7	63.5	62.3	61.3	60.3	59.3	58.4	57.5	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	80.6	79.2	77.9	76.6	75.4	74.2	N/A

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Fuel Cell Gasoline</b>															
Mini-compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Subcompact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Compact Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Midsized Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Cars	89.7	87.4	85.2	83.0	83.0	83.0	82.9	82.9	82.9	82.8	82.8	82.8	82.7	82.7	N/A
Two Seater Cars	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Large Pickup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Van	92.9	90.3	87.7	85.2	85.2	85.1	85.0	85.0	85.0	84.9	84.9	84.8	84.8	84.8	N/A
Large Van	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Small Utility	89.8	87.4	84.9	82.6	82.6	82.5	82.5	82.5	82.4	82.4	82.3	82.3	82.3	82.3	N/A
Large Utility	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
<b>Average Price</b>															
Cars	27.2	27.2	27.3	27.3	27.4	27.4	27.4	27.5	27.5	27.5	27.5	27.6	27.6	27.6	0.3%
Trucks	30.8	30.9	31.0	31.0	31.1	31.2	31.2	31.3	31.3	31.3	31.4	31.4	31.4	31.4	0.3%
Light Duty Vehicles	29.1	29.1	29.2	29.3	29.3	29.4	29.5	29.5	29.6	29.6	29.6	29.7	29.7	29.7	0.4%

Table 58. New Light-Duty Vehicle Prices  
(thousand 2004 dollars)

Sources: 2003 and 2004 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 59. New Light-Duty Vehicle Range  
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Gasoline</b>														
Mini-compact Cars	420	422	424	434	443	452	467	478	482	484	485	486	487	489
Subcompact Cars	408	409	409	413	419	424	437	447	451	452	453	455	457	459
Compact Cars	458	461	463	468	473	477	490	500	505	506	506	507	508	508
Midsized Cars	472	474	475	478	483	488	500	509	513	515	516	518	519	521
Large Cars	486	487	486	485	487	489	500	509	513	515	516	518	521	522
Two Seater Cars	405	407	406	407	410	415	424	431	435	437	439	441	442	443
Small Pickup	448	453	459	465	468	470	478	486	490	493	495	497	500	503
Large Pickup	484	488	495	497	500	501	507	516	521	525	526	529	532	535
Small Van	559	561	566	568	571	570	579	587	592	594	595	597	599	602
Large Van	834	840	850	851	855	854	868	879	887	890	891	893	896	900
Small Utility	430	433	439	443	449	452	463	472	477	480	481	484	487	490
Large Utility	515	519	526	527	529	532	542	551	557	561	563	566	569	572
<b>Turbo Direct Injection Diesel</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	603	609	611	612	614	617	619
Compact Cars	619	622	625	632	638	644	662	675	681	683	683	684	685	686
Midsized Cars	0	639	641	646	652	658	674	687	693	695	697	699	701	703
Large Cars	0	0	0	0	657	661	675	687	693	696	697	700	703	705
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	632	634	645	656	662	665	668	671	675	679
Large Pickup	654	659	668	671	675	676	685	696	704	708	711	714	718	722
Small Van	0	0	0	0	0	0	0	792	799	802	803	806	809	813
Large Van	1126	1134	1147	1148	1154	1152	1172	1187	1198	1201	1202	1206	1210	1215
Small Utility	0	0	592	598	606	610	625	637	644	647	650	653	657	661
Large Utility	696	701	710	712	714	719	732	744	752	757	760	764	768	772
<b>Methanol</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range  
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Methanol Flex</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	269	270	271	273	275	278	285	290	293	294	294	295	296	297
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ethanol</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	358	360	361	364	367	371	380	387	390	392	392	394	395	396
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ethanol Flex</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	326	329	330	331	332	334	335
Compact Cars	334	336	338	342	345	348	358	365	368	369	369	370	370	371
Midsized Cars	344	346	347	349	353	356	365	372	375	376	377	378	379	380
Large Cars	0	0	0	0	355	357	365	371	375	376	377	378	380	381
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	327	331	335	339	342	343	349	354	358	360	361	363	365	367
Large Pickup	353	356	361	363	365	365	370	377	381	383	384	386	388	390
Small Van	408	410	413	414	417	416	423	428	432	434	434	436	438	440
Large Van	0	0	620	621	624	623	634	642	648	650	650	652	654	657
Small Utility	0	0	0	0	328	330	338	345	348	350	351	353	355	358
Large Utility	376	379	384	385	386	389	396	402	407	410	411	413	415	418
<b>Compressed Natural Gas</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	275	276	278	281	284	286	294	300	303	304	304	304	305	305
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	292	292	292	291	292	294	300	305	308	309	310	311	312	313
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	290	293	297	298	300	300	304	310	313	315	316	317	319	321
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	501	504	510	510	513	512	521	528	532	534	534	536	538	540
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range  
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Compressed Natural Gas Bi-Fuel</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	229	230	231	234	236	238	245	250	252	253	253	253	254	254
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	243	243	243	245	250	254	257	258	258	259	260	261
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	242	244	247	248	250	250	254	258	261	262	263	264	266	267
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	417	420	425	425	427	427	434	440	444	445	445	447	448	450
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Liquefied Petroleum Gas</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	411	415	421	422	425	425	431	439	443	446	448	450	452	455
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	709	714	722	723	726	726	738	748	754	756	757	759	762	765
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Liquefied Petroleum Gas Bi-Fuel</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	370	375	378	381	392	400	404	405	405	405	406	407
Midsized Cars	0	0	380	383	387	390	400	407	411	412	413	414	415	416
Large Cars	0	0	389	388	389	392	400	407	411	412	413	415	416	418
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	387	390	396	398	400	400	406	413	417	420	421	423	426	428
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	667	672	680	680	684	683	694	704	710	712	712	715	717	720
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Electric</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range  
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel-Electric Hybrid</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	650	656	658	658	659	660	661
Midsized Cars	0	0	0	0	0	0	0	0	0	670	671	673	675	677
Large Cars	0	0	0	0	0	0	0	0	0	0	0	674	677	679
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	779	783
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Gasoline-Electric Hybrid</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	563	566	567	569	571	573
Compact Cars	573	576	578	585	591	596	613	625	631	632	633	633	634	636
Midsized Cars	0	0	594	598	604	609	625	636	642	644	645	647	649	651
Large Cars	0	0	0	0	0	0	625	636	642	644	645	648	651	653
Two Seater Cars	507	508	508	508	512	519	530	539	544	547	548	551	553	554
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	621	625	626	634	645	652	656	658	661	665	669
Small Van	0	0	0	0	0	0	0	733	740	742	744	746	749	753
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	1120	1125
Small Utility	0	0	0	0	0	565	579	590	596	599	601	605	609	612
Large Utility	0	0	657	659	661	665	677	689	697	701	704	707	711	715
<b>Fuel Cell Methanol</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Fuel Cell Hydrogen</b>														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	409	413	419	424	437	447	451	452	453	455	457	459
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	516	518	519	521
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	522
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	0	0	597	599	602
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	439	443	449	452	463	472	477	480	481	484	487	490
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 59. New Light-Duty Vehicle Range  
(miles)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Fuel Cell Gasoline														
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Cars	0	0	0	0	0	489	500	509	513	515	516	518	521	522
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Van	0	0	0	0	0	0	0	0	0	594	595	597	599	602
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Small Utility	0	0	0	0	0	0	0	0	0	480	481	484	487	490
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Table 59. New Light-Duty Vehicle Range  
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Gasoline</b>															
Mini-compact Cars	490	491	492	494	496	499	500	502	504	505	505	505	505	505	0.7%
Subcompact Cars	460	462	463	465	468	470	473	475	477	478	479	479	480	481	0.6%
Compact Cars	509	510	511	512	514	516	518	519	520	522	522	522	523	523	0.5%
Midsized Cars	522	523	525	526	529	531	533	535	536	537	538	539	539	539	0.5%
Large Cars	524	525	527	529	531	534	538	540	541	542	544	545	546	546	0.4%
Two Seater Cars	445	446	447	449	452	454	456	458	460	461	462	462	463	463	0.5%
Small Pickup	505	509	512	514	517	521	524	527	529	531	532	533	534	534	0.6%
Large Pickup	538	541	544	548	552	556	559	562	565	568	570	571	572	572	0.6%
Small Van	605	609	611	614	619	624	628	630	634	637	639	640	641	642	0.5%
Large Van	904	909	914	918	924	931	937	942	947	951	955	957	959	960	0.5%
Small Utility	492	495	498	501	506	510	514	517	520	521	523	524	525	526	0.7%
Large Utility	575	579	583	587	592	597	600	603	606	609	611	613	614	615	0.7%
<b>Turbo Direct Injection Diesel</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	621	623	626	628	631	635	639	641	644	645	646	647	648	649	N/A
Compact Cars	687	688	689	691	694	696	699	701	703	704	705	705	706	706	0.5%
Midsized Cars	705	707	709	710	714	717	720	722	724	725	726	727	728	728	0.5%
Large Cars	707	709	711	714	717	722	726	728	730	732	734	736	737	737	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	682	687	691	694	699	703	708	711	714	716	719	720	721	722	N/A
Large Pickup	726	730	735	739	745	750	754	758	763	767	769	770	772	773	0.6%
Small Van	817	822	825	829	836	842	848	851	856	860	862	864	865	867	N/A
Large Van	1220	1227	1234	1239	1247	1256	1265	1272	1278	1284	1289	1292	1294	1296	0.5%
Small Utility	665	669	673	677	683	688	694	697	701	704	706	707	709	710	N/A
Large Utility	777	782	787	793	800	806	810	814	818	822	825	827	829	831	0.7%
<b>Methanol</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Table 59. New Light-Duty Vehicle Range  
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Methanol Flex</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	298	298	299	300	301	303	304	305	306	306	307	307	307	307	0.5%
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
<b>Ethanol</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	397	398	399	400	402	404	405	407	408	408	409	409	410	410	0.5%
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
<b>Ethanol Flex</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	336	337	338	339	341	343	345	347	348	349	349	350	350	351	N/A
Compact Cars	372	372	373	374	375	377	378	379	380	381	381	381	382	382	0.5%
Midsized Cars	381	382	383	384	386	388	389	391	391	392	393	393	393	394	0.5%
Large Cars	383	384	385	386	388	390	392	394	395	396	397	398	398	399	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	369	371	373	375	378	380	383	385	386	387	389	389	390	390	0.6%
Large Pickup	392	395	397	400	403	406	408	410	412	415	416	417	417	418	0.6%
Small Van	442	445	446	449	452	455	458	460	463	465	466	467	468	469	0.5%
Large Van	660	664	667	670	675	679	684	688	691	695	697	698	700	701	N/A
Small Utility	360	362	364	366	369	372	375	377	379	381	381	382	383	384	N/A
Large Utility	420	423	426	429	432	436	438	440	442	445	446	447	448	449	0.7%
<b>Compressed Natural Gas</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	305	306	306	307	308	310	311	311	312	313	313	313	314	314	0.5%
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	314	315	316	317	319	321	323	324	324	325	326	327	327	328	0.4%
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	323	325	327	329	331	333	335	337	339	341	342	342	343	343	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	542	545	548	551	554	558	562	565	568	571	573	574	575	576	0.5%
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Table 59. New Light-Duty Vehicle Range  
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Compressed Natural Gas Bi-Fuel</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	255	255	255	256	257	258	259	260	260	261	261	261	261	261	0.5%
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	262	263	263	264	266	267	269	270	270	271	272	273	273	273	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	269	271	272	274	276	278	279	281	282	284	285	285	286	286	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	452	455	457	459	462	465	468	471	473	476	477	478	479	480	0.5%
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
<b>Liquefied Petroleum Gas</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	457	460	463	466	469	472	475	477	480	483	484	485	486	486	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	768	773	777	780	785	791	796	801	805	809	812	813	815	816	0.5%
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
<b>Liquefied Petroleum Gas Bi-Fuel</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	407	408	409	409	411	413	414	415	416	417	418	418	418	418	N/A
Midsized Cars	418	419	420	421	423	425	427	428	429	430	430	431	431	431	N/A
Large Cars	419	420	421	423	425	428	430	432	433	434	435	436	436	437	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	430	433	435	438	442	444	447	449	452	454	456	457	457	458	0.6%
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	723	727	731	734	739	744	750	754	757	761	764	765	767	768	0.5%
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
<b>Electric</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Table 59. New Light-Duty Vehicle Range  
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel-Electric Hybrid</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	662	663	664	665	668	671	673	675	677	678	679	679	679	680	N/A
Midsized Cars	679	680	682	684	687	691	693	695	697	699	700	700	701	701	N/A
Large Cars	681	683	685	687	691	695	699	701	703	705	707	709	709	710	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	787	792	795	799	805	811	816	820	824	828	831	832	833	835	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	0	0	0	652	657	663	668	672	675	678	679	681	682	683	N/A
Large Utility	748	753	758	763	770	776	780	784	788	792	795	797	798	800	N/A
<b>Gasoline-Electric Hybrid</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	575	577	579	581	585	588	591	594	596	597	598	599	600	601	N/A
Compact Cars	636	637	638	640	642	645	647	649	651	652	653	653	653	654	0.5%
Midsized Cars	653	654	656	658	661	664	666	669	670	672	673	673	674	674	N/A
Large Cars	655	657	659	661	664	668	672	674	676	678	680	682	682	682	N/A
Two Seater Cars	556	558	559	561	565	567	570	572	575	576	577	578	578	579	0.5%
Small Pickup	0	0	0	642	647	651	655	659	661	663	665	667	668	668	N/A
Large Pickup	672	676	680	685	690	695	698	702	706	710	712	713	714	715	N/A
Small Van	757	761	764	768	774	779	785	788	792	796	799	800	801	803	N/A
Large Van	1130	1136	1142	1147	1155	1163	1171	1178	1183	1189	1194	1196	1198	1200	N/A
Small Utility	616	619	623	627	632	637	643	646	649	652	653	655	656	657	N/A
Large Utility	719	724	729	734	740	746	750	754	758	761	764	766	768	769	N/A
<b>Fuel Cell Methanol</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
<b>Fuel Cell Hydrogen</b>															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	460	462	463	465	468	470	473	475	477	478	479	479	480	481	N/A
Compact Cars	0	510	511	512	514	516	518	519	520	522	522	522	523	523	N/A
Midsized Cars	522	523	525	526	529	531	533	535	536	537	538	539	539	539	N/A
Large Cars	524	525	527	529	531	534	538	540	541	542	544	545	546	546	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	605	609	611	614	619	624	628	630	634	637	639	640	641	642	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	492	495	498	501	506	510	514	517	520	521	523	524	525	526	N/A
Large Utility	0	0	0	0	0	0	0	0	606	609	611	613	614	615	N/A

Table 59. New Light-Duty Vehicle Range  
(miles)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004- 2030
Fuel Cell Gasoline															
Mini-compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Subcompact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Compact Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Midsized Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Cars	524	525	527	529	531	534	538	540	541	542	544	545	546	546	N/A
Two Seater Cars	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Large Pickup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Van	605	609	611	614	619	624	628	630	634	637	639	640	641	642	N/A
Large Van	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A
Small Utility	492	495	498	501	506	510	514	517	520	521	523	524	525	526	N/A
Large Utility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A

Table 59. New Light-Duty Vehicle Range  
(miles)

Sources: 2003 and 2004 derived using: Energy and Environmental Analysis Inc., Updates to the Fuel Economy Model, prepared for Energy Information Administration (EIA) (Washington, DC, June 1998); and EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 60. Electric Power Projections by Electricity Market Module Region  
 East Central Area Reliability Coordination Agreement

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	84.94	84.57	84.85	83.52	83.21	83.21	83.21	83.21	83.21	83.21	82.42	82.31	82.31	82.31
Other Fossil Steam 2/	4.19	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	0.24	0.12	0.12	0.12	0.12
Combined Cycle	10.57	11.67	11.67	12.39	12.93	12.93	12.93	12.93	12.93	12.93	12.93	12.93	13.21	14.54
Combustion Turbine/Diesel	19.61	20.34	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	18.75	18.75	18.75	18.83
Nuclear Power	7.73	7.73	7.73	7.73	7.74	7.81	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88
Pumped Storage/Other 3/	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	1.65	1.66	1.66	1.66	1.67	1.67	1.69	1.69	1.69	1.69	1.69	1.69	2.17	2.19
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capacity	132.20	133.64	134.30	133.69	133.93	133.99	134.09	134.09	134.09	130.16	127.29	127.18	127.94	129.37
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.72	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26
Combustion Turbine/Diesel	0.00	0.00	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.01	0.01	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Planned Additions	0.00	0.00	0.68	1.40	1.94	1.94	1.96	1.96	1.96	1.96	1.96	1.96	1.96	1.96
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	1.61
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	0.50
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.76	2.19
Cumulative Total Additions	0.00	0.00	0.68	1.40	1.94	1.94	1.96	1.96	1.96	1.96	1.96	1.96	2.73	4.15

Table 60. Electric Power Projections by Electricity Market Module Region  
East Central Area Reliability Coordination Agreement

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	1.32	1.63	1.63	1.63	1.63	1.63	1.63	2.42	2.53	2.53	2.53
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.93	4.05	4.05	4.05	4.05
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.99	1.99	1.99	1.99
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.04	1.36	1.67	1.67	1.67	1.67	1.67	5.60	8.46	8.58	8.58	8.58
<b>Commercial and Industrial 8/</b>														
Coal	0.98	0.96	0.99	0.99	0.99	0.99	0.99	0.99	1.10	1.22	1.33	1.39	1.45	1.50
Petroleum	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Natural Gas	0.98	0.98	1.00	1.02	1.04	1.05	1.08	1.10	1.12	1.15	1.17	1.19	1.22	1.25
Other Gaseous Fuels	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Renewable Sources 4/	0.17	0.17	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22	0.22	0.22	0.23
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	2.18	2.19	2.24	2.26	2.28	2.30	2.33	2.37	2.51	2.66	2.79	2.88	2.97	3.06
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	165.74	167.64	181.11	181.45	183.39	186.76	189.26	192.10	194.40	197.18	198.80	201.08	203.61	206.26
Commercial/Other	143.60	146.62	158.87	158.57	162.15	166.26	169.92	173.41	176.87	180.26	183.30	186.30	189.43	192.74
Industrial	200.91	202.30	208.43	210.29	210.77	211.90	212.67	214.45	216.33	217.74	218.55	219.69	220.94	222.25
Transportation	3.35	3.36	3.45	3.46	3.48	3.50	3.53	3.57	3.59	3.61	3.63	3.65	3.67	3.69
Total Sales	513.59	519.93	551.85	553.78	559.79	568.42	575.38	583.52	591.19	598.79	604.28	610.73	617.65	624.93
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	1.27	2.14	3.02	1.63	2.69	7.64	9.70	8.33	9.48	9.78	8.39	8.70	6.25	6.01
Gross International Exports	4.93	5.59	5.13	5.18	4.62	4.16	3.74	3.37	3.30	3.23	3.17	3.10	3.04	2.98
Gross Interregional Electricity Imports	5.92	8.32	7.69	8.67	7.67	6.32	6.56	9.78	9.86	9.11	8.79	8.35	7.41	6.06
Gross Interregional Electricity Exports	82.66	88.51	56.32	54.26	63.54	68.89	68.91	68.01	67.28	66.45	67.89	65.04	59.84	56.17
Purchases from Combined Heat and Power 8/	0.96	0.97	0.99	1.03	1.14	1.16	1.21	1.25	1.76	2.29	2.77	3.04	3.29	3.55
Electric Power Sector Generation for Customer	576.75	584.34	637.04	637.11	651.68	661.80	665.93	671.08	676.13	682.72	690.62	693.91	698.66	703.92
Total Net Energy for Load	497.32	501.68	587.29	588.99	595.02	603.87	610.74	619.06	626.66	634.22	639.51	645.84	652.73	660.39
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	503.53	495.95	539.67	540.85	548.95	557.78	559.95	562.23	565.29	567.67	567.98	567.07	565.86	566.91
Petroleum	4.95	5.71	4.25	4.17	4.24	4.25	4.46	4.41	4.18	3.65	3.49	3.41	3.37	3.61
Natural Gas	16.81	19.56	38.67	36.22	34.52	34.99	35.44	35.84	38.25	43.44	49.95	53.90	57.11	61.23
Nuclear	49.05	60.48	51.03	51.96	58.71	59.35	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98
Pumped Storage/Other 3/	-1.99	-1.49	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79
Renewable Sources 4/	6.43	5.99	6.53	7.02	8.37	8.53	9.22	11.73	11.54	11.10	12.32	12.66	15.45	15.31
Total Generation	578.78	586.20	638.36	638.42	652.99	663.12	667.25	672.41	677.45	684.05	691.94	695.23	699.98	705.25
Sales to Customers	576.75	584.34	637.04	637.11	651.68	661.80	665.93	671.08	676.13	682.72	690.62	693.91	698.66	703.92
Generation for Own Use	2.02	1.85	1.32	1.32	1.32	1.32	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Table 60. Electric Power Projections by Electricity Market Module Region  
East Central Area Reliability Coordination Agreement

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	4.26	4.52	4.57	4.57	4.56	4.56	4.56	4.56	5.34	6.13	6.91	7.28	7.66	8.02
Petroleum	0.08	0.08	0.09	0.09	0.17	0.17	0.19	0.19	0.20	0.22	0.20	0.21	0.21	0.21
Natural Gas	0.68	0.68	0.70	0.71	0.76	0.78	0.80	0.83	0.85	0.87	0.90	0.92	0.95	0.98
Other Gaseous Fuels	0.10	0.07	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Renewable Sources 4/	1.54	1.54	1.55	1.60	1.65	1.69	1.72	1.77	1.80	1.83	1.85	1.87	1.89	1.92
Other	2.85	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88
Total	9.51	9.77	9.87	9.94	10.10	10.15	10.23	10.30	11.15	12.00	12.80	13.23	13.66	14.09
Sales to Utilities	0.96	0.97	0.99	1.03	1.14	1.16	1.21	1.25	1.76	2.29	2.77	3.04	3.29	3.55
Generation for Own Use	8.55	8.80	8.88	8.91	8.95	8.99	9.02	9.06	9.38	9.71	10.03	10.20	10.37	10.53
Total Electricity Generation	588.28	595.97	648.23	648.36	663.09	673.27	677.48	682.71	688.60	696.04	704.74	708.46	713.64	719.33
End-Use Prices (2004 cents per kilowatthour)														
Residential	7.6	7.5	7.5	7.2	8.1	7.7	7.5	7.5	7.6	7.6	7.8	7.8	7.7	7.7
Commercial	6.9	6.9	7.4	7.1	7.7	7.4	7.2	7.1	7.1	7.1	7.4	7.4	7.4	7.4
Industrial	4.4	4.4	5.3	5.2	5.8	5.6	5.4	5.2	5.1	5.1	5.2	5.2	5.2	5.2
Transportation	7.2	6.9	7.2	7.4	6.6	6.3	6.2	6.2	6.3	6.3	6.5	6.4	6.4	6.4
All Sectors Average	6.2	6.1	6.6	6.4	7.1	6.8	6.6	6.5	6.5	6.5	6.7	6.7	6.7	6.7
Prices by Service Category (2004 cents per kilowatthour)														
Generation	4.1	4.1	4.6	4.4	5.0	4.8	4.6	4.4	4.4	4.4	4.6	4.6	4.6	4.6
Transmission	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5
Distribution	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.6
Fuel Consumption (quadrillion Btu) 9/														
Coal	5.36	5.36	5.60	5.62	5.70	5.79	5.81	5.83	5.86	5.89	5.90	5.89	5.88	5.90
Natural Gas	0.16	0.18	0.36	0.34	0.33	0.33	0.34	0.34	0.36	0.39	0.44	0.47	0.50	0.52
Oil	0.06	0.07	0.04	0.04	0.04	0.04	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04
Total	5.58	5.60	6.00	6.00	6.07	6.17	6.19	6.21	6.26	6.32	6.37	6.40	6.41	6.45
Fuel Prices (dollars per million Btu)														
Coal	1.33	1.42	1.51	1.53	1.58	1.59	1.63	1.67	1.66	1.65	1.64	1.61	1.61	1.60
Natural Gas	4.48	4.79	7.99	7.22	6.29	5.93	5.51	5.15	4.94	4.90	5.04	4.95	4.78	4.81
Distillate Fuel	6.65	9.39	10.18	11.01	10.08	9.81	9.37	9.03	9.03	9.18	8.86	9.00	9.03	9.20
Residual Fuel	5.11	5.06	7.62	7.05	5.77	5.46	5.14	4.86	4.83	4.79	4.76	4.74	4.72	4.76
Biomass	1.20	1.14	1.16	1.31	1.69	1.66	1.74	1.80	1.77	1.81	1.85	1.88	1.89	1.93
Emissions 10/														
Total Carbon (million tons)	160.23	161.05	165.02	165.10	167.36	170.20	170.72	171.13	172.56	173.81	174.72	174.99	175.04	175.98
Carbon Dioxide (million tons)	587.51	590.52	605.07	605.36	613.64	624.07	625.98	627.49	632.72	637.29	640.64	641.62	641.81	645.26
Sulfur Dioxide (million tons)	3.42	3.32	3.33	3.32	2.81	2.35	1.73	1.57	1.46	1.39	1.27	1.19	1.17	1.09
Nitrogen Oxide (million tons)	1.03	0.94	1.05	0.94	0.97	0.99	0.37	0.37	0.38	0.38	0.38	0.38	0.30	0.29
Mercury (tons)	12.19	12.96	12.65	15.14	14.39	11.51	13.20	8.26	8.33	8.24	6.90	6.37	5.22	4.70

Table 60. Electric Power Projections by Electricity Market Module Region  
 East Central Area Reliability Coordination Agreement

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/</b>															
<b>(gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	82.31	82.31	82.31	82.31	82.31	82.31	82.31	82.31	82.96	83.93	84.34	85.09	85.56	86.71	0.1%
Other Fossil Steam 2/	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	-12.7%
Combined Cycle	14.54	15.85	16.97	18.10	18.84	19.22	19.40	19.58	19.58	19.58	19.58	19.58	19.73	19.73	2.0%
Combustion Turbine/Diesel	20.15	20.19	20.42	20.64	20.88	21.52	22.48	23.52	24.19	24.74	25.83	26.84	28.02	28.74	1.3%
Nuclear Power	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	0.1%
Pumped Storage/Other 3/	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	2.21	2.25	2.28	2.31	2.33	2.37	2.39	2.42	2.42	2.42	2.44	2.47	2.50	2.51	1.6%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Capacity</b>	<b>130.72</b>	<b>132.11</b>	<b>133.48</b>	<b>134.87</b>	<b>135.86</b>	<b>136.93</b>	<b>138.08</b>	<b>139.33</b>	<b>140.66</b>	<b>142.18</b>	<b>143.70</b>	<b>145.49</b>	<b>147.32</b>	<b>149.21</b>	<b>0.4%</b>
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	1.26	N/A
Combustion Turbine/Diesel	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Planned Additions</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>1.96</b>	<b>N/A</b>
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	1.62	2.03	2.79	3.26	4.41	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	1.61	2.92	4.04	5.18	5.91	6.30	6.47	6.65	6.65	6.65	6.65	6.65	6.80	6.80	N/A
Combustion Turbine/Diesel	1.40	1.44	1.67	1.89	2.12	2.77	3.73	4.77	5.44	5.99	7.08	8.09	9.27	9.99	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.52	0.57	0.59	0.62	0.64	0.68	0.70	0.73	0.73	0.73	0.76	0.78	0.81	0.83	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Unplanned Additions</b>	<b>3.54</b>	<b>4.93</b>	<b>6.30</b>	<b>7.69</b>	<b>8.67</b>	<b>9.75</b>	<b>10.90</b>	<b>12.15</b>	<b>13.47</b>	<b>14.99</b>	<b>16.52</b>	<b>18.31</b>	<b>20.14</b>	<b>22.03</b>	<b>N/A</b>
<b>Cumulative Total Additions</b>	<b>5.50</b>	<b>6.89</b>	<b>8.27</b>	<b>9.65</b>	<b>10.64</b>	<b>11.71</b>	<b>12.86</b>	<b>14.11</b>	<b>15.44</b>	<b>16.96</b>	<b>18.49</b>	<b>20.27</b>	<b>22.10</b>	<b>23.99</b>	<b>N/A</b>

Table 60. Electric Power Projections by Electricity Market Module Region  
East Central Area Reliability Coordination Agreement

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	2.53	N/A
Other Fossil Steam 3/	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	4.05	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	1.99	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	8.58	N/A
<b>Commercial and Industrial 8/</b>															
Coal	1.60	1.70	1.79	2.37	2.95	3.53	3.85	4.17	4.49	4.83	5.16	5.50	5.51	5.51	6.9%
Petroleum	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.7%
Natural Gas	1.28	1.31	1.34	1.38	1.41	1.44	1.47	1.50	1.53	1.56	1.58	1.61	1.64	1.67	2.0%
Other Gaseous Fuels	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.5%
Renewable Sources 4/	0.23	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.28	0.29	0.30	0.31	2.4%
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	3.19	3.32	3.45	4.07	4.68	5.30	5.65	6.01	6.36	6.73	7.10	7.48	7.52	7.56	4.9%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	207.92	210.05	212.17	214.87	216.09	217.85	219.64	222.02	223.33	225.27	227.30	229.93	231.37	233.29	1.3%
Commercial/Other	196.10	199.46	202.78	206.24	209.74	213.34	217.03	220.39	223.83	227.59	231.30	235.38	239.49	243.56	2.0%
Industrial	223.09	224.56	225.40	225.87	226.48	226.93	227.73	228.85	229.92	231.52	233.05	234.48	235.97	237.16	0.6%
Transportation	3.71	3.73	3.74	3.76	3.77	3.78	3.80	3.81	3.82	3.84	3.85	3.86	3.87	3.88	0.6%
Total Sales	630.82	637.79	644.10	650.73	656.08	661.91	668.20	675.07	680.91	688.22	695.49	703.65	710.71	717.90	1.2%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	3.78	2.54	2.03	1.60	1.72	1.70	1.80	0.87	0.68	0.68	0.68	0.68	0.68	0.68	-4.3%
Gross International Exports	2.92	2.86	2.81	2.75	2.70	2.64	2.59	2.54	2.49	2.49	2.49	2.49	2.49	2.49	-3.1%
Gross Interregional Electricity Imports	5.29	5.02	4.17	2.95	1.99	1.62	2.59	3.18	3.35	4.96	5.00	5.12	4.79	3.49	-3.3%
Gross Interregional Electricity Exports	49.45	47.23	43.95	41.35	39.72	36.61	32.62	27.51	25.92	23.07	19.26	17.36	14.19	12.63	-7.2%
Purchases from Combined Heat and Power 8/	3.99	4.42	4.86	7.32	9.69	11.87	13.32	14.82	15.96	17.50	18.49	19.46	20.59	20.64	12.5%
Electric Power Sector Generation for Customer	705.83	711.91	716.01	718.97	720.83	721.51	721.23	721.80	724.96	726.44	728.94	734.36	737.63	744.93	0.9%
Total Net Energy for Load	666.52	673.80	680.32	686.74	691.81	697.45	703.72	710.63	716.54	724.01	731.35	739.78	747.01	754.61	1.6%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	568.40	568.84	568.90	567.46	566.41	565.43	564.40	564.14	570.82	574.02	576.06	581.78	584.12	590.91	0.7%
Petroleum	3.80	4.00	4.14	4.21	4.20	4.22	4.22	4.25	4.20	4.29	4.29	4.28	4.28	4.30	-1.1%
Natural Gas	62.11	66.58	70.24	72.72	74.62	76.18	76.83	77.77	76.95	75.26	75.88	76.10	76.92	77.15	5.4%
Nuclear	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	0.0%
Pumped Storage/Other 3/	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	0.7%
Renewable Sources 4/	14.66	15.62	15.87	17.71	18.73	18.82	18.91	18.78	16.13	16.01	15.84	15.35	15.45	15.71	3.8%
Total Generation	707.16	713.24	717.34	720.29	722.16	722.83	722.55	723.13	726.28	727.77	730.26	735.69	738.95	746.25	0.9%
Sales to Customers	705.83	711.91	716.01	718.97	720.83	721.51	721.23	721.80	724.96	726.44	728.94	734.36	737.63	744.93	0.9%
Generation for Own Use	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	1.33	-1.3%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 60. Electric Power Projections by Electricity Market Module Region  
East Central Area Reliability Coordination Agreement

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Commercial and Industrial 8/</b>															
Coal	8.69	9.35	10.01	13.93	17.76	21.26	23.56	25.95	27.76	30.19	31.74	33.28	35.06	35.08	8.2%
Petroleum	0.21	0.20	0.20	0.23	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	3.9%
Natural Gas	1.01	1.04	1.07	1.10	1.13	1.16	1.19	1.22	1.25	1.28	1.30	1.33	1.35	1.38	2.8%
Other Gaseous Fuels	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.3%
<b>Renewable Sources 4/</b>															
Other	1.95	1.98	2.01	2.04	2.07	2.10	2.13	2.17	2.20	2.24	2.29	2.34	2.40	2.46	1.8%
Total	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	2.88	0.0%
Total	14.81	15.53	16.25	20.25	24.12	27.68	30.05	32.50	34.38	36.88	38.50	40.12	41.98	42.09	5.8%
Sales to Utilities	3.99	4.42	4.86	7.32	9.69	11.87	13.32	14.82	15.96	17.50	18.49	19.46	20.59	20.64	12.5%
Generation for Own Use	10.82	11.11	11.39	12.93	14.43	15.81	16.73	17.68	18.41	19.38	20.02	20.66	21.39	21.45	3.5%
<b>Total Electricity Generation</b>	<b>721.97</b>	<b>728.77</b>	<b>733.59</b>	<b>740.54</b>	<b>746.28</b>	<b>750.52</b>	<b>752.60</b>	<b>755.63</b>	<b>760.66</b>	<b>764.65</b>	<b>768.77</b>	<b>775.81</b>	<b>780.94</b>	<b>788.34</b>	<b>1.1%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.9	7.9	7.9	7.9	7.8	7.8	7.9	0.2%
Commercial	7.4	7.5	7.5	7.5	7.6	7.6	7.7	7.7	7.8	7.8	7.8	7.8	7.8	7.9	0.5%
Industrial	5.3	5.3	5.4	5.3	5.4	5.5	5.5	5.5	5.6	5.6	5.6	5.5	5.5	5.6	0.9%
Transportation	6.4	6.4	6.5	6.5	6.5	6.5	6.5	6.6	6.6	6.6	6.6	6.5	6.5	6.6	-0.1%
All Sectors Average	6.8	6.8	6.8	6.8	6.9	6.9	7.0	7.0	7.1	7.1	7.1	7.1	7.1	7.1	0.6%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	4.7	4.7	4.8	4.7	4.8	4.9	4.9	4.9	5.0	5.0	5.0	5.0	5.0	5.0	0.8%
Transmission	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.7%
Distribution	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-0.1%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	5.92	5.93	5.93	5.91	5.91	5.90	5.88	5.89	5.94	5.94	5.95	5.99	6.01	6.05	0.5%
Natural Gas	0.53	0.56	0.58	0.59	0.61	0.62	0.62	0.63	0.62	0.61	0.62	0.62	0.63	0.63	5.0%
Oil	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-1.5%
Total	6.49	6.52	6.55	6.55	6.56	6.56	6.55	6.56	6.60	6.60	6.61	6.66	6.68	6.72	0.7%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.59	1.58	1.57	1.58	1.58	1.59	1.59	1.60	1.59	1.59	1.60	1.62	1.64	1.65	0.6%
Natural Gas	4.85	5.03	5.19	5.21	5.34	5.43	5.49	5.61	5.72	5.79	5.89	5.94	6.02	6.19	1.0%
Distillate Fuel	9.25	9.45	9.44	9.60	9.65	9.85	9.91	10.00	10.01	10.04	10.02	10.05	9.97	10.03	0.3%
Residual Fuel	4.81	4.85	4.90	4.95	5.01	5.08	5.15	5.22	5.29	5.33	5.38	5.42	5.47	5.51	0.3%
Biomass	1.91	1.97	1.99	2.01	2.02	1.99	2.02	2.00	1.94	1.92	1.94	1.92	1.91	1.90	2.0%
<b>Emissions 10/</b>															
Total Carbon (million tons)	176.77	177.50	178.02	177.92	177.87	177.74	177.44	177.44	178.84	178.78	179.21	180.34	180.80	182.05	0.5%
Carbon Dioxide (million tons)	648.16	650.83	652.73	652.38	652.17	651.73	650.62	650.61	655.76	655.52	657.10	661.26	662.95	667.51	0.5%
Sulfur Dioxide (million tons)	1.04	1.00	0.97	0.94	0.94	0.92	0.92	0.91	0.92	0.91	0.89	0.88	0.88	0.86	-5.0%
Nitrogen Oxide (million tons)	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.27	-4.7%
Mercury (tons)	4.61	4.49	4.40	4.15	4.25	4.06	3.95	3.79	3.76	3.64	3.54	3.46	3.45	3.41	-5.0%

Table 60. Electric Power Projections by Electricity Market Module Region  
East Central Area Reliability Coordination Agreement

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 61. Electric Power Projections by Electricity Market Module Region  
 Electric Reliability Council of Texas

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.99
Other Fossil Steam 2/	29.80	29.10	27.66	27.66	27.66	27.27	27.27	27.27	27.27	25.07	23.02	20.70	19.81	17.41
Combined Cycle	23.11	24.59	24.59	25.10	25.10	25.10	25.10	25.10	25.10	25.10	25.10	25.26	25.26	26.65
Combustion Turbine/Diesel	4.33	4.61	5.42	5.64	5.95	6.15	6.42	6.61	6.74	6.74	7.72	10.28	11.96	13.16
Nuclear Power	4.86	4.86	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	5.08
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	1.91	1.90	2.49	2.98	4.23	4.38	4.53	4.69	4.84	4.99	5.14	5.30	5.45	5.50
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.06	0.14	0.19	0.24	0.29	0.34	0.38	0.42	0.47	0.53
Total Capacity	79.19	80.25	80.28	81.50	83.13	83.17	83.64	84.03	84.36	82.36	81.49	82.08	83.08	84.33
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.59	1.08	2.33	2.48	2.63	2.79	2.94	3.09	3.24	3.40	3.55	3.55
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Planned Additions	0.00	0.00	0.59	1.59	2.85	3.00	3.15	3.30	3.46	3.61	3.76	3.91	4.07	4.07
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.80
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	1.54
Combustion Turbine/Diesel	0.00	0.00	0.92	1.14	1.45	1.65	1.92	2.11	2.24	2.24	3.22	5.78	7.46	8.66
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.06	0.14	0.19	0.24	0.29	0.34	0.38	0.42	0.47	0.53
Total Unplanned Additions	0.00	0.00	0.92	1.14	1.51	1.79	2.11	2.35	2.53	2.58	3.60	6.36	8.09	11.59
Cumulative Total Additions	0.00	0.00	1.51	2.73	4.36	4.79	5.26	5.65	5.98	6.18	7.36	10.27	12.16	15.66

Table 61. Electric Power Projections by Electricity Market Module Region  
Electric Reliability Council of Texas

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 3/	0.00	0.00	1.44	1.44	1.44	1.83	1.83	1.83	1.83	4.03	6.08	8.40	9.29	11.68
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	1.55	1.55	1.55	1.94	1.94	1.94	1.94	4.14	6.19	8.51	9.40	11.80
<b>Commercial and Industrial 8/</b>														
Coal	0.36	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.40	0.44	0.48	0.50	0.52	0.54
Petroleum	0.05	0.09	0.09	0.09	0.10	0.09	0.10	0.10	0.11	0.11	0.10	0.11	0.11	0.11
Natural Gas	4.80	4.82	4.91	4.98	5.07	5.16	5.28	5.40	5.51	5.62	5.72	5.85	5.99	6.14
Other Gaseous Fuels	0.10	0.10	0.10	0.10	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total	5.40	5.47	5.57	5.64	5.71	5.80	5.92	6.04	6.20	6.36	6.50	6.65	6.81	6.98
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	106.38	103.81	111.95	112.72	116.27	120.32	123.04	125.38	127.57	129.98	131.60	133.59	135.84	138.26
Commercial/Other	82.85	82.49	89.36	89.58	91.90	94.50	96.80	99.06	101.43	103.85	106.03	108.19	110.48	112.92
Industrial	83.20	82.65	87.09	87.56	87.50	88.24	87.94	88.26	89.36	89.72	90.98	91.72	92.60	94.20
Transportation	1.51	1.49	1.57	1.58	1.60	1.63	1.65	1.68	1.70	1.73	1.75	1.77	1.79	1.82
Total Sales	273.95	270.43	289.96	291.44	297.27	304.69	309.43	314.37	320.06	325.28	330.35	335.28	340.71	347.20
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross International Exports	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Gross Interregional Electricity Imports	4.82	3.71	3.36	4.10	4.27	4.56	4.81	4.28	3.89	3.33	2.95	3.07	2.97	2.15
Gross Interregional Electricity Exports	1.62	1.60	1.57	1.52	1.54	1.54	1.54	1.54	1.54	1.55	1.41	1.50	1.35	1.23
Purchases from Combined Heat and Power 8/	6.05	6.65	6.78	7.08	8.49	8.84	9.39	9.93	10.75	11.63	12.33	13.08	13.84	14.67
Electric Power Sector Generation for Customer	267.36	274.08	298.51	298.83	303.23	310.26	314.20	319.23	324.57	329.52	334.18	338.36	343.05	349.69
Total Net Energy for Load	276.58	282.81	307.05	308.46	314.41	322.07	326.82	331.86	337.62	342.89	348.01	352.97	358.46	365.25
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	111.52	113.01	105.37	105.49	106.37	108.17	109.94	110.86	110.82	110.80	110.61	110.42	110.00	116.16
Petroleum	2.13	1.34	0.87	0.80	0.71	0.72	0.80	0.92	0.91	0.91	0.93	0.96	1.26	1.28
Natural Gas	121.42	119.66	155.75	152.69	151.48	155.98	157.36	160.97	165.63	169.95	173.97	177.61	181.73	180.75
Nuclear	33.44	40.44	37.67	38.31	38.43	38.60	38.77	38.94	39.06	39.15	39.21	39.21	39.21	40.43
Pumped Storage/Other 3/	0.89	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	3.11	3.70	5.79	8.50	13.19	13.74	14.28	14.51	15.09	15.66	16.41	17.12	17.81	18.03
Total Generation	272.51	279.43	305.47	305.78	310.18	317.21	321.15	326.19	331.52	336.48	341.13	345.31	350.00	356.65
Sales to Customers	267.36	274.08	298.51	298.83	303.23	310.26	314.20	319.23	324.57	329.52	334.18	338.36	343.05	349.69
Generation for Own Use	5.14	5.34	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.03	0.06	0.09	0.10	0.13	0.15	0.17	0.18	0.21	0.23

Table 61. Electric Power Projections by Electricity Market Module Region  
Electric Reliability Council of Texas

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Commercial and Industrial 8/</b>														
Coal	2.84	3.02	3.05	3.05	3.04	3.04	3.04	3.04	3.56	4.09	4.61	4.86	5.11	5.35
Petroleum	0.23	0.21	0.26	0.26	0.47	0.46	0.50	0.53	0.55	0.59	0.53	0.56	0.56	0.58
Natural Gas	28.53	28.71	29.40	29.98	32.12	32.94	33.94	34.96	35.90	36.86	37.78	38.86	40.06	41.33
Other Gaseous Fuels	0.28	0.20	0.21	0.21	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19
<b>Renewable Sources 4/</b>														
Other	0.18	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.21	0.22	0.22	0.22	0.23	0.23
Other	1.63	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Total	33.70	33.98	34.76	35.34	37.67	38.48	39.53	40.58	42.07	43.60	44.98	46.35	47.80	49.34
Sales to Utilities	6.05	6.65	6.78	7.08	8.49	8.84	9.39	9.93	10.75	11.63	12.33	13.08	13.84	14.67
Generation for Own Use	27.65	27.32	27.98	28.27	29.18	29.64	30.14	30.65	31.31	31.97	32.65	33.27	33.96	34.67
<b>Total Electricity Generation</b>	<b>306.21</b>	<b>313.40</b>	<b>340.23</b>	<b>341.12</b>	<b>347.88</b>	<b>355.75</b>	<b>360.76</b>	<b>366.87</b>	<b>373.71</b>	<b>380.23</b>	<b>386.28</b>	<b>391.85</b>	<b>398.01</b>	<b>406.22</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)														
Residential	9.6	9.9	14.9	13.2	9.2	8.9	8.7	8.6	8.5	8.5	8.7	8.6	8.5	8.4
Commercial	8.3	8.1	9.1	9.3	8.7	8.5	8.3	8.1	7.9	7.9	8.0	7.9	7.8	7.7
Industrial	5.6	6.0	7.9	7.9	7.1	6.7	6.3	6.0	5.6	5.6	5.7	5.6	5.5	5.4
Transportation	6.9	7.0	7.9	8.0	7.9	7.6	7.5	7.4	7.3	7.4	7.6	7.5	7.4	7.3
All Sectors Average	8.0	8.2	11.0	10.4	8.4	8.1	7.9	7.7	7.5	7.5	7.7	7.6	7.5	7.3
<b>Prices by Service Category</b> (2004 cents per kilowatthour)														
Generation	5.5	5.6	8.5	7.9	6.0	5.6	5.4	5.3	5.0	5.1	5.3	5.2	5.1	4.9
Transmission	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Distribution	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7
<b>Fuel Consumption (quadrillion Btu) 9/</b>														
Coal	1.09	1.09	1.11	1.11	1.12	1.14	1.16	1.17	1.17	1.17	1.17	1.17	1.16	1.22
Natural Gas	1.17	1.11	1.21	1.17	1.17	1.21	1.22	1.25	1.29	1.33	1.36	1.38	1.41	1.38
Oil	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	2.28	2.21	2.33	2.29	2.30	2.35	2.39	2.43	2.47	2.51	2.54	2.56	2.59	2.61
<b>Fuel Prices (dollars per million Btu)</b>														
Coal	1.14	1.33	1.37	1.39	1.38	1.38	1.40	1.38	1.38	1.37	1.38	1.39	1.42	1.43
Natural Gas	5.63	5.80	7.75	7.07	5.95	5.59	5.20	4.92	4.69	4.65	4.75	4.65	4.56	4.58
Distillate Fuel	6.59	9.31	10.06	10.90	9.86	9.58	9.13	8.83	8.79	8.94	8.58	8.72	8.76	9.02
Residual Fuel	5.34	5.29	7.96	7.42	7.64	7.37	7.04	6.55	6.62	6.61	6.50	6.56	6.50	6.58
Biomass	0.71	0.71	0.71	0.71	1.23	1.25	1.37	1.56	1.52	1.51	1.67	1.65	1.67	1.69
<b>Emissions 10/</b>														
Total Carbon (million tons)	49.61	49.55	51.77	51.28	51.41	52.61	53.40	54.22	54.87	55.49	55.93	56.25	56.64	57.68
Carbon Dioxide (million tons)	181.90	181.70	189.83	188.03	188.52	192.90	195.81	198.80	201.19	203.48	205.07	206.26	207.68	211.51
Sulfur Dioxide (million tons)	0.24	0.29	0.26	0.25	0.25	0.25	0.22	0.21	0.20	0.18	0.17	0.17	0.17	0.16
Nitrogen Oxide (million tons)	0.22	0.20	0.15	0.15	0.15	0.15	0.13	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Mercury (tons)	3.33	3.43	3.51	3.46	3.59	3.66	3.78	2.97	2.93	2.90	2.58	2.13	1.11	1.00



Table 61. Electric Power Projections by Electricity Market Module Region  
Electric Reliability Council of Texas

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/</b>															
<b>(gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	15.99	15.99	15.99	15.99	15.99	15.99	15.99	16.40	16.40	16.40	17.23	19.15	21.17	21.81	1.4%
Other Fossil Steam 2/	15.07	14.39	14.29	14.29	14.29	14.29	14.29	13.54	13.34	12.72	12.65	9.83	9.38	9.38	-4.3%
Combined Cycle	29.73	31.96	32.62	33.34	33.91	34.49	35.22	36.38	37.21	38.27	38.41	39.62	39.62	39.79	1.9%
Combustion Turbine/Diesel	13.16	13.16	13.16	13.16	13.31	13.41	13.41	13.59	13.83	14.09	14.18	14.72	14.72	14.72	4.6%
Nuclear Power	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	0.3%
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	5.51	5.51	5.51	5.51	5.51	5.57	5.61	5.73	5.80	5.91	5.98	6.19	6.20	6.24	4.7%
Distributed Generation 5/	0.58	0.63	0.68	0.73	0.77	0.82	0.87	0.93	1.09	1.26	1.45	1.65	1.71	1.77	N/A
Total Capacity	85.27	86.89	87.50	88.26	89.03	89.81	90.64	91.82	92.90	93.89	95.14	96.40	98.03	98.94	0.8%
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	3.55	3.56	3.56	3.56	3.56	3.56	3.57	3.57	3.57	3.57	3.57	3.58	3.58	3.58	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	4.07	4.07	4.07	4.08	4.08	4.08	4.08	4.08	4.09	4.09	4.09	4.09	4.09	4.10	N/A
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.21	1.21	1.21	2.04	3.96	5.98	6.62	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	4.63	6.86	7.51	8.23	8.80	9.38	10.11	11.28	12.11	13.16	13.31	14.51	14.51	14.69	N/A
Combustion Turbine/Diesel	8.66	8.66	8.66	8.66	8.81	8.91	8.91	9.09	9.33	9.59	9.68	10.22	10.22	10.22	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.05	0.05	0.05	0.05	0.05	0.10	0.15	0.27	0.33	0.44	0.50	0.72	0.72	0.76	N/A
Distributed Generation 5/	0.58	0.63	0.68	0.73	0.77	0.82	0.87	0.93	1.09	1.26	1.45	1.65	1.71	1.77	N/A
Total Unplanned Additions	14.72	17.01	17.71	18.48	19.24	20.02	20.85	22.77	24.06	25.67	26.99	31.06	33.14	34.06	N/A
Cumulative Total Additions	18.79	21.08	21.79	22.55	23.32	24.10	24.93	26.86	28.15	29.76	31.08	35.16	37.24	38.15	N/A

Table 61. Electric Power Projections by Electricity Market Module Region  
Electric Reliability Council of Texas

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 3/	14.03	14.71	14.81	14.81	14.81	14.81	14.81	15.55	15.76	16.38	16.45	19.27	19.72	19.72	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>14.14</b>	<b>14.82</b>	<b>14.92</b>	<b>14.92</b>	<b>14.92</b>	<b>14.92</b>	<b>14.92</b>	<b>15.66</b>	<b>15.87</b>	<b>16.49</b>	<b>16.56</b>	<b>19.38</b>	<b>19.83</b>	<b>19.83</b>	<b>N/A</b>
<b>Commercial and Industrial 8/</b>															
Coal	0.58	0.62	0.65	0.86	1.07	1.28	1.40	1.51	1.63	1.75	1.87	2.00	2.00	2.00	6.9%
Petroleum	0.11	0.10	0.10	0.11	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.7%
Natural Gas	6.29	6.44	6.59	6.75	6.90	7.05	7.20	7.35	7.49	7.62	7.76	7.89	8.02	8.16	2.0%
Other Gaseous Fuels	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	-0.5%
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	N/A
<b>Total</b>	<b>7.17</b>	<b>7.34</b>	<b>7.53</b>	<b>7.91</b>	<b>8.26</b>	<b>8.63</b>	<b>8.89</b>	<b>9.16</b>	<b>9.42</b>	<b>9.68</b>	<b>9.93</b>	<b>10.18</b>	<b>10.32</b>	<b>10.46</b>	<b>2.5%</b>
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	140.08	142.18	144.20	146.56	148.05	149.90	151.80	154.08	155.69	157.76	159.88	162.44	164.38	166.58	1.8%
Commercial/Other	115.39	117.83	120.13	122.49	124.45	126.54	128.79	131.10	133.38	135.83	138.16	140.80	143.64	146.34	2.2%
Industrial	95.36	96.80	97.61	97.42	99.26	100.04	100.54	102.58	103.94	105.68	107.70	109.58	111.19	111.85	1.2%
Transportation	1.84	1.87	1.89	1.91	1.94	1.96	1.98	2.01	2.03	2.06	2.09	2.11	2.14	2.17	1.5%
<b>Total Sales</b>	<b>352.67</b>	<b>358.67</b>	<b>363.82</b>	<b>368.38</b>	<b>373.69</b>	<b>378.44</b>	<b>383.11</b>	<b>389.77</b>	<b>395.05</b>	<b>401.33</b>	<b>407.82</b>	<b>414.93</b>	<b>421.35</b>	<b>426.94</b>	<b>1.8%</b>
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross International Exports	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.8%
Gross Interregional Electricity Imports	1.61	0.92	0.71	0.80	0.71	0.69	0.74	0.95	1.05	1.02	1.18	1.20	1.17	1.52	-3.4%
Gross Interregional Electricity Exports	1.27	1.19	1.05	0.93	0.85	0.87	0.73	0.80	0.72	0.73	0.79	1.11	1.41	1.41	-0.5%
Purchases from Combined Heat and Power 8/	15.57	16.44	17.36	19.76	21.87	23.97	25.54	27.14	28.50	30.08	31.29	32.46	33.72	34.26	6.5%
Electric Power Sector Generation for Customer	355.10	361.12	365.65	367.70	371.05	373.87	376.92	382.11	386.02	391.03	396.35	402.83	408.58	413.54	1.6%
<b>Total Net Energy for Load</b>	<b>370.97</b>	<b>377.25</b>	<b>382.63</b>	<b>387.29</b>	<b>392.75</b>	<b>397.62</b>	<b>402.43</b>	<b>409.36</b>	<b>414.81</b>	<b>421.36</b>	<b>427.98</b>	<b>435.35</b>	<b>442.02</b>	<b>447.87</b>	<b>1.8%</b>
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	116.15	116.09	115.94	115.85	115.88	115.86	115.72	118.70	118.68	118.66	125.32	139.06	154.33	159.62	1.3%
Petroleum	1.27	1.26	1.26	1.25	1.26	1.25	1.27	1.30	1.30	1.30	1.34	1.38	1.38	1.38	0.1%
Natural Gas	184.96	190.98	195.50	197.55	200.90	203.30	205.98	207.13	210.51	214.58	213.16	203.56	194.25	194.05	1.9%
Nuclear	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	0.1%
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	18.05	18.11	18.26	18.36	18.33	18.78	19.26	20.30	20.84	21.80	21.85	24.15	23.93	23.79	7.4%
<b>Total Generation</b>	<b>362.05</b>	<b>368.07</b>	<b>372.60</b>	<b>374.65</b>	<b>378.01</b>	<b>380.83</b>	<b>383.87</b>	<b>389.06</b>	<b>392.98</b>	<b>397.98</b>	<b>403.30</b>	<b>409.79</b>	<b>415.53</b>	<b>420.49</b>	<b>1.6%</b>
Sales to Customers	355.10	361.12	365.65	367.70	371.05	373.87	376.92	382.11	386.02	391.03	396.35	402.83	408.58	413.54	1.6%
Generation for Own Use	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	6.95	1.0%
Distributed Generation 5/	0.25	0.28	0.30	0.32	0.34	0.36	0.38	0.41	0.48	0.55	0.63	0.72	0.75	0.78	N/A

Table 61. Electric Power Projections by Electricity Market Module Region  
Electric Reliability Council of Texas

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Commercial and Industrial 8/</b>															
Coal	5.80	6.24	6.68	9.29	11.84	14.18	15.71	17.31	18.51	20.13	21.17	22.19	23.38	23.39	8.2%
Petroleum	0.57	0.55	0.55	0.61	0.55	0.55	0.56	0.56	0.57	0.57	0.57	0.57	0.57	0.58	3.9%
Natural Gas	42.60	43.83	45.09	46.47	47.72	49.02	50.27	51.48	52.70	53.82	54.93	56.01	57.05	58.28	2.8%
Other Gaseous Fuels	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.3%
<b>Renewable Sources 4/</b>															
Other	0.23	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.27	0.28	0.29	0.29	1.8%
Other	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	0.0%
Total	51.04	52.70	54.41	58.47	62.22	65.86	68.65	71.47	73.91	76.65	78.80	80.92	83.15	84.41	3.6%
Sales to Utilities	15.57	16.44	17.36	19.76	21.87	23.97	25.54	27.14	28.50	30.08	31.29	32.46	33.72	34.26	6.5%
Generation for Own Use	35.47	36.26	37.05	38.72	40.35	41.89	43.10	44.33	45.41	46.57	47.52	48.46	49.44	50.15	2.4%
<b>Total Electricity Generation</b>	<b>413.35</b>	<b>421.05</b>	<b>427.31</b>	<b>433.44</b>	<b>440.56</b>	<b>447.05</b>	<b>452.90</b>	<b>460.94</b>	<b>467.36</b>	<b>475.19</b>	<b>482.74</b>	<b>491.43</b>	<b>499.44</b>	<b>505.67</b>	<b>1.9%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	8.4	8.4	8.6	8.6	8.7	8.8	8.8	8.9	9.1	9.1	9.2	9.2	9.2	9.4	-0.2%
Commercial	7.6	7.6	7.8	7.8	8.0	8.1	8.1	8.2	8.4	8.6	8.7	8.7	8.7	9.0	0.4%
Industrial	5.3	5.4	5.5	5.5	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.3	6.3	6.6	0.3%
Transportation	7.3	7.3	7.5	7.5	7.7	7.8	7.8	7.9	8.1	8.2	8.3	8.3	8.3	8.6	0.8%
All Sectors Average	7.3	7.3	7.5	7.5	7.7	7.7	7.8	7.9	8.1	8.2	8.3	8.3	8.2	8.5	0.2%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	4.9	4.9	5.1	5.1	5.3	5.4	5.5	5.6	5.8	5.9	6.0	6.0	6.0	6.3	0.4%
Transmission	0.8	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8%
Distribution	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	-1.0%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	1.22	1.22	1.22	1.21	1.21	1.21	1.21	1.24	1.24	1.24	1.29	1.40	1.51	1.55	1.4%
Natural Gas	1.38	1.40	1.43	1.44	1.46	1.47	1.49	1.49	1.50	1.53	1.52	1.44	1.37	1.37	0.8%
Oil	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.7%
Total	2.61	2.63	2.66	2.67	2.69	2.70	2.71	2.74	2.76	2.78	2.82	2.85	2.89	2.93	1.1%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.43	1.42	1.42	1.43	1.43	1.43	1.42	1.43	1.42	1.43	1.47	1.53	1.58	1.60	0.7%
Natural Gas	4.65	4.83	4.94	4.99	5.13	5.22	5.29	5.41	5.54	5.62	5.71	5.74	5.79	5.94	0.1%
Distillate Fuel	8.98	9.18	9.26	9.35	9.40	9.58	9.65	9.74	9.83	9.87	9.89	9.98	10.05	10.15	0.3%
Residual Fuel	6.61	6.64	6.68	6.85	6.87	6.90	6.97	7.11	7.18	7.22	7.28	14.90	14.90	14.90	4.1%
Biomass	1.69	1.69	1.65	1.68	1.68	1.69	1.72	1.82	1.84	1.88	1.90	1.96	1.97	1.98	4.0%
<b>Emissions 10/</b>															
Total Carbon (million tons)	57.60	57.96	58.39	58.51	58.85	59.05	59.25	59.95	60.25	60.60	61.99	63.75	65.83	66.93	1.2%
Carbon Dioxide (million tons)	211.20	212.54	214.11	214.54	215.77	216.51	217.25	219.81	220.90	222.19	227.28	233.76	241.36	245.40	1.2%
Sulfur Dioxide (million tons)	0.16	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	-2.7%
Nitrogen Oxide (million tons)	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	-2.3%
Mercury (tons)	0.97	0.90	0.85	0.86	0.90	0.91	0.87	0.90	0.97	0.88	0.96	0.93	0.91	1.07	-4.4%

Table 61. Electric Power Projections by Electricity Market Module Region  
Electric Reliability Council of Texas

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 62. Electric Power Projections by Electricity Market Module Region  
Mid-Atlantic Area Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	20.20	20.72	20.72	20.67	20.67	20.67	20.67	20.67	20.51	20.38	20.36	20.40	20.40	20.40
Other Fossil Steam 2/	8.67	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	6.76	6.76	6.76	6.76	6.76
Combined Cycle	9.83	11.99	13.16	13.16	13.16	13.16	13.16	13.16	13.16	13.16	13.16	13.65	14.42	15.25
Combustion Turbine/Diesel	11.42	11.84	11.98	12.30	12.30	12.30	12.31	12.31	12.31	12.04	12.04	12.04	12.04	12.04
Nuclear Power	13.23	13.28	13.28	13.30	13.30	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33
Pumped Storage/Other 3/	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	1.98	1.98	2.02	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.09	2.09	2.09
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.08	0.12
Total Capacity	66.85	69.39	70.74	71.06	71.06	71.08	71.09	71.09	70.93	69.26	69.25	69.85	70.66	71.53
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19
Combustion Turbine/Diesel	0.00	0.00	0.15	0.47	0.47	0.47	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Planned Additions	0.00	0.00	1.38	1.72	1.72	1.72	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	1.26	2.08
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.08	0.12
Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.62	1.43	2.29
Cumulative Total Additions	0.00	0.00	1.38	1.72	1.72	1.72	1.73	1.73	1.73	1.73	1.74	2.35	3.16	4.02

Table 62. Electric Power Projections by Electricity Market Module Region  
Mid-Atlantic Area Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.21	0.33	0.36	0.36	0.36	0.36
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	1.27	1.27	1.27	1.27
Combined Cycle	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Combustion Turbine/Diesel	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.28	0.28	0.28	0.28	0.28
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.03	0.07	0.07	0.07	0.07	0.07	0.23	1.90	1.92	1.92	1.92	1.92
<b>Commercial and Industrial 8/</b>														
Coal	0.10	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.12	0.13	0.14	0.14	0.15
Petroleum	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.06	0.07	0.07	0.07
Natural Gas	1.02	1.02	1.04	1.06	1.07	1.10	1.12	1.14	1.17	1.19	1.21	1.24	1.27	1.30
Other Gaseous Fuels	0.07	0.07	0.07	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06
Renewable Sources 4/	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.14
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.31	1.34	1.37	1.39	1.40	1.42	1.46	1.49	1.53	1.57	1.60	1.64	1.67	1.71
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	95.03	94.59	98.70	98.02	99.52	101.67	103.06	104.47	105.64	107.01	107.74	108.85	110.13	111.48
Commercial/Other	107.49	108.01	113.23	111.83	115.00	118.40	121.33	124.01	126.63	129.04	131.16	133.26	135.53	137.87
Industrial	63.60	62.54	62.56	62.83	62.46	62.69	62.69	62.88	63.27	63.50	63.51	63.57	63.83	64.00
Transportation	2.21	2.19	2.21	2.21	2.23	2.24	2.27	2.29	2.30	2.32	2.33	2.35	2.36	2.38
Total Sales	268.33	267.33	276.69	274.89	279.21	285.00	289.34	293.64	297.84	301.86	304.74	308.03	311.85	315.72
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Interregional Electricity Imports	37.67	28.49	21.57	20.02	27.85	29.49	28.63	27.40	29.14	25.25	23.03	22.52	17.43	18.38
Gross Interregional Electricity Exports	11.02	10.21	6.14	7.74	11.40	11.36	11.30	10.82	13.51	7.69	5.90	5.15	4.17	4.08
Purchases from Combined Heat and Power 8/	0.82	0.87	1.00	1.03	1.58	1.55	1.71	1.83	2.04	2.34	2.35	2.54	2.65	2.82
Electric Power Sector Generation for Customer	268.20	269.98	278.32	279.36	279.04	283.38	288.41	293.42	285.57	300.33	303.66	306.50	314.26	317.10
Total Net Energy for Load	295.66	289.13	294.75	292.66	297.06	303.06	307.45	311.82	303.24	320.24	323.14	326.41	330.17	334.21
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	125.88	123.30	128.59	130.70	133.57	138.11	141.66	145.23	131.41	145.29	145.31	145.33	146.32	146.28
Petroleum	10.51	9.41	8.52	6.90	7.43	7.84	7.74	7.68	7.79	7.58	7.58	7.61	7.58	7.60
Natural Gas	20.32	26.14	27.50	25.63	21.43	21.19	22.34	24.41	30.73	32.17	35.37	37.76	44.80	47.68
Nuclear	105.14	105.13	106.21	108.02	108.08	108.33	108.40	108.47	108.53	108.53	108.53	108.53	108.53	108.53
Pumped Storage/Other 3/	-0.29	-0.20	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82
Renewable Sources 4/	9.58	9.11	11.98	12.58	13.02	12.42	12.79	12.15	11.65	11.30	11.40	11.79	11.56	11.53
Total Generation	271.14	272.89	281.98	283.01	282.71	287.07	292.12	297.13	289.29	304.05	307.36	310.20	317.96	320.80
Sales to Customers	268.20	269.98	278.32	279.36	279.04	283.38	288.41	293.42	285.57	300.33	303.66	306.50	314.26	317.10
Generation for Own Use	2.94	2.91	3.66	3.66	3.67	3.69	3.71	3.72	3.72	3.72	3.70	3.70	3.70	3.70
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.05

Table 62. Electric Power Projections by Electricity Market Module Region  
Mid-Atlantic Area Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Commercial and Industrial 8/</b>														
Coal	1.10	1.17	1.18	1.18	1.18	1.18	1.18	1.18	1.38	1.58	1.78	1.88	1.98	2.07
Petroleum	0.60	0.56	0.68	0.68	1.25	1.22	1.33	1.40	1.44	1.57	1.41	1.49	1.48	1.54
Natural Gas	2.44	2.46	2.52	2.57	2.75	2.82	2.91	2.99	3.07	3.16	3.23	3.33	3.43	3.54
Other Gaseous Fuels	0.74	0.52	0.55	0.55	0.47	0.47	0.48	0.49	0.49	0.49	0.50	0.50	0.51	0.51
<b>Renewable Sources 4/</b>														
Other	0.73	0.73	0.73	0.76	0.78	0.80	0.82	0.84	0.85	0.86	0.87	0.88	0.90	0.91
Total	5.94	5.76	5.99	6.06	6.76	6.82	7.04	7.22	7.56	7.99	8.13	8.41	8.62	8.89
Sales to Utilities	0.82	0.87	1.00	1.03	1.58	1.55	1.71	1.83	2.04	2.34	2.35	2.54	2.65	2.82
Generation for Own Use	5.12	4.90	4.99	5.03	5.18	5.27	5.32	5.39	5.52	5.65	5.77	5.87	5.97	6.08
<b>Total Electricity Generation</b>	<b>277.08</b>	<b>278.65</b>	<b>287.97</b>	<b>289.07</b>	<b>289.47</b>	<b>293.89</b>	<b>299.16</b>	<b>304.35</b>	<b>296.85</b>	<b>312.04</b>	<b>315.50</b>	<b>318.63</b>	<b>326.62</b>	<b>329.74</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)														
Residential	9.8	9.7	10.5	9.7	8.7	8.2	8.2	8.3	8.4	8.7	8.9	8.9	8.8	8.8
Commercial	8.4	8.5	9.9	9.2	8.2	7.6	7.4	7.1	7.1	7.3	7.6	7.5	7.4	7.5
Industrial	6.6	7.1	8.9	8.9	8.2	7.8	7.2	6.5	6.2	6.2	6.3	6.3	6.2	6.2
Transportation	7.8	7.7	8.8	8.5	7.6	7.2	7.1	7.1	7.1	7.3	7.6	7.5	7.4	7.5
All Sectors Average	8.5	8.6	9.9	9.3	8.3	7.9	7.6	7.4	7.4	7.6	7.8	7.7	7.7	7.7
<b>Prices by Service Category</b> (2004 cents per kilowatthour)														
Generation	5.7	5.8	7.1	6.5	5.5	5.1	4.8	4.6	4.5	4.8	5.0	4.9	4.8	4.9
Transmission	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
Distribution	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
<b>Fuel Consumption (quadrillion Btu) 9/</b>														
Coal	1.25	1.28	1.34	1.36	1.39	1.44	1.48	1.52	1.37	1.52	1.52	1.52	1.53	1.53
Natural Gas	0.20	0.23	0.23	0.22	0.19	0.19	0.20	0.21	0.27	0.27	0.30	0.31	0.36	0.38
Oil	0.12	0.11	0.09	0.07	0.08	0.09	0.09	0.08	0.09	0.08	0.08	0.08	0.08	0.08
Total	1.57	1.62	1.66	1.65	1.67	1.72	1.77	1.82	1.72	1.88	1.90	1.92	1.98	2.00
<b>Fuel Prices (dollars per million Btu)</b>														
Coal	1.50	1.62	1.71	1.73	1.77	1.78	1.82	1.80	1.76	1.73	1.73	1.71	1.68	1.67
Natural Gas	6.31	6.43	8.19	7.39	6.36	6.01	5.63	5.30	5.23	5.13	5.24	5.14	4.99	5.05
Distillate Fuel	6.57	9.35	10.03	10.93	9.86	9.62	9.25	8.90	8.88	8.99	8.77	8.83	8.81	9.07
Residual Fuel	4.86	4.81	7.27	6.71	6.31	5.72	5.58	5.44	5.36	5.30	5.38	5.32	5.30	5.33
Biomass	0.71	0.79	0.88	1.05	2.02	1.98	2.00	1.99	1.92	1.87	1.89	1.86	1.82	1.86
<b>Emissions 10/</b>														
Total Carbon (million tons)	40.48	41.09	43.38	43.44	44.17	45.79	47.03	48.29	44.88	49.14	49.51	49.77	50.90	51.18
Carbon Dioxide (million tons)	148.44	150.66	159.06	159.28	161.97	167.90	172.45	177.06	164.55	180.16	181.55	182.50	186.63	187.65
Sulfur Dioxide (million tons)	1.19	1.28	1.28	1.20	0.94	0.59	0.41	0.36	0.32	0.32	0.30	0.29	0.29	0.28
Nitrogen Oxide (million tons)	0.22	0.20	0.24	0.23	0.23	0.24	0.15	0.12	0.11	0.12	0.12	0.12	0.11	0.11
Mercury (tons)	4.56	5.24	5.63	4.19	4.07	4.83	2.43	2.12	1.73	1.91	1.80	1.74	1.57	1.53

Table 62. Electric Power Projections by Electricity Market Module Region  
Mid-Atlantic Area Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/ (gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	20.42	20.42	20.42	20.42	20.42	20.42	21.05	21.98	22.85	23.89	24.94	26.06	27.23	28.28	1.2%
Other Fossil Steam 2/	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	-0.7%
Combined Cycle	16.06	16.87	17.43	18.27	19.03	19.82	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.19	2.0%
Combustion Turbine/Diesel	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	0.1%
Nuclear Power	13.33	13.33	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	0.1%
Pumped Storage/Other 3/	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	2.09	2.09	2.09	2.13	2.13	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	0.4%
Distributed Generation 5/	0.16	0.20	0.24	0.28	0.32	0.36	0.41	0.45	0.50	0.54	0.59	0.64	0.70	0.75	N/A
Total Capacity	72.40	73.25	74.12	75.04	75.84	76.75	77.62	78.60	79.51	80.60	81.70	82.87	84.10	85.36	0.8%
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	N/A
Combustion Turbine/Diesel	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.48	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.73	N/A
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	0.06	0.06	0.06	0.06	0.06	0.06	0.69	1.63	2.49	3.53	4.58	5.70	6.88	7.92	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	2.90	3.71	4.27	5.10	5.87	6.66	6.86	6.86	6.86	6.86	6.86	6.86	6.86	7.02	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.05	0.05	0.05	0.09	0.09	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	N/A
Distributed Generation 5/	0.16	0.20	0.24	0.28	0.32	0.36	0.41	0.45	0.50	0.54	0.59	0.64	0.70	0.75	N/A
Total Unplanned Additions	3.17	4.02	4.61	5.53	6.34	7.24	8.12	9.10	10.00	11.09	12.19	13.37	14.59	15.85	N/A
Cumulative Total Additions	4.90	5.75	6.34	7.26	8.06	8.97	9.84	10.82	11.73	12.82	13.92	15.09	16.32	17.58	N/A



Table 62. Electric Power Projections by Electricity Market Module Region  
Mid-Atlantic Area Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	N/A
Other Fossil Steam 3/	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	1.27	N/A
Combined Cycle	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	N/A
Combustion Turbine/Diesel	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	N/A
<b>Commercial and Industrial 8/</b>															
Coal	0.16	0.17	0.18	0.23	0.29	0.35	0.38	0.41	0.44	0.47	0.51	0.54	0.54	0.54	6.9%
Petroleum	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.7%
Natural Gas	1.33	1.36	1.40	1.43	1.46	1.50	1.53	1.56	1.59	1.62	1.64	1.67	1.70	1.73	2.0%
Other Gaseous Fuels	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-0.5%
Renewable Sources 4/	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19	2.4%
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	1.76	1.80	1.84	1.94	2.03	2.12	2.19	2.25	2.32	2.38	2.45	2.52	2.55	2.59	2.6%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	112.29	113.34	114.39	115.76	116.36	117.26	118.19	119.43	120.11	121.15	122.22	123.62	124.39	125.45	1.1%
Commercial/Other	140.21	142.47	144.68	147.02	149.39	151.83	154.36	156.95	159.54	162.36	165.11	168.14	171.22	174.16	1.9%
Industrial	64.24	64.47	64.67	64.67	64.63	64.67	64.76	64.82	64.99	65.28	65.53	65.75	65.96	66.12	0.2%
Transportation	2.39	2.41	2.42	2.43	2.44	2.45	2.46	2.48	2.49	2.50	2.51	2.52	2.53	2.54	0.6%
Total Sales	319.13	322.68	326.16	329.88	332.83	336.20	339.77	343.68	347.13	351.28	355.37	360.03	364.10	368.28	1.2%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	17.66	18.04	18.00	18.41	19.07	20.26	20.81	20.08	20.83	19.10	18.15	17.65	15.85	12.63	-3.1%
Gross Interregional Electricity Exports	4.13	4.26	4.33	4.34	4.29	4.43	5.80	7.56	9.46	9.62	9.48	10.31	11.37	11.86	0.6%
Purchases from Combined Heat and Power 8/	2.95	3.06	3.23	4.09	4.59	5.21	5.64	6.10	6.46	6.91	7.22	7.52	7.86	7.92	8.9%
Electric Power Sector Generation for Customer	321.48	324.91	328.49	331.46	333.48	335.63	339.95	346.24	350.80	356.76	361.67	367.45	374.40	382.44	1.3%
Total Net Energy for Load	337.95	341.74	345.40	349.62	352.85	356.68	360.60	364.86	368.62	373.17	377.56	382.31	386.73	391.13	1.2%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	146.54	146.63	146.43	146.58	146.16	146.11	150.69	157.60	163.56	170.72	177.84	184.97	193.03	200.14	1.9%
Petroleum	7.55	7.44	7.43	7.51	7.57	7.48	7.49	7.57	7.55	7.52	7.62	7.61	7.65	7.67	-0.8%
Natural Gas	51.85	55.30	56.74	59.16	61.36	63.11	62.85	62.14	60.82	59.40	57.04	55.38	54.25	55.20	2.9%
Nuclear	108.53	108.53	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.78	0.2%
Pumped Storage/Other 3/	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	5.5%
Renewable Sources 4/	11.53	11.54	11.60	11.92	12.10	12.64	12.63	12.65	12.59	12.84	12.88	13.20	13.18	13.17	1.4%
Total Generation	325.18	328.61	332.19	335.16	337.18	339.33	343.65	349.94	354.50	360.46	365.37	371.15	378.10	386.14	1.3%
Sales to Customers	321.48	324.91	328.49	331.46	333.48	335.63	339.95	346.24	350.80	356.76	361.67	367.45	374.40	382.44	1.3%
Generation for Own Use	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	0.9%
Distributed Generation 5/	0.07	0.09	0.11	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.28	0.31	0.33	N/A

Table 62. Electric Power Projections by Electricity Market Module Region  
Mid-Atlantic Area Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Commercial and Industrial 8/</b>															
Coal	2.24	2.41	2.59	3.60	4.59	5.49	6.08	6.70	7.17	7.80	8.20	8.59	9.05	9.06	8.2%
Petroleum	1.50	1.44	1.45	1.62	1.46	1.46	1.47	1.48	1.50	1.51	1.51	1.51	1.51	1.52	3.9%
Natural Gas	3.65	3.75	3.86	3.98	4.08	4.20	4.30	4.41	4.51	4.61	4.70	4.79	4.88	4.99	2.8%
Other Gaseous Fuels	0.52	0.52	0.53	0.53	0.53	0.54	0.54	0.55	0.55	0.55	0.55	0.55	0.55	0.57	0.3%
<b>Renewable Sources 4/</b>															
Other	0.92	0.94	0.95	0.96	0.98	0.99	1.01	1.02	1.04	1.06	1.08	1.11	1.13	1.16	1.8%
Total	9.16	9.40	9.70	11.02	11.97	13.01	13.73	14.49	15.10	15.85	16.37	16.89	17.46	17.62	4.4%
Sales to Utilities	2.95	3.06	3.23	4.09	4.59	5.21	5.64	6.10	6.46	6.91	7.22	7.52	7.86	7.92	8.9%
Generation for Own Use	6.21	6.34	6.47	6.94	7.38	7.80	8.09	8.39	8.64	8.94	9.15	9.37	9.60	9.70	2.7%
<b>Total Electricity Generation</b>	<b>334.41</b>	<b>338.10</b>	<b>342.00</b>	<b>346.31</b>	<b>349.29</b>	<b>352.50</b>	<b>357.56</b>	<b>364.63</b>	<b>369.81</b>	<b>376.55</b>	<b>382.00</b>	<b>388.32</b>	<b>395.87</b>	<b>404.09</b>	<b>1.4%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	8.9	9.0	9.2	9.1	9.2	9.3	9.3	9.3	9.4	9.3	9.3	9.2	9.2	9.3	-0.2%
Commercial	7.5	7.7	7.8	7.8	8.0	8.0	8.0	8.1	8.2	8.2	8.2	8.1	8.1	8.2	-0.2%
Industrial	6.3	6.4	6.6	6.5	6.7	6.7	6.8	6.8	6.8	6.8	6.8	6.7	6.6	6.7	-0.2%
Transportation	7.5	7.6	7.7	7.7	7.8	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.8	7.8	0.1%
All Sectors Average	7.8	7.9	8.1	8.0	8.2	8.2	8.2	8.3	8.4	8.3	8.3	8.2	8.2	8.3	-0.2%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	4.9	5.1	5.2	5.2	5.3	5.4	5.4	5.5	5.5	5.5	5.5	5.4	5.4	5.5	-0.3%
Transmission	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.7%
Distribution	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	0.0%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	1.54	1.54	1.54	1.54	1.53	1.53	1.56	1.61	1.65	1.70	1.75	1.80	1.85	1.90	1.5%
Natural Gas	0.41	0.43	0.44	0.45	0.46	0.48	0.47	0.47	0.46	0.45	0.43	0.42	0.41	0.42	2.3%
Oil	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	-0.9%
Total	2.03	2.05	2.05	2.07	2.08	2.09	2.12	2.17	2.20	2.24	2.27	2.30	2.35	2.41	1.5%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.66	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.67	1.69	1.70	1.71	1.73	1.74	0.3%
Natural Gas	5.10	5.27	5.40	5.39	5.53	5.62	5.68	5.79	5.89	5.96	6.03	6.07	6.13	6.17	-0.2%
Distillate Fuel	9.02	9.22	9.30	9.38	9.43	9.61	9.69	9.78	9.87	9.90	9.92	9.98	10.04	10.11	0.3%
Residual Fuel	5.44	5.60	5.65	5.64	5.71	5.85	5.91	5.93	6.03	6.10	6.06	6.09	6.09	6.15	1.0%
Biomass	1.82	1.83	1.85	1.86	1.93	1.97	1.96	1.99	1.97	1.97	1.96	1.99	1.98	1.99	3.6%
<b>Emissions 10/</b>															
Total Carbon (million tons)	51.66	52.02	52.09	52.39	52.47	52.58	53.46	54.80	55.81	57.02	58.13	59.23	60.67	62.16	1.6%
Carbon Dioxide (million tons)	189.43	190.74	191.01	192.10	192.39	192.79	196.04	200.93	204.63	209.09	213.16	217.18	222.45	227.93	1.6%
Sulfur Dioxide (million tons)	0.29	0.28	0.27	0.28	0.27	0.27	0.27	0.28	0.27	0.27	0.27	0.27	0.27	0.27	-5.8%
Nitrogen Oxide (million tons)	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	-2.4%
Mercury (tons)	1.52	1.39	1.34	1.40	1.34	1.39	1.40	1.40	1.43	1.41	1.37	1.28	1.29	1.29	-5.2%

Table 62. Electric Power Projections by Electricity Market Module Region  
Mid-Atlantic Area Council

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 63. Electric Power Projections by Electricity Market Module Region  
Mid-America Interconnected Network

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	29.20	28.96	28.65	28.65	28.65	29.17	31.06	32.54	32.25	32.25	31.89	31.89	31.89	31.89
Other Fossil Steam 2/ Combined Cycle	3.56	0.89	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.48	0.43	0.43	0.43	0.43
Combustion Turbine/Diesel	16.85	16.91	16.94	16.93	17.08	17.23	17.23	17.23	17.23	16.76	14.88	14.39	14.39	14.39
Nuclear Power	14.28	14.28	14.28	14.28	14.28	14.30	14.35	14.35	14.35	14.35	14.35	14.35	14.43	14.43
Pumped Storage/Other 3/ Fuel Cells	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Renewable Sources 4/ Distributed Generation 5/ Total Capacity	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	68.52	66.84	67.83	67.82	67.97	69.21	71.15	72.63	72.34	71.40	69.12	68.63	68.71	68.71
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.01	0.01	0.01	0.53	2.42	3.98	3.98	3.98	3.98	3.98	3.98	3.98
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Combustion Turbine/Diesel	0.00	0.00	1.14	1.14	1.14	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Nuclear Power	0.00	0.00	0.77	0.77	0.92	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Planned Additions	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
	0.00	0.00	2.05	2.05	2.20	3.41	5.30	6.87	6.87	6.87	6.87	6.87	6.87	6.87
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative Total Additions	0.00	0.00	2.05	2.05	2.20	3.41	5.30	6.87	6.87	6.87	6.87	6.87	6.87	6.87

Table 63. Electric Power Projections by Electricity Market Module Region  
Mid-America Interconnected Network

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.31	0.31	0.31	0.31	0.31	0.40	0.69	0.69	1.05	1.05	1.05	1.05
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.51	0.51	0.51	0.51
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.74	0.75	0.75	0.75	0.75	0.75	0.75	1.22	3.10	3.59	3.59	3.59
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	1.05	1.07	1.07	1.07	1.07	1.15	1.44	2.38	4.66	5.15	5.15	5.15
<b>Commercial and Industrial 8/</b>														
Coal	0.85	0.83	0.86	0.86	0.85	0.85	0.85	0.85	0.95	1.06	1.16	1.20	1.25	1.30
Petroleum	0.03	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Natural Gas	0.43	0.43	0.44	0.45	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.54	0.55
Other Gaseous Fuels	0.08	0.08	0.08	0.08	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Renewable Sources 4/	0.19	0.19	0.20	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.25	0.25	0.26	0.26
Other	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	1.60	1.62	1.66	1.67	1.68	1.69	1.71	1.73	1.85	1.97	2.08	2.14	2.21	2.28
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	78.94	79.16	84.78	84.98	85.85	87.36	88.48	89.76	90.80	92.09	92.83	93.88	95.04	96.25
Commercial/Other	86.27	87.30	93.45	93.35	95.29	97.52	99.48	101.34	103.21	105.07	106.73	108.36	110.05	111.84
Industrial	83.25	83.34	84.49	85.37	85.91	86.52	87.03	87.94	88.77	89.40	89.71	90.13	90.54	90.97
Transportation	1.68	1.68	1.69	1.69	1.70	1.71	1.72	1.74	1.75	1.76	1.76	1.77	1.78	1.79
Total Sales	250.14	251.47	264.41	265.40	268.75	273.12	276.71	280.79	284.53	288.32	291.04	294.15	297.42	300.85
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Interregional Electricity Imports	6.06	12.15	8.32	8.86	7.63	5.52	4.50	4.04	4.09	4.15	3.75	3.33	2.93	2.53
Gross Interregional Electricity Exports	53.89	66.07	55.36	57.80	56.72	55.92	56.27	64.82	65.35	65.52	63.83	61.36	58.50	54.25
Purchases from Combined Heat and Power 8/	0.86	0.88	0.95	0.99	1.28	1.29	1.38	1.46	1.93	2.45	2.82	3.10	3.33	3.59
Electric Power Sector Generation for Customer	297.80	303.54	326.79	329.54	332.79	338.57	343.43	356.54	360.67	364.47	365.87	366.80	367.55	367.23
Total Net Energy for Load	250.83	250.50	280.69	281.58	284.98	289.46	293.05	297.22	301.35	305.55	308.61	311.87	315.32	319.10
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	169.26	178.31	178.85	181.17	184.36	189.53	193.14	206.20	209.23	211.98	212.86	212.72	211.17	209.67
Petroleum	1.47	1.03	1.61	1.59	1.55	1.57	1.55	1.55	1.54	1.47	1.59	1.59	1.61	1.63
Natural Gas	6.56	6.66	27.60	25.86	25.49	25.91	25.95	25.85	27.10	28.03	28.18	28.47	28.67	28.92
Nuclear	118.52	114.62	115.96	117.58	117.58	117.54	117.74	117.74	117.74	117.74	117.74	117.74	118.17	118.17
Pumped Storage/Other 3/	-0.02	-0.20	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13
Renewable Sources 4/	4.03	5.05	4.10	4.67	5.14	5.34	6.39	6.53	6.40	6.58	6.83	7.61	9.27	10.17
Total Generation	299.81	305.47	327.99	330.74	333.99	339.77	344.64	357.74	361.88	365.67	367.07	368.00	368.75	368.43
Sales to Customers	297.80	303.54	326.79	329.54	332.79	338.57	343.43	356.54	360.67	364.47	365.87	366.80	367.55	367.23
Generation for Own Use	2.01	1.93	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 63. Electric Power Projections by Electricity Market Module Region  
Mid-America Interconnected Network

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	3.68	3.91	3.95	3.95	3.94	3.94	3.94	3.94	4.62	5.29	5.97	6.29	6.62	6.93
Petroleum	0.30	0.28	0.34	0.34	0.62	0.61	0.66	0.69	0.71	0.78	0.70	0.74	0.74	0.76
Natural Gas	1.43	1.44	1.47	1.50	1.61	1.65	1.70	1.75	1.80	1.84	1.89	1.94	2.00	2.07
Other Gaseous Fuels	0.37	0.26	0.27	0.27	0.23	0.23	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25
Renewable Sources 4/	1.38	1.38	1.39	1.44	1.48	1.52	1.55	1.59	1.62	1.64	1.66	1.68	1.70	1.72
Other	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Total	7.41	7.52	7.68	7.75	8.14	8.20	8.34	8.47	9.24	10.06	10.72	11.16	11.56	11.99
Sales to Utilities	0.86	0.88	0.95	0.99	1.28	1.29	1.38	1.46	1.93	2.45	2.82	3.10	3.33	3.59
Generation for Own Use	6.55	6.64	6.73	6.77	6.86	6.91	6.96	7.01	7.31	7.61	7.90	8.06	8.23	8.40
Total Electricity Generation	307.22	312.98	335.66	338.49	342.13	347.97	352.98	366.21	371.12	375.73	377.79	379.16	380.32	380.42
End-Use Prices (2004 cents per kilowatthour)														
Residential	8.5	8.4	9.3	9.0	8.5	8.3	8.3	8.4	8.4	8.4	8.5	8.5	8.5	8.5
Commercial	7.1	6.9	8.2	7.9	7.5	7.3	7.2	7.1	7.1	7.0	7.2	7.1	7.1	7.2
Industrial	4.8	4.9	5.6	5.7	5.4	5.2	5.1	4.8	4.7	4.6	4.7	4.7	4.7	4.7
Transportation	6.7	6.7	6.9	7.0	6.6	6.5	6.5	6.5	6.5	6.5	6.7	6.6	6.6	6.6
All Sectors Average	6.8	6.7	7.7	7.5	7.1	7.0	6.9	6.8	6.7	6.7	6.8	6.8	6.8	6.9
Prices by Service Category (2004 cents per kilowatthour)														
Generation	4.2	4.1	5.2	5.0	4.6	4.4	4.3	4.2	4.1	4.1	4.2	4.2	4.2	4.3
Transmission	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6
Distribution	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0
Fuel Consumption (quadrillion Btu) 9/														
Coal	1.83	1.84	1.91	1.93	1.96	2.01	2.04	2.17	2.20	2.23	2.24	2.24	2.22	2.21
Natural Gas	0.07	0.07	0.28	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.29	0.29	0.29	0.29
Oil	0.02	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	1.92	1.92	2.21	2.22	2.24	2.30	2.32	2.45	2.49	2.53	2.54	2.54	2.53	2.52
Fuel Prices (dollars per million Btu)														
Coal	1.24	1.34	1.55	1.58	1.57	1.57	1.61	1.70	1.63	1.58	1.56	1.55	1.56	1.57
Natural Gas	6.00	6.24	8.69	7.60	6.79	6.43	6.05	5.75	5.68	5.68	5.80	5.72	5.50	5.50
Distillate Fuel	6.69	9.45	10.22	11.06	10.08	9.79	9.35	9.00	9.03	9.18	8.88	9.03	9.06	9.16
Residual Fuel	5.24	5.17	7.78	7.28	7.43	7.26	6.93	6.46	6.55	6.50	6.42	6.47	6.46	6.47
Biomass	1.22	1.19	1.33	1.50	1.64	1.64	1.73	1.72	1.71	1.78	1.81	1.83	1.96	2.02
Emissions 10/														
Total Carbon (million tons)	57.02	57.79	59.74	60.24	61.01	62.50	63.20	66.87	67.81	68.90	69.29	69.36	68.97	68.57
Carbon Dioxide (million tons)	209.08	211.89	219.05	220.89	223.71	229.17	231.74	245.19	248.63	252.63	254.07	254.32	252.87	251.41
Sulfur Dioxide (million tons)	0.88	0.90	0.93	0.95	0.95	0.91	0.83	0.75	0.65	0.60	0.57	0.55	0.53	0.50
Nitrogen Oxide (million tons)	0.31	0.28	0.29	0.27	0.28	0.28	0.14	0.15	0.15	0.15	0.16	0.16	0.15	0.15
Mercury (tons)	4.63	4.75	5.01	5.02	5.10	5.21	5.15	4.76	4.74	4.79	4.16	4.22	3.16	3.02

Table 63. Electric Power Projections by Electricity Market Module Region  
Mid-America Interconnected Network

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/</b>															
<b>(gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	0.4%
Other Fossil Steam 2/	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	-2.7%
Combined Cycle	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	1.3%
Combustion Turbine/Diesel	14.39	14.39	14.67	15.28	15.78	16.33	16.97	17.63	18.17	18.90	19.62	20.36	21.07	21.81	1.0%
Nuclear Power	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	0.0%
Pumped Storage/Other 3/	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.10	1.12	1.19	1.19	1.23	1.23	1.0%
Distributed Generation 5/	0.00	0.03	0.07	0.10	0.13	0.16	0.20	0.23	0.26	0.30	0.33	0.47	0.59	0.71	N/A
Total Capacity	68.71	68.74	69.06	69.70	70.23	70.81	71.48	72.18	72.83	73.61	74.44	75.32	76.20	77.05	0.5%
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	N/A
Other Fossil Steam 2/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	N/A
Combined Cycle	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	N/A
Combustion Turbine/Diesel	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	1.08	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87	6.87	N/A
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.00	0.00	0.28	0.89	1.39	1.94	2.58	3.24	3.78	4.51	5.23	5.97	6.68	7.42	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.10	0.17	0.17	0.21	0.21	N/A
Distributed Generation 5/	0.00	0.03	0.07	0.10	0.13	0.16	0.20	0.23	0.26	0.30	0.33	0.47	0.59	0.71	N/A
Total Unplanned Additions	0.00	0.03	0.35	0.99	1.52	2.10	2.77	3.47	4.12	4.90	5.73	6.61	7.49	8.34	N/A
Cumulative Total Additions	6.87	6.90	7.22	7.86	8.39	8.97	9.64	10.34	10.99	11.77	12.60	13.48	14.36	15.21	N/A

Table 63. Electric Power Projections by Electricity Market Module Region  
Mid-America Interconnected Network

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	N/A
Other Fossil Steam 3/	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	3.59	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	N/A
<b>Commercial and Industrial 8/</b>															
Coal	1.38	1.47	1.55	2.06	2.56	3.06	3.34	3.61	3.89	4.18	4.47	4.76	4.77	4.77	6.9%
Petroleum	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.7%
Natural Gas	0.56	0.57	0.59	0.60	0.62	0.63	0.64	0.66	0.67	0.68	0.69	0.70	0.72	0.73	2.0%
Other Gaseous Fuels	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	-0.5%
Renewable Sources 4/	0.26	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.32	0.33	0.34	0.36	2.4%
Other	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	N/A
Total	2.38	2.48	2.58	3.11	3.62	4.14	4.44	4.73	5.03	5.34	5.65	5.97	6.00	6.03	5.2%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	96.99	97.95	98.91	100.14	100.66	101.43	102.21	103.26	103.80	104.63	105.50	106.65	107.24	108.04	1.2%
Commercial/Other	113.67	115.50	117.30	119.18	121.06	123.00	124.96	126.70	128.50	130.46	132.39	134.52	136.67	138.82	1.8%
Industrial	91.16	91.63	91.83	91.88	91.96	91.94	92.07	92.35	92.53	92.93	93.31	93.65	94.00	94.22	0.5%
Transportation	1.79	1.80	1.81	1.81	1.82	1.82	1.82	1.83	1.83	1.83	1.84	1.84	1.84	1.84	0.4%
Total Sales	303.62	306.88	309.85	313.01	315.50	318.19	321.07	324.14	326.65	329.86	333.04	336.66	339.75	342.93	1.2%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	2.12	1.74	1.57	1.36	1.32	1.01	1.44	2.08	2.61	3.43	3.94	4.58	4.73	7.08	-2.1%
Gross Interregional Electricity Exports	52.38	49.44	46.60	44.24	41.78	38.66	36.09	34.23	33.68	29.90	26.13	21.69	18.33	16.30	-5.2%
Purchases from Combined Heat and Power 8/	3.98	4.35	4.75	6.96	8.96	10.87	12.14	13.46	14.47	15.82	16.69	17.55	18.55	18.61	12.5%
Electric Power Sector Generation for Customer	368.62	369.43	369.78	370.55	370.53	370.26	370.07	370.59	371.97	370.53	369.43	367.97	367.49	366.37	0.7%
Total Net Energy for Load	322.34	326.08	329.50	334.63	339.02	343.47	347.56	351.90	355.38	359.89	363.93	368.41	372.44	375.75	1.6%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	210.75	211.35	211.76	214.31	214.74	214.75	214.81	215.12	216.70	215.28	213.55	211.72	210.63	209.75	0.6%
Petroleum	1.64	1.50	1.44	1.10	1.09	1.07	1.07	1.05	1.02	0.99	0.97	0.96	0.95	0.94	-0.3%
Natural Gas	28.93	28.94	29.03	29.25	29.44	29.63	29.65	30.14	30.21	30.49	30.77	31.04	31.32	31.14	6.1%
Nuclear	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	0.1%
Pumped Storage/Other 3/	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-1.6%
Renewable Sources 4/	10.46	10.80	10.70	9.04	8.42	7.96	7.70	7.45	7.20	6.94	7.31	7.40	7.75	7.69	1.6%
Total Generation	369.82	370.63	370.98	371.75	371.73	371.46	371.27	371.79	373.17	371.73	370.63	369.17	368.69	367.57	0.7%
Sales to Customers	368.62	369.43	369.78	370.55	370.53	370.26	370.07	370.59	371.97	370.53	369.43	367.97	367.49	366.37	0.7%
Generation for Own Use	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	-1.8%
Distributed Generation 5/	0.00	0.01	0.03	0.04	0.06	0.07	0.09	0.10	0.11	0.13	0.15	0.20	0.26	0.31	N/A



Table 63. Electric Power Projections by Electricity Market Module Region  
Mid-America Interconnected Network

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	7.51	8.08	8.65	12.04	15.34	18.37	20.36	22.43	23.98	26.09	27.43	28.76	30.30	30.31	8.2%
Petroleum	0.75	0.72	0.72	0.81	0.72	0.73	0.73	0.74	0.74	0.75	0.75	0.75	0.75	0.76	3.9%
Natural Gas	2.13	2.19	2.26	2.32	2.39	2.45	2.51	2.58	2.64	2.69	2.75	2.80	2.85	2.92	2.8%
Other Gaseous Fuels	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.3%
Renewable Sources 4/	1.75	1.78	1.81	1.83	1.86	1.89	1.92	1.95	1.98	2.02	2.06	2.11	2.16	2.21	1.8%
Other	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.0%
Total	12.65	13.29	13.95	17.52	20.84	23.96	26.04	28.21	29.87	32.07	33.51	34.94	36.59	36.73	6.3%
Sales to Utilities	3.98	4.35	4.75	6.96	8.96	10.87	12.14	13.46	14.47	15.82	16.69	17.55	18.55	18.61	12.5%
Generation for Own Use	8.67	8.94	9.20	10.56	11.88	13.09	13.90	14.75	15.40	16.25	16.82	17.39	18.04	18.12	3.9%
<b>Total Electricity Generation</b>	<b>382.47</b>	<b>383.93</b>	<b>384.96</b>	<b>389.31</b>	<b>392.62</b>	<b>395.49</b>	<b>397.40</b>	<b>400.10</b>	<b>403.15</b>	<b>403.93</b>	<b>404.29</b>	<b>404.32</b>	<b>405.53</b>	<b>404.61</b>	<b>1.0%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	8.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.7	8.7	8.6	8.6	8.6	8.7	0.1%
Commercial	7.3	7.4	7.5	7.4	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	7.6	7.7	0.5%
Industrial	4.8	4.9	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.1	5.1	5.0	5.0	5.1	0.2%
Transportation	6.7	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.9	6.9	6.8	6.8	6.8	6.9	0.1%
All Sectors Average	6.9	7.0	7.1	7.1	7.1	7.1	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.3	0.4%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	4.3	4.4	4.5	4.5	4.6	4.6	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.8	0.6%
Transmission	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.7%
Distribution	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	-0.4%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	2.22	2.23	2.24	2.27	2.27	2.27	2.28	2.28	2.30	2.28	2.26	2.24	2.23	2.22	0.7%
Natural Gas	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.32	0.32	0.32	6.1%
Oil	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-1.0%
Total	2.53	2.54	2.54	2.57	2.58	2.59	2.59	2.60	2.61	2.60	2.59	2.57	2.56	2.55	1.1%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.57	1.57	1.58	1.50	1.49	1.49	1.50	1.51	1.49	1.46	1.48	1.49	1.50	1.51	0.5%
Natural Gas	5.55	5.72	5.88	5.88	6.01	6.09	6.16	6.27	6.40	6.48	6.57	6.63	6.70	6.85	0.4%
Distillate Fuel	9.27	9.47	9.41	9.63	9.68	9.88	9.94	10.02	9.96	10.00	9.98	9.98	9.84	9.88	0.2%
Residual Fuel	6.56	6.55	6.59	6.74	6.76	6.79	6.88	7.00	7.07	7.10	7.17	7.19	7.22	7.38	1.4%
Biomass	2.02	2.06	2.06	2.07	2.08	2.06	2.05	2.03	1.84	1.84	1.84	1.84	1.85	1.84	1.7%
<b>Emissions 10/</b>															
Total Carbon (million tons)	68.98	69.24	69.37	70.19	70.45	70.51	70.60	71.01	71.50	71.08	70.58	70.05	69.75	69.46	0.7%
Carbon Dioxide (million tons)	252.91	253.89	254.37	257.37	258.31	258.55	258.87	260.37	262.16	260.62	258.80	256.83	255.76	254.69	0.7%
Sulfur Dioxide (million tons)	0.48	0.48	0.47	0.47	0.44	0.44	0.44	0.42	0.43	0.42	0.41	0.41	0.40	0.39	-3.1%
Nitrogen Oxide (million tons)	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	-2.5%
Mercury (tons)	2.93	2.71	2.52	2.09	2.01	1.97	1.92	1.80	1.66	1.57	1.54	1.53	1.50	1.43	-4.5%

Table 63. Electric Power Projections by Electricity Market Module Region  
Mid-America Interconnected Network

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 64. Electric Power Projections by Electricity Market Module Region  
Mid-Continent Area Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	18.77	18.77	18.76	18.76	19.77	19.50	19.50	19.50	19.48	19.48	19.48	19.51	19.51	19.51
Other Fossil Steam 2/	0.55	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.34	0.34	0.34	0.34	0.34
Combined Cycle	0.96	1.20	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
Combustion Turbine/Diesel	7.11	7.33	9.15	9.15	9.15	9.15	9.15	9.15	9.15	8.99	8.99	9.25	9.59	9.96
Nuclear Power	3.23	3.23	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	4.41	4.62	5.06	5.12	5.34	5.36	5.38	5.40	5.40	5.40	5.40	5.40	5.40	5.40
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.06
Total Capacity	35.03	35.66	38.16	38.22	39.44	39.20	39.22	39.23	39.21	38.89	38.90	39.20	39.56	39.95
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Combustion Turbine/Diesel	0.00	0.00	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.44	0.50	0.71	0.74	0.76	0.77	0.77	0.77	0.77	0.77	0.77	0.77
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Planned Additions	0.00	0.00	0.90	0.97	2.19	2.22	2.23	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.03
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.56	1.90	2.27
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.04	0.06
Total Unplanned Additions	0.00	0.00	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.31	1.61	1.97	2.36
Cumulative Total Additions	0.00	0.00	2.20	2.27	3.49	3.52	3.53	3.55	3.55	3.55	3.56	3.86	4.22	4.61

Table 64. Electric Power Projections by Electricity Market Module Region  
Mid-Continent Area Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.01	0.01	0.01	0.28	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.30
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.16	0.16	0.16
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.17	0.17	0.17	0.17	0.17
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.01	0.02	0.02	0.29	0.29	0.29	0.31	0.63	0.63	0.63	0.63	0.63
<b>Commercial and Industrial 8/</b>														
Coal	0.55	0.54	0.56	0.56	0.55	0.55	0.55	0.55	0.62	0.68	0.75	0.78	0.81	0.84
Petroleum	0.03	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.08	0.08	0.08
Natural Gas	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.09
Other Gaseous Fuels	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Renewable Sources 4/	0.16	0.16	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.20	0.21	0.21	0.21
Other	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total	0.90	0.93	0.95	0.96	0.95	0.96	0.97	0.98	1.05	1.13	1.19	1.23	1.27	1.31
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	50.50	51.01	53.52	53.90	54.65	55.76	56.56	57.42	58.22	59.24	59.91	60.72	61.60	62.50
Commercial/Other	43.90	45.00	47.21	47.58	48.83	50.13	51.19	52.14	53.19	54.33	55.39	56.39	57.41	58.46
Industrial	49.25	50.20	49.84	50.41	51.46	52.08	52.65	53.45	54.19	54.81	55.09	55.30	55.50	55.71
Transportation	0.93	0.94	0.93	0.93	0.94	0.95	0.96	0.97	0.97	0.98	0.98	0.99	1.00	1.00
Total Sales	144.57	147.16	151.51	152.82	155.89	158.91	161.35	163.98	166.58	169.35	171.37	173.40	175.50	177.67
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	5.11	7.67	5.30	4.82	4.66	5.83	6.55	6.23	6.59	6.80	7.10	7.66	7.42	8.08
Gross International Exports	8.19	4.98	6.00	5.98	5.98	5.96	5.96	5.95	5.95	5.95	5.65	5.37	5.10	4.85
Gross Interregional Electricity Imports	5.50	13.49	8.68	8.42	8.20	7.51	7.22	8.32	8.61	10.07	10.04	9.41	8.61	8.62
Gross Interregional Electricity Exports	13.32	21.29	15.28	16.56	20.49	21.43	20.20	19.53	17.61	17.42	16.54	15.23	13.32	12.59
Purchases from Combined Heat and Power 8/	0.41	0.41	0.43	0.44	0.52	0.53	0.56	0.59	0.87	1.16	1.42	1.57	1.71	1.85
Electric Power Sector Generation for Custome	160.34	158.37	170.39	173.67	181.09	184.67	185.45	186.68	186.73	187.66	188.23	188.70	189.66	190.29
Total Net Energy for Load	149.85	153.66	163.52	164.82	168.01	171.15	173.62	176.33	179.23	182.32	184.60	186.75	188.97	191.40
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	121.84	118.44	124.86	125.69	132.03	135.49	136.29	137.29	137.36	138.14	138.35	138.58	138.65	139.14
Petroleum	1.07	0.86	1.06	0.88	0.86	0.85	0.98	1.00	0.98	0.93	0.89	0.84	0.82	0.77
Natural Gas	2.41	2.17	1.65	1.36	1.36	1.37	1.40	1.41	1.42	1.65	2.14	2.43	3.28	3.67
Nuclear	23.53	25.61	24.73	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	12.90	12.66	18.30	20.86	21.96	22.07	21.89	22.10	22.10	22.08	21.98	21.99	22.04	21.84
Total Generation	161.75	159.75	170.61	173.89	181.31	184.90	185.68	186.91	186.96	187.89	188.47	188.94	189.89	190.52
Sales to Customers	160.34	158.37	170.39	173.67	181.09	184.67	185.45	186.68	186.73	187.66	188.23	188.70	189.66	190.29
Generation for Own Use	1.41	1.38	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.03

Table 64. Electric Power Projections by Electricity Market Module Region  
Mid-Continent Area Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	2.32	2.47	2.50	2.50	2.49	2.49	2.49	2.49	2.92	3.34	3.77	3.98	4.18	4.38
Petroleum	0.07	0.06	0.08	0.08	0.14	0.14	0.15	0.16	0.16	0.18	0.16	0.17	0.17	0.17
Natural Gas	0.39	0.39	0.40	0.41	0.44	0.45	0.46	0.48	0.49	0.50	0.51	0.53	0.54	0.56
Other Gaseous Fuels	0.08	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06
Renewable Sources 4/	0.84	0.84	0.85	0.87	0.90	0.92	0.94	0.97	0.98	1.00	1.01	1.02	1.04	1.05
Other	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Total	3.78	3.90	3.96	3.99	4.10	4.13	4.17	4.22	4.68	5.15	5.59	5.83	6.06	6.30
Sales to Utilities	0.41	0.41	0.43	0.44	0.52	0.53	0.56	0.59	0.87	1.16	1.42	1.57	1.71	1.85
Generation for Own Use	3.38	3.49	3.53	3.55	3.58	3.60	3.61	3.63	3.81	3.99	4.17	4.26	4.35	4.44
Total Electricity Generation	165.53	163.65	174.56	177.88	185.41	189.02	189.85	191.13	191.64	193.04	194.06	194.77	195.97	196.85
End-Use Prices (2004 cents per kilowatthour)														
Residential	7.8	7.8	7.8	7.9	7.8	7.7	7.7	7.8	7.6	7.4	7.4	7.4	7.3	7.3
Commercial	6.1	6.2	6.3	6.5	6.4	6.3	6.4	6.5	6.4	6.2	6.2	6.2	6.2	6.1
Industrial	4.4	4.4	4.4	4.7	4.6	4.6	4.6	4.7	4.6	4.5	4.5	4.5	4.5	4.5
Transportation	5.7	5.8	5.5	5.9	5.8	5.8	5.8	5.9	5.8	5.7	5.7	5.7	5.6	5.6
All Sectors Average	6.1	6.1	6.2	6.4	6.3	6.2	6.3	6.4	6.2	6.1	6.1	6.1	6.0	6.0
Prices by Service Category (2004 cents per kilowatthour)														
Generation	3.4	3.5	3.5	3.7	3.6	3.6	3.6	3.7	3.6	3.4	3.4	3.5	3.4	3.4
Transmission	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Distribution	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7
Fuel Consumption (quadrillion Btu) 9/														
Coal	1.30	1.31	1.35	1.36	1.42	1.46	1.47	1.48	1.48	1.49	1.50	1.50	1.50	1.51
Natural Gas	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03
Oil	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	1.34	1.35	1.38	1.38	1.45	1.48	1.49	1.51	1.51	1.52	1.53	1.53	1.54	1.55
Fuel Prices (dollars per million Btu)														
Coal	0.90	1.06	1.37	1.41	1.31	1.28	1.15	1.22	1.18	1.12	1.14	1.17	1.16	1.17
Natural Gas	5.12	5.82	7.92	7.53	6.66	6.35	5.86	5.50	5.33	5.29	5.44	5.38	5.08	5.03
Distillate Fuel	6.73	9.50	10.27	11.11	9.98	9.70	9.26	8.92	8.94	9.09	8.79	8.93	8.97	9.07
Residual Fuel	4.20	4.16	6.25	5.81	6.36	6.19	5.86	5.39	5.48	5.43	5.35	5.40	5.39	5.40
Biomass	1.46	1.45	1.48	1.52	1.65	1.60	1.40	1.52	1.52	1.59	1.62	1.65	1.66	1.53
Emissions 10/														
Total Carbon (million tons)	38.13	38.67	39.72	39.92	41.79	42.82	43.18	43.57	43.60	43.91	44.03	44.14	44.30	44.51
Carbon Dioxide (million tons)	139.81	141.81	145.64	146.39	153.24	157.02	158.34	159.74	159.88	160.99	161.43	161.86	162.44	163.21
Sulfur Dioxide (million tons)	0.38	0.36	0.38	0.38	0.37	0.37	0.31	0.25	0.24	0.23	0.23	0.24	0.23	0.22
Nitrogen Oxide (million tons)	0.27	0.24	0.27	0.27	0.28	0.28	0.19	0.19	0.19	0.19	0.19	0.19	0.17	0.17
Mercury (tons)	3.62	3.60	3.75	3.75	3.85	3.88	3.92	3.06	3.20	3.10	2.68	2.56	2.10	1.93

Table 64. Electric Power Projections by Electricity Market Module Region  
Mid-Continent Area Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/</b>															
<b>(gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	19.51	19.56	19.56	19.56	19.74	19.99	20.24	20.33	20.56	20.93	21.42	21.91	22.39	22.83	0.8%
Other Fossil Steam 2/	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	-1.5%
Combined Cycle	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	0.7%
Combustion Turbine/Diesel	10.34	10.68	11.08	11.47	11.76	11.87	11.98	12.29	12.44	12.44	12.44	12.44	12.44	12.48	2.1%
Nuclear Power	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	0.0%
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	0.6%
Distributed Generation 5/	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.33	0.36	N/A
<b>Total Capacity</b>	<b>40.35</b>	<b>40.77</b>	<b>41.18</b>	<b>41.59</b>	<b>42.07</b>	<b>42.47</b>	<b>42.84</b>	<b>43.26</b>	<b>43.66</b>	<b>44.05</b>	<b>44.57</b>	<b>45.08</b>	<b>45.59</b>	<b>46.09</b>	<b>1.0%</b>
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	N/A
Combustion Turbine/Diesel	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Planned Additions</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>2.25</b>	<b>N/A</b>
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	0.03	0.08	0.08	0.08	0.25	0.51	0.75	0.85	1.07	1.44	1.94	2.42	2.91	3.35	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	2.65	3.00	3.39	3.78	4.07	4.19	4.30	4.60	4.75	4.75	4.75	4.76	4.76	4.80	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Distributed Generation 5/	0.08	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.26	0.29	0.31	0.33	0.36	N/A
<b>Total Unplanned Additions</b>	<b>2.76</b>	<b>3.18</b>	<b>3.60</b>	<b>4.00</b>	<b>4.49</b>	<b>4.88</b>	<b>5.25</b>	<b>5.67</b>	<b>6.07</b>	<b>6.46</b>	<b>6.98</b>	<b>7.49</b>	<b>8.00</b>	<b>8.50</b>	<b>N/A</b>
<b>Cumulative Total Additions</b>	<b>5.01</b>	<b>5.43</b>	<b>5.85</b>	<b>6.25</b>	<b>6.74</b>	<b>7.13</b>	<b>7.50</b>	<b>7.92</b>	<b>8.32</b>	<b>8.71</b>	<b>9.23</b>	<b>9.74</b>	<b>10.25</b>	<b>10.75</b>	<b>N/A</b>

Table 64. Electric Power Projections by Electricity Market Module Region  
Mid-Continent Area Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	N/A
Other Fossil Steam 3/	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	N/A
<b>Commercial and Industrial 8/</b>															
Coal	0.90	0.95	1.01	1.33	1.66	1.98	2.16	2.34	2.52	2.71	2.90	3.09	3.09	3.09	6.9%
Petroleum	0.08	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.7%
Natural Gas	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	2.0%
Other Gaseous Fuels	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-0.5%
Renewable Sources 4/	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.27	0.28	0.29	2.4%
Other	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Total	1.37	1.42	1.48	1.82	2.15	2.48	2.67	2.85	3.04	3.23	3.43	3.64	3.65	3.66	5.4%
<b>Electricity Demand</b>															
<b>(billion kilowatthours)</b>															
Residential	63.09	63.85	64.61	65.54	66.02	66.66	67.30	68.11	68.59	69.25	69.92	70.78	71.26	71.90	1.3%
Commercial/Other	59.53	60.62	61.71	62.82	63.93	65.08	66.25	67.41	68.57	69.81	71.01	72.31	73.62	74.93	2.0%
Industrial	55.97	56.22	56.33	56.34	56.37	56.34	56.40	56.54	56.62	56.83	57.03	57.20	57.38	57.49	0.5%
Transportation	1.01	1.01	1.02	1.02	1.02	1.03	1.03	1.04	1.04	1.04	1.05	1.05	1.05	1.05	0.4%
Total Sales	179.60	181.71	183.67	185.72	187.35	189.11	190.99	193.10	194.82	196.94	199.01	201.34	203.32	205.37	1.3%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	7.62	7.83	7.82	7.48	8.49	10.10	12.73	11.89	13.26	13.14	12.48	12.52	12.28	12.50	1.9%
Gross International Exports	4.60	4.37	4.15	3.95	3.75	3.56	3.38	3.21	3.05	3.05	3.05	3.05	3.05	3.05	-1.9%
Gross Interregional Electricity Imports	8.96	9.66	10.46	11.20	10.64	9.45	8.59	9.71	9.85	9.81	8.82	8.24	7.52	7.30	-2.3%
Gross Interregional Electricity Exports	11.01	10.56	9.89	8.95	9.05	9.56	11.12	11.48	12.85	13.14	12.76	13.01	13.07	13.54	-1.7%
Purchases from Combined Heat and Power 8/	2.09	2.32	2.56	3.91	5.20	6.39	7.18	8.00	8.63	9.47	10.01	10.54	11.16	11.19	13.6%
Electric Power Sector Generation for Custome	190.61	191.26	191.63	192.17	193.29	194.97	196.53	198.63	200.11	202.76	206.19	209.41	212.49	215.13	1.2%
Total Net Energy for Load	193.67	196.14	198.44	201.86	204.81	207.80	210.53	213.54	215.94	218.98	221.68	224.65	227.32	229.52	1.6%
<b>Generation by Fuel Type</b>															
<b>(billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	139.05	139.55	139.67	139.50	140.65	142.35	144.37	146.14	147.50	150.18	153.62	156.93	160.41	163.38	1.2%
Petroleum	0.77	0.75	0.76	0.75	0.79	0.76	0.83	0.96	0.96	0.95	0.96	0.96	0.97	0.96	0.4%
Natural Gas	4.04	4.14	4.29	4.82	4.70	4.61	4.48	4.63	4.53	4.53	4.44	4.35	4.30	4.08	2.5%
Nuclear	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	-0.1%
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	21.88	21.94	22.04	22.23	22.28	22.38	21.98	22.02	22.25	22.23	22.30	22.30	21.93	21.84	2.1%
Total Generation	190.85	191.49	191.86	192.40	193.53	195.21	196.76	198.86	200.34	203.00	206.42	209.65	212.72	215.36	1.2%
Sales to Customers	190.61	191.26	191.63	192.17	193.29	194.97	196.53	198.63	200.11	202.76	206.19	209.41	212.49	215.13	1.2%
Generation for Own Use	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	-6.6%
Distributed Generation 5/	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.14	0.15	0.16	N/A

Table 64. Electric Power Projections by Electricity Market Module Region  
Mid-Continent Area Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	4.74	5.11	5.47	7.60	9.69	11.61	12.86	14.17	15.15	16.48	17.33	18.17	19.14	19.15	8.2%
Petroleum	0.17	0.16	0.16	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	3.9%
Natural Gas	0.58	0.60	0.61	0.63	0.65	0.67	0.68	0.70	0.72	0.73	0.75	0.76	0.78	0.79	2.8%
Other Gaseous Fuels	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.3%
Renewable Sources 4/	1.07	1.09	1.10	1.12	1.13	1.15	1.17	1.19	1.21	1.23	1.25	1.28	1.31	1.35	1.8%
Other	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.0%
Total	6.69	7.08	7.48	9.67	11.78	13.72	15.01	16.36	17.38	18.75	19.64	20.52	21.54	21.60	6.8%
Sales to Utilities	2.09	2.32	2.56	3.91	5.20	6.39	7.18	8.00	8.63	9.47	10.01	10.54	11.16	11.19	13.6%
Generation for Own Use	4.60	4.76	4.91	5.75	6.58	7.33	7.83	8.35	8.75	9.28	9.63	9.98	10.38	10.41	4.3%
<b>Total Electricity Generation</b>	<b>197.58</b>	<b>198.62</b>	<b>199.39</b>	<b>202.13</b>	<b>205.37</b>	<b>209.01</b>	<b>211.86</b>	<b>215.32</b>	<b>217.83</b>	<b>221.86</b>	<b>226.18</b>	<b>230.30</b>	<b>234.41</b>	<b>237.12</b>	<b>1.4%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	7.3	7.2	7.2	7.1	7.1	7.0	7.0	7.0	7.0	6.9	7.0	6.9	7.0	7.0	-0.4%
Commercial	6.2	6.1	6.1	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	6.1	6.1	0.0%
Industrial	4.5	4.5	4.5	4.5	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.5	0.1%
Transportation	5.6	5.6	5.6	5.6	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.6	-0.1%
All Sectors Average	6.0	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	6.0	-0.1%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.5	3.5	0.1%
Transmission	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8%
Distribution	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-0.8%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	1.50	1.51	1.51	1.51	1.52	1.53	1.55	1.57	1.58	1.60	1.62	1.64	1.66	1.68	1.0%
Natural Gas	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.5%
Oil	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.3%
Total	1.55	1.55	1.56	1.56	1.57	1.58	1.59	1.62	1.63	1.64	1.67	1.69	1.71	1.73	1.0%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.18	1.16	1.17	1.13	1.13	1.14	1.14	1.10	1.11	1.12	1.12	1.15	1.16	1.17	0.4%
Natural Gas	5.12	5.28	5.46	5.47	5.58	5.65	5.70	5.83	5.96	6.04	6.12	6.19	6.28	6.44	0.4%
Distillate Fuel	9.18	9.37	9.32	9.51	9.56	9.62	9.66	9.64	9.65	9.78	9.78	9.76	9.74	9.77	0.1%
Residual Fuel	5.49	5.48	5.52	5.67	5.69	5.72	5.81	5.93	6.00	6.03	6.10	6.11	6.14	6.30	1.6%
Biomass	1.69	1.70	1.72	1.72	1.72	1.72	1.66	1.67	1.71	1.71	1.71	1.71	1.70	1.69	0.6%
<b>Emissions 10/</b>															
Total Carbon (million tons)	44.53	44.68	44.74	44.75	45.02	45.33	45.77	46.41	46.68	47.25	47.89	48.52	49.21	49.77	1.0%
Carbon Dioxide (million tons)	163.27	163.84	164.05	164.09	165.08	166.19	167.81	170.17	171.15	173.25	175.59	177.91	180.43	182.47	1.0%
Sulfur Dioxide (million tons)	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18	0.19	0.19	0.18	0.19	0.19	-2.4%
Nitrogen Oxide (million tons)	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.17	0.17	-1.3%
Mercury (tons)	1.86	1.83	1.81	1.80	1.70	1.53	1.39	1.11	1.04	1.04	1.05	1.04	0.95	0.93	-5.1%



Table 64. Electric Power Projections by Electricity Market Module Region  
Mid-Continent Area Power Pool

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 65. Electric Power Projections by Electricity Market Module Region  
 Northeast Power Coordinating Council/New York

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.15	3.15	3.15	3.15
Other Fossil Steam 2/	11.94	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	10.91	9.75	8.93	8.93	8.93
Combined Cycle	4.84	5.72	7.09	7.89	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05
Combustion Turbine/Diesel	4.69	4.78	6.09	6.25	6.25	6.25	6.25	6.25	6.25	5.97	5.97	5.97	5.97	5.97
Nuclear Power	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.84	5.84	5.84
Pumped Storage/Other 3/	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	4.85	4.85	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capacity	36.56	37.47	40.35	41.32	41.47	41.47	41.47	41.47	41.47	40.22	39.02	38.28	38.28	38.28
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	1.37	2.18	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33
Combustion Turbine/Diesel	0.00	0.00	0.00	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Planned Additions	0.00	0.00	1.57	2.54	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70	2.70
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Unplanned Additions	0.00	0.00	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31
Cumulative Total Additions	0.00	0.00	2.88	3.85	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01

Table 65. Electric Power Projections by Electricity Market Module Region  
 Northeast Power Coordinating Council/New York

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.04	0.04	0.04
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97	2.12	2.94	2.94	2.94
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.29	0.29	0.29	0.29
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	2.46	3.28	3.28	3.28
<b>Commercial and Industrial 8/</b>														
Coal	0.19	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.21	0.23	0.25	0.26	0.27	0.28
Petroleum	0.08	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.20	0.21	0.19	0.20	0.20	0.21
Natural Gas	0.39	0.39	0.40	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.46	0.47	0.49	0.50
Other Gaseous Fuels	0.19	0.19	0.19	0.19	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Renewable Sources 4/	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.90	0.99	1.00	1.01	0.99	1.00	1.02	1.04	1.07	1.12	1.14	1.17	1.19	1.22
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	48.85	47.03	48.97	48.12	48.73	49.62	50.08	50.52	50.82	51.20	51.27	51.54	51.89	52.28
Commercial/Other	68.56	66.79	70.04	68.09	69.78	71.60	73.06	74.36	75.56	76.56	77.33	78.11	79.00	79.93
Industrial	26.90	25.62	25.45	25.55	25.31	25.40	25.39	25.43	25.54	25.57	25.52	25.47	25.53	25.53
Transportation	1.43	1.38	1.38	1.38	1.38	1.39	1.40	1.41	1.42	1.42	1.43	1.43	1.44	1.44
Total Sales	145.73	140.82	145.84	143.14	145.20	148.02	149.92	151.73	153.34	154.77	155.55	156.55	157.86	159.18
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	9.99	9.46	16.20	15.51	15.51	15.52	16.02	16.29	15.66	15.20	14.51	13.92	14.13	13.16
Gross International Exports	4.51	4.26	5.35	5.34	4.72	4.24	3.82	3.38	3.04	2.88	2.64	2.41	2.18	1.96
Gross Interregional Electricity Imports	11.37	9.36	5.63	7.04	11.19	11.17	11.12	10.63	11.11	7.16	5.28	4.61	3.78	3.91
Gross Interregional Electricity Exports	5.21	8.80	5.07	6.84	10.90	11.69	11.68	11.49	11.24	11.06	9.94	9.50	9.74	9.84
Purchases from Combined Heat and Power 8/	0.40	0.42	0.47	0.49	0.71	0.70	0.77	0.82	0.94	1.09	1.13	1.22	1.28	1.37
Electric Power Sector Generation for Custome	137.31	141.24	144.49	142.52	143.64	146.83	147.74	149.12	150.22	155.63	157.58	159.14	161.03	163.09
Total Net Energy for Load	149.35	147.42	156.38	153.38	155.44	158.29	160.15	161.98	163.65	165.12	165.92	166.99	168.31	169.74
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	19.86	19.33	20.29	20.50	20.67	20.88	21.41	22.06	22.06	22.04	21.98	22.04	21.90	21.78
Petroleum	19.30	20.95	18.21	18.19	18.22	18.22	18.22	18.21	18.14	19.46	19.32	19.02	15.59	13.98
Natural Gas	28.81	27.46	36.53	33.07	33.63	36.22	36.51	37.71	38.83	42.91	45.15	46.36	51.79	55.59
Nuclear	45.66	46.58	43.31	43.97	43.97	43.97	43.97	43.97	43.97	43.97	43.97	44.64	44.64	44.64
Pumped Storage/Other 3/	-0.91	-0.81	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57
Renewable Sources 4/	26.43	29.62	28.42	29.06	29.45	29.83	29.93	29.48	29.53	29.55	29.47	29.39	29.42	29.41
Total Generation	139.15	143.13	146.20	144.23	145.36	148.55	149.47	150.85	151.96	157.36	159.32	160.88	162.77	164.82
Sales to Customers	137.31	141.24	144.49	142.52	143.64	146.83	147.74	149.12	150.22	155.63	157.58	159.14	161.03	163.09
Generation for Own Use	1.84	1.89	1.71	1.71	1.72	1.72	1.73	1.74	1.74	1.74	1.74	1.74	1.74	1.74
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 65. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New York

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Commercial and Industrial 8/</b>														
Coal	0.69	0.73	0.74	0.74	0.74	0.74	0.74	0.74	0.86	0.99	1.12	1.18	1.24	1.30
Petroleum	0.22	0.21	0.25	0.25	0.46	0.44	0.48	0.51	0.52	0.57	0.51	0.54	0.54	0.56
Natural Gas	1.20	1.21	1.24	1.27	1.36	1.39	1.43	1.48	1.52	1.56	1.60	1.64	1.69	1.75
Other Gaseous Fuels	0.27	0.19	0.20	0.20	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.19
<b>Renewable Sources 4/</b>														
Other	0.42	0.42	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.50	0.51	0.52	0.52
Other	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Total	2.88	2.83	2.92	2.96	3.24	3.28	3.37	3.46	3.65	3.87	3.99	4.13	4.25	4.39
Sales to Utilities	0.40	0.42	0.47	0.49	0.71	0.70	0.77	0.82	0.94	1.09	1.13	1.22	1.28	1.37
Generation for Own Use	2.48	2.41	2.45	2.47	2.54	2.58	2.60	2.64	2.71	2.78	2.86	2.91	2.96	3.02
<b>Total Electricity Generation</b>	<b>142.02</b>	<b>145.96</b>	<b>149.12</b>	<b>147.19</b>	<b>148.60</b>	<b>151.83</b>	<b>152.85</b>	<b>154.31</b>	<b>155.60</b>	<b>161.23</b>	<b>163.30</b>	<b>165.01</b>	<b>167.01</b>	<b>169.21</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)														
Residential	14.7	14.5	15.0	14.3	13.0	12.5	12.5	12.5	12.5	12.7	12.9	12.9	12.7	12.8
Commercial	13.5	13.0	13.4	13.0	11.6	11.1	10.5	10.0	9.6	9.5	9.6	9.5	9.3	9.4
Industrial	6.2	7.4	7.9	7.8	6.8	6.4	6.2	5.9	5.8	5.8	5.9	5.9	5.7	5.8
Transportation	10.7	10.6	11.1	11.6	10.5	10.1	9.9	9.8	9.7	9.8	9.9	9.9	9.8	9.8
All Sectors Average	12.6	12.8	13.0	12.5	11.2	10.8	10.4	10.1	9.9	9.9	10.1	10.0	9.9	10.0
<b>Prices by Service Category</b> (2004 cents per kilowatthour)														
Generation	7.6	7.8	7.9	7.3	6.1	5.7	5.3	5.0	4.8	4.8	4.9	4.9	4.8	4.8
Transmission	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Distribution	3.5	3.5	3.6	3.6	3.6	3.6	3.6	3.7	3.7	3.6	3.7	3.7	3.7	3.7
<b>Fuel Consumption (quadrillion Btu) 9/</b>														
Coal	0.21	0.22	0.22	0.22	0.22	0.22	0.23	0.24	0.24	0.24	0.24	0.24	0.23	0.23
Natural Gas	0.28	0.26	0.32	0.30	0.31	0.33	0.33	0.34	0.35	0.37	0.39	0.40	0.45	0.48
Oil	0.21	0.22	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.16	0.15
Total	0.69	0.70	0.73	0.71	0.72	0.74	0.75	0.77	0.78	0.81	0.83	0.84	0.85	0.86
<b>Fuel Prices (dollars per million Btu)</b>														
Coal	1.48	1.63	1.74	1.68	1.76	1.85	1.86	1.86	1.84	1.84	1.84	1.84	1.78	1.77
Natural Gas	6.47	6.94	8.36	7.64	6.63	6.31	5.91	5.55	5.35	5.26	5.35	5.23	5.06	5.12
Distillate Fuel	6.65	9.38	10.14	10.97	9.89	9.64	9.30	8.93	8.90	9.00	8.84	8.86	8.83	9.09
Residual Fuel	5.10	5.04	7.59	7.04	5.74	5.43	5.12	4.83	4.81	4.79	4.76	4.74	4.72	4.76
Biomass	0.71	0.71	0.84	0.99	2.11	2.09	2.13	2.06	1.98	1.96	2.03	1.97	1.84	1.96
<b>Emissions 10/</b>														
Total Carbon (million tons)	15.17	15.27	15.86	15.51	15.68	16.13	16.31	16.65	16.78	17.51	17.71	17.82	17.72	17.80
Carbon Dioxide (million tons)	55.64	55.99	58.16	56.87	57.48	59.13	59.80	61.04	61.51	64.21	64.94	65.33	64.98	65.28
Sulfur Dioxide (million tons)	0.28	0.28	0.25	0.28	0.25	0.22	0.23	0.22	0.20	0.20	0.19	0.17	0.16	0.15
Nitrogen Oxide (million tons)	0.06	0.05	0.06	0.06	0.06	0.06	0.05	0.04	0.04	0.05	0.05	0.05	0.04	0.04
Mercury (tons)	1.64	1.85	1.76	0.72	0.62	1.06	0.85	0.46	0.42	0.39	0.29	0.27	0.24	0.22

Table 65. Electric Power Projections by Electricity Market Module Region  
 Northeast Power Coordinating Council/New York

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/</b>															
<b>(gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	3.15	3.15	3.15	3.15	3.15	3.37	3.62	3.91	4.17	4.53	4.87	5.25	5.65	6.03	2.5%
Other Fossil Steam 2/	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	-1.1%
Combined Cycle	8.05	8.05	8.23	8.48	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	1.6%
Combustion Turbine/Diesel	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	0.9%
Nuclear Power	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	0.1%
Pumped Storage/Other 3/	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	5.05	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	0.2%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Capacity</b>	<b>38.28</b>	<b>38.31</b>	<b>38.49</b>	<b>38.74</b>	<b>38.95</b>	<b>39.17</b>	<b>39.42</b>	<b>39.71</b>	<b>39.97</b>	<b>40.33</b>	<b>40.67</b>	<b>41.05</b>	<b>41.45</b>	<b>41.84</b>	<b>0.4%</b>
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	2.33	N/A
Combustion Turbine/Diesel	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Planned Additions</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>2.70</b>	<b>N/A</b>
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.22	0.47	0.76	1.02	1.38	1.72	2.10	2.50	2.88	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.00	0.18	0.43	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	0.64	N/A
Combustion Turbine/Diesel	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	1.31	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Unplanned Additions</b>	<b>1.31</b>	<b>1.34</b>	<b>1.52</b>	<b>1.77</b>	<b>1.98</b>	<b>2.20</b>	<b>2.45</b>	<b>2.74</b>	<b>2.99</b>	<b>3.36</b>	<b>3.70</b>	<b>4.08</b>	<b>4.48</b>	<b>4.87</b>	<b>N/A</b>
<b>Cumulative Total Additions</b>	<b>4.01</b>	<b>4.03</b>	<b>4.22</b>	<b>4.47</b>	<b>4.67</b>	<b>4.90</b>	<b>5.15</b>	<b>5.44</b>	<b>5.69</b>	<b>6.06</b>	<b>6.40</b>	<b>6.78</b>	<b>7.18</b>	<b>7.56</b>	<b>N/A</b>

Table 65. Electric Power Projections by Electricity Market Module Region  
 Northeast Power Coordinating Council/New York

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.04	0.04	0.04	0.05	0.05	0.04	0.04	0.04	0.04	0.05	0.04	0.05	0.05	0.05	N/A
Other Fossil Steam 3/	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	2.94	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>3.28</b>	<b>N/A</b>
<b>Commercial and Industrial 8/</b>															
Coal	0.30	0.32	0.34	0.45	0.56	0.67	0.73	0.79	0.85	0.91	0.98	1.04	1.04	1.04	6.9%
Petroleum	0.20	0.20	0.20	0.22	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.7%
Natural Gas	0.51	0.52	0.53	0.55	0.56	0.57	0.58	0.60	0.61	0.62	0.63	0.64	0.65	0.66	2.0%
Other Gaseous Fuels	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-0.5%
Renewable Sources 4/	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	2.4%
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>1.25</b>	<b>1.27</b>	<b>1.30</b>	<b>1.45</b>	<b>1.55</b>	<b>1.68</b>	<b>1.75</b>	<b>1.83</b>	<b>1.90</b>	<b>1.98</b>	<b>2.06</b>	<b>2.14</b>	<b>2.15</b>	<b>2.17</b>	<b>3.1%</b>
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	52.40	52.63	52.85	53.24	53.25	53.41	53.58	53.90	53.94	54.15	54.37	54.75	54.83	55.04	0.6%
Commercial/Other	80.83	81.65	82.40	83.23	84.06	84.90	85.79	86.70	87.59	88.60	89.56	90.66	91.77	92.91	1.3%
Industrial	25.55	25.55	25.58	25.49	25.38	25.30	25.24	25.15	25.09	25.09	25.06	25.03	24.98	24.91	-0.1%
Transportation	1.45	1.45	1.46	1.46	1.46	1.46	1.46	1.47	1.47	1.47	1.47	1.47	1.47	1.47	0.3%
<b>Total Sales</b>	<b>160.23</b>	<b>161.28</b>	<b>162.28</b>	<b>163.42</b>	<b>164.16</b>	<b>165.07</b>	<b>166.07</b>	<b>167.21</b>	<b>168.09</b>	<b>169.31</b>	<b>170.46</b>	<b>171.91</b>	<b>173.05</b>	<b>174.33</b>	<b>0.8%</b>
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	12.75	12.88	12.06	9.97	8.39	6.64	5.52	4.75	4.60	4.60	4.60	4.60	4.37	4.37	-2.9%
Gross International Exports	1.74	1.53	1.33	1.13	0.94	0.75	0.66	0.58	0.50	0.50	0.50	0.50	0.50	0.50	-7.9%
Gross Interregional Electricity Imports	3.92	3.90	3.93	4.00	4.00	4.09	5.42	7.11	8.94	9.06	9.09	9.77	10.67	10.59	0.5%
Gross Interregional Electricity Exports	9.71	9.17	8.96	8.30	7.53	6.85	6.90	7.19	7.28	7.30	7.56	7.67	7.73	7.48	-0.6%
Purchases from Combined Heat and Power 8/	1.45	1.53	1.63	2.11	2.46	2.84	3.11	3.38	3.59	3.87	4.06	4.24	4.44	4.48	9.5%
Electric Power Sector Generation for Custome	164.24	164.46	165.87	168.06	169.43	171.09	171.83	172.24	171.45	172.56	173.97	174.87	175.42	176.58	0.9%
<b>Total Net Energy for Load</b>	<b>170.91</b>	<b>172.08</b>	<b>173.20</b>	<b>174.72</b>	<b>175.82</b>	<b>177.07</b>	<b>178.31</b>	<b>179.72</b>	<b>180.81</b>	<b>182.30</b>	<b>183.66</b>	<b>185.31</b>	<b>186.67</b>	<b>188.05</b>	<b>0.9%</b>
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	21.87	21.82	22.05	22.25	22.59	24.48	26.35	28.50	30.41	33.10	35.66	38.56	41.52	44.33	3.2%
Petroleum	14.00	13.69	15.97	15.47	16.48	16.27	14.57	14.80	15.18	17.91	19.03	19.06	19.05	19.04	-0.4%
Natural Gas	56.61	56.98	55.84	58.55	58.92	59.15	59.71	57.74	54.66	50.35	48.07	46.04	43.63	42.06	1.7%
Nuclear	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.56	-0.2%
Pumped Storage/Other 3/	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-1.4%
Renewable Sources 4/	29.44	29.64	29.68	29.46	29.11	28.86	28.86	28.87	28.87	28.87	28.88	28.88	28.89	28.89	-0.1%
<b>Total Generation</b>	<b>165.98</b>	<b>166.20</b>	<b>167.61</b>	<b>169.80</b>	<b>171.16</b>	<b>172.83</b>	<b>173.56</b>	<b>173.98</b>	<b>173.19</b>	<b>174.30</b>	<b>175.71</b>	<b>176.61</b>	<b>177.15</b>	<b>178.32</b>	<b>0.8%</b>
Sales to Customers	164.24	164.46	165.87	168.06	169.43	171.09	171.83	172.24	171.45	172.56	173.97	174.87	175.42	176.58	0.9%
Generation for Own Use	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	-0.3%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 65. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New York

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Commercial and Industrial 8/</b>															
Coal	1.41	1.51	1.62	2.25	2.87	3.44	3.81	4.20	4.49	4.89	5.14	5.39	5.67	5.68	8.2%
Petroleum	0.55	0.53	0.53	0.59	0.53	0.53	0.53	0.54	0.54	0.55	0.55	0.55	0.55	0.55	3.9%
Natural Gas	1.80	1.85	1.90	1.96	2.01	2.07	2.12	2.17	2.23	2.27	2.32	2.36	2.41	2.46	2.8%
Other Gaseous Fuels	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.3%
<b>Renewable Sources 4/</b>															
Other	0.53	0.54	0.55	0.56	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.64	0.65	0.67	1.8%
Other	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.0%
Total	4.55	4.69	4.87	5.63	6.25	6.89	7.32	7.78	8.14	8.59	8.90	9.21	9.56	9.64	4.8%
Sales to Utilities	1.45	1.53	1.63	2.11	2.46	2.84	3.11	3.38	3.59	3.87	4.06	4.24	4.44	4.48	9.5%
Generation for Own Use	3.09	3.17	3.24	3.52	3.79	4.04	4.22	4.40	4.54	4.72	4.85	4.98	5.12	5.17	3.0%
<b>Total Electricity Generation</b>	<b>170.53</b>	<b>170.89</b>	<b>172.47</b>	<b>175.43</b>	<b>177.42</b>	<b>179.71</b>	<b>180.89</b>	<b>181.76</b>	<b>181.33</b>	<b>182.89</b>	<b>184.61</b>	<b>185.82</b>	<b>186.72</b>	<b>187.96</b>	<b>1.0%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	12.9	13.0	13.1	13.1	13.2	13.3	13.3	13.4	13.5	13.5	13.5	13.5	13.6	13.6	-0.2%
Commercial	9.4	9.5	9.7	9.7	9.8	9.9	9.9	10.0	10.1	10.1	10.1	10.1	10.1	10.1	-0.9%
Industrial	5.9	6.0	6.1	6.1	6.2	6.3	6.3	6.4	6.5	6.5	6.5	6.5	6.5	6.5	-0.5%
Transportation	9.9	10.0	10.1	10.1	10.2	10.3	10.3	10.4	10.5	10.4	10.5	10.4	10.5	10.4	-0.1%
All Sectors Average	10.0	10.1	10.3	10.2	10.3	10.4	10.4	10.5	10.6	10.6	10.6	10.6	10.7	10.7	-0.7%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	4.9	5.0	5.2	5.2	5.3	5.3	5.4	5.5	5.6	5.6	5.6	5.6	5.6	5.6	-1.3%
Transmission	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	-0.1%
Distribution	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	0.2%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	0.23	0.23	0.24	0.24	0.24	0.26	0.27	0.29	0.30	0.32	0.34	0.36	0.38	0.40	2.4%
Natural Gas	0.49	0.49	0.48	0.50	0.50	0.50	0.51	0.49	0.47	0.43	0.41	0.39	0.38	0.37	1.3%
Oil	0.15	0.14	0.17	0.16	0.17	0.17	0.15	0.16	0.16	0.19	0.20	0.20	0.20	0.20	-0.4%
Total	0.87	0.87	0.88	0.90	0.91	0.93	0.93	0.94	0.93	0.94	0.95	0.95	0.96	0.97	1.3%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.76	1.79	1.89	1.81	1.77	1.70	1.71	1.71	1.71	1.70	1.71	1.75	1.75	1.75	0.3%
Natural Gas	5.14	5.28	5.40	5.38	5.50	5.59	5.65	5.76	5.85	5.90	5.96	5.99	6.04	6.05	-0.5%
Distillate Fuel	9.04	9.24	9.32	9.40	9.46	9.63	9.71	9.80	9.89	9.93	9.94	10.00	10.04	10.12	0.3%
Residual Fuel	4.81	4.85	4.90	4.95	5.01	5.08	5.15	5.22	5.29	5.33	5.38	5.42	5.47	5.51	0.3%
Biomass	1.92	1.94	1.98	1.97	2.07	2.09	2.09	2.11	2.07	2.07	2.09	2.10	2.09	2.08	4.2%
<b>Emissions 10/</b>															
Total Carbon (million tons)	17.96	17.93	18.33	18.56	18.90	19.29	19.42	19.67	19.76	20.34	20.82	21.21	21.53	21.90	1.4%
Carbon Dioxide (million tons)	65.86	65.76	67.21	68.06	69.28	70.73	71.21	72.12	72.46	74.58	76.33	77.76	78.95	80.30	1.4%
Sulfur Dioxide (million tons)	0.15	0.14	0.13	0.14	0.13	0.13	0.12	0.12	0.12	0.14	0.15	0.14	0.14	0.15	-2.4%
Nitrogen Oxide (million tons)	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-1.0%
Mercury (tons)	0.22	0.21	0.18	0.19	0.20	0.21	0.20	0.22	0.23	0.24	0.25	0.25	0.26	0.26	-7.2%

Table 65. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New York

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 66. Electric Power Projections by Electricity Market Module Region  
 Northeast Power Coordinating Council/New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.52	3.52	3.52	3.52
Other Fossil Steam 2/	7.52	7.21	7.18	7.18	7.18	7.18	7.18	7.18	7.18	6.67	5.68	5.04	5.04	5.04
Combined Cycle	9.78	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24
Combustion Turbine/Diesel	2.29	2.37	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35
Nuclear Power	3.70	3.70	3.78	3.78	3.78	3.78	3.78	3.78	3.88	3.88	3.88	3.88	3.88	3.88
Pumped Storage/Other 3/	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	2.87	2.87	2.91	3.18	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.65	3.71
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04
Total Capacity	31.55	31.78	31.85	32.12	32.56	32.56	32.56	32.56	32.66	32.16	30.95	30.31	30.36	30.43
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.03	0.31	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Planned Additions	0.00	0.00	0.03	0.31	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.09
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04
Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.12
Cumulative Total Additions	0.00	0.00	0.03	0.31	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.80	0.87

Table 66. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.22	0.22	0.22	0.22
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	1.50	2.14	2.14	2.14
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.53	1.74	2.38	2.38	2.38
<b>Commercial and Industrial 8/</b>														
Coal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Petroleum	0.15	0.30	0.30	0.30	0.32	0.31	0.33	0.34	0.35	0.37	0.34	0.36	0.35	0.36
Natural Gas	0.37	0.38	0.38	0.39	0.39	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48
Other Gaseous Fuels	0.34	0.34	0.34	0.34	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29
Renewable Sources 4/	0.62	0.62	0.63	0.66	0.69	0.71	0.73	0.76	0.78	0.79	0.80	0.81	0.82	0.83
Other	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	1.51	1.67	1.69	1.72	1.71	1.74	1.78	1.84	1.87	1.92	1.91	1.95	1.97	2.00
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	45.17	45.47	46.52	46.68	47.55	48.62	49.27	49.90	50.40	51.02	51.32	51.80	52.39	52.99
Commercial/Other	52.56	53.20	55.44	54.85	56.65	58.44	59.82	61.04	62.21	63.36	64.39	65.31	66.38	67.40
Industrial	23.71	23.76	23.26	23.35	23.53	23.58	23.54	23.57	23.67	23.69	23.62	23.58	23.61	23.60
Transportation	1.21	1.22	1.21	1.21	1.22	1.23	1.24	1.25	1.26	1.27	1.27	1.28	1.29	1.29
Total Sales	122.65	123.65	126.42	126.09	128.95	131.88	133.87	135.77	137.54	139.33	140.60	141.97	143.67	145.29
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	5.71	8.22	8.89	7.95	5.41	6.27	6.05	6.53	6.25	6.01	5.91	5.85	7.32	6.96
Gross International Exports	0.54	0.28	0.56	0.55	0.54	0.52	0.51	0.50	0.49	0.49	0.49	0.49	0.49	0.49
Gross Interregional Electricity Imports	3.63	9.25	5.31	7.21	11.57	12.08	11.88	11.68	11.44	11.27	10.04	9.48	9.59	9.55
Gross Interregional Electricity Exports	0.92	0.05	0.07	0.05	0.06	0.04	0.05	0.04	0.04	0.04	0.03	0.02	0.01	0.01
Purchases from Combined Heat and Power 8/	1.19	1.23	1.47	1.55	2.51	2.47	2.76	2.97	3.15	3.49	3.29	3.52	3.60	3.79
Electric Power Sector Generation for Custome	113.90	118.34	120.44	118.91	119.10	120.80	122.92	124.37	126.50	128.41	131.21	132.95	133.00	134.92
Total Net Energy for Load	122.96	136.70	135.48	135.02	138.00	141.05	143.06	145.01	146.81	148.65	149.92	151.29	153.00	154.72
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	22.26	22.18	22.77	23.35	24.08	25.06	25.85	26.07	25.79	25.49	25.34	25.34	25.20	25.10
Petroleum	12.13	10.98	11.05	10.59	10.61	10.69	10.72	11.27	11.00	11.08	11.44	11.77	11.38	11.75
Natural Gas	40.66	45.37	48.76	45.71	43.62	44.46	45.71	46.40	48.29	50.40	52.94	54.31	54.66	55.98
Nuclear	29.80	30.58	28.53	29.05	29.13	29.21	29.27	29.35	30.20	30.27	30.34	30.38	30.38	30.38
Pumped Storage/Other 3/	-0.51	-0.49	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52
Renewable Sources 4/	12.78	12.70	12.80	13.66	15.11	14.84	14.84	14.74	14.69	14.64	14.61	14.61	14.85	15.18
Total Generation	117.12	121.31	123.38	121.85	122.04	123.74	125.87	127.31	129.45	131.36	134.15	135.90	135.95	137.87
Sales to Customers	113.90	118.34	120.44	118.91	119.10	120.80	122.92	124.37	126.50	128.41	131.21	132.95	133.00	134.92
Generation for Own Use	3.22	2.97	2.94	2.94	2.94	2.94	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02

Table 66. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Commercial and Industrial 8/</b>														
Coal	0.20	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.26	0.29	0.33	0.35	0.37	0.38
Petroleum	1.11	1.05	1.25	1.25	2.32	2.26	2.47	2.59	2.67	2.91	2.61	2.76	2.75	2.85
Natural Gas	2.77	2.79	2.86	2.91	3.12	3.20	3.30	3.40	3.49	3.58	3.67	3.78	3.89	4.02
Other Gaseous Fuels	1.38	0.96	1.02	1.02	0.86	0.88	0.89	0.90	0.91	0.92	0.92	0.93	0.94	0.95
<b>Renewable Sources 4/</b>														
Other	3.22	3.22	3.24	3.34	3.45	3.53	3.61	3.70	3.76	3.82	3.87	3.91	3.96	4.01
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	8.69	8.23	8.59	8.76	9.98	10.09	10.48	10.81	11.09	11.52	11.41	11.73	11.91	12.21
Sales to Utilities	1.19	1.23	1.47	1.55	2.51	2.47	2.76	2.97	3.15	3.49	3.29	3.52	3.60	3.79
Generation for Own Use	7.50	7.00	7.12	7.20	7.47	7.62	7.72	7.84	7.93	8.03	8.12	8.21	8.31	8.42
<b>Total Electricity Generation</b>	<b>125.81</b>	<b>129.54</b>	<b>131.97</b>	<b>130.61</b>	<b>132.02</b>	<b>133.84</b>	<b>136.35</b>	<b>138.12</b>	<b>140.53</b>	<b>142.88</b>	<b>145.56</b>	<b>147.63</b>	<b>147.87</b>	<b>150.10</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)														
Residential	12.0	11.9	13.1	12.5	11.3	10.8	10.9	10.9	11.0	11.1	11.2	11.3	11.1	11.2
Commercial	10.7	10.3	11.7	11.0	9.8	9.3	9.1	8.8	8.7	8.6	8.7	8.8	8.7	8.9
Industrial	9.2	9.1	9.5	9.8	9.0	8.7	8.2	7.6	7.3	7.1	7.2	7.2	7.0	7.1
Transportation	10.1	10.4	10.5	10.7	9.6	9.3	9.2	9.1	9.1	9.1	9.3	9.3	9.1	9.2
All Sectors Average	10.9	10.7	11.8	11.3	10.2	9.8	9.6	9.4	9.3	9.2	9.4	9.4	9.3	9.4
<b>Prices by Service Category</b> (2004 cents per kilowatthour)														
Generation	6.6	6.5	7.6	7.0	6.0	5.6	5.3	5.1	5.1	5.0	5.2	5.3	5.1	5.3
Transmission	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Distribution	3.2	3.2	3.1	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1
<b>Fuel Consumption (quadrillion Btu) 9/</b>														
Coal	0.23	0.23	0.24	0.25	0.26	0.27	0.28	0.28	0.27	0.27	0.26	0.26	0.26	0.26
Natural Gas	0.33	0.36	0.37	0.35	0.34	0.34	0.35	0.36	0.37	0.39	0.41	0.42	0.42	0.43
Oil	0.13	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.11	0.12
Total	0.69	0.70	0.73	0.71	0.70	0.72	0.74	0.75	0.75	0.76	0.78	0.80	0.79	0.81
<b>Fuel Prices (dollars per million Btu)</b>														
Coal	1.97	1.95	2.13	2.16	2.30	2.28	2.27	2.33	2.32	2.29	2.30	2.32	2.28	2.29
Natural Gas	6.18	6.61	8.37	7.83	6.86	6.63	6.31	6.00	5.95	5.87	6.00	5.94	5.52	5.58
Distillate Fuel	6.66	9.41	10.17	11.00	9.93	9.68	9.34	8.97	8.94	9.05	8.89	8.91	8.88	9.14
Residual Fuel	4.78	4.73	7.11	6.59	5.22	4.91	4.60	4.32	4.30	4.27	4.25	4.23	4.21	4.25
Biomass	2.21	2.19	2.45	2.33	2.30	2.24	2.22	2.21	2.20	2.21	2.22	2.21	2.16	2.18
<b>Emissions 10/</b>														
Total Carbon (million tons)	16.55	15.44	15.56	15.28	15.27	15.69	16.09	16.27	16.27	16.38	16.68	16.91	16.84	17.06
Carbon Dioxide (million tons)	60.68	56.62	57.05	56.01	56.00	57.55	59.00	59.65	59.67	60.06	61.15	62.00	61.73	62.54
Sulfur Dioxide (million tons)	0.24	0.26	0.23	0.19	0.18	0.16	0.16	0.15	0.15	0.14	0.14	0.13	0.12	0.13
Nitrogen Oxide (million tons)	0.04	0.04	0.07	0.06	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Mercury (tons)	0.78	0.82	0.80	0.85	0.87	0.87	0.90	0.84	0.82	0.80	0.79	0.75	0.73	0.73

Table 66. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Electricity Generating Capacity 1/ (gigawatts)															
Electric Power Sector															
Coal Steam	3.64	3.64	3.64	3.64	3.64	4.00	4.40	4.83	5.19	5.51	5.81	6.13	6.55	6.89	2.4%
Other Fossil Steam 2/	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	-1.4%
Combined Cycle	10.24	10.77	11.19	11.64	12.01	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	0.6%
Combustion Turbine/Diesel	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.37	2.47	2.57	2.63	2.63	2.70	0.5%
Nuclear Power	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	0.2%
Pumped Storage/Other 3/	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	1.6%
Distributed Generation 5/	0.05	0.07	0.09	0.11	0.13	0.15	0.17	0.18	0.20	0.22	0.24	0.31	0.33	0.40	N/A
Total Capacity	31.19	31.73	32.17	32.65	33.03	33.51	33.93	34.37	34.76	35.21	35.63	36.08	36.52	37.01	0.6%
Cumulative Planned Additions 6/															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	N/A
Cumulative Unplanned Additions 6/															
Coal Steam	0.12	0.12	0.12	0.12	0.12	0.48	0.88	1.31	1.67	1.99	2.29	2.61	3.03	3.38	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.52	0.94	1.40	1.77	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.11	0.22	0.28	0.28	0.35	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	N/A
Distributed Generation 5/	0.05	0.07	0.09	0.11	0.13	0.15	0.17	0.18	0.20	0.22	0.24	0.31	0.33	0.40	N/A
Total Unplanned Additions	0.88	1.42	1.86	2.34	2.73	3.20	3.62	4.06	4.46	4.90	5.32	5.77	6.21	6.70	N/A
Cumulative Total Additions	1.63	2.17	2.61	3.09	3.48	3.95	4.37	4.81	5.21	5.65	6.07	6.52	6.96	7.45	N/A

Table 66. Electric Power Projections by Electricity Market Module Region  
 Northeast Power Coordinating Council/New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	N/A
Other Fossil Steam 3/	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>2.38</b>	<b>N/A</b>
<b>Commercial and Industrial 8/</b>															
Coal	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	6.9%
Petroleum	0.36	0.34	0.35	0.38	0.35	0.35	0.35	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.7%
Natural Gas	0.49	0.50	0.51	0.53	0.54	0.55	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.64	2.0%
Other Gaseous Fuels	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	-0.5%
Renewable Sources 4/	0.85	0.86	0.88	0.89	0.91	0.92	0.94	0.95	0.97	1.00	1.03	1.06	1.10	1.15	2.4%
Other	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	N/A
<b>Total</b>	<b>2.02</b>	<b>2.04</b>	<b>2.07</b>	<b>2.13</b>	<b>2.13</b>	<b>2.17</b>	<b>2.20</b>	<b>2.24</b>	<b>2.27</b>	<b>2.31</b>	<b>2.35</b>	<b>2.40</b>	<b>2.46</b>	<b>2.51</b>	<b>1.6%</b>
<b>Electricity Demand</b> (billion kilowatthours)															
Residential	53.31	53.76	54.22	54.87	55.11	55.48	55.85	56.36	56.57	56.94	57.32	57.83	58.05	58.48	1.0%
Commercial/Other	68.43	69.52	70.62	71.82	73.01	74.22	75.46	76.71	77.93	79.21	80.43	81.74	83.08	84.57	1.8%
Industrial	23.62	23.61	23.52	23.41	23.31	23.22	23.14	23.07	23.01	22.99	22.97	22.93	22.89	22.83	-0.2%
Transportation	1.30	1.31	1.31	1.32	1.32	1.33	1.33	1.34	1.34	1.34	1.35	1.35	1.35	1.35	0.4%
<b>Total Sales</b>	<b>146.67</b>	<b>148.20</b>	<b>149.66</b>	<b>151.43</b>	<b>152.75</b>	<b>154.25</b>	<b>155.78</b>	<b>157.48</b>	<b>158.84</b>	<b>160.50</b>	<b>162.06</b>	<b>163.85</b>	<b>165.37</b>	<b>167.23</b>	<b>1.2%</b>
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	6.34	5.77	5.36	8.90	8.81	8.77	8.87	8.24	7.75	7.75	7.75	7.75	8.01	7.97	-0.1%
Gross International Exports	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	2.1%
Gross Interregional Electricity Imports	9.31	8.65	8.33	7.54	6.66	5.87	5.93	6.21	6.30	6.32	6.58	6.69	6.75	6.27	-1.5%
Gross Interregional Electricity Exports	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.03	-1.5%
Purchases from Combined Heat and Power 8/	3.84	3.85	3.97	4.50	4.41	4.62	4.79	4.98	5.16	5.35	5.50	5.65	5.80	5.91	6.2%
Electric Power Sector Generation for Custome	137.21	140.08	142.27	140.97	143.54	145.86	147.23	149.25	150.98	152.59	153.88	155.55	156.72	159.08	1.1%
<b>Total Net Energy for Load</b>	<b>156.20</b>	<b>157.85</b>	<b>159.42</b>	<b>161.40</b>	<b>162.92</b>	<b>164.60</b>	<b>166.29</b>	<b>168.16</b>	<b>169.66</b>	<b>171.48</b>	<b>173.18</b>	<b>175.11</b>	<b>176.76</b>	<b>178.71</b>	<b>1.0%</b>
<b>Generation by Fuel Type</b> (billion kilowatthours)															
<b>Electric Power Sector</b>															
Coal	26.01	25.99	26.23	26.24	26.24	28.93	31.92	35.11	37.81	40.25	42.48	44.85	47.96	50.55	3.2%
Petroleum	11.45	11.66	11.60	11.00	11.00	10.98	10.78	10.75	10.76	10.75	10.77	10.90	10.94	10.83	-0.1%
Natural Gas	55.46	58.03	60.27	59.56	62.13	61.79	60.36	59.22	58.23	57.41	56.42	55.59	53.59	53.49	0.6%
Nuclear	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	0.0%
Pumped Storage/Other 3/	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	0.2%
Renewable Sources 4/	17.38	17.49	17.25	17.25	17.25	17.25	17.25	17.25	17.26	17.26	17.29	17.29	17.32	17.29	1.2%
<b>Total Generation</b>	<b>140.16</b>	<b>143.03</b>	<b>145.21</b>	<b>143.91</b>	<b>146.49</b>	<b>148.80</b>	<b>150.17</b>	<b>152.19</b>	<b>153.92</b>	<b>155.53</b>	<b>156.82</b>	<b>158.49</b>	<b>159.67</b>	<b>162.03</b>	<b>1.1%</b>
Sales to Customers	137.21	140.08	142.27	140.97	143.54	145.86	147.23	149.25	150.98	152.59	153.88	155.55	156.72	159.08	1.1%
Generation for Own Use	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	2.95	0.0%
Distributed Generation 5/	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.08	0.09	0.10	0.10	0.13	0.14	0.18	N/A

Table 66. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	0.42	0.45	0.48	0.67	0.85	1.02	1.13	1.24	1.33	1.45	1.52	1.60	1.68	1.68	8.2%
Petroleum	2.78	2.68	2.69	3.01	2.70	2.71	2.72	2.74	2.77	2.79	2.80	2.80	2.80	2.82	3.9%
Natural Gas	4.14	4.26	4.38	4.52	4.64	4.76	4.88	5.00	5.12	5.23	5.34	5.44	5.54	5.66	2.8%
Other Gaseous Fuels	0.96	0.97	0.97	0.98	0.99	1.00	1.01	1.02	1.02	1.02	1.02	1.02	1.02	1.05	0.3%
Renewable Sources 4/															
Other	4.08	4.15	4.21	4.27	4.33	4.39	4.46	4.53	4.61	4.69	4.79	4.90	5.02	5.14	1.8%
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total	12.38	12.51	12.74	13.45	13.52	13.89	14.20	14.54	14.86	15.19	15.48	15.77	16.07	16.36	2.7%
Sales to Utilities	3.84	3.85	3.97	4.50	4.41	4.62	4.79	4.98	5.16	5.35	5.50	5.65	5.80	5.91	6.2%
Generation for Own Use	8.54	8.65	8.76	8.94	9.11	9.27	9.42	9.56	9.70	9.84	9.98	10.12	10.28	10.45	1.6%
<b>Total Electricity Generation</b>	<b>152.56</b>	<b>155.57</b>	<b>157.99</b>	<b>157.41</b>	<b>160.06</b>	<b>162.76</b>	<b>164.45</b>	<b>166.81</b>	<b>168.87</b>	<b>170.82</b>	<b>172.41</b>	<b>174.39</b>	<b>175.88</b>	<b>178.57</b>	<b>1.2%</b>
End-Use Prices (2004 cents per kilowatthour)															
Residential	11.2	11.3	11.4	11.2	11.3	11.4	11.4	11.5	11.6	11.6	11.7	11.8	11.8	11.7	-0.1%
Commercial	8.9	8.9	9.0	8.9	8.9	9.0	9.0	9.0	9.1	9.2	9.3	9.4	9.4	9.3	-0.4%
Industrial	7.2	7.2	7.3	7.2	7.3	7.4	7.4	7.4	7.6	7.6	7.7	7.8	7.8	7.7	-0.6%
Transportation	9.2	9.2	9.3	9.2	9.3	9.3	9.4	9.4	9.5	9.6	9.6	9.7	9.7	9.6	-0.3%
All Sectors Average	9.5	9.5	9.6	9.5	9.6	9.6	9.6	9.7	9.8	9.8	9.9	10.0	10.0	9.9	-0.3%
Prices by Service Category (2004 cents per kilowatthour)															
Generation	5.3	5.4	5.5	5.3	5.4	5.5	5.5	5.5	5.7	5.7	5.8	5.9	5.9	5.8	-0.4%
Transmission	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.2%
Distribution	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	-0.2%
Fuel Consumption (quadrillion Btu) 9/															
Coal	0.27	0.27	0.27	0.27	0.27	0.29	0.31	0.33	0.35	0.37	0.39	0.40	0.43	0.44	2.6%
Natural Gas	0.42	0.44	0.45	0.45	0.46	0.46	0.45	0.44	0.43	0.43	0.42	0.41	0.40	0.40	0.4%
Oil	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	-0.1%
Total	0.81	0.82	0.84	0.83	0.84	0.86	0.87	0.88	0.89	0.91	0.91	0.93	0.94	0.95	1.2%
Fuel Prices (dollars per million Btu)															
Coal	2.28	2.24	2.23	2.23	2.21	2.20	2.19	2.23	2.24	2.24	2.25	2.24	2.23	2.21	0.5%
Natural Gas	5.59	5.73	5.89	5.74	5.86	5.90	5.94	6.04	6.14	6.19	6.25	6.30	6.36	6.17	-0.3%
Distillate Fuel	9.09	9.29	9.37	9.44	9.50	9.67	9.75	9.84	9.93	9.97	9.98	10.04	10.08	10.15	0.3%
Residual Fuel	4.30	4.34	4.39	4.43	4.50	4.57	4.64	4.70	4.77	4.82	4.86	4.91	4.95	5.00	0.2%
Biomass	2.19	2.19	2.21	2.21	2.22	2.22	2.22	2.23	2.22	2.22	2.23	2.24	2.24	2.23	0.1%
Emissions 10/															
Total Carbon (million tons)	17.12	17.42	17.68	17.41	17.68	18.17	18.57	19.08	19.53	19.94	20.29	20.72	21.14	21.63	1.3%
Carbon Dioxide (million tons)	62.78	63.87	64.83	63.85	64.81	66.62	68.09	69.97	71.60	73.10	74.40	75.96	77.51	79.33	1.3%
Sulfur Dioxide (million tons)	0.12	0.11	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	-3.0%
Nitrogen Oxide (million tons)	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	1.9%
Mercury (tons)	0.68	0.62	0.40	0.25	0.20	0.18	0.18	0.19	0.19	0.19	0.19	0.18	0.17	0.17	-5.8%

Table 66. Electric Power Projections by Electricity Market Module Region  
Northeast Power Coordinating Council/New England

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 67. Electric Power Projections by Electricity Market Module Region  
Florida Reliability Coordinating Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.35	0.35	0.35	0.35	0.35
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.01	0.04	0.04	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.04</b>	<b>0.04</b>	<b>0.06</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.42</b>	<b>0.42</b>	<b>0.42</b>	<b>0.42</b>	<b>0.42</b>
<b>Commercial and Industrial 8/</b>														
Coal	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.11	0.12	0.12	0.13	0.13
Petroleum	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Natural Gas	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.12	0.12
Other Gaseous Fuels	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Renewable Sources 4/	0.15	0.16	0.16	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	0.21	0.21
Other	0.44	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43
<b>Total</b>	<b>0.83</b>	<b>0.84</b>	<b>0.85</b>	<b>0.86</b>	<b>0.86</b>	<b>0.87</b>	<b>0.88</b>	<b>0.89</b>	<b>0.90</b>	<b>0.92</b>	<b>0.93</b>	<b>0.95</b>	<b>0.96</b>	<b>0.97</b>
<b>Electricity Demand</b>														
<b>(billion kilowatthours)</b>														
Residential	106.27	106.71	111.43	113.15	115.54	118.81	121.50	124.35	127.03	130.02	132.30	134.93	137.72	140.61
Commercial/Other	80.18	80.81	84.41	85.98	88.97	92.20	95.24	98.08	101.04	104.02	106.90	109.75	112.66	115.66
Industrial	17.33	17.25	17.52	17.63	17.71	17.77	17.80	17.93	18.14	18.33	18.46	18.62	18.80	19.00
Transportation	1.24	1.23	1.25	1.26	1.28	1.30	1.33	1.35	1.37	1.39	1.41	1.44	1.46	1.48
<b>Total Sales</b>	<b>205.02</b>	<b>206.00</b>	<b>214.61</b>	<b>218.02</b>	<b>223.51</b>	<b>230.09</b>	<b>235.87</b>	<b>241.71</b>	<b>247.58</b>	<b>253.76</b>	<b>259.08</b>	<b>264.74</b>	<b>270.63</b>	<b>276.75</b>
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Interregional Electricity Imports	41.95	45.21	33.04	37.65	44.78	45.56	49.01	45.01	44.91	44.93	44.06	43.43	42.61	41.54
Gross Interregional Electricity Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Purchases from Combined Heat and Power 8/	0.41	0.42	0.44	0.47	0.60	0.61	0.65	0.69	0.73	0.79	0.79	0.83	0.86	0.90
Electric Power Sector Generation for Customer	200.37	204.28	194.39	193.25	191.68	197.74	200.19	209.69	215.72	221.69	227.61	233.69	240.21	247.53
<b>Total Net Energy for Load</b>	<b>242.73</b>	<b>249.91</b>	<b>227.88</b>	<b>231.36</b>	<b>237.05</b>	<b>243.90</b>	<b>249.85</b>	<b>255.39</b>	<b>261.37</b>	<b>267.41</b>	<b>272.46</b>	<b>277.95</b>	<b>283.68</b>	<b>289.97</b>
<b>Generation by Fuel Type</b>														
<b>(billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	63.79	59.96	70.28	70.70	71.33	73.18	74.75	73.74	78.94	83.10	84.06	83.84	83.64	82.77
Petroleum	37.04	36.98	38.01	36.13	26.30	26.48	27.03	28.02	28.08	28.89	28.86	28.83	28.65	28.53
Natural Gas	65.21	72.96	51.26	50.86	57.54	61.64	62.36	70.31	71.48	72.41	77.12	83.47	90.38	97.44
Nuclear	30.98	31.22	31.70	32.21	32.24	32.28	32.28	32.56	32.56	32.56	32.61	32.61	32.61	32.61
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	4.10	3.90	4.14	4.34	5.26	5.17	4.79	6.09	5.67	5.75	5.96	5.95	5.93	7.20
<b>Total Generation</b>	<b>201.12</b>	<b>205.01</b>	<b>195.39</b>	<b>194.25</b>	<b>192.68</b>	<b>198.74</b>	<b>201.20</b>	<b>210.71</b>	<b>216.74</b>	<b>222.71</b>	<b>228.62</b>	<b>234.70</b>	<b>241.22</b>	<b>248.55</b>
Sales to Customers	200.37	204.28	194.39	193.25	191.68	197.74	200.19	209.69	215.72	221.69	227.61	233.69	240.21	247.53
Generation for Own Use	0.75	0.73	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Table 67. Electric Power Projections by Electricity Market Module Region  
Florida Reliability Coordinating Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.15	0.18	0.20	0.21	0.22	0.23
Petroleum	0.12	0.12	0.14	0.14	0.26	0.25	0.28	0.29	0.30	0.32	0.29	0.31	0.31	0.32
Natural Gas	0.59	0.60	0.61	0.62	0.67	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.83	0.86
Other Gaseous Fuels	0.15	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11
Renewable Sources 4/	0.99	0.99	0.99	1.03	1.06	1.08	1.11	1.13	1.15	1.17	1.19	1.20	1.22	1.23
Other	1.52	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Total	3.51	3.48	3.54	3.58	3.76	3.80	3.86	3.93	4.00	4.09	4.11	4.18	4.23	4.29
Sales to Utilities	0.41	0.42	0.44	0.47	0.60	0.61	0.65	0.69	0.73	0.79	0.79	0.83	0.86	0.90
Generation for Own Use	3.10	3.07	3.09	3.11	3.16	3.19	3.21	3.24	3.27	3.30	3.32	3.34	3.37	3.40
Total Electricity Generation	204.63	208.50	198.92	197.83	196.44	202.54	205.07	214.63	220.74	226.79	232.73	238.88	245.45	252.84
End-Use Prices (2004 cents per kilowatthour)														
Residential	8.8	9.1	10.3	10.6	10.3	10.0	9.9	9.8	9.5	9.3	9.3	9.2	9.2	9.1
Commercial	7.4	7.7	8.8	9.2	9.0	8.8	8.7	8.6	8.4	8.3	8.2	8.2	8.2	8.2
Industrial	5.7	6.0	6.8	7.1	7.0	6.8	6.7	6.6	6.5	6.4	6.3	6.3	6.3	6.3
Transportation	7.2	7.4	8.0	8.4	8.2	7.9	7.9	7.8	7.5	7.4	7.4	7.4	7.3	7.3
All Sectors Average	8.0	8.2	9.4	9.8	9.5	9.3	9.2	9.1	8.8	8.7	8.6	8.6	8.5	8.5
Prices by Service Category (2004 cents per kilowatthour)														
Generation	5.5	5.7	6.9	7.2	7.0	6.7	6.6	6.4	6.2	6.0	6.0	5.9	5.9	5.8
Transmission	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Distribution	2.1	2.0	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.0	2.0
Fuel Consumption (quadrillion Btu) 9/														
Coal	0.72	0.70	0.72	0.72	0.73	0.75	0.77	0.76	0.80	0.84	0.85	0.85	0.85	0.84
Natural Gas	0.54	0.58	0.39	0.39	0.47	0.50	0.51	0.56	0.57	0.58	0.61	0.65	0.69	0.74
Oil	0.37	0.38	0.38	0.36	0.26	0.26	0.27	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Total	1.64	1.66	1.49	1.47	1.46	1.51	1.54	1.60	1.65	1.71	1.74	1.78	1.82	1.86
Fuel Prices (dollars per million Btu)														
Coal	1.87	1.94	2.10	2.16	2.19	2.15	2.09	2.10	2.08	2.06	2.07	2.06	2.04	2.04
Natural Gas	6.05	6.34	8.11	7.51	6.45	6.08	5.69	5.44	5.17	5.11	5.21	5.12	5.06	5.10
Distillate Fuel	6.50	9.17	9.92	10.72	9.75	9.54	9.10	8.80	8.76	8.91	8.55	8.70	8.73	8.99
Residual Fuel	4.85	4.80	7.21	6.70	7.32	7.14	6.81	6.33	6.40	6.39	6.28	6.33	6.28	6.36
Biomass	0.71	0.74	0.78	1.12	1.69	1.69	1.65	1.88	1.84	1.82	1.83	1.84	1.86	1.98
Emissions 10/														
Total Carbon (million tons)	33.33	32.63	35.40	35.12	34.13	35.22	35.99	36.80	38.17	39.63	40.39	41.00	41.65	42.12
Carbon Dioxide (million tons)	122.20	119.64	129.78	128.76	125.15	129.13	131.96	134.94	139.96	145.32	148.11	150.33	152.71	154.44
Sulfur Dioxide (million tons)	0.42	0.38	0.40	0.40	0.34	0.33	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Nitrogen Oxide (million tons)	0.25	0.22	0.23	0.23	0.23	0.24	0.11	0.12	0.12	0.12	0.12	0.12	0.11	0.11
Mercury (tons)	1.58	1.33	1.32	1.43	1.33	1.36	0.77	0.73	0.75	0.76	0.73	0.70	0.67	0.61

Table 67. Electric Power Projections by Electricity Market Module Region  
 Florida Reliability Coordinating Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/ (gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	11.77	11.77	12.10	12.48	13.28	14.52	15.44	16.45	17.10	18.09	19.52	21.10	22.82	23.97	3.3%
Other Fossil Steam 2/	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	-0.1%
Combined Cycle	22.33	23.64	24.58	25.52	25.92	25.92	26.20	26.48	27.01	27.42	27.42	27.42	27.42	27.85	2.7%
Combustion Turbine/Diesel	10.83	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.90	0.3%
Nuclear Power	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	0.1%
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.69	0.69	0.75	0.82	0.89	0.89	1.00	1.13	1.20	1.31	1.31	1.31	1.31	1.42	3.1%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	N/A
<b>Total Capacity</b>	<b>59.84</b>	<b>61.11</b>	<b>62.44</b>	<b>63.83</b>	<b>65.10</b>	<b>66.34</b>	<b>67.65</b>	<b>69.06</b>	<b>70.32</b>	<b>71.83</b>	<b>73.26</b>	<b>74.84</b>	<b>76.57</b>	<b>78.41</b>	<b>1.8%</b>
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	N/A
Combustion Turbine/Diesel	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Planned Additions</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>3.96</b>	<b>N/A</b>
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	0.63	0.63	0.96	1.34	2.14	3.38	4.30	5.31	5.96	6.95	8.38	9.96	11.68	12.83	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	6.09	7.40	8.34	9.28	9.69	9.69	9.96	10.24	10.77	11.18	11.18	11.18	11.18	11.61	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.04	0.04	0.10	0.17	0.23	0.23	0.34	0.47	0.55	0.65	0.65	0.65	0.65	0.77	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.05	N/A
<b>Total Unplanned Additions</b>	<b>6.76</b>	<b>8.07</b>	<b>9.40</b>	<b>10.79</b>	<b>12.06</b>	<b>13.30</b>	<b>14.61</b>	<b>16.02</b>	<b>17.28</b>	<b>18.79</b>	<b>20.21</b>	<b>21.80</b>	<b>23.53</b>	<b>25.36</b>	<b>N/A</b>
<b>Cumulative Total Additions</b>	<b>10.73</b>	<b>12.03</b>	<b>13.36</b>	<b>14.76</b>	<b>16.02</b>	<b>17.26</b>	<b>18.58</b>	<b>19.98</b>	<b>21.24</b>	<b>22.75</b>	<b>24.18</b>	<b>25.76</b>	<b>27.50</b>	<b>29.33</b>	<b>N/A</b>

Table 67. Electric Power Projections by Electricity Market Module Region  
 Florida Reliability Coordinating Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 3/	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.35	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.07	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.42	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	N/A
<b>Commercial and Industrial 8/</b>															
Coal	0.14	0.15	0.16	0.21	0.26	0.31	0.33	0.36	0.39	0.42	0.45	0.48	0.48	0.48	6.9%
Petroleum	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.7%
Natural Gas	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	2.0%
Other Gaseous Fuels	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	-0.5%
Renewable Sources 4/	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.25	0.26	0.27	0.28	0.29	2.4%
Other	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	N/A
Total	0.98	1.00	1.01	1.07	1.13	1.18	1.22	1.25	1.29	1.33	1.37	1.41	1.42	1.44	2.1%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	142.90	145.53	148.16	151.13	153.18	155.60	158.07	160.93	163.12	165.78	168.49	171.63	173.98	176.69	2.0%
Commercial/Other	118.73	121.81	124.93	128.15	131.46	134.89	138.42	142.01	145.66	149.52	153.37	157.48	161.69	165.53	2.8%
Industrial	19.23	19.48	19.66	19.84	20.03	20.24	20.48	20.73	21.03	21.38	21.71	22.04	22.38	22.71	1.1%
Transportation	1.50	1.52	1.55	1.57	1.59	1.61	1.63	1.66	1.68	1.70	1.73	1.75	1.77	1.80	1.5%
Total Sales	282.36	288.34	294.30	300.69	306.26	312.34	318.60	325.33	331.50	338.38	345.31	352.90	359.82	366.74	2.2%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	40.01	39.23	37.21	36.72	35.10	33.79	33.42	32.21	32.06	31.14	30.51	29.45	30.13	30.54	-1.5%
Gross Interregional Electricity Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Purchases from Combined Heat and Power 8/	0.93	0.95	0.99	1.12	1.18	1.26	1.33	1.40	1.46	1.53	1.58	1.64	1.69	1.72	5.6%
Electric Power Sector Generation for Customer	254.70	261.65	269.75	275.16	281.31	287.57	293.54	300.86	306.76	313.99	321.29	329.71	335.57	342.41	2.0%
Total Net Energy for Load	295.63	301.83	307.96	313.00	317.58	322.62	328.29	334.47	340.27	346.66	353.37	360.80	367.39	374.67	1.6%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	82.77	84.05	86.73	89.12	96.20	104.62	111.76	119.38	124.27	131.62	141.07	152.80	165.14	173.00	4.2%
Petroleum	28.41	28.32	28.32	28.15	28.18	28.21	28.22	28.22	28.22	28.25	28.28	28.34	28.16	28.06	-1.1%
Natural Gas	104.71	111.51	116.54	118.90	118.21	115.58	113.79	112.42	112.79	111.87	109.04	105.68	99.40	97.47	1.1%
Nuclear	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	0.2%
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	7.20	6.17	6.57	7.39	7.11	7.56	8.17	9.25	9.88	10.65	11.29	11.29	11.26	12.29	4.5%
Total Generation	255.71	262.66	270.77	276.18	282.32	288.58	294.55	301.88	307.77	315.01	322.30	330.73	336.58	343.43	2.0%
Sales to Customers	254.70	261.65	269.75	275.16	281.31	287.57	293.54	300.86	306.76	313.99	321.29	329.71	335.57	342.41	2.0%
Generation for Own Use	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.3%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	N/A

Table 67. Electric Power Projections by Electricity Market Module Region  
Florida Reliability Coordinating Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	0.25	0.27	0.29	0.40	0.51	0.62	0.68	0.75	0.80	0.87	0.92	0.96	1.02	1.02	8.2%
Petroleum	0.31	0.30	0.30	0.34	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	3.9%
Natural Gas	0.89	0.91	0.94	0.97	0.99	1.02	1.05	1.07	1.10	1.12	1.14	1.17	1.19	1.21	2.8%
Other Gaseous Fuels	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.3%
Renewable Sources 4/	1.25	1.27	1.29	1.31	1.33	1.35	1.37	1.39	1.41	1.44	1.47	1.50	1.54	1.58	1.8%
Other	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	0.0%
Total	4.35	4.41	4.47	4.67	4.79	4.94	5.06	5.18	5.28	5.40	5.50	5.61	5.71	5.78	2.0%
Sales to Utilities	0.93	0.95	0.99	1.12	1.18	1.26	1.33	1.40	1.46	1.53	1.58	1.64	1.69	1.72	5.6%
Generation for Own Use	3.43	3.46	3.49	3.55	3.62	3.68	3.73	3.78	3.82	3.88	3.92	3.97	4.02	4.06	1.1%
Total Electricity Generation	260.06	267.07	275.24	280.85	287.11	293.52	299.61	307.06	313.05	320.41	327.80	336.33	342.31	349.23	2.0%
End-Use Prices (2004 cents per kilowatthour)															
Residential	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.2	9.2	9.2	9.2	9.2	9.3	0.1%
Commercial	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.3	8.4	0.4%
Industrial	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.4	6.4	6.4	6.3	6.4	6.4	0.3%
Transportation	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.4	0.0%
All Sectors Average	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.6	8.6	8.7	0.2%
Prices by Service Category (2004 cents per kilowatthour)															
Generation	5.8	5.8	5.8	5.8	5.9	5.9	5.9	5.9	5.9	6.0	5.9	5.9	5.9	6.0	0.2%
Transmission	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.9%
Distribution	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	-0.1%
Fuel Consumption (quadrillion Btu) 9/															
Coal	0.84	0.85	0.88	0.90	0.96	1.03	1.09	1.16	1.20	1.26	1.33	1.41	1.50	1.56	3.1%
Natural Gas	0.78	0.82	0.85	0.87	0.86	0.84	0.83	0.82	0.82	0.82	0.80	0.77	0.73	0.72	0.8%
Oil	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	-1.2%
Total	1.90	1.96	2.01	2.04	2.10	2.16	2.21	2.26	2.30	2.36	2.41	2.47	2.51	2.55	1.7%
Fuel Prices (dollars per million Btu)															
Coal	2.06	2.02	2.03	2.04	2.01	2.01	2.02	2.06	2.08	2.08	2.11	2.11	2.12	2.13	0.4%
Natural Gas	5.16	5.34	5.45	5.48	5.62	5.70	5.76	5.87	6.00	6.07	6.16	6.19	6.24	6.39	0.0%
Distillate Fuel	8.95	9.14	9.22	9.32	9.36	9.54	9.61	9.70	9.79	9.82	9.85	9.93	10.01	10.10	0.4%
Residual Fuel	6.39	6.42	6.46	6.63	6.64	6.68	6.75	6.89	6.96	6.99	7.06	7.07	7.10	7.26	1.6%
Biomass	1.98	1.86	1.86	1.87	1.84	1.87	1.87	1.90	1.91	1.93	1.91	1.91	1.91	1.93	3.7%
Emissions 10/															
Total Carbon (million tons)	42.85	43.93	45.14	45.87	47.64	49.40	50.96	52.67	53.83	55.49	57.09	59.12	60.88	62.20	2.5%
Carbon Dioxide (million tons)	157.10	161.08	165.50	168.18	174.69	181.13	186.85	193.12	197.38	203.47	209.33	216.78	223.25	228.07	2.5%
Sulfur Dioxide (million tons)	0.20	0.20	0.20	0.20	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	-2.8%
Nitrogen Oxide (million tons)	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.13	-2.0%
Mercury (tons)	0.65	0.61	0.60	0.59	0.58	0.60	0.63	0.64	0.63	0.66	0.60	0.61	0.64	0.62	-2.9%

Table 67. Electric Power Projections by Electricity Market Module Region  
Florida Reliability Coordinating Council

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 68. Electric Power Projections by Electricity Market Module Region  
Southeastern Electric Reliability Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	71.40	71.50	70.92	70.91	71.53	71.51	72.80	72.80	72.80	72.80	72.11	73.17	73.59	74.50
Other Fossil Steam 2/	18.40	18.64	18.56	18.56	18.56	18.56	18.56	18.56	18.56	14.94	14.94	14.94	14.94	14.94
Combined Cycle	30.92	34.15	35.99	37.48	38.04	38.57	38.57	38.57	38.57	38.57	38.57	38.57	38.71	38.71
Combustion Turbine/Diesel	31.29	31.61	31.70	31.71	31.71	31.62	31.47	31.36	31.28	30.87	30.78	30.78	31.69	32.51
Nuclear Power	32.41	32.45	32.73	32.85	33.03	33.03	33.07	33.14	33.14	33.22	33.22	34.36	35.93	37.53
Pumped Storage/Other 3/	7.01	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	12.36	12.41	12.38	12.44	12.55	12.55	12.55	12.55	12.55	12.55	12.55	12.58	12.68	12.71
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Capacity	203.78	207.80	209.31	210.99	212.46	212.88	214.06	214.02	213.94	210.00	209.22	211.46	214.58	217.94
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.62	0.62	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	1.84	3.33	3.89	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42
Combustion Turbine/Diesel	0.00	0.00	0.09	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.02	0.08	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Planned Additions	0.00	0.00	1.95	3.58	4.87	5.40	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.06	1.48	2.39
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.14
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.91	1.72
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	2.20	3.64
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.13	0.16
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09	4.86	8.05
Cumulative Total Additions	0.00	0.00	1.95	3.58	4.87	5.40	6.70	6.70	6.70	6.70	6.70	8.79	11.56	14.75

Table 68. Electric Power Projections by Electricity Market Module Region  
Southeastern Electric Reliability Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.58	0.59	0.59	0.61	0.61	0.62	0.62	0.62	1.30	1.30	1.30	1.30
Other Fossil Steam 3/	0.00	0.00	0.08	0.08	0.08	0.08	0.08	0.08	0.08	3.70	3.70	3.70	3.70	3.70
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.07	0.07	0.16	0.31	0.42	0.50	0.90	0.99	0.99	0.99	0.99
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.71</b>	<b>0.79</b>	<b>0.79</b>	<b>0.90</b>	<b>1.05</b>	<b>1.16</b>	<b>1.25</b>	<b>5.27</b>	<b>6.05</b>	<b>6.05</b>	<b>6.05</b>	<b>6.05</b>
<b>Commercial and Industrial 8/</b>														
Coal	0.81	0.79	0.82	0.82	0.82	0.82	0.82	0.82	0.91	1.01	1.10	1.15	1.19	1.24
Petroleum	0.25	0.50	0.50	0.50	0.53	0.52	0.54	0.57	0.58	0.62	0.57	0.60	0.59	0.61
Natural Gas	4.61	4.63	4.72	4.79	4.87	4.96	5.07	5.18	5.29	5.40	5.50	5.62	5.76	5.90
Other Gaseous Fuels	0.57	0.57	0.57	0.57	0.47	0.47	0.47	0.47	0.48	0.48	0.48	0.48	0.48	0.48
Renewable Sources 4/	2.96	2.99	3.02	3.16	3.31	3.41	3.52	3.66	3.73	3.79	3.84	3.89	3.95	4.00
Other	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
<b>Total</b>	<b>9.27</b>	<b>9.56</b>	<b>9.71</b>	<b>9.91</b>	<b>10.06</b>	<b>10.25</b>	<b>10.49</b>	<b>10.77</b>	<b>11.05</b>	<b>11.36</b>	<b>11.56</b>	<b>11.81</b>	<b>12.04</b>	<b>12.30</b>
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	295.73	303.34	312.83	316.13	321.97	330.15	336.47	343.06	349.17	356.15	361.12	367.05	373.39	380.05
Commercial/Other	227.88	237.37	245.95	249.33	257.57	266.45	274.59	282.20	290.18	298.29	306.04	313.65	321.45	329.53
Industrial	251.72	258.60	259.27	260.79	261.76	263.03	263.25	264.91	268.10	270.50	272.87	275.12	277.75	281.05
Transportation	4.35	4.45	4.45	4.49	4.54	4.60	4.68	4.75	4.81	4.87	4.93	5.00	5.06	5.12
<b>Total Sales</b>	<b>779.69</b>	<b>803.76</b>	<b>822.49</b>	<b>830.75</b>	<b>845.84</b>	<b>864.24</b>	<b>878.99</b>	<b>894.92</b>	<b>912.26</b>	<b>929.82</b>	<b>944.97</b>	<b>960.82</b>	<b>977.64</b>	<b>995.74</b>
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Interregional Electricity Imports	103.29	112.81	80.80	82.57	86.61	92.76	93.98	98.43	101.34	96.09	96.28	90.52	87.97	79.01
Gross Interregional Electricity Exports	66.95	67.14	50.35	54.28	63.46	63.73	66.79	62.93	66.77	60.41	57.35	55.48	53.53	51.32
Purchases from Combined Heat and Power 8/	8.35	8.75	9.17	9.78	12.33	12.75	13.73	14.59	15.81	17.24	17.84	18.90	19.81	20.90
Electric Power Sector Generation for Customer	810.39	831.64	833.30	843.08	861.13	873.87	889.63	896.85	914.12	929.46	941.00	959.86	976.69	1001.37
<b>Total Net Energy for Load</b>	<b>855.07</b>	<b>886.06</b>	<b>872.92</b>	<b>881.15</b>	<b>896.60</b>	<b>915.65</b>	<b>930.55</b>	<b>946.93</b>	<b>964.50</b>	<b>982.38</b>	<b>997.76</b>	<b>1013.81</b>	<b>1030.93</b>	<b>1049.96</b>
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	438.00	446.83	456.04	460.82	468.07	478.10	490.00	489.21	494.15	498.72	499.25	506.15	509.84	512.87
Petroleum	12.26	12.58	14.27	13.31	7.60	7.64	7.86	7.96	7.26	7.69	7.82	7.78	7.78	7.82
Natural Gas	74.43	85.01	83.48	79.84	80.53	82.12	84.19	85.40	99.75	113.36	123.54	128.29	130.27	136.34
Nuclear	246.95	256.42	252.42	257.14	267.60	267.67	267.94	267.72	267.79	268.59	268.66	275.10	285.96	297.91
Pumped Storage/Other 3/	-2.48	-3.14	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60
Renewable Sources 4/	44.11	36.59	35.26	40.14	45.51	46.55	47.87	54.79	53.42	49.34	49.85	50.66	50.96	54.55
<b>Total Generation</b>	<b>813.27</b>	<b>834.28</b>	<b>837.87</b>	<b>847.66</b>	<b>865.73</b>	<b>878.48</b>	<b>894.26</b>	<b>901.49</b>	<b>918.76</b>	<b>934.10</b>	<b>945.52</b>	<b>964.38</b>	<b>981.21</b>	<b>1005.89</b>
Sales to Customers	810.39	831.64	833.30	843.08	861.13	873.87	889.63	896.85	914.12	929.46	941.00	959.86	976.69	1001.37
Generation for Own Use	2.87	2.64	4.56	4.58	4.59	4.61	4.63	4.64	4.64	4.64	4.52	4.52	4.52	4.52
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 68. Electric Power Projections by Electricity Market Module Region  
Southeastern Electric Reliability Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	3.97	4.21	4.26	4.26	4.25	4.25	4.25	4.25	4.98	5.71	6.44	6.79	7.14	7.47
Petroleum	1.54	1.45	1.74	1.74	3.22	3.14	3.42	3.59	3.70	4.03	3.63	3.83	3.81	3.95
Natural Gas	25.22	25.38	25.99	26.51	28.40	29.12	30.01	30.91	31.74	32.59	33.40	34.35	35.42	36.54
Other Gaseous Fuels	1.91	1.33	1.42	1.42	1.20	1.22	1.23	1.25	1.26	1.27	1.28	1.29	1.31	1.32
Renewable Sources 4/	20.15	20.11	20.23	20.91	21.59	22.08	22.56	23.12	23.53	23.88	24.17	24.45	24.76	25.09
Other	2.73	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76
Total	55.52	55.26	56.40	57.60	61.42	62.57	64.24	65.88	67.97	70.25	71.68	73.47	75.19	77.13
Sales to Utilities	8.35	8.75	9.17	9.78	12.33	12.75	13.73	14.59	15.81	17.24	17.84	18.90	19.81	20.90
Generation for Own Use	47.17	46.50	47.23	47.82	49.09	49.82	50.51	51.29	52.16	53.01	53.84	54.57	55.39	56.23
<b>Total Electricity Generation</b>	<b>868.79</b>	<b>889.54</b>	<b>894.27</b>	<b>905.25</b>	<b>927.15</b>	<b>941.05</b>	<b>958.49</b>	<b>967.37</b>	<b>986.73</b>	<b>1004.35</b>	<b>1017.20</b>	<b>1037.86</b>	<b>1056.40</b>	<b>1083.02</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)														
Residential	7.9	8.0	8.3	8.2	7.9	7.6	7.6	7.5	7.4	7.2	7.2	7.2	7.1	7.1
Commercial	6.8	6.9	7.2	7.3	7.0	6.8	6.7	6.7	6.6	6.5	6.5	6.5	6.4	6.5
Industrial	4.5	4.5	4.8	4.9	4.7	4.6	4.6	4.5	4.5	4.4	4.4	4.4	4.4	4.4
Transportation	6.2	6.2	6.4	6.5	6.2	6.0	6.0	5.9	5.8	5.8	5.7	5.7	5.7	5.7
All Sectors Average	6.5	6.5	6.9	6.9	6.6	6.4	6.4	6.4	6.2	6.2	6.2	6.1	6.1	6.1
<b>Prices by Service Category</b> (2004 cents per kilowatthour)														
Generation	4.5	4.6	5.0	5.0	4.7	4.5	4.5	4.4	4.3	4.3	4.3	4.2	4.2	4.3
Transmission	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5
Distribution	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4
<b>Fuel Consumption (quadrillion Btu) 9/</b>														
Coal	4.48	4.54	4.67	4.72	4.79	4.89	5.01	5.00	5.05	5.11	5.11	5.16	5.20	5.22
Natural Gas	0.71	0.77	0.69	0.66	0.69	0.70	0.71	0.72	0.83	0.92	1.00	1.03	1.05	1.10
Oil	0.13	0.13	0.14	0.13	0.08	0.08	0.08	0.08	0.07	0.08	0.08	0.08	0.08	0.08
Total	5.32	5.44	5.50	5.51	5.55	5.67	5.80	5.80	5.96	6.11	6.19	6.27	6.33	6.39
<b>Fuel Prices (dollars per million Btu)</b>														
Coal	1.52	1.59	1.73	1.78	1.75	1.76	1.74	1.78	1.75	1.73	1.72	1.71	1.70	1.70
Natural Gas	5.84	6.06	8.08	7.26	6.27	5.92	5.52	5.23	5.03	5.04	5.18	5.09	5.01	5.06
Distillate Fuel	6.62	9.36	10.10	10.94	9.98	9.74	9.28	8.98	8.94	9.09	8.72	8.87	8.91	9.18
Residual Fuel	4.41	4.36	6.51	6.03	6.63	6.44	6.07	5.59	5.60	5.53	5.44	5.50	5.46	5.52
Biomass	0.71	0.86	1.13	1.24	1.53	1.58	1.64	1.80	1.78	1.71	1.75	1.77	1.79	1.87
<b>Emissions 10/</b>														
Total Carbon (million tons)	138.30	140.71	146.40	147.14	147.93	151.11	154.87	154.59	157.75	160.76	162.15	164.11	165.36	166.71
Carbon Dioxide (million tons)	507.09	515.94	536.79	539.51	542.41	554.08	567.85	566.82	578.41	589.46	594.55	601.74	606.31	611.27
Sulfur Dioxide (million tons)	2.84	3.11	2.92	2.62	2.48	2.08	1.69	1.44	1.39	1.25	1.16	1.14	1.11	1.07
Nitrogen Oxide (million tons)	1.04	0.94	0.80	0.80	0.79	0.82	0.46	0.46	0.47	0.48	0.48	0.48	0.40	0.39
Mercury (tons)	10.54	11.41	10.95	10.08	10.58	10.24	9.12	7.01	7.07	7.01	6.40	5.95	4.30	3.84



Table 68. Electric Power Projections by Electricity Market Module Region  
Southeastern Electric Reliability Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Electricity Generating Capacity 1/ (gigawatts)															
Electric Power Sector															
Coal Steam	76.01	78.49	81.51	84.79	87.85	91.21	94.84	98.94	102.78	107.16	111.64	116.35	121.31	124.46	2.2%
Other Fossil Steam 2/	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	-0.8%
Combined Cycle	38.71	38.71	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	39.44	0.6%
Combustion Turbine/Diesel	32.63	32.80	33.01	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10	34.28	0.3%
Nuclear Power	39.26	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	0.8%
Pumped Storage/Other 3/	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	12.79	12.84	12.90	12.90	12.90	12.90	12.90	12.90	12.91	12.91	12.91	12.91	12.91	13.12	0.2%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Capacity	221.38	224.92	228.38	231.76	234.81	238.17	241.80	245.90	249.74	254.12	258.60	263.31	268.28	273.38	1.1%
Cumulative Planned Additions 6/															
Coal Steam	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	1.92	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	N/A
Combustion Turbine/Diesel	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	6.70	N/A
Cumulative Unplanned Additions 6/															
Coal Steam	3.90	6.38	9.40	12.68	15.74	19.09	22.73	26.82	30.66	35.04	39.52	44.23	49.20	52.34	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.14	0.14	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.87	N/A
Combustion Turbine/Diesel	1.84	2.02	2.22	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	2.32	3.50	N/A
Nuclear Power	5.37	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.24	0.29	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.36	0.36	0.36	0.36	0.57	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Unplanned Additions	11.49	14.83	18.29	21.67	24.73	28.09	31.72	35.81	39.65	44.03	48.51	53.22	58.19	63.29	N/A
Cumulative Total Additions	18.19	21.53	24.99	28.37	31.43	34.78	38.42	42.51	46.35	50.73	55.21	59.92	64.89	69.99	N/A

Table 68. Electric Power Projections by Electricity Market Module Region  
 Southeastern Electric Reliability Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	N/A
Other Fossil Steam 3/	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	N/A
Total	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	6.05	N/A
<b>Commercial and Industrial 8/</b>															
Coal	1.32	1.40	1.48	1.96	2.44	2.92	3.18	3.45	3.71	3.99	4.27	4.55	4.55	4.55	6.9%
Petroleum	0.59	0.58	0.58	0.63	0.58	0.58	0.59	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.7%
Natural Gas	6.04	6.18	6.33	6.48	6.63	6.77	6.92	7.06	7.20	7.33	7.45	7.58	7.71	7.84	2.0%
Other Gaseous Fuels	0.49	0.49	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	-0.5%
Renewable Sources 4/	4.08	4.15	4.22	4.29	4.35	4.42	4.50	4.58	4.67	4.78	4.93	5.11	5.30	5.50	2.4%
Other	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	N/A
Total	12.59	12.87	13.16	13.92	14.56	15.26	15.75	16.24	16.75	17.26	17.82	18.40	18.73	19.07	2.7%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	385.01	390.86	396.72	403.49	407.81	413.13	418.55	425.03	429.65	435.48	441.45	448.56	453.59	459.56	1.6%
Commercial/Other	337.76	346.06	354.41	362.99	371.64	380.66	390.01	399.45	409.02	419.16	429.18	439.94	450.97	461.35	2.6%
Industrial	284.49	288.24	290.85	292.75	296.12	299.05	302.05	306.31	310.65	315.68	320.82	325.77	330.73	334.97	1.0%
Transportation	5.18	5.25	5.31	5.37	5.43	5.49	5.56	5.62	5.69	5.75	5.82	5.89	5.95	6.02	1.2%
Total Sales	1012.44	1030.41	1047.28	1064.60	1081.01	1098.33	1116.16	1136.42	1155.01	1176.08	1197.27	1220.15	1241.24	1261.89	1.8%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	69.67	63.25	55.69	50.23	46.60	41.61	36.04	30.16	27.09	19.35	14.96	9.47	7.75	7.98	-9.7%
Gross Interregional Electricity Exports	49.18	48.25	45.83	44.52	43.01	42.13	43.01	44.58	45.73	43.88	45.34	44.15	45.06	45.88	-1.5%
Purchases from Combined Heat and Power 8/	21.99	23.02	24.20	27.72	30.26	33.08	35.18	37.37	39.23	41.44	43.13	44.79	46.57	47.38	6.7%
Electric Power Sector Generation for Customer	1024.96	1048.28	1069.95	1088.21	1104.49	1123.51	1146.25	1172.44	1194.14	1219.71	1245.96	1272.51	1295.31	1316.88	1.8%
Total Net Energy for Load	1067.44	1086.30	1104.00	1121.64	1138.34	1156.06	1174.47	1195.38	1214.73	1236.62	1258.71	1282.62	1304.58	1326.35	1.6%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	523.87	545.53	567.17	590.80	613.27	635.84	660.46	687.84	712.97	741.46	772.74	802.24	829.90	849.34	2.5%
Petroleum	7.92	8.07	8.08	8.16	8.27	8.31	8.45	8.54	8.70	8.79	8.78	8.72	8.89	8.87	-1.3%
Natural Gas	135.72	130.85	128.23	123.18	117.53	113.32	111.73	109.82	106.10	102.65	99.40	96.85	92.48	93.34	0.4%
Nuclear	310.94	319.94	322.13	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	0.9%
Pumped Storage/Other 3/	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	0.5%
Renewable Sources 4/	54.63	52.01	52.47	51.69	51.04	51.65	51.23	51.85	51.99	52.43	50.65	50.33	49.66	50.94	1.3%
Total Generation	1029.48	1052.80	1074.47	1092.73	1109.01	1128.03	1150.77	1176.96	1198.66	1224.23	1250.48	1277.04	1299.83	1321.40	1.8%
Sales to Customers	1024.96	1048.28	1069.95	1088.21	1104.49	1123.51	1146.25	1172.44	1194.14	1219.71	1245.96	1272.51	1295.31	1316.88	1.8%
Generation for Own Use	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	4.52	2.1%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 68. Electric Power Projections by Electricity Market Module Region  
Southeastern Electric Reliability Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	8.10	8.72	9.33	12.98	16.55	19.82	21.96	24.19	25.87	28.14	29.59	31.02	32.68	32.70	8.2%
Petroleum	3.86	3.71	3.73	4.17	3.75	3.76	3.77	3.81	3.84	3.87	3.88	3.88	3.88	3.91	3.9%
Natural Gas	37.66	38.74	39.86	41.08	42.19	43.33	44.44	45.51	46.59	47.58	48.56	49.52	50.44	51.52	2.8%
Other Gaseous Fuels	1.33	1.34	1.35	1.36	1.38	1.39	1.40	1.41	1.42	1.42	1.42	1.42	1.42	1.45	0.3%
Renewable Sources 4/	25.51	25.95	26.32	26.68	27.07	27.47	27.88	28.32	28.80	29.33	29.97	30.66	31.39	32.16	1.8%
Other	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	2.76	0.0%
Total	79.22	81.23	83.36	89.05	93.70	98.53	102.21	106.01	109.29	113.11	116.17	119.26	122.57	124.50	3.2%
Sales to Utilities	21.99	23.02	24.20	27.72	30.26	33.08	35.18	37.37	39.23	41.44	43.13	44.79	46.57	47.38	6.7%
Generation for Own Use	57.22	58.20	59.16	61.33	63.44	65.46	67.02	68.64	70.07	71.67	73.05	74.47	76.00	77.12	2.0%
<b>Total Electricity Generation</b>	<b>1108.70</b>	<b>1134.03</b>	<b>1157.83</b>	<b>1181.78</b>	<b>1202.72</b>	<b>1226.56</b>	<b>1252.98</b>	<b>1282.97</b>	<b>1307.96</b>	<b>1337.34</b>	<b>1366.65</b>	<b>1396.30</b>	<b>1422.40</b>	<b>1445.90</b>	<b>1.9%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	7.2	7.2	7.2	7.2	7.2	7.2	7.1	7.1	7.2	7.2	7.2	7.2	7.2	7.2	-0.4%
Commercial	6.5	6.5	6.6	6.6	6.6	6.6	6.5	6.6	6.6	6.6	6.7	6.7	6.7	6.7	-0.1%
Industrial	4.4	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.6	0.0%
Transportation	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.9	-0.2%
All Sectors Average	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.3	6.3	6.3	6.3	6.3	-0.1%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	4.3	4.3	4.3	4.4	4.4	4.4	4.3	4.4	4.4	4.4	4.4	4.4	4.5	4.5	-0.1%
Transmission	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	1.5%
Distribution	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	-0.8%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	5.31	5.49	5.65	5.82	5.99	6.14	6.32	6.51	6.68	6.87	7.09	7.28	7.45	7.58	2.0%
Natural Gas	1.09	1.05	1.03	1.00	0.96	0.92	0.91	0.90	0.87	0.84	0.82	0.80	0.77	0.77	0.0%
Oil	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	-1.5%
Total	6.48	6.62	6.76	6.90	7.02	7.15	7.32	7.49	7.64	7.80	7.99	8.17	8.31	8.44	1.7%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.71	1.71	1.70	1.70	1.70	1.70	1.71	1.72	1.72	1.72	1.73	1.75	1.76	1.77	0.4%
Natural Gas	5.10	5.26	5.37	5.39	5.52	5.61	5.67	5.78	5.90	5.97	6.05	6.08	6.13	6.28	0.1%
Distillate Fuel	9.15	9.35	9.44	9.54	9.58	9.77	9.84	9.93	10.02	10.05	10.06	10.11	10.12	10.20	0.3%
Residual Fuel	5.56	5.60	5.68	5.88	5.91	5.98	6.09	6.23	6.35	6.48	6.57	6.59	6.67	6.83	1.7%
Biomass	1.86	1.80	1.80	1.80	1.79	1.81	1.81	1.83	1.83	1.84	1.82	1.81	1.80	1.82	2.9%
<b>Emissions 10/</b>															
Total Carbon (million tons)	169.27	173.71	177.91	182.21	186.15	190.15	194.88	200.01	204.32	209.24	215.00	220.07	224.20	227.88	1.9%
Carbon Dioxide (million tons)	620.67	636.93	652.33	668.12	682.54	697.22	714.55	733.37	749.17	767.22	788.32	806.92	822.06	835.57	1.9%
Sulfur Dioxide (million tons)	1.04	1.00	0.99	0.97	0.93	0.93	0.91	0.90	0.87	0.86	0.84	0.85	0.83	0.82	-5.0%
Nitrogen Oxide (million tons)	0.40	0.40	0.40	0.40	0.39	0.38	0.38	0.37	0.37	0.37	0.37	0.36	0.36	0.35	-3.7%
Mercury (tons)	3.81	3.82	3.53	3.37	3.40	3.40	3.41	3.41	3.34	3.43	3.25	3.18	3.18	3.20	-4.8%

Table 68. Electric Power Projections by Electricity Market Module Region  
Southeastern Electric Reliability Council

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 69. Electric Power Projections by Electricity Market Module Region  
Southwest Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	21.37	21.35	21.35	21.35	21.35	21.35	21.60	21.60	21.60	21.35	20.83	20.83	20.83	20.83
Other Fossil Steam 2/ Combined Cycle	13.23	13.16	13.14	13.12	13.12	13.12	13.12	13.10	13.10	11.57	9.92	8.32	7.87	7.87
Combustion Turbine/Diesel	9.76	10.91	10.91	11.07	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03
Nuclear Power	7.18	7.23	7.24	7.23	7.38	7.38	7.38	7.38	7.38	7.34	7.34	7.34	7.34	7.34
Pumped Storage/Other 3/ Fuel Cells	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Renewable Sources 4/ Distributed Generation 5/ Total Capacity	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.93	2.93	3.50	3.50	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.52	3.52	3.52
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	56.14	57.25	57.82	57.95	59.06	59.06	59.32	59.30	59.30	57.47	55.30	53.71	53.26	53.26
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.25	0.49	0.49	0.49	0.49	0.49
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.16	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12
Nuclear Power	0.00	0.00	0.01	0.01	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Planned Additions	0.00	0.00	0.57	0.57	0.57	0.57	0.58	0.58	0.58	0.58	0.58	0.58	0.59	0.59
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.58	0.74	1.86	1.86	2.11	2.12	2.12	2.35	2.35	2.36	2.36	2.36
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Cumulative Total Additions	0.00	0.00	0.58	0.74	1.86	1.86	2.11	2.12	2.12	2.35	2.35	2.36	2.36	2.36

Table 69. Electric Power Projections by Electricity Market Module Region  
Southwest Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.49	1.01	1.01	1.01	1.01
Other Fossil Steam 3/	0.00	0.00	0.05	0.07	0.07	0.07	0.07	0.09	0.09	1.62	3.27	4.87	5.32	5.32
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.06	0.06	0.06	0.06	0.06
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.05</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.11</b>	<b>0.11</b>	<b>2.17</b>	<b>4.34</b>	<b>5.94</b>	<b>6.39</b>	<b>6.39</b>
<b>Commercial and Industrial 8/</b>														
Coal	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.09	0.09	0.10	0.10	0.11
Petroleum	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Natural Gas	0.39	0.39	0.40	0.41	0.41	0.42	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50
Other Gaseous Fuels	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Renewable Sources 4/	0.34	0.35	0.35	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.45	0.46	0.47
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.82</b>	<b>0.83</b>	<b>0.84</b>	<b>0.86</b>	<b>0.88</b>	<b>0.90</b>	<b>0.93</b>	<b>0.95</b>	<b>0.98</b>	<b>1.00</b>	<b>1.02</b>	<b>1.04</b>	<b>1.07</b>	<b>1.09</b>
<b>Electricity Demand</b> <b>(billion kilowatthours)</b>														
Residential	63.06	62.62	66.53	67.03	68.73	70.78	72.19	73.48	74.70	76.10	77.04	78.19	79.47	80.82
Commercial/Other	63.34	63.99	68.25	68.61	70.43	72.39	74.09	75.70	77.43	79.22	80.86	82.47	84.13	85.90
Industrial	49.18	49.54	50.89	51.28	51.66	52.17	52.27	52.69	53.38	53.76	54.35	54.73	55.15	55.84
Transportation	1.04	1.04	1.06	1.07	1.08	1.10	1.11	1.13	1.14	1.15	1.16	1.18	1.19	1.20
<b>Total Sales</b>	<b>176.62</b>	<b>177.19</b>	<b>186.72</b>	<b>187.99</b>	<b>191.90</b>	<b>196.43</b>	<b>199.66</b>	<b>202.99</b>	<b>206.65</b>	<b>210.23</b>	<b>213.42</b>	<b>216.56</b>	<b>219.94</b>	<b>223.77</b>
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Interregional Electricity Imports	19.53	30.41	22.07	19.61	22.42	23.55	23.42	23.65	22.46	22.90	21.72	20.79	19.65	19.54
Gross Interregional Electricity Exports	15.33	17.48	13.91	15.85	16.00	16.20	16.33	15.87	15.15	15.11	13.90	13.10	10.07	8.14
Purchases from Combined Heat and Power 8/	0.73	0.74	0.78	0.83	1.03	1.07	1.15	1.22	1.36	1.52	1.61	1.72	1.81	1.91
Electric Power Sector Generation for Custome	206.87	208.19	191.50	197.07	198.27	202.03	205.48	208.15	212.21	215.24	218.37	221.56	223.03	225.16
<b>Total Net Energy for Load</b>	<b>211.80</b>	<b>221.87</b>	<b>200.44</b>	<b>201.66</b>	<b>205.71</b>	<b>210.45</b>	<b>213.71</b>	<b>217.15</b>	<b>220.89</b>	<b>224.55</b>	<b>227.80</b>	<b>230.97</b>	<b>234.41</b>	<b>238.48</b>
<b>Generation by Fuel Type</b> <b>(billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	144.81	142.04	143.49	144.27	146.19	148.87	152.66	153.84	154.20	152.69	148.71	148.53	148.12	148.12
Petroleum	1.49	1.13	1.85	1.39	1.05	1.01	1.09	1.08	1.06	0.93	0.93	0.84	0.90	0.93
Natural Gas	46.24	46.74	31.08	34.43	33.35	34.47	33.90	34.59	38.37	43.45	49.87	53.15	54.60	56.86
Nuclear	8.89	10.13	9.30	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36
Pumped Storage/Other 3/	-0.20	0.12	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20
Renewable Sources 4/	5.80	8.19	6.46	8.30	9.00	9.02	9.17	9.99	9.91	9.52	10.21	10.37	10.75	10.60
<b>Total Generation</b>	<b>207.04</b>	<b>208.35</b>	<b>191.99</b>	<b>197.55</b>	<b>198.76</b>	<b>202.53</b>	<b>205.98</b>	<b>208.66</b>	<b>212.71</b>	<b>215.74</b>	<b>218.87</b>	<b>222.06</b>	<b>223.53</b>	<b>225.66</b>
Sales to Customers	206.87	208.19	191.50	197.07	198.27	202.03	205.48	208.15	212.21	215.24	218.37	221.56	223.03	225.16
Generation for Own Use	0.17	0.16	0.49	0.49	0.49	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 69. Electric Power Projections by Electricity Market Module Region  
Southwest Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	0.72	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.90	1.04	1.17	1.23	1.30	1.36
Petroleum	0.12	0.11	0.14	0.14	0.25	0.25	0.27	0.28	0.29	0.32	0.28	0.30	0.30	0.31
Natural Gas	1.59	1.60	1.64	1.67	1.79	1.84	1.89	1.95	2.00	2.06	2.11	2.17	2.24	2.31
Other Gaseous Fuels	0.15	0.10	0.11	0.11	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Renewable Sources 4/	2.31	2.31	2.32	2.40	2.48	2.53	2.59	2.65	2.70	2.74	2.77	2.80	2.84	2.88
Other	0.44	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Total	5.34	5.34	5.43	5.54	5.83	5.93	6.07	6.20	6.44	6.70	6.88	7.05	7.22	7.40
Sales to Utilities	0.73	0.74	0.78	0.83	1.03	1.07	1.15	1.22	1.36	1.52	1.61	1.72	1.81	1.91
Generation for Own Use	4.61	4.60	4.65	4.71	4.80	4.86	4.92	4.99	5.08	5.18	5.27	5.34	5.41	5.49
Total Electricity Generation	212.37	213.69	197.42	203.10	204.59	208.46	212.05	214.86	219.15	222.44	225.75	229.11	230.75	233.07
End-Use Prices (2004 cents per kilowatthour)														
Residential	7.5	7.5	8.4	8.3	8.1	7.8	7.8	7.8	7.6	7.4	7.5	7.4	7.4	7.4
Commercial	6.3	6.3	7.2	7.3	7.1	6.9	6.9	6.9	6.7	6.6	6.6	6.6	6.6	6.7
Industrial	4.6	4.7	5.3	5.5	5.3	5.2	5.2	5.2	5.0	4.9	4.9	4.9	4.9	5.0
Transportation	5.7	6.0	6.1	6.4	6.2	6.0	6.0	6.1	5.9	5.8	5.9	5.9	5.8	5.9
All Sectors Average	6.3	6.2	7.1	7.2	6.9	6.8	6.8	6.8	6.6	6.5	6.5	6.5	6.4	6.5
Prices by Service Category (2004 cents per kilowatthour)														
Generation	3.8	3.8	4.8	4.9	4.6	4.5	4.5	4.5	4.3	4.2	4.3	4.3	4.3	4.4
Transmission	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Distribution	2.0	1.9	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.6
Fuel Consumption (quadrillion Btu) 9/														
Coal	1.50	1.51	1.55	1.56	1.58	1.61	1.65	1.66	1.67	1.65	1.61	1.61	1.61	1.61
Natural Gas	0.43	0.43	0.26	0.28	0.27	0.28	0.28	0.28	0.31	0.35	0.40	0.43	0.44	0.45
Oil	0.02	0.01	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	1.95	1.96	1.83	1.85	1.86	1.90	1.94	1.96	1.99	2.01	2.02	2.04	2.05	2.07
Fuel Prices (dollars per million Btu)														
Coal	1.12	1.22	1.40	1.45	1.38	1.37	1.33	1.37	1.35	1.33	1.36	1.36	1.37	1.39
Natural Gas	5.76	6.01	7.94	7.20	6.18	5.82	5.42	5.14	4.93	4.90	5.02	4.94	4.86	4.89
Distillate Fuel	6.65	9.36	10.13	10.96	9.89	9.61	9.16	8.85	8.83	8.98	8.62	8.77	8.80	9.03
Residual Fuel	4.35	4.53	6.55	5.89	6.55	7.25	6.24	5.71	5.85	5.82	5.87	5.98	6.11	6.16
Biomass	0.71	0.71	0.71	0.71	1.23	1.25	1.37	1.56	1.52	1.51	1.67	1.65	1.67	1.68
Emissions 10/														
Total Carbon (million tons)	47.94	47.33	49.62	50.05	50.46	51.47	52.62	53.04	53.64	53.72	53.26	53.58	53.80	54.10
Carbon Dioxide (million tons)	175.78	173.54	181.95	183.53	185.01	188.72	192.95	194.49	196.67	196.98	195.29	196.45	197.26	198.37
Sulfur Dioxide (million tons)	0.40	0.40	0.43	0.41	0.41	0.41	0.43	0.42	0.41	0.41	0.40	0.39	0.33	0.31
Nitrogen Oxide (million tons)	0.29	0.26	0.27	0.27	0.27	0.28	0.22	0.23	0.23	0.23	0.22	0.22	0.21	0.21
Mercury (tons)	4.13	4.12	4.42	4.21	4.31	4.41	4.73	4.00	4.07	3.47	3.03	2.69	2.06	1.94

Table 69. Electric Power Projections by Electricity Market Module Region  
Southwest Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Electricity Generating Capacity 1/ (gigawatts)															
Electric Power Sector															
Coal Steam	20.83	20.83	20.93	21.29	21.48	21.78	22.38	22.80	22.81	22.97	23.79	24.66	25.58	26.25	0.8%
Other Fossil Steam 2/	7.87	7.87	7.87	7.87	7.87	7.87	7.87	7.81	7.81	7.81	7.81	7.81	7.81	7.81	-2.0%
Combined Cycle	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.17	12.32	12.48	12.48	12.48	12.48	12.65	0.6%
Combustion Turbine/Diesel	8.07	8.90	9.58	9.94	10.44	10.84	10.91	11.25	11.70	12.14	12.14	12.14	12.14	12.14	2.0%
Nuclear Power	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	N/A
Pumped Storage/Other 3/	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	3.52	3.53	3.53	3.53	3.53	3.54	3.54	3.54	3.61	3.68	3.68	3.68	3.69	3.73	0.9%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Capacity	53.99	54.83	55.62	56.34	57.03	57.73	58.40	59.24	59.91	60.74	61.57	62.43	63.36	64.24	0.4%
Cumulative Planned Additions 6/															
Coal Steam	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	0.49	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	N/A
Combustion Turbine/Diesel	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.59	0.59	0.60	0.60	0.60	0.60	0.61	0.61	0.61	0.61	0.62	0.62	0.62	0.62	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	2.36	2.37	2.37	2.37	2.37	2.38	2.38	2.38	2.38	2.39	2.39	2.39	2.39	2.40	N/A
Cumulative Unplanned Additions 6/															
Coal Steam	0.00	0.00	0.11	0.47	0.65	0.95	1.55	1.97	1.98	2.14	2.97	3.83	4.75	5.42	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.29	0.44	0.44	0.44	0.44	0.62	N/A
Combustion Turbine/Diesel	0.73	1.56	2.24	2.60	3.10	3.50	3.57	3.91	4.36	4.80	4.80	4.80	4.80	4.80	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.13	0.13	0.13	0.13	0.18	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Unplanned Additions	0.73	1.56	2.35	3.07	3.75	4.46	5.12	6.02	6.69	7.52	8.34	9.20	10.12	11.01	N/A
Cumulative Total Additions	3.09	3.93	4.71	5.44	6.12	6.83	7.50	8.40	9.08	9.90	10.73	11.60	12.52	13.40	N/A





Table 69. Electric Power Projections by Electricity Market Module Region  
Southwest Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	1.47	1.58	1.70	2.36	3.01	3.60	3.99	4.39	4.70	5.11	5.37	5.64	5.94	5.94	8.2%
Petroleum	0.30	0.29	0.29	0.33	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.31	3.9%
Natural Gas	2.38	2.45	2.52	2.59	2.66	2.74	2.81	2.87	2.94	3.00	3.07	3.13	3.18	3.25	2.8%
Other Gaseous Fuels	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.3%
Renewable Sources 4/	2.92	2.98	3.02	3.06	3.10	3.15	3.20	3.25	3.30	3.36	3.44	3.52	3.60	3.69	1.8%
Other	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.0%
Total	7.63	7.85	8.08	8.89	9.62	10.34	10.84	11.37	11.80	12.34	12.74	13.14	13.58	13.75	3.7%
Sales to Utilities	2.04	2.16	2.29	2.79	3.22	3.65	3.95	4.26	4.51	4.83	5.06	5.29	5.53	5.60	8.1%
Generation for Own Use	5.59	5.69	5.79	6.10	6.40	6.69	6.90	7.11	7.29	7.51	7.68	7.85	8.05	8.14	2.2%
Total Electricity Generation	234.81	236.72	240.21	243.64	246.61	248.90	251.44	254.46	256.34	260.45	264.54	269.04	273.81	277.92	1.0%
End-Use Prices (2004 cents per kilowatthour)															
Residential	7.5	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.5	0.0%
Commercial	6.7	6.7	6.7	6.7	6.7	6.8	6.8	6.8	6.9	6.9	6.9	6.9	6.9	7.0	0.4%
Industrial	5.0	5.0	5.0	5.0	5.0	5.1	5.1	5.1	5.2	5.2	5.2	5.2	5.2	5.2	0.4%
Transportation	5.9	5.9	6.0	6.0	6.0	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.1	6.2	0.1%
All Sectors Average	6.5	6.5	6.6	6.5	6.6	6.6	6.6	6.6	6.7	6.7	6.7	6.7	6.7	6.8	0.3%
Prices by Service Category (2004 cents per kilowatthour)															
Generation	4.5	4.5	4.5	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.8	4.8	4.8	4.8	0.9%
Transmission	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7%
Distribution	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	-1.4%
Fuel Consumption (quadrillion Btu) 9/															
Coal	1.60	1.60	1.62	1.64	1.65	1.67	1.71	1.74	1.74	1.75	1.79	1.83	1.87	1.90	0.9%
Natural Gas	0.47	0.48	0.50	0.50	0.50	0.50	0.48	0.48	0.48	0.50	0.48	0.47	0.45	0.44	0.0%
Oil	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.3%
Total	2.08	2.09	2.12	2.15	2.17	2.18	2.20	2.22	2.23	2.26	2.28	2.31	2.33	2.36	0.7%
Fuel Prices (dollars per million Btu)															
Coal	1.39	1.32	1.32	1.29	1.30	1.30	1.30	1.31	1.31	1.31	1.32	1.33	1.33	1.34	0.3%
Natural Gas	4.95	5.12	5.23	5.27	5.40	5.48	5.54	5.65	5.77	5.85	5.93	5.96	6.01	6.17	0.1%
Distillate Fuel	9.01	9.21	9.27	9.38	9.43	9.58	9.63	9.67	9.72	9.81	9.82	9.85	9.89	9.95	0.2%
Residual Fuel	6.21	6.22	6.27	6.40	6.40	6.37	6.41	6.56	6.63	6.65	6.72	6.73	6.72	6.82	1.6%
Biomass	1.69	1.68	1.66	1.68	1.68	1.69	1.72	1.81	1.82	1.84	1.86	1.90	1.89	1.91	3.9%
Emissions 10/															
Total Carbon (million tons)	54.12	54.31	55.10	55.85	56.24	56.73	57.54	58.27	58.52	59.00	59.86	60.89	61.80	62.54	1.1%
Carbon Dioxide (million tons)	198.43	199.14	202.05	204.77	206.20	208.02	211.00	213.65	214.56	216.33	219.50	223.25	226.61	229.30	1.1%
Sulfur Dioxide (million tons)	0.30	0.29	0.27	0.26	0.26	0.25	0.25	0.24	0.23	0.23	0.22	0.23	0.23	0.23	-2.1%
Nitrogen Oxide (million tons)	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	-0.8%
Mercury (tons)	1.84	1.53	1.41	1.39	1.37	1.37	1.11	1.10	0.97	1.04	0.96	0.86	0.87	0.88	-5.8%

Table 69. Electric Power Projections by Electricity Market Module Region  
Southwest Power Pool

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 70. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	11.10	11.10	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21
Other Fossil Steam 2/ Combined Cycle	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.28	0.06	0.06	0.06	0.06
Combustion Turbine/Diesel	4.81	5.15	5.43	5.68	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
Nuclear Power	2.42	2.42	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.08	2.08	2.08	2.08	2.08
Pumped Storage/Other 3/ Fuel Cells	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Renewable Sources 4/ Distributed Generation 5/ Total Capacity	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	36.59	36.52	36.98	37.18	37.40	37.45	37.61	37.78	37.93	38.07	38.19	38.31	38.41	38.47
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	57.12	57.39	58.40	58.84	60.33	60.37	60.54	60.71	60.85	60.00	59.90	60.02	60.12	60.17
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.28	0.53	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79
Nuclear Power	0.00	0.00	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Planned Additions	0.00	0.00	0.44	0.62	0.84	0.88	0.93	0.97	1.02	1.06	1.10	1.15	1.20	1.20
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.99	1.41	2.90	2.94	2.99	3.03	3.07	3.12	3.16	3.21	3.26	3.26
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.25	0.35	0.45	0.53	0.60	0.65	0.70
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.25	0.35	0.45	0.53	0.60	0.65	0.70
Cumulative Total Additions	0.00	0.00	0.99	1.41	2.90	2.94	3.11	3.28	3.42	3.57	3.69	3.81	3.91	3.96



Table 70. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/ Coal	0.48	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.61	0.70	0.79	0.83	0.87	0.91
Petroleum	0.07	0.07	0.08	0.08	0.15	0.14	0.15	0.16	0.17	0.18	0.16	0.17	0.17	0.18
Natural Gas	1.06	1.06	1.09	1.11	1.19	1.22	1.26	1.29	1.33	1.36	1.40	1.44	1.48	1.53
Other Gaseous Fuels	0.09	0.06	0.06	0.06	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Renewable Sources 4/ Other	1.69	1.68	1.69	1.75	1.81	1.85	1.89	1.93	1.97	2.00	2.02	2.05	2.07	2.10
Other	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Total	3.52	3.53	3.59	3.66	3.86	3.92	4.02	4.11	4.27	4.44	4.57	4.69	4.80	4.92
Sales to Utilities	0.49	0.50	0.52	0.56	0.68	0.71	0.76	0.81	0.91	1.01	1.08	1.15	1.21	1.28
Generation for Own Use	3.04	3.03	3.07	3.11	3.17	3.21	3.25	3.30	3.37	3.43	3.49	3.54	3.59	3.64
Total Electricity Generation	240.16	243.56	244.14	263.34	267.16	270.97	272.99	276.32	278.45	280.79	283.12	286.73	290.78	293.42
End-Use Prices (2004 cents per kilowatthour)														
Residential	6.9	6.9	6.7	6.6	6.4	6.4	6.3	6.3	6.2	6.2	6.2	6.2	6.1	6.2
Commercial	6.4	6.3	6.1	5.8	5.7	5.7	5.6	5.5	5.5	5.4	5.5	5.5	5.4	5.4
Industrial	4.6	4.4	4.8	4.6	4.4	4.4	4.3	4.3	4.2	4.2	4.2	4.3	4.1	4.2
Transportation	5.1	5.2	5.7	5.5	5.4	5.4	5.3	5.2	5.1	5.1	5.1	5.2	5.0	5.1
All Sectors Average	6.0	5.9	5.9	5.7	5.6	5.5	5.5	5.4	5.3	5.3	5.4	5.4	5.3	5.3
Prices by Service Category (2004 cents per kilowatthour)														
Generation	3.4	3.3	3.3	3.2	3.0	3.0	2.9	2.8	2.8	2.8	2.8	2.9	2.8	2.9
Transmission	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
Distribution	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
Fuel Consumption (quadrillion Btu) 9/ Coal	0.84	0.83	0.85	0.85	0.85	0.87	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Natural Gas	0.18	0.19	0.14	0.16	0.14	0.16	0.16	0.17	0.17	0.18	0.19	0.21	0.23	0.24
Oil	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.01
Total	1.03	1.04	1.00	1.02	1.01	1.04	1.05	1.06	1.06	1.07	1.08	1.10	1.12	1.13
Fuel Prices (dollars per million Btu)														
Coal	1.09	0.88	1.00	1.16	1.15	1.13	1.14	1.14	1.16	1.14	1.14	1.13	1.12	1.11
Natural Gas	4.62	5.00	7.87	7.66	6.82	6.60	6.15	5.81	5.76	5.64	5.73	5.68	5.19	5.14
Distillate Fuel	7.17	10.14	10.94	11.86	10.64	10.39	9.96	9.70	9.81	9.85	9.64	9.66	9.86	9.89
Residual Fuel	5.64	5.59	8.42	7.90	7.78	7.55	7.18	6.88	6.95	6.91	6.83	6.80	6.87	6.82
Biomass	0.71	0.71	0.71	0.71	0.71	0.71	0.90	1.79	1.78	1.79	1.81	1.82	1.77	1.78
Emissions 10/ Total Carbon (million tons)	27.63	28.23	26.95	27.25	27.21	27.81	28.08	28.25	28.32	28.43	28.58	28.87	29.26	29.47
Carbon Dioxide (million tons)	101.32	103.50	98.81	99.91	99.79	101.97	102.96	103.59	103.85	104.25	104.79	105.85	107.29	108.05
Sulfur Dioxide (million tons)	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11
Nitrogen Oxide (million tons)	0.11	0.10	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Mercury (tons)	1.66	1.62	1.74	1.72	1.64	1.71	1.69	1.55	1.64	1.64	1.52	1.52	1.38	1.30

Table 70. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Electricity Generating Capacity 1/ (gigawatts)															
Electric Power Sector															
Coal Steam	11.21	11.21	11.21	11.74	12.71	13.70	13.87	14.04	14.21	14.85	15.71	16.22	16.62	17.06	1.7%
Other Fossil Steam 2/ Combined Cycle	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-9.6%
Combustion Turbine/Diesel	6.94	6.94	6.94	6.94	6.94	6.94	7.69	8.47	9.34	9.63	9.63	9.63	9.63	9.63	2.4%
Nuclear Power	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.16	2.22	2.84	3.40	4.11	2.1%
Pumped Storage/Other 3/ Fuel Cells	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	N/A
Renewable Sources 4/ Distributed Generation 5/ Total Capacity	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	N/A
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
	38.52	38.63	38.74	39.24	39.47	40.13	40.39	40.73	40.87	41.06	41.25	41.31	41.43	41.44	0.5%
	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.13	0.15	0.33	0.51	0.71	0.88	1.07	N/A
	60.23	60.34	60.45	61.50	62.72	64.39	65.62	66.92	68.13	69.51	70.80	72.19	73.44	74.78	1.0%
Cumulative Planned Additions 6/															
Coal Steam	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	N/A
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	1.79	N/A
Nuclear Power	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	N/A
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/ Distributed Generation 5/ Total Planned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
	1.21	1.21	1.22	1.23	1.23	1.24	1.25	1.25	1.26	1.27	1.27	1.28	1.29	1.29	N/A
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
	3.27	3.27	3.28	3.29	3.29	3.30	3.31	3.31	3.32	3.32	3.33	3.34	3.34	3.35	N/A
Cumulative Unplanned Additions 6/															
Coal Steam	0.00	0.00	0.00	0.53	1.50	2.49	2.66	2.83	3.00	3.64	4.50	5.01	5.41	5.85	N/A
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.75	1.53	2.40	2.68	2.68	2.68	2.68	2.68	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.14	0.76	1.33	2.03	N/A
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/ Distributed Generation 5/ Total Unplanned Additions	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.13	0.15	0.33	0.51	0.71	0.88	1.07	N/A
	0.75	0.86	0.96	1.45	1.68	2.33	2.59	2.91	3.05	3.23	3.42	3.47	3.59	3.59	N/A
	0.00	0.00	0.00	0.02	0.04	0.06	0.11	0.13	0.15	0.33	0.51	0.71	0.88	1.07	N/A
	0.75	0.86	0.96	2.01	3.22	4.88	6.10	7.40	8.60	9.97	11.26	12.64	13.89	15.22	N/A
Cumulative Total Additions	4.02	4.13	4.24	5.29	6.51	8.18	9.41	10.71	11.92	13.30	14.59	15.98	17.23	18.57	N/A

Table 70. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 3/	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	N/A
<b>Commercial and Industrial 8/</b>															
Coal	0.17	0.18	0.19	0.26	0.32	0.38	0.42	0.45	0.49	0.52	0.56	0.60	0.60	0.60	6.9%
Petroleum	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.7%
Natural Gas	0.24	0.25	0.25	0.26	0.26	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.31	2.0%
Other Gaseous Fuels	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.5%
Renewable Sources 4/	0.52	0.53	0.54	0.54	0.55	0.56	0.57	0.58	0.59	0.61	0.63	0.65	0.67	0.70	2.4%
Other	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	N/A
Total	0.96	0.99	1.02	1.09	1.17	1.25	1.30	1.35	1.40	1.46	1.52	1.58	1.61	1.64	3.3%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	94.76	96.32	97.79	99.51	100.57	101.96	103.47	105.25	106.49	108.04	109.61	111.43	112.70	114.23	1.8%
Commercial/Other	94.04	96.27	98.38	100.53	102.74	105.10	107.66	110.17	112.67	115.32	117.93	120.64	123.41	126.13	2.5%
Industrial	76.65	78.04	79.03	80.06	81.11	82.32	83.55	84.87	86.35	87.96	89.54	91.12	92.75	94.44	1.5%
Transportation	2.24	2.27	2.30	2.33	2.36	2.39	2.42	2.45	2.49	2.52	2.55	2.58	2.61	2.65	1.4%
Total Sales	267.69	272.89	277.50	282.43	286.78	291.78	297.10	302.74	307.98	313.83	319.64	325.78	331.47	337.45	1.9%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	2.50	3.49	0.37	0.25	0.14	0.02	0.02	0.03	0.04	0.05	0.07	0.23	0.23	0.14	-13.2%
Gross International Exports	6.33	6.27	6.21	6.14	6.08	6.02	5.96	5.84	5.84	5.84	5.84	5.84	5.84	5.84	-0.9%
Gross Interregional Electricity Imports	10.52	9.95	13.37	13.99	11.57	9.77	10.37	13.11	17.18	20.38	22.33	26.19	29.16	32.44	2.6%
Gross Interregional Electricity Exports	10.45	8.73	7.25	7.52	7.40	6.87	7.70	8.20	7.73	7.67	7.59	8.58	9.08	9.08	-5.2%
Purchases from Combined Heat and Power 8/	1.37	1.45	1.54	1.88	2.17	2.46	2.66	2.87	3.04	3.26	3.41	3.57	3.74	3.78	8.1%
Electric Power Sector Generation for Custome	290.47	293.80	296.85	301.64	308.49	315.01	320.75	324.37	325.28	328.09	332.09	335.49	338.94	342.06	1.4%
Total Net Energy for Load	288.08	293.69	298.67	304.09	308.89	314.37	320.14	326.28	331.96	338.26	344.47	351.05	357.14	363.50	2.0%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	82.42	82.49	82.52	86.46	93.60	100.98	102.21	103.51	104.70	109.38	115.60	119.02	121.77	125.26	1.7%
Petroleum	1.02	1.01	1.13	1.17	1.24	1.20	1.18	1.20	1.21	1.26	1.38	1.47	1.49	1.53	3.5%
Natural Gas	32.41	34.95	36.93	34.84	32.99	28.85	31.59	31.79	30.39	27.07	23.39	22.60	22.36	21.96	-0.3%
Nuclear	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	0.0%
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	166.64	167.37	168.30	171.20	172.68	176.01	177.79	179.89	181.00	182.41	183.75	184.44	185.34	185.33	1.5%
Total Generation	291.38	294.70	297.76	302.54	309.40	315.92	321.65	325.27	326.18	328.99	332.99	336.40	339.85	342.97	1.4%
Sales to Customers	290.47	293.80	296.85	301.64	308.49	315.01	320.75	324.37	325.28	328.09	332.09	335.49	338.94	342.06	1.4%
Generation for Own Use	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	2.7%
Distributed Generation 5/	0.00	0.00	0.00	0.01	0.02	0.02	0.05	0.06	0.07	0.15	0.22	0.31	0.39	0.47	N/A



Table 70. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	0.99	1.06	1.14	1.59	2.02	2.42	2.68	2.96	3.16	3.44	3.61	3.79	3.99	4.00	8.2%
Petroleum	0.17	0.17	0.17	0.19	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.18	3.9%
Natural Gas	1.58	1.62	1.67	1.72	1.77	1.81	1.86	1.91	1.95	1.99	2.03	2.07	2.11	2.16	2.8%
Other Gaseous Fuels	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.3%
Renewable Sources 4/	2.13	2.17	2.20	2.23	2.27	2.30	2.33	2.37	2.41	2.45	2.51	2.57	2.63	2.69	1.8%
Other	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.0%
Total	5.08	5.23	5.38	5.93	6.43	6.91	7.25	7.61	7.90	8.27	8.54	8.81	9.11	9.23	3.8%
Sales to Utilities	1.37	1.45	1.54	1.88	2.17	2.46	2.66	2.87	3.04	3.26	3.41	3.57	3.74	3.78	8.1%
Generation for Own Use	3.71	3.78	3.84	4.05	4.26	4.45	4.59	4.74	4.86	5.01	5.12	5.24	5.38	5.44	2.3%
Total Electricity Generation	296.46	299.93	303.14	308.48	315.84	322.85	328.95	332.94	334.15	337.41	341.75	345.52	349.34	352.66	1.4%
End-Use Prices (2004 cents per kilowatthour)															
Residential	6.2	6.3	6.5	6.7	6.8	6.8	6.8	6.8	6.9	6.9	6.9	7.0	7.1	7.2	0.2%
Commercial	5.5	5.6	5.8	6.0	6.1	6.1	6.1	6.2	6.3	6.3	6.3	6.4	6.5	6.6	0.2%
Industrial	4.3	4.3	4.5	4.6	4.7	4.7	4.8	4.8	4.8	4.8	4.8	4.9	4.9	5.0	0.5%
Transportation	5.2	5.3	5.5	5.6	5.7	5.7	5.8	5.8	5.9	5.9	5.9	6.0	6.0	6.1	0.6%
All Sectors Average	5.4	5.5	5.7	5.8	5.9	6.0	6.0	6.0	6.1	6.1	6.1	6.2	6.2	6.4	0.3%
Prices by Service Category (2004 cents per kilowatthour)															
Generation	2.9	3.0	3.3	3.4	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.7	3.8	3.9	0.6%
Transmission	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.5%
Distribution	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-0.6%
Fuel Consumption (quadrillion Btu) 9/															
Coal	0.88	0.88	0.88	0.91	0.97	1.04	1.05	1.06	1.07	1.11	1.16	1.19	1.21	1.24	1.6%
Natural Gas	0.26	0.28	0.29	0.28	0.27	0.24	0.25	0.25	0.24	0.22	0.19	0.19	0.19	0.18	-0.2%
Oil	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	2.4%
Total	1.15	1.17	1.19	1.21	1.25	1.29	1.31	1.32	1.32	1.34	1.37	1.40	1.42	1.45	1.3%
Fuel Prices (dollars per million Btu)															
Coal	1.12	1.13	1.14	1.17	1.18	1.22	1.25	1.36	1.32	1.32	1.36	1.45	1.44	1.46	1.9%
Natural Gas	5.18	5.34	5.58	5.40	5.45	5.48	5.55	5.66	5.74	5.79	5.84	5.91	5.99	6.34	0.9%
Distillate Fuel	9.89	10.03	10.07	10.28	10.37	10.52	10.63	10.65	10.77	10.90	11.00	11.05	11.13	11.13	0.4%
Residual Fuel	6.98	6.95	7.00	7.10	7.11	7.21	7.30	7.28	7.32	7.48	7.55	7.44	7.47	7.61	1.2%
Biomass	1.77	1.79	1.80	1.80	1.80	1.80	1.86	1.89	1.89	1.90	1.92	1.92	1.93	1.93	3.9%
Emissions 10/															
Total Carbon (million tons)	29.73	30.05	30.31	31.07	32.64	33.99	34.53	34.86	34.95	35.75	36.93	37.70	38.36	39.20	1.3%
Carbon Dioxide (million tons)	109.01	110.18	111.14	113.91	119.69	124.61	126.62	127.82	128.14	131.07	135.40	138.24	140.65	143.73	1.3%
Sulfur Dioxide (million tons)	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.3%
Nitrogen Oxide (million tons)	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.3%
Mercury (tons)	1.25	1.21	1.21	1.21	1.21	1.20	1.19	1.19	1.19	1.20	1.07	0.96	0.96	0.97	-1.9%

Table 70. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/Northwest Power Pool Area

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 71. Electric Power Projections by Electricity Market Module Region  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona-New Mexico Southern Nevada Power Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	16.22	16.22	16.22	16.62	16.62	16.62	17.02	17.02	17.02	17.02	17.02	17.02	17.02	18.14
Other Fossil Steam 2/ Combined Cycle	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	1.89	0.28	0.17	0.17	0.17
Combustion Turbine/Diesel	12.54	15.32	17.12	18.12	18.39	18.39	18.39	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Nuclear Power	4.73	4.68	5.29	5.84	5.84	5.84	5.84	5.84	5.84	5.78	5.78	5.78	5.78	5.78
Pumped Storage/Other 3/ Fuel Cells	2.76	2.76	2.82	2.84	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
Renewable Sources 4/ Distributed Generation 5/ Total Capacity	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6.13	6.20	6.43	6.44	6.52	6.52	6.52	6.53	6.53	6.54	6.54	6.54	6.55	6.55
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	46.46	49.26	51.94	53.95	54.34	54.35	54.75	55.61	55.62	54.14	52.54	52.43	52.44	53.56
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.40	0.40	0.40	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	1.80	2.80	3.07	3.07	3.07	3.93	3.93	3.93	3.93	3.93	3.93	3.93
Nuclear Power	0.00	0.00	0.60	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Planned Additions	0.00	0.00	0.23	0.25	0.32	0.32	0.33	0.33	0.34	0.34	0.34	0.35	0.35	0.36
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	2.63	4.61	4.95	4.96	5.36	6.22	6.23	6.23	6.23	6.24	6.24	6.25
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11
Cumulative Total Additions	0.00	0.00	2.63	4.61	4.95	4.96	5.36	6.22	6.23	6.23	6.23	6.24	6.24	7.36

Table 71. Electric Power Projections by Electricity Market Module Region  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona-New Mexico Southern Nevada Power Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.41	3.01	3.12	3.12	3.12
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.07	0.07
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.48	3.09	3.20	3.20	3.20
<b>Commercial and Industrial 8/</b>														
Coal	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10
Petroleum	0.03	0.05	0.05	0.05	0.06	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Natural Gas	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17
Other Gaseous Fuels	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.28	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.33	0.35	0.36	0.37	0.37	0.38
<b>Electricity Demand</b> (billion kilowatthours)														
Residential	60.23	62.16	63.60	65.14	66.71	68.76	70.54	72.45	74.25	76.18	77.67	79.41	81.35	83.44
Commercial/Other	60.31	61.86	63.44	64.45	66.53	68.73	70.89	73.02	75.22	77.41	79.49	81.53	83.65	86.03
Industrial	36.34	36.74	37.18	37.70	38.11	38.50	38.78	39.20	39.77	40.25	40.74	41.19	41.73	42.33
Transportation	1.11	1.15	1.15	1.17	1.19	1.21	1.23	1.26	1.28	1.30	1.32	1.35	1.37	1.39
Total Sales	158.00	161.92	165.37	168.46	172.53	177.21	181.43	185.93	190.52	195.14	199.21	203.48	208.10	213.20
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Interregional Electricity Imports	14.87	12.56	11.26	12.31	11.62	11.47	13.80	13.73	14.22	12.60	12.25	11.93	9.31	7.53
Gross Interregional Electricity Exports	42.81	48.47	55.88	53.01	51.98	52.62	48.63	47.61	47.50	49.83	51.36	52.63	50.62	52.71
Purchases from Combined Heat and Power 8/	0.15	0.16	0.17	0.18	0.21	0.22	0.23	0.25	0.30	0.35	0.40	0.43	0.47	0.50
Electric Power Sector Generation for Custome	196.43	212.27	223.74	223.02	226.92	232.63	230.67	234.42	238.60	247.36	253.47	259.44	264.85	274.19
Total Net Energy for Load	168.65	176.52	179.29	182.50	186.77	191.70	196.07	200.79	205.62	210.49	214.75	219.18	224.01	229.51
<b>Generation by Fuel Type</b> (billion kilowatthours)														
<b>Electric Power Sector</b>														
Coal	118.16	119.53	117.24	117.14	120.64	122.84	125.48	128.16	128.19	128.18	128.18	128.00	128.01	136.19
Petroleum	1.49	2.71	0.71	0.63	0.64	0.65	0.62	0.63	0.61	0.61	0.62	0.90	0.90	0.97
Natural Gas	43.00	56.54	68.06	64.93	64.18	67.55	62.92	63.82	67.99	76.74	82.82	88.69	94.10	95.13
Nuclear	20.75	20.41	22.10	22.70	23.18	23.23	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26
Pumped Storage/Other 3/	0.10	-0.14	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24
Renewable Sources 4/	13.76	14.02	16.62	18.61	19.27	19.35	19.38	19.53	19.54	19.56	19.57	19.57	19.57	19.63
Total Generation	197.25	213.06	224.49	223.78	227.67	233.38	231.42	235.17	239.36	248.12	254.22	260.19	265.61	274.95
Sales to Customers	196.43	212.27	223.74	223.02	226.92	232.63	230.67	234.42	238.60	247.36	253.47	259.44	264.85	274.19
Generation for Own Use	0.82	0.80	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 71. Electric Power Projections by Electricity Market Module Region  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona-New Mexico Southern Nevada Power Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	0.37	0.39	0.40	0.40	0.39	0.39	0.39	0.39	0.46	0.53	0.60	0.63	0.66	0.69
Petroleum	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Natural Gas	0.59	0.60	0.61	0.62	0.67	0.69	0.71	0.73	0.75	0.77	0.79	0.81	0.83	0.86
Other Gaseous Fuels	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	1.00	1.02	1.04	1.06	1.11	1.13	1.15	1.18	1.27	1.36	1.44	1.50	1.55	1.61
Sales to Utilities	0.15	0.16	0.17	0.18	0.21	0.22	0.23	0.25	0.30	0.35	0.40	0.43	0.47	0.50
Generation for Own Use	0.85	0.86	0.87	0.88	0.90	0.91	0.92	0.93	0.97	1.00	1.04	1.06	1.09	1.11
<b>Total Electricity Generation</b>	<b>198.26</b>	<b>214.08</b>	<b>225.54</b>	<b>224.83</b>	<b>228.79</b>	<b>234.51</b>	<b>232.58</b>	<b>236.35</b>	<b>240.62</b>	<b>249.47</b>	<b>255.66</b>	<b>261.69</b>	<b>267.16</b>	<b>276.56</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)														
Residential	8.7	8.7	9.7	9.9	9.5	9.2	8.9	8.7	8.6	8.6	8.7	8.7	8.6	8.4
Commercial	7.5	7.5	8.6	8.9	8.5	8.2	7.9	7.6	7.4	7.3	7.4	7.4	7.4	7.2
Industrial	5.8	5.7	6.8	7.2	6.8	6.6	6.3	6.0	5.8	5.8	5.8	5.8	5.7	5.5
Transportation	7.1	7.4	8.2	8.6	8.1	7.9	7.6	7.5	7.4	7.4	7.5	7.4	7.3	7.1
All Sectors Average	7.6	7.5	8.6	8.9	8.5	8.2	7.9	7.7	7.5	7.5	7.6	7.6	7.6	7.3
<b>Prices by Service Category</b> (2004 cents per kilowatthour)														
Generation	5.0	5.0	6.2	6.4	6.0	5.7	5.4	5.1	5.0	5.0	5.1	5.0	5.0	4.8
Transmission	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7
Distribution	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
<b>Fuel Consumption (quadrillion Btu) 9/</b>														
Coal	1.22	1.22	1.24	1.24	1.27	1.30	1.33	1.35	1.35	1.35	1.35	1.35	1.35	1.42
Natural Gas	0.39	0.48	0.53	0.51	0.50	0.52	0.49	0.50	0.53	0.59	0.64	0.68	0.72	0.73
Oil	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	1.61	1.70	1.77	1.75	1.78	1.83	1.82	1.86	1.89	1.95	2.00	2.04	2.08	2.16
<b>Fuel Prices (dollars per million Btu)</b>														
Coal	1.09	1.07	1.15	1.21	1.20	1.19	1.21	1.26	1.24	1.23	1.23	1.22	1.21	1.21
Natural Gas	4.92	5.53	7.86	7.90	6.98	6.67	6.11	5.74	5.60	5.61	5.72	5.69	5.20	4.90
Distillate Fuel	7.44	10.80	11.60	12.63	11.48	11.25	10.87	10.30	10.57	10.43	10.01	10.03	10.21	10.25
Residual Fuel	5.64	14.90	14.90	14.90	14.90	7.37	14.90	14.90	6.62	6.90	14.90	14.90	14.90	14.90
Biomass	0.71	0.71	0.71	0.71	0.71	0.71	0.84	1.53	1.56	1.58	1.58	1.63	1.66	1.57
<b>Emissions 10/</b>														
Total Carbon (million tons)	40.96	42.30	43.84	43.46	44.42	45.50	45.72	46.67	47.14	48.18	48.89	49.59	50.22	52.34
Carbon Dioxide (million tons)	150.18	155.09	160.74	159.36	162.87	166.82	167.65	171.11	172.84	176.64	179.25	181.83	184.15	191.91
Sulfur Dioxide (million tons)	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.15
Nitrogen Oxide (million tons)	0.26	0.24	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.18	0.18	0.18
Mercury (tons)	1.74	1.85	1.78	1.81	1.96	1.86	2.01	1.69	1.69	1.68	1.63	1.48	1.25	1.17

Table 71. Electric Power Projections by Electricity Market Module Region  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona-New Mexico Southern Nevada Power Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/</b>															
<b>(gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	19.31	20.49	21.54	22.64	23.76	24.98	26.32	27.61	28.91	30.29	31.74	33.17	34.68	36.13	3.1%
Other Fossil Steam 2/	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-10.7%
Combined Cycle	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	0.9%
Combustion Turbine/Diesel	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	0.8%
Nuclear Power	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	0.2%
Pumped Storage/Other 3/	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	6.56	6.61	6.66	6.72	6.77	6.77	6.83	6.88	6.93	7.04	7.04	7.05	7.05	7.05	0.5%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	N/A
Total Capacity	54.74	55.96	57.07	58.23	59.39	60.62	62.01	63.36	64.71	66.20	67.65	69.09	70.62	72.10	1.5%
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	3.93	N/A
Combustion Turbine/Diesel	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	1.16	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.36	0.36	0.37	0.37	0.37	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.40	0.40	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	6.25	6.25	6.26	6.26	6.26	6.27	6.27	6.27	6.28	6.28	6.28	6.29	6.29	6.30	N/A
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	2.29	3.46	4.52	5.62	6.73	7.96	9.29	10.59	11.88	13.27	14.72	16.15	17.65	19.11	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.05	0.10	0.15	0.20	0.20	0.25	0.30	0.35	0.45	0.45	0.45	0.45	0.45	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.05	N/A
Total Unplanned Additions	2.29	3.51	4.62	5.77	6.93	8.16	9.54	10.89	12.23	13.72	15.17	16.60	18.13	19.61	N/A
Cumulative Total Additions	8.54	9.77	10.88	12.03	13.20	14.42	15.82	17.16	18.51	20.00	21.45	22.89	24.42	25.91	N/A

Table 71. Electric Power Projections by Electricity Market Module Region  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona-New Mexico Southern Nevada Power Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 3/	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	3.12	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	N/A
Total	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	N/A
<b>Commercial and Industrial 8/</b>															
Coal	0.11	0.12	0.12	0.16	0.20	0.24	0.26	0.28	0.31	0.33	0.35	0.37	0.37	0.37	6.9%
Petroleum	0.06	0.06	0.06	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.7%
Natural Gas	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	0.21	0.21	0.21	0.22	0.22	2.0%
Other Gaseous Fuels	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-0.5%
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.39	0.40	0.41	0.46	0.50	0.54	0.57	0.60	0.62	0.65	0.68	0.70	0.71	0.71	3.3%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	85.11	86.93	88.64	90.57	91.94	93.61	95.36	97.37	98.92	100.80	102.71	104.80	106.44	108.32	2.2%
Commercial/Other	88.44	90.87	93.15	95.50	97.93	100.56	103.35	106.09	108.87	111.84	114.72	117.76	120.93	123.92	2.7%
Industrial	42.97	43.62	44.20	44.74	45.35	46.00	46.68	47.46	48.28	49.18	50.09	51.01	51.91	52.85	1.4%
Transportation	1.42	1.44	1.47	1.49	1.51	1.54	1.56	1.59	1.61	1.64	1.67	1.69	1.72	1.75	1.6%
Total Sales	217.94	222.86	227.44	232.30	236.73	241.71	246.96	252.50	257.69	263.46	269.18	275.26	281.00	286.83	2.2%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross International Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	6.42	4.94	6.15	5.24	4.55	4.26	5.07	4.90	5.18	5.49	5.61	4.80	3.75	3.27	-5.0%
Gross Interregional Electricity Exports	51.71	49.64	50.18	48.11	46.05	42.27	40.52	39.70	40.46	41.37	42.15	43.58	44.96	46.94	-0.1%
Purchases from Combined Heat and Power 8/	0.55	0.60	0.64	0.87	1.08	1.28	1.42	1.56	1.67	1.81	1.90	2.00	2.10	2.11	10.3%
Electric Power Sector Generation for Custome	279.38	284.08	288.33	292.38	295.75	297.60	300.68	305.98	312.03	318.83	325.62	334.39	342.98	351.69	2.0%
Total Net Energy for Load	234.64	239.97	244.94	250.37	255.34	260.88	266.65	272.73	278.41	284.75	290.99	297.61	303.86	310.13	2.2%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	144.90	153.54	161.37	169.49	177.73	186.77	196.58	206.12	215.57	225.46	235.34	245.62	255.92	265.68	3.1%
Petroleum	1.01	1.09	1.17	1.24	1.33	1.42	1.61	1.71	1.92	2.01	2.12	2.22	2.38	2.48	-0.3%
Natural Gas	91.58	87.22	83.18	78.59	73.20	65.79	58.49	53.79	49.75	45.74	42.42	40.74	38.86	37.70	-1.5%
Nuclear	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	0.5%
Pumped Storage/Other 3/	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	2.1%
Renewable Sources 4/	19.62	19.96	20.34	20.79	21.22	21.34	21.72	22.09	22.52	23.34	23.48	23.54	23.55	23.56	2.0%
Total Generation	280.13	284.84	289.09	293.13	296.51	298.36	301.43	306.74	312.78	319.58	326.38	335.15	343.73	352.44	2.0%
Sales to Customers	279.38	284.08	288.33	292.38	295.75	297.60	300.68	305.98	312.03	318.83	325.62	334.39	342.98	351.69	2.0%
Generation for Own Use	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	-0.2%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	N/A

Table 71. Electric Power Projections by Electricity Market Module Region  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona-New Mexico Southern Nevada Power Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	0.75	0.81	0.87	1.20	1.53	1.84	2.04	2.24	2.40	2.61	2.74	2.88	3.03	3.03	8.2%
Petroleum	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	3.9%
Natural Gas	0.89	0.91	0.94	0.97	0.99	1.02	1.05	1.07	1.10	1.12	1.14	1.17	1.19	1.21	2.8%
Other Gaseous Fuels	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.3%
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	1.8%
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	1.70	1.78	1.86	2.23	2.59	2.92	3.14	3.37	3.56	3.79	3.95	4.10	4.28	4.31	5.7%
Sales to Utilities	0.55	0.60	0.64	0.87	1.08	1.28	1.42	1.56	1.67	1.81	1.90	2.00	2.10	2.11	10.3%
Generation for Own Use	1.15	1.18	1.22	1.36	1.50	1.63	1.72	1.82	1.89	1.98	2.05	2.11	2.18	2.19	3.7%
Total Electricity Generation	281.83	286.62	290.95	295.37	299.09	301.28	304.58	310.11	316.34	323.37	330.33	339.25	348.03	356.77	2.0%
End-Use Prices (2004 cents per kilowatthour)															
Residential	8.4	8.5	8.7	8.7	8.8	8.8	8.7	8.8	8.9	8.9	9.0	9.0	9.0	9.1	0.2%
Commercial	7.2	7.2	7.4	7.4	7.5	7.5	7.4	7.6	7.7	7.7	7.8	7.9	7.9	8.0	0.3%
Industrial	5.5	5.5	5.7	5.7	5.8	5.8	5.7	5.8	5.8	5.8	5.8	5.8	5.8	5.8	0.1%
Transportation	7.1	7.1	7.3	7.4	7.4	7.4	7.3	7.4	7.5	7.4	7.5	7.5	7.5	7.5	0.0%
All Sectors Average	7.3	7.4	7.6	7.6	7.7	7.7	7.6	7.7	7.8	7.8	7.9	8.0	7.9	8.0	0.2%
Prices by Service Category (2004 cents per kilowatthour)															
Generation	4.8	4.8	5.0	5.0	5.1	5.0	5.0	5.1	5.1	5.1	5.2	5.3	5.2	5.3	0.2%
Transmission	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.8%
Distribution	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-0.3%
Fuel Consumption (quadrillion Btu) 9/															
Coal	1.50	1.57	1.64	1.71	1.78	1.86	1.94	2.03	2.11	2.19	2.27	2.36	2.45	2.53	2.9%
Natural Gas	0.70	0.67	0.64	0.60	0.57	0.51	0.46	0.42	0.39	0.37	0.34	0.33	0.32	0.31	-1.7%
Oil	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	11.9%
Total	2.21	2.25	2.29	2.33	2.36	2.38	2.42	2.47	2.52	2.58	2.64	2.71	2.79	2.86	2.0%
Fuel Prices (dollars per million Btu)															
Coal	1.22	1.26	1.26	1.28	1.29	1.31	1.33	1.36	1.39	1.41	1.43	1.45	1.46	1.46	1.2%
Natural Gas	4.97	5.11	5.36	5.40	5.50	5.54	5.59	5.68	5.78	5.83	5.90	5.98	6.07	6.29	0.5%
Distillate Fuel	10.21	10.40	10.34	10.55	10.60	10.65	10.67	10.63	10.64	10.79	10.78	10.77	10.76	10.80	0.0%
Residual Fuel	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	14.90	N/A
Biomass	1.67	1.62	1.62	1.61	1.62	1.66	1.68	1.67	1.69	1.90	1.90	1.90	1.90	1.90	3.9%
Emissions 10/															
Total Carbon (million tons)	54.04	55.61	57.05	58.47	59.84	61.17	62.73	64.50	66.36	68.25	70.21	72.46	74.69	76.86	2.3%
Carbon Dioxide (million tons)	198.16	203.91	209.19	214.39	219.42	224.30	230.00	236.51	243.30	250.27	257.43	265.70	273.88	281.82	2.3%
Sulfur Dioxide (million tons)	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.3%
Nitrogen Oxide (million tons)	0.19	0.19	0.19	0.20	0.20	0.20	0.21	0.21	0.21	0.22	0.22	0.22	0.23	0.23	-0.1%
Mercury (tons)	1.16	1.15	1.16	1.17	1.17	1.17	1.06	1.04	0.90	0.84	0.83	0.83	0.77	0.77	-3.3%



Table 71. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona-New Mexico Southern Nevada Power Area

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 72. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/California

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	4.14	4.14	4.14	4.14	4.14	4.14	7.23	7.50	8.38	8.38	8.38	8.38	8.96	10.15
Other Fossil Steam 2/ Combined Cycle	16.83	16.06	16.06	16.06	16.06	16.06	16.06	16.06	16.06	13.94	11.82	11.74	11.74	11.74
Combustion Turbine/Diesel	8.90	9.40	12.19	12.70	13.24	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76
Nuclear Power	6.14	6.03	6.27	6.27	6.43	6.43	6.43	6.43	6.43	6.38	6.38	6.38	6.38	6.38
Pumped Storage/Other 3/ Fuel Cells	5.37	5.37	5.39	5.40	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Renewable Sources 4/ Distributed Generation 5/ Total Capacity	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	14.54	14.71	15.00	15.98	17.96	18.15	18.16	18.16	18.17	18.17	18.18	18.31	18.39	18.49
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	59.59	59.40	62.73	64.23	66.93	67.65	70.74	71.02	71.91	69.74	67.63	67.68	68.33	69.63
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	3.37	3.88	4.42	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94
Nuclear Power	0.00	0.00	0.23	0.23	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Planned Additions	0.00	0.00	0.29	1.28	3.23	3.24	3.24	3.25	3.25	3.25	3.26	3.27	3.27	3.28
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	3.89	5.39	8.05	8.58	8.58	8.59	8.59	8.59	8.60	8.60	8.61	8.62
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	3.09	3.36	4.24	4.24	4.24	4.24	4.82	6.01
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.19	0.19	0.19	0.19	0.19	0.19	0.32	0.39	0.49
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.19	3.28	3.56	4.44	4.44	4.44	4.56	5.21	6.50
Cumulative Total Additions	0.00	0.00	3.89	5.39	8.05	8.77	11.86	12.14	13.03	13.03	13.04	13.17	13.82	15.12

Table 72. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/California

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Other Fossil Steam 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.12	4.24	4.32	4.32	4.32
Combined Cycle	0.00	0.00	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.05	0.05	0.05
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.59	0.59	0.59	0.59	0.59	0.59	0.59	2.75	4.87	4.95	4.95	4.95
<b>Commercial and Industrial 8/</b>														
Coal	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.05
Petroleum	0.08	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.21	0.19	0.20	0.20	0.20
Natural Gas	2.24	2.25	2.29	2.32	2.37	2.41	2.46	2.52	2.57	2.62	2.67	2.73	2.80	2.87
Other Gaseous Fuels	0.19	0.19	0.19	0.19	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Renewable Sources 4/	0.20	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.27
Other	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Total	2.79	2.89	2.93	2.98	3.00	3.05	3.12	3.19	3.26	3.33	3.37	3.44	3.52	3.60
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	76.81	80.94	80.65	82.19	83.31	85.06	86.40	87.88	89.32	90.99	92.12	93.49	94.98	96.57
Commercial/Other	107.81	113.80	113.41	115.36	118.77	122.42	125.56	128.38	131.44	134.57	137.63	140.57	143.62	146.83
Industrial	47.01	48.88	48.97	49.66	50.72	51.29	51.67	52.23	53.00	53.37	54.07	54.69	55.34	56.01
Transportation	2.40	2.53	2.50	2.52	2.55	2.58	2.62	2.66	2.69	2.72	2.76	2.79	2.82	2.86
Total Sales	234.04	246.14	245.53	249.72	255.34	261.35	266.24	271.15	276.46	281.65	286.57	291.53	296.77	302.27
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	1.00	1.10	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Gross International Exports	0.52	0.52	0.50	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Gross Interregional Electricity Imports	68.67	68.47	69.73	77.51	70.55	69.65	61.01	59.83	56.58	57.69	56.59	56.85	55.63	53.07
Gross Interregional Electricity Exports	10.22	9.14	6.69	3.23	3.22	3.43	3.72	3.69	4.05	4.09	3.70	3.45	3.57	3.10
Purchases from Combined Heat and Power 8/	3.61	3.95	4.15	4.34	5.61	5.76	6.20	6.58	6.98	7.50	7.61	8.06	8.43	8.89
Electric Power Sector Generation for Custome	203.49	203.77	199.37	192.29	203.84	211.13	224.63	230.48	231.40	242.49	247.92	251.93	258.18	265.59
Total Net Energy for Load	266.03	267.62	267.26	271.60	277.48	283.79	288.79	293.88	291.58	304.26	309.09	314.06	319.35	325.13
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	30.25	31.28	30.80	30.62	30.97	31.50	53.89	56.98	63.33	63.57	63.56	63.55	67.76	76.58
Petroleum	1.97	1.91	0.39	0.50	0.29	0.29	0.51	0.49	0.49	0.77	0.77	1.22	1.14	1.22
Natural Gas	75.17	81.86	75.61	60.99	64.54	69.74	60.61	61.38	56.19	66.65	71.97	74.71	76.54	74.38
Nuclear	43.43	37.97	42.52	43.15	43.32	43.34	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35
Pumped Storage/Other 3/	-0.82	-0.82	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88
Renewable Sources 4/	56.27	54.28	53.18	60.15	67.84	69.39	69.41	71.41	71.17	71.29	71.41	72.23	72.53	73.20
Total Generation	206.26	206.49	201.61	194.53	206.08	213.38	226.88	232.73	233.65	244.74	250.17	254.18	260.43	267.84
Sales to Customers	203.49	203.77	199.37	192.29	203.84	211.13	224.63	230.48	231.40	242.49	247.92	251.93	258.18	265.59
Generation for Own Use	2.78	2.72	2.24	2.24	2.24	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 72. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/California

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	0.51	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.64	0.73	0.82	0.87	0.91	0.95
Petroleum	0.78	0.74	0.88	0.88	1.64	1.60	1.74	1.82	1.88	2.05	1.84	1.94	1.94	2.01
Natural Gas	16.02	16.12	16.51	16.83	18.03	18.49	19.05	19.62	20.15	20.69	21.20	21.81	22.49	23.20
Other Gaseous Fuels	0.97	0.68	0.72	0.72	0.61	0.62	0.63	0.63	0.64	0.65	0.65	0.66	0.66	0.67
Renewable Sources 4/	1.23	1.23	1.24	1.28	1.32	1.35	1.38	1.41	1.44	1.46	1.48	1.49	1.51	1.53
Other	1.37	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
Total	20.88	20.69	21.28	21.64	23.53	23.98	24.73	25.43	26.13	26.96	27.39	28.16	28.90	29.75
Sales to Utilities	3.61	3.95	4.15	4.34	5.61	5.76	6.20	6.58	6.98	7.50	7.61	8.06	8.43	8.89
Generation for Own Use	17.27	16.74	17.12	17.30	17.91	18.23	18.53	18.84	19.15	19.47	19.78	20.10	20.47	20.86
Total Electricity Generation	227.14	227.17	222.89	216.18	229.61	237.36	251.60	258.16	259.78	271.70	277.56	282.34	289.33	297.59
End-Use Prices (2004 cents per kilowatthour)														
Residential	12.4	12.6	13.7	13.9	13.5	12.7	12.4	12.2	11.8	11.6	11.5	11.4	11.2	11.1
Commercial	12.3	11.4	12.2	12.3	11.8	11.2	10.9	10.7	10.3	10.1	10.0	9.9	9.7	9.6
Industrial	10.7	9.8	9.8	9.9	9.5	9.2	9.0	8.7	8.3	8.1	8.0	7.9	7.7	7.6
Transportation	11.0	11.0	11.5	11.6	11.1	10.8	10.5	10.3	9.9	9.7	9.5	9.4	9.2	9.1
All Sectors Average	12.0	11.5	12.2	12.3	11.9	11.3	11.0	10.8	10.4	10.2	10.1	10.0	9.8	9.7
Prices by Service Category (2004 cents per kilowatthour)														
Generation	7.8	7.4	8.2	8.2	7.8	7.6	7.2	7.0	6.6	6.5	6.4	6.3	6.2	6.1
Transmission	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8
Distribution	3.6	3.5	3.5	3.5	3.5	3.1	3.1	3.1	3.1	3.0	3.0	3.0	2.9	2.9
Fuel Consumption (quadrillion Btu) 9/														
Coal	0.31	0.31	0.32	0.32	0.32	0.33	0.52	0.55	0.60	0.60	0.60	0.60	0.64	0.71
Natural Gas	0.72	0.75	0.68	0.57	0.60	0.64	0.57	0.58	0.54	0.61	0.65	0.67	0.68	0.67
Oil	0.02	0.02	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.01
Total	1.05	1.08	1.01	0.90	0.93	0.97	1.10	1.13	1.15	1.22	1.26	1.28	1.33	1.39
Fuel Prices (dollars per million Btu)														
Coal	1.08	1.11	1.19	1.23	1.19	1.20	1.20	1.26	1.23	1.22	1.22	1.22	1.21	1.22
Natural Gas	5.41	5.64	8.93	8.67	7.91	7.64	7.02	6.65	6.47	6.53	6.64	6.61	6.19	6.05
Distillate Fuel	7.38	10.43	11.24	12.16	10.98	10.73	10.55	10.09	10.32	10.23	9.88	9.93	10.12	10.18
Residual Fuel	5.79	5.73	8.62	8.03	8.03	7.87	7.29	7.50	7.53	7.55	7.37	7.35	7.53	7.48
Biomass	0.71	0.71	0.71	0.71	0.71	0.71	0.90	1.97	1.96	1.97	1.98	1.99	1.96	1.96
Emissions 10/														
Total Carbon (million tons)	19.52	20.76	20.03	18.30	18.78	19.56	24.06	24.86	25.69	26.91	27.52	27.93	29.16	31.07
Carbon Dioxide (million tons)	71.59	76.11	73.44	67.12	68.85	71.71	88.23	91.14	94.19	98.66	100.90	102.42	106.93	113.94
Sulfur Dioxide (million tons)	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07
Nitrogen Oxide (million tons)	0.01	0.01	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10
Mercury (tons)	0.30	0.34	0.31	0.30	0.30	0.36	0.35	0.29	0.29	0.30	0.30	0.28	0.25	0.27

Table 72. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/California

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/</b>															
<b>(gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	11.68	13.08	14.06	15.34	15.67	16.66	17.79	19.05	20.27	21.40	22.41	23.41	24.22	25.11	7.2%
Other Fossil Steam 2/	11.43	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	-1.4%
Combined Cycle	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	1.5%
Combustion Turbine/Diesel	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.57	6.84	7.06	7.39	8.03	1.1%
Nuclear Power	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	0.0%
Pumped Storage/Other 3/	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	18.65	18.86	19.06	19.24	19.40	19.56	19.71	19.81	19.98	20.06	20.15	20.24	20.25	20.29	1.2%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.14	0.22	0.28	0.35	N/A
<b>Total Capacity</b>	<b>71.01</b>	<b>72.30</b>	<b>73.48</b>	<b>74.94</b>	<b>75.43</b>	<b>76.58</b>	<b>77.86</b>	<b>79.23</b>	<b>80.60</b>	<b>82.08</b>	<b>83.52</b>	<b>84.89</b>	<b>86.11</b>	<b>87.76</b>	<b>1.5%</b>
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	N/A
Combustion Turbine/Diesel	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	3.28	3.29	3.29	3.30	3.31	3.32	3.32	3.33	3.34	3.35	3.35	3.36	3.37	3.38	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Planned Additions</b>	<b>8.62</b>	<b>8.63</b>	<b>8.63</b>	<b>8.64</b>	<b>8.65</b>	<b>8.66</b>	<b>8.66</b>	<b>8.67</b>	<b>8.68</b>	<b>8.69</b>	<b>8.69</b>	<b>8.70</b>	<b>8.71</b>	<b>8.72</b>	<b>N/A</b>
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	7.54	8.94	9.92	11.20	11.53	12.52	13.65	14.91	16.13	17.26	18.27	19.27	20.08	20.97	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.45	0.67	1.01	1.65	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.64	0.84	1.04	1.22	1.37	1.52	1.66	1.76	1.91	1.99	2.07	2.15	2.15	2.19	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.14	0.22	0.28	0.35	N/A
<b>Total Unplanned Additions</b>	<b>8.19</b>	<b>9.78</b>	<b>10.96</b>	<b>12.42</b>	<b>12.89</b>	<b>14.04</b>	<b>15.31</b>	<b>16.67</b>	<b>18.04</b>	<b>19.51</b>	<b>20.94</b>	<b>22.30</b>	<b>23.51</b>	<b>25.16</b>	<b>N/A</b>
<b>Cumulative Total Additions</b>	<b>16.81</b>	<b>18.41</b>	<b>19.60</b>	<b>21.06</b>	<b>21.54</b>	<b>22.69</b>	<b>23.98</b>	<b>25.34</b>	<b>26.72</b>	<b>28.20</b>	<b>29.63</b>	<b>31.00</b>	<b>32.22</b>	<b>33.87</b>	<b>N/A</b>

Table 72. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/California

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Other Fossil Steam 3/	4.63	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	4.95	N/A
Combined Cycle	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	N/A
Combustion Turbine/Diesel	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	5.26	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	N/A
<b>Commercial and Industrial 8/</b>															
Coal	0.06	0.06	0.06	0.08	0.10	0.12	0.13	0.14	0.16	0.17	0.18	0.19	0.19	0.19	6.9%
Petroleum	0.20	0.19	0.19	0.21	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.7%
Natural Gas	2.93	3.00	3.07	3.15	3.22	3.29	3.36	3.43	3.50	3.56	3.62	3.68	3.74	3.81	2.0%
Other Gaseous Fuels	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-0.5%
Renewable Sources 4/	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.32	0.33	0.34	0.36	0.37	2.4%
Other	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	N/A
Total	3.67	3.74	3.82	3.94	4.02	4.11	4.20	4.29	4.38	4.46	4.54	4.63	4.70	4.78	2.0%
<b>Electricity Demand (billion kilowatthours)</b>															
Residential	97.66	99.01	100.29	101.83	102.68	103.86	105.16	106.75	107.75	109.05	110.38	111.98	112.98	114.26	1.3%
Commercial/Other	150.01	153.17	156.19	159.22	162.32	165.60	169.19	172.74	176.19	179.86	183.50	187.24	190.98	194.79	2.1%
Industrial	56.91	58.07	58.76	59.53	60.28	61.18	62.07	63.01	64.08	65.26	66.40	67.51	68.71	69.94	1.4%
Transportation	2.89	2.93	2.96	2.99	3.03	3.06	3.09	3.13	3.16	3.20	3.23	3.27	3.30	3.34	1.1%
Total Sales	307.47	313.17	318.21	323.58	328.31	333.70	339.52	345.62	351.19	357.37	363.51	370.00	375.97	382.33	1.7%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.20	1.10	1.10	1.20	0.3%
Gross International Exports	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.0%
Gross Interregional Electricity Imports	50.65	48.40	46.97	44.77	44.51	43.64	43.28	42.81	42.86	43.17	43.37	44.92	45.52	47.15	-1.4%
Gross Interregional Electricity Exports	3.76	4.03	7.38	7.79	6.47	8.30	10.56	13.92	18.00	21.13	23.09	25.38	26.81	29.16	4.6%
Purchases from Combined Heat and Power 8/	9.26	9.60	10.03	10.95	11.38	12.02	12.55	13.10	13.61	14.15	14.60	15.03	15.48	15.80	5.5%
Electric Power Sector Generation for Custome	273.61	281.74	291.32	297.63	300.08	306.91	314.50	323.66	332.64	340.90	348.29	355.21	361.49	368.52	2.3%
Total Net Energy for Load	330.44	336.38	341.61	346.24	350.18	354.94	360.45	366.33	371.79	377.76	383.84	390.35	396.25	402.98	1.6%
<b>Generation by Fuel Type (billion kilowatthours)</b>															
<b>Electric Power Sector</b>															
Coal	87.82	98.14	105.42	114.85	117.25	124.59	132.94	142.23	151.19	159.36	166.83	174.12	180.22	186.73	7.1%
Petroleum	1.34	1.46	1.53	1.64	1.66	1.74	1.87	1.97	2.06	2.14	2.21	2.29	2.28	2.29	0.7%
Natural Gas	69.86	66.09	66.68	61.85	60.48	58.60	56.53	55.23	53.80	53.13	52.29	51.16	51.33	51.28	-1.8%
Nuclear	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	0.5%
Pumped Storage/Other 3/	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	0.3%
Renewable Sources 4/	74.38	75.83	77.47	79.07	80.47	81.76	82.95	84.01	85.38	86.05	86.73	87.41	87.45	88.00	1.9%
Total Generation	275.86	283.99	293.57	299.88	302.33	309.16	316.75	325.91	334.89	343.15	350.54	357.45	363.74	370.77	2.3%
Sales to Customers	273.61	281.74	291.32	297.63	300.08	306.91	314.50	323.66	332.64	340.90	348.29	355.21	361.49	368.52	2.3%
Generation for Own Use	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	-0.7%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.09	0.12	0.15	N/A

Table 72. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/California

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Commercial and Industrial 8/</b>															
Coal	1.03	1.11	1.19	1.66	2.11	2.53	2.80	3.09	3.30	3.59	3.77	3.96	4.17	4.17	8.2%
Petroleum	1.96	1.89	1.89	2.12	1.91	1.91	1.91	1.93	1.95	1.97	1.97	1.97	1.97	1.99	3.9%
Natural Gas	23.91	24.60	25.31	26.08	26.79	27.51	28.21	28.90	29.58	30.21	30.83	31.44	32.02	32.71	2.8%
Other Gaseous Fuels	0.68	0.68	0.69	0.69	0.70	0.70	0.71	0.72	0.72	0.72	0.72	0.72	0.72	0.74	0.3%
<b>Renewable Sources 4/</b>															
Other	1.56	1.59	1.61	1.63	1.65	1.68	1.70	1.73	1.76	1.79	1.83	1.87	1.92	1.97	1.8%
Other	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	0.0%
Total	30.53	31.25	32.08	33.57	34.55	35.72	36.73	37.75	38.71	39.67	40.52	41.35	42.19	42.96	2.9%
Sales to Utilities	9.26	9.60	10.03	10.95	11.38	12.02	12.55	13.10	13.61	14.15	14.60	15.03	15.48	15.80	5.5%
Generation for Own Use	21.26	21.66	22.05	22.62	23.17	23.71	24.18	24.65	25.10	25.53	25.92	26.32	26.72	27.16	1.9%
<b>Total Electricity Generation</b>	<b>306.39</b>	<b>315.24</b>	<b>325.65</b>	<b>333.45</b>	<b>336.88</b>	<b>344.88</b>	<b>353.48</b>	<b>363.66</b>	<b>373.60</b>	<b>382.85</b>	<b>391.12</b>	<b>398.90</b>	<b>406.05</b>	<b>413.88</b>	<b>2.3%</b>
<b>End-Use Prices</b> (2004 cents per kilowatthour)															
Residential	11.1	11.0	11.0	10.9	10.9	10.8	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.7	-0.6%
Commercial	9.5	9.5	9.4	9.4	9.3	9.3	9.0	9.1	9.1	9.1	9.0	9.0	9.0	9.0	-0.9%
Industrial	7.6	7.5	7.5	7.5	7.4	7.4	7.1	7.1	7.2	7.1	7.1	7.1	7.1	7.1	-1.2%
Transportation	9.0	8.9	8.9	8.8	8.8	8.7	8.5	8.4	8.5	8.4	8.4	8.4	8.4	8.4	-1.0%
All Sectors Average	9.6	9.6	9.6	9.5	9.5	9.4	9.2	9.2	9.2	9.2	9.1	9.2	9.2	9.2	-0.9%
<b>Prices by Service Category</b> (2004 cents per kilowatthour)															
Generation	6.0	5.9	5.9	5.9	5.9	5.8	5.8	5.8	5.9	5.8	5.8	5.8	5.8	5.8	-0.9%
Transmission	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.2%
Distribution	2.9	2.9	2.8	2.8	2.8	2.8	2.6	2.6	2.5	2.5	2.5	2.5	2.5	2.5	-1.3%
<b>Fuel Consumption (quadrillion Btu) 9/</b>															
Coal	0.81	0.90	0.96	1.04	1.07	1.13	1.20	1.28	1.36	1.43	1.49	1.55	1.60	1.64	6.6%
Natural Gas	0.63	0.61	0.61	0.58	0.57	0.55	0.54	0.53	0.52	0.51	0.51	0.50	0.50	0.50	-1.5%
Oil	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Total	1.46	1.52	1.59	1.64	1.65	1.70	1.76	1.83	1.89	1.96	2.02	2.08	2.12	2.17	2.7%
<b>Fuel Prices (dollars per million Btu)</b>															
Coal	1.22	1.28	1.29	1.33	1.34	1.36	1.39	1.42	1.46	1.49	1.51	1.53	1.54	1.54	1.3%
Natural Gas	6.05	6.18	6.41	6.32	6.41	6.44	6.48	6.59	6.67	6.75	6.82	6.90	6.99	7.27	1.0%
Distillate Fuel	10.14	10.33	10.30	10.50	10.56	10.63	10.66	10.63	10.66	10.81	10.82	10.82	10.82	10.86	0.2%
Residual Fuel	7.52	7.41	7.60	7.66	7.75	7.88	8.10	8.08	8.18	8.39	8.59	8.59	8.76	8.84	1.7%
Biomass	1.95	1.95	1.96	1.95	1.96	1.96	1.95	1.95	2.02	2.02	2.02	2.02	2.04	2.05	4.2%
<b>Emissions 10/</b>															
Total Carbon (million tons)	33.27	35.34	37.17	38.90	39.33	40.90	42.70	44.83	46.81	48.71	50.45	52.09	53.34	54.62	3.8%
Carbon Dioxide (million tons)	121.97	129.58	136.28	142.63	144.22	149.97	156.57	164.36	171.65	178.62	184.99	191.01	195.59	200.28	3.8%
Sulfur Dioxide (million tons)	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.08	1.5%
Nitrogen Oxide (million tons)	0.10	0.11	0.11	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.14	11.1%
Mercury (tons)	0.27	0.28	0.29	0.28	0.28	0.28	0.28	0.28	0.29	0.28	0.28	0.29	0.29	0.29	-0.6%

Table 72. Electric Power Projections by Electricity Market Module Region  
Western Electricity Coordinating Council/California

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 73. Electric Power Projections by Electricity Market Module Region  
United States

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electricity Generating Capacity 1/ (gigawatts)														
Electric Power Sector														
Coal Steam	310.36	309.85	309.33	308.35	309.66	309.89	316.82	318.57	319.60	319.98	317.34	318.35	319.34	323.36
Other Fossil Steam 2/ Combined Cycle	129.36	124.30	122.80	122.78	122.78	122.38	122.38	122.36	122.36	103.34	93.38	87.81	86.47	84.08
Combustion Turbine/Diesel	142.08	158.70	171.62	177.07	181.35	182.96	182.96	183.82	183.82	184.13	185.19	186.92	189.29	194.03
Nuclear Power	128.06	130.14	135.79	137.18	138.12	138.36	138.64	139.04	139.08	136.83	133.89	136.23	139.15	141.62
Pumped Storage/Other 3/ Fuel Cells	99.49	99.60	100.11	100.29	100.55	100.67	100.82	100.94	101.04	101.13	101.14	102.37	104.01	105.77
Renewable Sources 4/ Distributed Generation 5/ Total Capacity	20.73	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	91.80	92.26	95.14	97.24	101.55	101.98	102.34	102.69	103.00	103.31	103.59	104.08	105.03	105.39
	0.00	0.00	0.00	0.00	0.06	0.14	0.19	0.24	0.29	0.34	0.40	0.49	0.62	0.75
	921.87	935.60	955.56	963.67	974.84	977.14	984.92	988.42	989.95	969.81	955.69	957.00	964.67	975.76
Cumulative Planned Additions 6/														
Coal Steam	0.00	0.00	0.38	0.78	2.41	2.93	6.77	8.33	8.33	9.32	9.32	9.32	9.32	9.32
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Combustion Turbine/Diesel	0.00	0.00	13.52	18.97	23.26	24.86	24.86	25.72	25.72	25.72	25.72	25.72	25.72	25.72
Nuclear Power	0.00	0.00	2.76	4.05	4.68	4.84	5.00	5.32	5.32	5.32	5.32	5.32	5.32	5.32
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Planned Additions	0.00	0.00	2.92	5.01	9.30	9.53	9.77	10.00	10.20	10.41	10.62	10.83	11.04	11.06
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	19.64	28.87	39.71	42.22	46.47	49.43	49.64	50.83	51.04	51.25	51.46	51.48
Cumulative Unplanned Additions 6/														
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	3.09	3.36	4.86	4.87	4.87	6.00	6.99	11.01
Other Fossil Steam 2/ Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.31	1.37	3.11	5.48	10.22
Nuclear Power	0.00	0.00	3.53	3.75	4.06	4.26	4.53	4.72	4.85	4.85	5.83	8.66	11.59	14.05
Pumped Storage/Other 3/ Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/ Distributed Generation 5/ Total Unplanned Additions	0.00	0.00	0.00	0.00	0.00	0.19	0.32	0.44	0.54	0.64	0.72	1.00	1.74	2.08
	0.00	0.00	0.00	0.00	0.06	0.14	0.19	0.24	0.29	0.34	0.40	0.49	0.62	0.75
	0.00	0.00	3.53	3.75	4.12	4.59	8.13	8.76	10.55	11.02	13.20	20.25	28.60	41.75
Cumulative Total Additions	0.00	0.00	23.17	32.62	43.83	46.81	54.59	58.20	60.18	61.85	64.23	71.50	80.06	93.22

Table 73. Electric Power Projections by Electricity Market Module Region  
United States

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Cumulative Retirements 7/</b>														
Coal Steam	0.00	0.00	0.90	2.28	2.60	2.89	2.89	2.98	3.45	4.07	6.71	6.82	6.82	6.82
Other Fossil Steam 3/	0.00	0.00	1.56	1.59	1.59	1.98	1.98	2.00	2.00	21.02	30.98	36.56	37.89	40.29
Combined Cycle	0.00	0.00	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60
Combustion Turbine/Diesel	0.00	0.00	0.94	1.06	1.06	1.17	1.34	1.44	1.53	3.78	7.71	8.20	8.20	8.20
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 4/	0.00	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Total	0.00	0.00	4.05	5.59	5.91	6.70	6.87	7.08	7.64	29.53	46.05	52.23	53.57	55.96
<b>Commercial and Industrial 8/</b>														
Coal	4.19	4.12	4.25	4.25	4.22	4.22	4.22	4.22	4.72	5.22	5.71	5.95	6.19	6.42
Petroleum	0.77	1.56	1.56	1.56	1.65	1.63	1.69	1.76	1.80	1.94	1.77	1.85	1.84	1.88
Natural Gas	15.70	15.78	16.08	16.30	16.59	16.90	17.27	17.66	18.01	18.38	18.73	19.14	19.60	20.09
Other Gaseous Fuels	1.77	1.77	1.77	1.77	1.45	1.46	1.47	1.47	1.48	1.48	1.49	1.49	1.50	1.50
Renewable Sources 4/	5.32	5.38	5.43	5.68	5.94	6.13	6.33	6.57	6.70	6.81	6.90	6.99	7.09	7.19
Other	0.74	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Total	28.50	29.34	29.82	30.29	30.59	31.07	31.71	32.41	33.44	34.55	35.33	36.16	36.95	37.83
<b>Electricity Demand (billion kilowatthours)</b>														
Residential	1268.34	1282.28	1341.43	1352.03	1376.10	1409.59	1434.35	1460.07	1483.32	1510.05	1527.99	1550.43	1575.08	1601.12
Commercial/Other	1195.44	1219.86	1278.61	1284.42	1321.08	1360.75	1395.95	1428.83	1462.76	1496.60	1528.08	1558.87	1590.99	1624.68
Industrial	1000.57	1010.37	1026.67	1035.17	1040.86	1047.95	1050.99	1059.09	1070.80	1078.63	1086.44	1093.69	1102.20	1112.42
Transportation	24.41	24.68	24.91	25.07	25.31	25.59	25.92	26.27	26.54	26.81	27.07	27.34	27.60	27.86
Total Sales	3488.76	3537.19	3671.61	3696.69	3763.36	3843.89	3907.21	3974.26	4043.42	4112.09	4169.58	4230.33	4295.88	4366.09
<b>Net Energy for Load (billion kilowatthours) 7/</b>														
Gross International Imports	30.32	34.11	46.99	40.69	32.66	38.97	41.88	42.25	42.93	42.67	40.36	40.27	41.12	38.12
Gross International Exports	24.14	23.04	24.71	24.76	23.39	22.37	21.45	20.56	20.07	19.78	19.11	18.46	17.84	17.24
Gross Interregional Electricity Imports	347.49	370.93	294.29	309.97	330.63	335.82	331.93	332.28	333.04	319.85	308.62	296.87	278.83	262.73
Gross Interregional Electricity Exports	351.80	375.60	297.71	313.85	335.00	340.40	336.44	336.91	337.75	324.27	312.98	301.12	282.84	266.54
Purchases from Combined Heat and Power 8/	24.41	25.95	27.32	28.77	36.70	37.66	40.51	42.97	47.53	52.86	55.44	59.15	62.28	66.02
Electric Power Sector Generation for Custome	3693.56	3767.53	3872.74	3902.45	3970.17	4045.58	4102.78	4167.65	4212.34	4297.37	4354.58	4411.51	4473.08	4545.83
Total Net Energy for Load	3719.85	3799.89	3918.93	3943.26	4011.76	4095.26	4159.21	4227.68	4278.03	4368.69	4426.92	4488.21	4554.63	4628.93
<b>Generation by Fuel Type (billion kilowatthours)</b>														
<b>Electric Power Sector</b>														
Coal	1952.96	1953.97	2018.06	2031.10	2067.85	2111.23	2167.66	2194.77	2203.62	2230.48	2229.00	2234.35	2239.23	2264.33
Petroleum	115.41	115.17	109.49	103.81	88.43	89.27	90.78	92.57	91.54	93.64	94.04	94.73	91.08	90.31
Natural Gas	567.32	618.60	666.79	635.48	632.91	659.36	652.38	672.61	709.48	767.75	820.96	859.71	901.88	929.94
Nuclear	763.73	788.55	774.07	787.36	805.57	806.87	808.32	808.69	809.79	810.75	811.00	818.16	829.44	842.61
Pumped Storage/Other 3/	-5.91	-5.62	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75
Renewable Sources 4/	326.78	322.93	341.04	381.45	412.20	415.68	420.55	435.94	434.86	431.68	436.39	441.35	448.23	455.45
Total Generation	3720.29	3793.60	3900.71	3930.44	3998.22	4073.67	4130.93	4195.84	4240.53	4325.55	4382.63	4439.55	4501.12	4573.88
Sales to Customers	3693.56	3767.53	3872.74	3902.45	3970.17	4045.58	4102.78	4167.65	4212.34	4297.37	4354.58	4411.51	4473.08	4545.83
Generation for Own Use	26.73	26.07	27.97	27.99	28.05	28.09	28.15	28.19	28.19	28.19	28.04	28.04	28.04	28.04
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.03	0.06	0.09	0.10	0.13	0.15	0.17	0.21	0.27	0.33

Table 73. Electric Power Projections by Electricity Market Module Region  
United States

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial 8/														
Coal	21.27	22.59	22.85	22.85	22.79	22.79	22.79	22.79	26.69	30.60	34.51	36.38	38.25	40.06
Petroleum	5.26	4.95	5.94	5.94	10.99	10.71	11.67	12.25	12.62	13.76	12.37	13.05	13.01	13.47
Natural Gas	82.51	83.04	85.03	86.71	92.90	95.26	98.15	101.11	103.83	106.60	109.25	112.38	115.85	119.52
Other Gaseous Fuels	6.52	4.54	4.84	4.84	4.09	4.15	4.20	4.26	4.30	4.34	4.38	4.42	4.46	4.49
Renewable Sources 4/	34.69	34.63	34.82	36.00	37.17	38.01	38.85	39.80	40.51	41.12	41.62	42.09	42.63	43.20
Other	11.41	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55
Total	161.67	161.29	165.03	167.88	179.49	182.48	187.22	191.76	199.51	207.98	213.67	219.87	225.75	232.30
Sales to Utilities	24.41	25.95	27.32	28.77	36.70	37.66	40.51	42.97	47.53	52.86	55.44	59.15	62.28	66.02
Generation for Own Use	137.25	135.34	137.71	139.11	142.79	144.82	146.72	148.79	151.97	155.12	158.24	160.72	163.47	166.28
Total Electricity Generation	3881.95	3954.89	4065.74	4098.32	4177.73	4256.21	4318.24	4387.70	4440.17	4533.68	4596.48	4659.64	4727.14	4806.51
End-Use Prices (2004 cents per kilowatthour)														
Residential	8.9	8.9	9.8	9.5	8.9	8.6	8.5	8.5	8.4	8.3	8.4	8.4	8.3	8.3
Commercial	8.2	8.0	8.7	8.6	8.2	7.9	7.8	7.6	7.5	7.4	7.5	7.5	7.4	7.4
Industrial	5.3	5.3	6.0	6.0	5.9	5.7	5.5	5.3	5.2	5.1	5.2	5.2	5.1	5.1
Transportation	7.4	7.4	7.8	8.0	7.5	7.2	7.1	7.1	7.0	7.0	7.0	7.0	6.9	6.9
All Sectors Average	7.6	7.6	8.3	8.2	7.8	7.6	7.4	7.3	7.2	7.1	7.2	7.2	7.1	7.1
Prices by Service Category (2004 cents per kilowatthour)														
Generation	5.0	5.0	5.8	5.6	5.3	5.0	4.9	4.7	4.6	4.6	4.7	4.7	4.6	4.6
Transmission	0.6	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Distribution	2.1	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9
Fuel Consumption (quadrillion Btu) 9/														
Coal	20.37	20.47	21.14	21.28	21.65	22.11	22.65	22.92	22.98	23.28	23.26	23.30	23.35	23.57
Natural Gas	5.26	5.49	5.53	5.29	5.33	5.54	5.49	5.65	5.93	6.34	6.73	7.01	7.32	7.50
Oil	1.21	1.20	1.14	1.08	0.93	0.94	0.96	0.97	0.96	0.98	0.99	1.00	0.96	0.95
Total	26.84	27.15	27.81	27.65	27.92	28.60	29.10	29.54	29.88	30.60	30.98	31.30	31.63	32.02
Fuel Prices (dollars per million Btu)														
Coal	1.33	1.36	1.50	1.53	1.51	1.50	1.47	1.48	1.45	1.44	1.43	1.41	1.40	1.40
Natural Gas	5.66	5.92	8.09	7.24	6.54	6.22	5.77	5.46	5.26	5.24	5.36	5.28	5.08	5.06
Distillate Fuel	6.65	9.23	9.71	10.61	10.06	9.80	9.38	9.04	9.04	9.16	8.85	8.98	9.02	9.23
Residual Fuel	4.90	4.76	6.98	6.55	6.57	6.35	5.99	5.70	5.72	5.71	5.65	5.67	5.72	5.78
Biomass	1.34	1.29	1.49	1.49	1.77	1.75	1.77	1.85	1.82	1.81	1.84	1.85	1.86	1.91
Emissions 10/														
Total Carbon (million tons)	684.88	690.82	713.28	712.10	719.63	736.41	751.28	761.19	767.47	782.77	788.66	794.32	799.85	808.59
Carbon Dioxide (million tons)	2511.23	2533.01	2615.37	2611.02	2638.63	2700.17	2754.71	2791.03	2814.07	2870.15	2891.75	2912.50	2932.79	2964.83
Sulfur Dioxide (million tons)	10.60	10.89	10.74	10.32	9.29	8.01	6.55	5.91	5.54	5.25	4.96	4.80	4.63	4.45
Nitrogen Oxide (million tons)	4.12	3.74	3.90	3.75	3.79	3.90	2.37	2.34	2.36	2.38	2.39	2.33	2.10	2.09
Mercury (tons)	50.70	53.31	53.64	52.70	52.60	50.95	48.90	37.73	37.68	36.99	32.81	30.65	24.04	22.25

Table 73. Electric Power Projections by Electricity Market Module Region  
United States

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electricity Generating Capacity 1/ (gigawatts)</b>															
<b>Electric Power Sector</b>															
Coal Steam	327.72	332.83	338.32	345.25	351.88	360.82	370.13	380.54	390.08	401.84	415.33	430.40	445.67	457.42	1.5%
Other Fossil Steam 2/	81.42	80.42	80.33	80.33	80.33	80.33	80.33	79.51	79.31	78.69	78.62	75.80	75.35	75.35	-1.9%
Combined Cycle	199.19	205.37	209.41	213.76	216.81	218.66	220.80	223.32	225.71	227.62	227.76	228.97	229.12	230.62	1.4%
Combustion Turbine/Diesel	144.17	145.52	147.30	148.98	150.65	152.47	154.24	156.77	158.83	161.18	163.51	166.71	169.49	173.69	1.1%
Nuclear Power	107.65	108.48	108.75	108.75	108.75	108.75	108.75	108.75	108.75	108.75	108.75	108.75	108.75	108.75	0.3%
Pumped Storage/Other 3/	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	20.76	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	106.34	106.83	107.35	108.23	108.76	109.75	110.40	111.17	111.81	112.51	112.95	113.35	113.56	114.06	0.8%
Distributed Generation 5/	0.88	1.05	1.21	1.39	1.56	1.73	1.95	2.14	2.43	2.99	3.56	4.30	4.87	5.52	N/A
Total Capacity	988.11	1001.26	1013.44	1027.45	1039.49	1053.27	1067.36	1082.97	1097.70	1114.34	1131.24	1149.04	1167.58	1186.17	0.9%
<b>Cumulative Planned Additions 6/</b>															
Coal Steam	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	9.32	N/A
Other Fossil Steam 2/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	N/A
Combined Cycle	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	25.72	N/A
Combustion Turbine/Diesel	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	5.32	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	11.08	11.10	11.12	11.14	11.16	11.18	11.21	11.23	11.25	11.27	11.29	11.32	11.34	11.36	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	51.50	51.51	51.54	51.56	51.58	51.60	51.62	51.65	51.67	51.69	51.71	51.73	51.76	51.78	N/A
<b>Cumulative Unplanned Additions 6/</b>															
Coal Steam	15.37	20.48	25.97	32.90	39.53	48.47	57.78	68.19	77.73	89.49	102.98	118.05	133.32	145.07	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	15.37	21.55	25.60	29.94	32.99	34.85	36.98	39.50	41.90	43.80	43.95	45.15	45.31	46.81	N/A
Combustion Turbine/Diesel	16.60	17.99	19.77	21.45	23.12	24.94	26.71	29.24	31.30	33.65	35.98	39.18	41.96	46.16	N/A
Nuclear Power	5.37	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	N/A
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	3.01	3.48	3.98	4.84	5.35	6.31	6.94	7.69	8.31	8.98	9.40	9.78	9.97	10.44	N/A
Distributed Generation 5/	0.88	1.05	1.21	1.39	1.56	1.73	1.95	2.14	2.43	2.99	3.56	4.30	4.87	5.52	N/A
Total Unplanned Additions	56.59	70.55	82.53	96.52	108.54	122.30	136.37	152.77	167.67	184.91	201.87	222.47	241.44	260.00	N/A
Cumulative Total Additions	108.09	122.07	134.07	148.08	160.12	173.90	187.99	204.41	219.34	236.60	253.58	274.20	293.19	311.78	N/A

Table 73. Electric Power Projections by Electricity Market Module Region  
United States

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Cumulative Retirements 7/</b>															
Coal Steam	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	6.82	N/A
Other Fossil Steam 3/	42.95	43.94	44.04	44.04	44.04	44.04	44.04	44.85	45.05	45.67	45.74	48.57	49.02	49.02	N/A
Combined Cycle	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	0.60	N/A
Combustion Turbine/Diesel	8.20	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	8.23	N/A
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	N/A
Total	58.62	59.65	59.75	59.75	59.75	59.75	59.75	60.56	60.76	61.38	61.46	64.28	64.73	64.73	N/A
<b>Commercial and Industrial 8/</b>															
Coal	6.84	7.26	7.68	10.16	12.65	15.13	16.49	17.86	19.22	20.66	22.11	23.55	23.57	23.58	6.9%
Petroleum	1.84	1.78	1.79	1.97	1.80	1.80	1.82	1.83	1.85	1.85	1.85	1.85	1.86	1.87	0.7%
Natural Gas	20.58	21.06	21.55	22.08	22.57	23.07	23.56	24.04	24.51	24.95	25.39	25.81	26.26	26.70	2.0%
Other Gaseous Fuels	1.51	1.51	1.52	1.52	1.53	1.53	1.54	1.54	1.55	1.55	1.55	1.55	1.55	1.56	-0.5%
Renewable Sources 4/	7.32	7.46	7.58	7.70	7.82	7.95	8.08	8.23	8.40	8.59	8.86	9.18	9.52	9.89	2.4%
Other	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	N/A
Total	38.83	39.81	40.85	44.17	47.10	50.22	52.22	54.23	56.26	58.33	60.48	62.68	63.49	64.33	3.1%
<b>Electricity Demand</b> (billion kilowatthours)															
Residential	1619.59	1641.70	1663.47	1689.47	1704.55	1724.06	1744.20	1768.90	1785.27	1806.81	1828.88	1855.63	1873.44	1895.33	1.5%
Commercial/Other	1658.77	1692.82	1726.15	1760.57	1794.89	1830.71	1868.22	1905.34	1942.65	1982.55	2021.65	2063.83	2107.02	2148.81	2.2%
Industrial	1122.21	1134.07	1141.66	1146.28	1155.37	1162.75	1170.59	1182.55	1194.03	1208.22	1222.65	1236.45	1250.08	1261.19	0.9%
Transportation	28.13	28.41	28.67	28.92	29.17	29.41	29.66	29.92	30.18	30.44	30.70	30.96	31.22	31.47	0.9%
Total Sales	4428.71	4496.99	4559.95	4625.25	4683.98	4746.93	4812.68	4886.70	4952.12	5028.02	5103.88	5186.87	5261.76	5336.81	1.6%
<b>Net Energy for Load (billion kilowatthours) 7/</b>															
Gross International Imports	34.18	33.72	28.84	29.40	28.73	28.43	30.14	26.99	27.51	27.41	26.77	26.86	26.66	26.86	-0.9%
Gross International Exports	16.65	16.09	15.55	15.03	14.52	14.03	13.65	13.29	12.94	12.94	12.94	12.94	12.94	12.94	-2.2%
Gross Interregional Electricity Imports	245.82	233.42	225.70	215.58	205.02	194.85	193.35	193.61	199.98	195.97	192.40	191.18	190.35	192.94	-2.5%
Gross Interregional Electricity Exports	249.41	236.89	229.14	218.95	208.30	198.06	196.52	196.79	203.28	199.20	195.55	194.31	193.46	196.10	-2.5%
Purchases from Combined Heat and Power 8/	70.00	73.74	78.03	93.98	106.46	119.51	128.81	138.44	146.29	156.01	162.93	169.74	177.23	179.41	7.7%
Electric Power Sector Generation for Custome	4611.36	4679.89	4746.62	4798.54	4848.44	4901.87	4959.90	5031.47	5092.19	5163.20	5236.73	5317.31	5389.22	5466.17	1.4%
Total Net Energy for Load	4695.30	4767.80	4834.50	4903.53	4965.83	5032.57	5102.02	5180.43	5249.75	5330.46	5410.33	5497.85	5577.07	5656.34	1.5%
<b>Generation by Fuel Type</b> (billion kilowatthours)															
<b>Electric Power Sector</b>															
Coal	2298.33	2341.83	2383.57	2435.22	2484.20	2546.39	2612.24	2687.49	2757.45	2834.03	2926.37	3027.81	3127.27	3205.45	1.9%
Petroleum	90.48	90.60	93.44	92.44	94.00	94.06	93.05	94.05	95.04	98.29	100.10	100.79	101.19	101.33	-0.5%
Natural Gas	943.12	958.38	972.40	967.77	964.25	949.21	939.07	928.33	916.33	902.08	879.62	855.26	826.60	821.83	1.1%
Nuclear	856.85	865.86	870.32	870.70	870.70	870.70	870.70	870.70	870.70	870.70	870.70	870.70	870.70	870.59	0.4%
Pumped Storage/Other 3/	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	-8.75	1.7%
Renewable Sources 4/	459.37	460.01	463.68	469.21	472.08	478.31	481.63	487.69	489.47	494.90	496.74	499.53	500.25	503.77	1.7%
Total Generation	4639.41	4707.94	4774.67	4826.59	4876.49	4929.91	4987.95	5059.51	5120.24	5191.25	5264.77	5345.35	5417.26	5494.21	1.4%
Sales to Customers	4611.36	4679.89	4746.62	4798.54	4848.44	4901.87	4959.90	5031.47	5092.19	5163.20	5236.73	5317.31	5389.22	5466.17	1.4%
Generation for Own Use	28.04	28.04	28.04	28.04	28.04	28.04	28.04	28.04	28.04	28.04	28.04	28.04	28.04	28.04	0.3%
Distributed Generation 5/	0.39	0.46	0.53	0.61	0.68	0.76	0.85	0.94	1.07	1.31	1.56	1.88	2.13	2.42	N/A

Table 73. Electric Power Projections by Electricity Market Module Region  
United States

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial 8/															
Coal	43.41	46.71	50.00	69.57	88.70	106.19	117.69	129.64	138.64	150.80	158.55	166.23	175.13	175.23	8.2%
Petroleum	13.17	12.67	12.72	14.24	12.80	12.83	12.85	12.99	13.12	13.22	13.23	13.24	13.25	13.34	3.9%
Natural Gas	123.19	126.74	130.40	134.39	138.00	141.76	145.36	148.88	152.41	155.64	158.85	161.99	164.99	168.53	2.8%
Other Gaseous Fuels	4.53	4.57	4.61	4.65	4.69	4.73	4.77	4.81	4.85	4.85	4.85	4.85	4.85	4.96	0.3%
Renewable Sources 4/	43.92	44.68	45.31	45.94	46.62	47.30	48.00	48.77	49.59	50.51	51.60	52.79	54.05	55.37	1.8%
Other	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	11.55	0.0%
Total	239.78	246.92	254.61	280.34	302.37	324.36	340.23	356.64	370.17	386.57	398.63	410.65	423.81	428.98	3.8%
Sales to Utilities	70.00	73.74	78.03	93.98	106.46	119.51	128.81	138.44	146.29	156.01	162.93	169.74	177.23	179.41	7.7%
Generation for Own Use	169.78	173.18	176.58	186.36	195.90	204.85	211.43	218.20	223.88	230.56	235.70	240.91	246.58	249.57	2.4%
Total Electricity Generation	4879.57	4955.32	5029.81	5107.54	5179.53	5255.03	5329.04	5417.09	5491.47	5579.13	5664.96	5757.88	5843.21	5925.61	1.6%
End-Use Prices (2004 cents per kilowatthour)															
Residential	8.3	8.3	8.4	8.3	8.4	8.4	8.4	8.4	8.4	8.4	8.5	8.4	8.5	8.5	-0.2%
Commercial	7.4	7.4	7.5	7.5	7.6	7.6	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.8	-0.1%
Industrial	5.1	5.2	5.2	5.2	5.3	5.3	5.3	5.3	5.4	5.4	5.4	5.4	5.4	5.4	0.1%
Transportation	6.9	7.0	7.0	7.0	7.1	7.1	7.0	7.1	7.1	7.1	7.1	7.1	7.1	7.2	-0.1%
All Sectors Average	7.1	7.2	7.3	7.2	7.3	7.3	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.5	0.0%
Prices by Service Category (2004 cents per kilowatthour)															
Generation	4.6	4.7	4.8	4.8	4.8	4.8	4.8	4.9	5.0	5.0	5.0	5.0	5.0	5.1	0.1%
Transmission	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.9%
Distribution	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-0.6%
Fuel Consumption (quadrillion Btu) 9/															
Coal	23.87	24.25	24.59	25.02	25.41	25.91	26.42	27.02	27.54	28.09	28.77	29.50	30.19	30.74	1.6%
Natural Gas	7.55	7.62	7.70	7.65	7.60	7.49	7.41	7.32	7.23	7.11	6.96	6.78	6.57	6.54	0.7%
Oil	0.95	0.95	0.98	0.97	0.99	0.99	0.98	0.99	1.00	1.03	1.05	1.06	1.07	1.07	-0.4%
Total	32.38	32.82	33.27	33.64	34.01	34.38	34.81	35.33	35.77	36.24	36.78	37.34	37.83	38.35	1.3%
Fuel Prices (dollars per million Btu)															
Coal	1.39	1.39	1.39	1.39	1.40	1.40	1.41	1.43	1.44	1.46	1.47	1.49	1.50	1.51	0.4%
Natural Gas	5.10	5.26	5.41	5.40	5.52	5.59	5.65	5.76	5.87	5.93	6.02	6.06	6.12	6.26	0.2%
Distillate Fuel	9.23	9.43	9.48	9.62	9.67	9.85	9.92	9.99	10.05	10.12	10.14	10.19	10.21	10.28	0.4%
Residual Fuel	5.83	5.86	5.90	6.02	6.06	6.14	6.27	6.36	6.43	6.47	6.54	6.56	6.63	6.73	1.3%
Biomass	1.91	1.90	1.91	1.91	1.92	1.91	1.92	1.93	1.91	1.91	1.92	1.92	1.92	1.93	1.6%
Emissions 10/															
Total Carbon (million tons)	817.90	829.72	841.31	852.11	863.07	875.01	887.86	903.49	917.14	931.46	948.44	966.15	982.21	997.20	1.4%
Carbon Dioxide (million tons)	2998.96	3042.29	3084.79	3124.39	3164.58	3208.37	3255.47	3312.81	3362.85	3415.34	3477.62	3542.55	3601.43	3656.42	1.4%
Sulfur Dioxide (million tons)	4.31	4.19	4.11	4.04	3.94	3.91	3.86	3.82	3.80	3.78	3.75	3.75	3.73	3.72	-4.0%
Nitrogen Oxide (million tons)	2.10	2.11	2.12	2.13	2.13	2.13	2.14	2.15	2.16	2.16	2.18	2.19	2.17	2.17	-2.1%
Mercury (tons)	21.76	20.76	19.68	18.74	18.61	18.28	17.60	17.06	16.59	16.41	15.88	15.40	15.24	15.31	-4.7%

Table 73. Electric Power Projections by Electricity Market Module Region  
United States

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2004.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

10/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003 and 2004 electricity generating capacity and projected planned additions: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2003 and 2004 data: Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005) and supporting databases. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 74. Electricity Generation by Electricity Market Module Region and Source  
(billion kilowatthours)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>East Central Area Reliability Coordination Agreement</b>															
Coal	503.53	495.95	539.67	540.85	548.95	557.78	559.95	562.23	565.29	567.67	567.98	567.07	565.86	566.91	568.40
Petroleum	4.95	5.71	4.25	4.17	4.24	4.25	4.46	4.41	4.18	3.65	3.49	3.41	3.37	3.61	3.80
Natural Gas	16.81	19.56	38.67	36.22	34.52	34.99	35.44	35.84	38.25	43.44	49.95	53.90	57.11	61.23	62.11
Nuclear	49.05	60.48	51.03	51.96	58.71	59.35	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98
Pumped Storage/Other 1/	-1.99	-1.49	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79
Renewables 2/	6.43	5.99	6.53	7.02	8.37	8.53	9.22	11.73	11.54	11.10	12.32	12.66	15.45	15.31	14.66
Total	578.78	586.20	638.36	638.42	652.99	663.12	667.25	672.41	677.45	684.05	691.94	695.23	699.98	705.25	707.16
<b>Electric Reliability Council of Texas</b>															
Coal	111.52	113.01	105.37	105.49	106.37	108.17	109.94	110.86	110.82	110.80	110.61	110.42	110.00	116.16	116.15
Petroleum	2.13	1.34	0.87	0.80	0.71	0.72	0.80	0.92	0.91	0.91	0.93	0.96	1.26	1.28	1.27
Natural Gas	121.42	119.66	155.75	152.69	151.48	155.98	157.36	160.97	165.63	169.95	173.97	177.61	181.73	180.75	184.96
Nuclear	33.44	40.44	37.67	38.31	38.43	38.60	38.77	38.94	39.06	39.15	39.21	39.21	39.21	40.43	41.64
Pumped Storage/Other 1/	0.89	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewables 2/	3.11	3.70	5.79	8.50	13.19	13.74	14.28	14.51	15.09	15.66	16.41	17.12	17.81	18.03	18.05
Total	272.51	279.43	305.47	305.78	310.21	317.27	321.23	326.29	331.65	336.63	341.30	345.50	350.21	356.88	362.31
<b>Mid-Atlantic Area Council</b>															
Coal	125.88	123.30	128.59	130.70	133.57	138.11	141.66	145.23	131.41	145.29	145.31	145.33	146.32	146.28	146.54
Petroleum	10.51	9.41	8.52	6.90	7.43	7.84	7.74	7.68	7.79	7.58	7.58	7.61	7.58	7.60	7.55
Natural Gas	20.32	26.14	27.50	25.63	21.43	21.19	22.34	24.41	30.73	32.17	35.37	37.76	44.80	47.68	51.85
Nuclear	105.14	105.13	106.21	108.02	108.08	108.33	108.40	108.47	108.53	108.53	108.53	108.53	108.53	108.53	108.53
Pumped Storage/Other 1/	-0.29	-0.20	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82
Renewables 2/	9.58	9.11	11.98	12.58	13.02	12.42	12.79	12.15	11.65	11.30	11.40	11.79	11.56	11.53	11.53
Total	271.14	272.89	281.98	283.01	282.71	287.07	292.12	297.13	289.29	304.05	307.37	310.22	318.00	320.85	325.25
<b>Mid-America Interconnected Network</b>															
Coal	169.26	178.31	178.85	181.17	184.36	189.53	193.14	206.20	209.23	211.98	212.86	212.72	211.17	209.67	210.75
Petroleum	1.47	1.03	1.61	1.59	1.55	1.57	1.55	1.55	1.54	1.47	1.59	1.59	1.61	1.63	1.64
Natural Gas	6.56	6.66	27.60	25.86	25.49	25.91	25.95	25.85	27.10	28.03	28.18	28.47	28.67	28.92	28.93
Nuclear	118.52	114.62	115.96	117.58	117.58	117.54	117.74	117.74	117.74	117.74	117.74	117.74	118.17	118.17	118.17
Pumped Storage/Other 1/	-0.02	-0.20	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13
Renewables 2/	4.03	5.05	4.10	4.67	5.14	5.34	6.39	6.53	6.40	6.58	6.83	7.61	9.27	10.17	10.46
Total	299.81	305.47	327.99	330.74	333.99	339.77	344.64	357.74	361.88	365.67	367.07	368.00	368.75	368.43	369.82
<b>Mid-Continent Area Power Pool</b>															
Coal	121.84	118.44	124.86	125.69	132.03	135.49	136.29	137.29	137.36	138.14	138.35	138.58	138.65	139.14	139.05
Petroleum	1.07	0.86	1.06	0.88	0.86	0.85	0.98	1.00	0.98	0.93	0.89	0.84	0.82	0.77	0.77
Natural Gas	2.41	2.17	1.65	1.36	1.36	1.37	1.40	1.41	1.42	1.65	2.14	2.43	3.28	3.67	4.04
Nuclear	23.53	25.61	24.73	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11
Pumped Storage/Other 1/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewables 2/	12.90	12.66	18.30	20.86	21.96	22.07	21.89	22.10	22.10	22.08	21.98	21.99	22.04	21.84	21.88
Total	161.75	159.75	170.61	173.89	181.31	184.90	185.68	186.91	186.96	187.89	188.47	188.95	189.91	190.55	190.88



Table 74. Electricity Generation by Electricity Market Module Region and Source  
(billion kilowatthours)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Northeast Power Coordinating Council/ New York</b>															
Coal	19.86	19.33	20.29	20.50	20.67	20.88	21.41	22.06	22.06	22.04	21.98	22.04	21.90	21.78	21.87
Petroleum	19.30	20.95	18.21	18.19	18.22	18.22	18.22	18.21	18.14	19.46	19.32	19.02	15.59	13.98	14.00
Natural Gas	28.81	27.46	36.53	33.07	33.63	36.22	36.51	37.71	38.83	42.91	45.15	46.36	51.79	55.59	56.61
Nuclear	45.66	46.58	43.31	43.97	43.97	43.97	43.97	43.97	43.97	43.97	43.97	44.64	44.64	44.64	44.64
Pumped Storage/Other 1/	-0.91	-0.81	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57
Renewables 2/	26.43	29.62	28.42	29.06	29.45	29.83	29.93	29.48	29.53	29.55	29.47	29.39	29.42	29.41	29.44
Total	139.15	143.13	146.20	144.23	145.36	148.55	149.47	150.85	151.96	157.36	159.32	160.88	162.77	164.82	165.98
<b>Northeast Power Coordinating Council/ New England</b>															
Coal	22.26	22.18	22.77	23.35	24.08	25.06	25.85	26.07	25.79	25.49	25.34	25.34	25.20	25.10	26.01
Petroleum	12.13	10.98	11.05	10.59	10.61	10.69	10.72	11.27	11.00	11.08	11.44	11.77	11.38	11.75	11.45
Natural Gas	40.66	45.37	48.76	45.71	43.62	44.46	45.71	46.40	48.29	50.40	52.94	54.31	54.66	55.98	55.46
Nuclear	29.80	30.58	28.53	29.05	29.13	29.21	29.27	29.35	30.20	30.27	30.34	30.38	30.38	30.38	30.38
Pumped Storage/Other 1/	-0.51	-0.49	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52
Renewables 2/	12.78	12.70	12.80	13.66	15.11	14.84	14.84	14.74	14.69	14.64	14.61	14.61	14.85	15.18	17.38
Total	117.12	121.31	123.38	121.85	122.04	123.74	125.87	127.31	129.45	131.36	134.15	135.90	135.95	137.88	140.18
<b>Southeastern Electric Reliability Council/ Florida</b>															
Coal	63.79	59.96	70.28	70.70	71.33	73.18	74.75	73.74	78.94	83.10	84.06	83.84	83.64	82.77	82.77
Petroleum	37.04	36.98	38.01	36.13	26.30	26.48	27.03	28.02	28.08	28.89	28.86	28.83	28.65	28.53	28.41
Natural Gas	65.21	72.96	51.26	50.86	57.54	61.64	62.36	70.31	71.48	72.41	77.12	83.47	90.38	97.44	104.71
Nuclear	30.98	31.22	31.70	32.21	32.24	32.28	32.28	32.56	32.56	32.56	32.61	32.61	32.61	32.61	32.61
Pumped Storage/Other 1/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewables 2/	4.10	3.90	4.14	4.34	5.26	5.17	4.79	6.09	5.67	5.75	5.96	5.95	5.93	7.20	7.20
Total	201.12	205.01	195.39	194.25	192.68	198.74	201.20	210.71	216.74	222.71	228.62	234.70	241.22	248.55	255.71
<b>Southeastern Electric Reliability Council/ excluding Florida</b>															
Coal	438.00	446.83	456.04	460.82	468.07	478.10	490.00	489.21	494.15	498.72	499.25	506.15	509.84	512.87	523.87
Petroleum	12.26	12.58	14.27	13.31	7.60	7.64	7.86	7.96	7.26	7.69	7.82	7.78	7.78	7.82	7.92
Natural Gas	74.43	85.01	83.48	79.84	80.53	82.12	84.19	85.40	99.75	113.36	123.54	128.29	130.27	136.34	135.72
Nuclear	246.95	256.42	252.42	257.14	267.60	267.67	267.94	267.72	267.79	268.59	268.66	275.10	285.96	297.91	310.94
Pumped Storage/Other 1/	-2.48	-3.14	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60
Renewables 2/	44.11	36.59	35.26	40.14	45.51	46.55	47.87	54.79	53.42	49.34	49.85	50.66	50.96	54.55	54.63
Total	813.27	834.28	837.87	847.66	865.73	878.48	894.26	901.49	918.76	934.10	945.52	964.38	981.21	1005.89	1029.48
<b>Southwest Power Pool</b>															
Coal	144.81	142.04	143.49	144.27	146.19	148.87	152.66	153.84	154.20	152.69	148.71	148.53	148.12	148.12	147.51
Petroleum	1.49	1.13	1.85	1.39	1.05	1.01	1.09	1.08	1.06	0.93	0.93	0.84	0.90	0.93	0.99
Natural Gas	46.24	46.74	31.08	34.43	33.35	34.47	33.90	34.59	38.37	43.45	49.87	53.15	54.60	56.86	58.81
Nuclear	8.89	10.13	9.30	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36
Pumped Storage/Other 1/	-0.20	0.12	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20
Renewables 2/	5.80	8.19	6.46	8.30	9.00	9.02	9.17	9.99	9.91	9.52	10.21	10.37	10.75	10.60	10.71
Total	207.04	208.35	191.99	197.55	198.76	202.53	205.98	208.66	212.71	215.74	218.87	222.06	223.53	225.66	227.18
<b>Western Electricity Coordinating Council/ Northwest Power Pool Area</b>															
Coal	81.76	81.73	79.60	79.55	80.37	81.48	82.40	82.67	82.61	82.58	82.56	82.54	82.51	82.49	82.42
Petroleum	0.52	0.63	1.19	1.11	1.17	1.10	1.10	1.10	1.10	1.10	1.10	1.11	1.12	1.07	1.02
Natural Gas	21.28	23.67	15.95	18.92	16.15	18.53	18.42	19.13	19.96	21.02	22.26	24.77	28.08	29.99	32.41
Nuclear	7.61	8.98	8.58	8.79	8.86	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88
Pumped Storage/Other 1/	0.31	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewables 2/	125.16	124.76	135.23	151.30	156.76	157.05	158.17	160.42	161.62	162.77	163.75	164.74	165.39	166.07	166.64
Total	236.64	240.03	240.55	259.68	263.31	267.04	268.98	272.21	274.18	276.35	278.55	282.05	285.98	288.49	291.38

Table 74. Electricity Generation by Electricity Market Module Region and Source  
(billion kilowatthours)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Western Electricity Coordinating Council/ Rocky Mountain Power Area and Arizona-New Mexico-Southern Nevada Power Area															
Coal	118.16	119.53	117.24	117.14	120.64	122.84	125.48	128.16	128.19	128.18	128.18	128.00	128.01	136.19	144.90
Petroleum	1.49	2.71	0.71	0.63	0.64	0.65	0.62	0.63	0.61	0.61	0.62	0.90	0.90	0.97	1.01
Nuclear	43.00	56.54	68.06	64.93	64.18	67.55	62.92	63.82	67.99	76.74	82.82	88.69	94.10	95.13	91.58
Pumped Storage/Other 1/	20.75	20.41	22.10	22.70	23.18	23.23	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26
Renewables 2/	0.10	-0.14	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24
Total	13.76	14.02	16.62	18.61	19.27	19.35	19.38	19.53	19.54	19.56	19.57	19.57	19.57	19.63	19.62
Total	197.25	213.06	224.49	223.78	227.67	233.38	231.42	235.17	239.36	248.12	254.22	260.19	265.61	274.95	280.13
Western Electricity Coordinating Council/ California															
Coal	30.25	31.28	30.80	30.62	30.97	31.50	53.89	56.98	63.33	63.57	63.56	63.55	67.76	76.58	87.82
Petroleum	1.97	1.91	0.39	0.50	0.29	0.29	0.51	0.49	0.49	0.77	0.77	1.22	1.14	1.22	1.34
Natural Gas	75.17	81.86	75.61	60.99	64.54	69.74	60.61	61.38	56.19	66.65	71.97	74.71	76.54	74.38	69.86
Nuclear	43.43	37.97	42.52	43.15	43.32	43.34	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35
Pumped Storage/Other 1/	-0.82	-0.82	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88
Renewables 2/	56.27	54.28	53.18	60.15	67.84	69.39	69.41	71.41	71.17	71.29	71.41	72.23	72.53	73.20	74.38
Total	206.26	206.49	201.61	194.53	206.08	213.38	226.88	232.73	233.65	244.74	250.17	254.18	260.43	267.84	275.86

Table 74. Electricity Generation by Electricity Market Module Region and Source  
(billion kilowatthours)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>East Central Area Reliability Coordination Agreement</b>														
Coal	568.84	568.90	567.46	566.41	565.43	564.40	564.14	570.82	574.02	576.06	581.78	584.12	590.91	0.7%
Petroleum	4.00	4.14	4.21	4.20	4.22	4.22	4.25	4.20	4.29	4.29	4.28	4.28	4.30	-1.1%
Natural Gas	66.58	70.24	72.72	74.62	76.18	76.83	77.77	76.95	75.26	75.88	76.10	76.92	77.15	5.4%
Nuclear	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	59.98	0.0%
Pumped Storage/Other 1/	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	-1.79	0.7%
Renewables 2/	15.62	15.87	17.71	18.73	18.82	18.91	18.78	16.13	16.01	15.84	15.35	15.45	15.71	3.8%
Total	713.24	717.34	720.29	722.16	722.83	722.55	723.13	726.28	727.77	730.26	735.69	738.95	746.25	0.9%
<b>Electric Reliability Council of Texas</b>														
Coal	116.09	115.94	115.85	115.88	115.86	115.72	118.70	118.68	118.66	125.32	139.06	154.33	159.62	1.3%
Petroleum	1.26	1.26	1.25	1.26	1.25	1.27	1.30	1.30	1.30	1.34	1.38	1.38	1.38	0.1%
Natural Gas	190.98	195.50	197.55	200.90	203.30	205.98	207.13	210.51	214.58	213.16	203.56	194.25	194.05	1.9%
Nuclear	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	41.64	0.1%
Pumped Storage/Other 1/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewables 2/	18.11	18.26	18.36	18.33	18.78	19.26	20.30	20.84	21.80	21.85	24.15	23.93	23.79	7.4%
Total	368.35	372.90	374.97	378.35	381.19	384.25	389.47	393.45	398.54	403.94	410.51	416.28	421.27	1.6%
<b>Mid-Atlantic Area Council</b>														
Coal	146.63	146.43	146.58	146.16	146.11	150.69	157.60	163.56	170.72	177.84	184.97	193.03	200.14	1.9%
Petroleum	7.44	7.43	7.51	7.57	7.48	7.49	7.57	7.55	7.52	7.62	7.61	7.65	7.67	-0.8%
Natural Gas	55.30	56.74	59.16	61.36	63.11	62.85	62.14	60.82	59.40	57.04	55.38	54.25	55.20	2.9%
Nuclear	108.53	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.81	110.78	0.2%
Pumped Storage/Other 1/	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	-0.82	5.5%
Renewables 2/	11.54	11.60	11.92	12.10	12.64	12.63	12.65	12.59	12.84	12.88	13.20	13.18	13.17	1.4%
Total	328.70	332.30	335.29	337.32	339.49	343.83	350.14	354.72	360.70	365.63	371.44	378.40	386.47	1.3%
<b>Mid-America Interconnected Network</b>														
Coal	211.35	211.76	214.31	214.74	214.75	214.81	215.12	216.70	215.28	213.55	211.72	210.63	209.75	0.6%
Petroleum	1.50	1.44	1.10	1.09	1.07	1.07	1.05	1.02	0.99	0.97	0.96	0.95	0.94	-0.3%
Natural Gas	28.94	29.03	29.25	29.44	29.63	29.65	30.14	30.21	30.49	30.77	31.04	31.32	31.14	6.1%
Nuclear	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	118.17	0.1%
Pumped Storage/Other 1/	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-0.13	-1.6%
Renewables 2/	10.80	10.70	9.04	8.42	7.96	7.70	7.45	7.20	6.94	7.31	7.40	7.75	7.69	1.6%
Total	370.65	371.01	371.79	371.78	371.53	371.36	371.89	373.28	371.86	370.78	369.37	368.95	367.88	0.7%
<b>Mid-Continent Area Power Pool</b>														
Coal	139.55	139.67	139.50	140.65	142.35	144.37	146.14	147.50	150.18	153.62	156.93	160.41	163.38	1.2%
Petroleum	0.75	0.76	0.75	0.79	0.76	0.83	0.96	0.96	0.95	0.96	0.96	0.97	0.96	0.4%
Natural Gas	4.14	4.29	4.82	4.70	4.61	4.48	4.63	4.53	4.53	4.44	4.35	4.30	4.08	2.5%
Nuclear	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	25.11	-0.1%
Pumped Storage/Other 1/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewables 2/	21.94	22.04	22.23	22.28	22.38	21.98	22.02	22.25	22.23	22.30	22.30	21.93	21.84	2.1%
Total	191.53	191.91	192.46	193.60	195.28	196.85	198.96	200.45	203.11	206.54	209.78	212.87	215.52	1.2%

Table 74. Electricity Generation by Electricity Market Module Region and Source  
(billion kilowatthours)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Northeast Power Coordinating Council/ New York</b>														
Coal	21.82	22.05	22.25	22.59	24.48	26.35	28.50	30.41	33.10	35.66	38.56	41.52	44.33	3.2%
Petroleum	13.69	15.97	15.47	16.48	16.27	14.57	14.80	15.18	17.91	19.03	19.06	19.05	19.04	-0.4%
Natural Gas	56.98	55.84	58.55	58.92	59.15	59.71	57.74	54.66	50.35	48.07	46.04	43.63	42.06	1.7%
Nuclear	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.64	44.56	-0.2%
Pumped Storage/Other 1/	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-0.57	-1.4%
Renewables 2/	29.64	29.68	29.46	29.11	28.86	28.86	28.87	28.87	28.87	28.88	28.88	28.89	28.89	-0.1%
<b>Total</b>	<b>166.20</b>	<b>167.61</b>	<b>169.80</b>	<b>171.16</b>	<b>172.83</b>	<b>173.56</b>	<b>173.98</b>	<b>173.19</b>	<b>174.30</b>	<b>175.71</b>	<b>176.61</b>	<b>177.15</b>	<b>178.32</b>	<b>0.8%</b>
<b>Northeast Power Coordinating Council/ New England</b>														
Coal	25.99	26.23	26.24	26.24	28.93	31.92	35.11	37.81	40.25	42.48	44.85	47.96	50.55	3.2%
Petroleum	11.66	11.60	11.00	11.00	10.98	10.78	10.75	10.76	10.75	10.77	10.90	10.94	10.83	-0.1%
Natural Gas	58.03	60.27	59.56	62.13	61.79	60.36	59.22	58.23	57.41	56.42	55.59	53.59	53.49	0.6%
Nuclear	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	30.38	0.0%
Pumped Storage/Other 1/	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	-0.52	0.2%
Renewables 2/	17.49	17.25	17.25	17.25	17.25	17.25	17.25	17.26	17.26	17.29	17.29	17.32	17.29	1.2%
<b>Total</b>	<b>143.06</b>	<b>145.25</b>	<b>143.96</b>	<b>146.55</b>	<b>148.87</b>	<b>150.25</b>	<b>152.27</b>	<b>154.01</b>	<b>155.63</b>	<b>156.93</b>	<b>158.63</b>	<b>159.81</b>	<b>162.21</b>	<b>1.1%</b>
<b>Southeastern Electric Reliability Council/ Florida</b>														
Coal	84.05	86.73	89.12	96.20	104.62	111.76	119.38	124.27	131.62	141.07	152.80	165.14	173.00	4.2%
Petroleum	28.32	28.32	28.15	28.18	28.21	28.22	28.22	28.22	28.25	28.28	28.34	28.16	28.06	-1.1%
Natural Gas	111.51	116.54	118.90	118.21	115.58	113.79	112.42	112.79	111.87	109.04	105.68	99.40	97.47	1.1%
Nuclear	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	32.61	0.2%
Pumped Storage/Other 1/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewables 2/	6.17	6.57	7.39	7.11	7.56	8.17	9.25	9.88	10.65	11.29	11.29	11.26	12.29	4.5%
<b>Total</b>	<b>262.66</b>	<b>270.77</b>	<b>276.18</b>	<b>282.32</b>	<b>288.58</b>	<b>294.55</b>	<b>301.88</b>	<b>307.77</b>	<b>315.01</b>	<b>322.30</b>	<b>330.73</b>	<b>336.59</b>	<b>343.45</b>	<b>2.0%</b>
<b>Southeastern Electric Reliability Council/ excluding Florida</b>														
Coal	545.53	567.17	590.80	613.27	635.84	660.46	687.84	712.97	741.46	772.74	802.24	829.90	849.34	2.5%
Petroleum	8.07	8.08	8.16	8.27	8.31	8.45	8.54	8.70	8.79	8.78	8.72	8.89	8.87	-1.3%
Natural Gas	130.85	128.23	123.18	117.53	113.32	111.73	109.82	106.10	102.65	99.40	96.85	92.48	93.34	0.4%
Nuclear	319.94	322.13	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	322.50	0.9%
Pumped Storage/Other 1/	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	-3.60	0.5%
Renewables 2/	52.01	52.47	51.69	51.04	51.65	51.23	51.85	51.99	52.43	50.65	50.33	49.66	50.94	1.3%
<b>Total</b>	<b>1052.80</b>	<b>1074.47</b>	<b>1092.73</b>	<b>1109.01</b>	<b>1128.03</b>	<b>1150.77</b>	<b>1176.96</b>	<b>1198.66</b>	<b>1224.23</b>	<b>1250.48</b>	<b>1277.04</b>	<b>1299.83</b>	<b>1321.40</b>	<b>1.8%</b>
<b>Southwest Power Pool</b>														
Coal	147.53	149.13	152.02	153.19	155.37	159.73	162.80	162.97	164.23	169.94	175.83	181.98	186.42	1.1%
Petroleum	0.87	0.97	0.98	0.99	1.05	1.21	1.29	1.36	1.34	1.37	1.43	1.42	1.43	0.9%
Natural Gas	60.62	62.64	62.41	63.27	62.70	60.40	59.68	60.65	62.55	60.13	58.87	56.53	55.36	0.7%
Nuclear	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	9.36	-0.3%
Pumped Storage/Other 1/	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	-0.20	N/A
Renewables 2/	10.69	10.24	10.17	10.37	10.27	10.10	10.15	10.39	10.83	11.19	10.61	11.14	11.80	1.4%
<b>Total</b>	<b>228.87</b>	<b>232.13</b>	<b>234.75</b>	<b>236.99</b>	<b>238.56</b>	<b>240.59</b>	<b>243.09</b>	<b>244.53</b>	<b>248.11</b>	<b>251.81</b>	<b>255.90</b>	<b>260.23</b>	<b>264.17</b>	<b>0.9%</b>
<b>Western Electricity Coordinating Council/ Northwest Power Pool Area</b>														
Coal	82.49	82.52	86.46	93.60	100.98	102.21	103.51	104.70	109.38	115.60	119.02	121.77	125.26	1.7%
Petroleum	1.01	1.13	1.17	1.24	1.20	1.18	1.20	1.21	1.26	1.38	1.47	1.49	1.53	3.5%
Natural Gas	34.95	36.93	34.84	32.99	28.85	31.59	31.79	30.39	27.07	23.39	22.60	22.36	21.96	-0.3%
Nuclear	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	8.88	0.0%
Pumped Storage/Other 1/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewables 2/	167.37	168.30	171.20	172.68	176.01	177.79	179.89	181.00	182.41	183.75	184.44	185.34	185.33	1.5%
<b>Total</b>	<b>294.70</b>	<b>297.76</b>	<b>302.55</b>	<b>309.41</b>	<b>315.94</b>	<b>321.70</b>	<b>325.33</b>	<b>326.25</b>	<b>329.14</b>	<b>333.22</b>	<b>336.71</b>	<b>340.23</b>	<b>343.44</b>	<b>1.4%</b>

Table 74. Electricity Generation by Electricity Market Module Region and Source  
(billion kilowatthours)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Western Electricity Coordinating Council/ Rocky Mountain Power Area and Arizona-New Mexico-Southern Nevada Power Area														
Coal	153.54	161.37	169.49	177.73	186.77	196.58	206.12	215.57	225.46	235.34	245.62	255.92	265.68	3.1%
Petroleum	1.09	1.17	1.24	1.33	1.42	1.61	1.71	1.92	2.01	2.12	2.22	2.38	2.48	-0.3%
Nuclear	87.22	83.18	78.59	73.20	65.79	58.49	53.79	49.75	45.74	42.42	40.74	38.86	37.70	-1.5%
Pumped Storage/Other 1/	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	23.26	0.5%
Renewables 2/	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	-0.24	2.1%
Total	19.96	20.34	20.79	21.22	21.34	21.72	22.09	22.52	23.34	23.48	23.54	23.55	23.56	2.0%
Total	284.84	289.09	293.13	296.51	298.36	301.43	306.74	312.78	319.58	326.38	335.15	343.75	352.47	2.0%
Western Electricity Coordinating Council/ California														
Coal	98.14	105.42	114.85	117.25	124.59	132.94	142.23	151.19	159.36	166.83	174.12	180.22	186.73	7.1%
Petroleum	1.46	1.53	1.64	1.66	1.74	1.87	1.97	2.06	2.14	2.21	2.29	2.28	2.29	0.7%
Natural Gas	66.09	66.68	61.85	60.48	58.60	56.53	55.23	53.80	53.13	52.29	51.16	51.33	51.28	-1.8%
Nuclear	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	43.35	0.5%
Pumped Storage/Other 1/	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	-0.88	0.3%
Renewables 2/	75.83	77.47	79.07	80.47	81.76	82.95	84.01	85.38	86.05	86.73	87.41	87.45	88.00	1.9%
Total	283.99	293.57	299.88	302.33	309.16	316.75	325.91	334.89	343.18	350.60	357.55	363.86	370.92	2.3%

Table 74. Electricity Generation by Electricity Market Module Region and Source  
(billion kilowatthours)

1/ Other includes methane, propane and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

2/ Renewables include conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

Sources: 2004 utility generation: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." Other 2004 and projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 75. Electricity Generation Capacity by Electricity Market Module Region and Source  
(gigawatts)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
East Central Area Reliability Coordination Agreement															
Coal Steam	84.94	84.57	84.85	83.52	83.21	83.21	83.21	83.21	83.21	83.21	82.42	82.31	82.31	82.31	82.31
Other Fossil Steam 1/	4.19	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	0.24	0.12	0.12	0.12	0.12	0.12
Combined Cycle	10.57	11.67	11.67	12.39	12.93	12.93	12.93	12.93	12.93	12.93	12.93	12.93	13.21	14.54	14.54
Combustion Turbine/ Diesel	19.61	20.34	20.71	20.71	20.71	20.71	20.71	20.71	20.71	20.71	18.75	18.75	18.75	18.83	20.15
Nuclear Power	7.73	7.73	7.73	7.73	7.74	7.81	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88
Pumped Storage/Other 2/	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	1.65	1.66	1.66	1.66	1.67	1.67	1.69	1.69	1.69	1.69	1.69	1.69	2.17	2.19	2.21
Total	132.20	133.64	134.30	133.69	133.93	133.99	134.09	134.09	134.09	130.16	127.29	127.18	127.94	129.37	130.72
Electric Reliability Council of Texas															
Coal Steam	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.19	15.99	15.99
Other Fossil Steam 1/	29.80	29.10	27.66	27.66	27.66	27.27	27.27	27.27	27.27	25.07	23.02	20.70	19.81	17.41	15.07
Combined Cycle	23.11	24.59	24.59	25.10	25.10	25.10	25.10	25.10	25.10	25.10	25.10	25.26	25.26	26.65	29.73
Combustion Turbine/ Diesel	4.33	4.61	5.42	5.64	5.95	6.15	6.42	6.61	6.74	6.74	7.72	10.28	11.96	13.16	13.16
Nuclear Power	4.86	4.86	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	4.93	5.08	5.24
Pumped Storage/Other 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	1.91	1.90	2.49	2.98	4.23	4.38	4.53	4.69	4.84	4.99	5.14	5.30	5.45	5.50	5.51
Total	79.19	80.25	80.28	81.50	83.13	83.17	83.64	84.03	84.36	82.36	81.49	82.08	83.08	84.33	85.27
Mid-Atlantic Area Council															
Coal Steam	20.20	20.72	20.72	20.67	20.67	20.67	20.67	20.67	20.51	20.38	20.36	20.40	20.40	20.40	20.42
Other Fossil Steam 1/	8.67	8.03	8.03	8.03	8.03	8.03	8.03	8.03	8.03	6.76	6.76	6.76	6.76	6.76	6.76
Combined Cycle	9.83	11.99	13.16	13.16	13.16	13.16	13.16	13.16	13.16	13.16	13.16	13.65	14.42	15.25	16.06
Combustion Turbine/ Diesel	11.42	11.84	11.98	12.30	12.30	12.30	12.31	12.31	12.31	12.04	12.04	12.04	12.04	12.04	12.04
Nuclear Power	13.23	13.28	13.28	13.30	13.30	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33	13.33
Pumped Storage/Other 2/	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	1.98	1.98	2.02	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.09	2.09	2.09	2.09
Total	66.85	69.39	70.74	71.06	71.06	71.08	71.09	71.09	70.93	69.26	69.25	69.85	70.66	71.53	72.40
Mid-America Interconnected Network															
Coal Steam	29.20	28.96	28.65	28.65	28.65	29.17	31.06	32.54	32.25	32.25	31.89	31.89	31.89	31.89	31.89
Other Fossil Steam 1/	3.56	0.89	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.48	0.43	0.43	0.43	0.43	0.43
Combined Cycle	3.26	4.41	5.56	5.56	5.56	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10
Combustion Turbine/ Diesel	16.85	16.91	16.94	16.93	17.08	17.23	17.23	17.23	17.23	16.76	14.88	14.39	14.39	14.39	14.39
Nuclear Power	14.28	14.28	14.28	14.28	14.28	14.30	14.35	14.35	14.35	14.35	14.35	14.35	14.43	14.43	14.43
Pumped Storage/Other 2/	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	0.94	0.96	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
Total	68.52	66.84	67.83	67.82	67.97	69.21	71.15	72.63	72.34	71.40	69.12	68.63	68.71	68.71	68.71

Table 75. Electricity Generation Capacity by Electricity Market Module Region and Source (gigawatts)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Mid-Continent Area Power Pool															
Coal Steam	18.77	18.77	18.76	18.76	19.77	19.50	19.50	19.50	19.48	19.48	19.48	19.51	19.51	19.51	19.51
Other Fossil Steam 1/	0.55	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.34	0.34	0.34	0.34	0.34	0.34
Combined Cycle	0.96	1.20	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
Combustion Turbine/ Diesel	7.11	7.33	9.15	9.15	9.15	9.15	9.15	9.15	9.15	8.99	8.99	9.25	9.59	9.96	10.34
Nuclear Power	3.23	3.23	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25
Pumped Storage/Other 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	4.41	4.62	5.06	5.12	5.34	5.36	5.38	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40
Total	35.03	35.66	38.16	38.22	39.44	39.20	39.22	39.23	39.21	38.89	38.90	39.20	39.56	39.95	40.35
Northeast Power Coordinating Council/ New York															
Coal Steam	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.15	3.15	3.15	3.15	3.15
Other Fossil Steam 1/	11.94	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	10.91	9.75	8.93	8.93	8.93	8.93
Combined Cycle	4.84	5.72	7.09	7.89	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05	8.05
Combustion Turbine/ Diesel	4.69	4.78	6.09	6.25	6.25	6.25	6.25	6.25	6.25	5.97	5.97	5.97	5.97	5.97	5.97
Nuclear Power	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.75	5.84	5.84	5.84	5.84
Pumped Storage/Other 2/	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	4.85	4.85	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05
Total	36.56	37.47	40.35	41.32	41.47	41.47	41.47	41.47	41.47	40.22	39.02	38.28	38.28	38.28	38.28
Northeast Power Coordinating Council/ New England															
Coal Steam	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.74	3.52	3.52	3.52	3.52	3.64
Other Fossil Steam 1/	7.52	7.21	7.18	7.18	7.18	7.18	7.18	7.18	7.18	6.67	5.68	5.04	5.04	5.04	5.04
Combined Cycle	9.78	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24	10.24
Combustion Turbine/ Diesel	2.29	2.37	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.35
Nuclear Power	3.70	3.70	3.78	3.78	3.78	3.78	3.78	3.78	3.88	3.88	3.88	3.88	3.88	3.88	3.88
Pumped Storage/Other 2/	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	2.87	2.87	2.91	3.18	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.65	3.71	4.33
Total	31.55	31.78	31.85	32.12	32.56	32.56	32.56	32.56	32.66	32.16	30.95	30.31	30.36	30.43	31.19
Southeastern Electric Reliability Council/ Florida															
Coal Steam	10.90	10.39	10.39	10.39	10.39	10.39	10.39	10.39	11.01	11.77	11.77	11.77	11.77	11.77	11.77
Other Fossil Steam 1/	10.61	10.61	10.61	10.61	10.61	10.61	10.61	10.61	10.61	10.26	10.26	10.26	10.26	10.26	10.26
Combined Cycle	12.80	13.94	16.24	16.24	16.24	16.24	16.24	16.24	16.24	16.55	17.61	18.70	19.88	21.08	22.33
Combustion Turbine/ Diesel	10.01	10.01	10.09	10.22	10.38	10.36	10.51	10.83	10.83	10.83	10.83	10.83	10.83	10.83	10.83
Nuclear Power	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.95	3.95	3.95	3.96	3.96	3.96	3.96	3.96
Pumped Storage/Other 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	0.64	0.64	0.64	0.64	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.69	0.69
Total	48.85	49.47	51.86	51.99	52.17	52.15	52.30	52.67	53.28	54.01	55.08	56.17	57.34	58.58	59.84
Southeastern Electric Reliability Council/ excluding Florida															
Coal Steam	71.40	71.50	70.92	70.91	71.53	71.51	72.80	72.80	72.80	72.80	72.11	73.17	73.59	74.50	76.01
Other Fossil Steam 1/	18.40	18.64	18.56	18.56	18.56	18.56	18.56	18.56	18.56	14.94	14.94	14.94	14.94	14.94	14.94
Combined Cycle	30.92	34.15	35.99	37.48	38.04	38.57	38.57	38.57	38.57	38.57	38.57	38.57	38.71	38.71	38.71
Combustion Turbine/ Diesel	31.29	31.61	31.70	31.71	31.71	31.62	31.47	31.36	31.28	30.87	30.78	30.78	31.69	32.51	32.63
Nuclear Power	32.41	32.45	32.73	32.85	33.03	33.03	33.07	33.14	33.14	33.22	33.22	34.36	35.93	37.53	39.26
Pumped Storage/Other 2/	7.01	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	12.36	12.41	12.38	12.44	12.55	12.55	12.55	12.55	12.55	12.55	12.55	12.58	12.68	12.71	12.79
Total	203.78	207.80	209.31	210.99	212.46	212.88	214.06	214.02	213.94	210.00	209.22	211.46	214.58	217.94	221.38



Table 75. Electricity Generation Capacity by Electricity Market Module Region and Source  
(gigawatts)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
<b>Southwest Power Pool</b>															
Coal Steam	21.37	21.35	21.35	21.35	21.35	21.35	21.60	21.60	21.60	21.35	20.83	20.83	20.83	20.83	20.83
Other Fossil Steam 1/	13.23	13.16	13.14	13.12	13.12	13.12	13.12	13.10	13.10	11.57	9.92	8.32	7.87	7.87	7.87
Combined Cycle	9.76	10.91	10.91	11.07	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03	12.03
Combustion Turbine/ Diesel	7.18	7.23	7.24	7.23	7.38	7.38	7.38	7.38	7.38	7.34	7.34	7.34	7.34	7.34	8.07
Nuclear Power	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17
Pumped Storage/Other 2/	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	2.93	2.93	3.50	3.50	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.52	3.52	3.52	3.52
Total	56.14	57.25	57.82	57.95	59.06	59.06	59.32	59.30	59.30	57.47	55.30	53.71	53.26	53.26	53.99
<b>Western Electricity Coordinating Council/ Northwest Power Pool Area</b>															
Coal Steam	11.10	11.10	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21	11.21
Other Fossil Steam 1/	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.28	0.06	0.06	0.06	0.06	0.06
Combined Cycle	4.81	5.15	5.43	5.68	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94
Combustion Turbine/ Diesel	2.42	2.42	2.58	2.58	2.58	2.58	2.58	2.58	2.58	2.08	2.08	2.08	2.08	2.08	2.08
Nuclear Power	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11
Pumped Storage/Other 2/	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	36.59	36.52	36.98	37.18	37.40	37.45	37.61	37.78	37.93	38.07	38.19	38.31	38.41	38.47	38.52
Total	57.12	57.39	58.40	58.84	60.33	60.37	60.54	60.71	60.85	60.00	59.90	60.02	60.12	60.17	60.23
<b>Western Electricity Coordinating Council/ Rocky Mountain Power Area and Arizona-New Mexico-Southern Nevada Power Area</b>															
Coal Steam	16.22	16.22	16.22	16.62	16.62	16.62	17.02	17.02	17.02	17.02	17.02	17.02	17.02	18.14	19.31
Other Fossil Steam 1/	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	3.30	1.89	0.28	0.17	0.17	0.17	0.17
Combined Cycle	12.54	15.32	17.12	18.12	18.39	18.39	18.39	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25
Combustion Turbine/ Diesel	4.73	4.68	5.29	5.84	5.84	5.84	5.84	5.84	5.84	5.78	5.78	5.78	5.78	5.78	5.78
Nuclear Power	2.76	2.76	2.82	2.84	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
Pumped Storage/Other 2/	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	6.13	6.20	6.43	6.44	6.52	6.52	6.52	6.53	6.53	6.54	6.54	6.54	6.55	6.55	6.56
Total	46.46	49.26	51.94	53.95	54.34	54.35	54.75	55.61	55.62	54.14	52.54	52.43	52.44	53.56	54.74
<b>Western Electricity Coordinating Council/ California</b>															
Coal Steam	4.14	4.14	4.14	4.14	4.14	4.14	7.23	7.50	8.38	8.38	8.38	8.38	8.96	10.15	11.68
Other Fossil Steam 1/	16.83	16.06	16.06	16.06	16.06	16.06	16.06	16.06	16.06	13.94	11.82	11.74	11.74	11.74	11.43
Combined Cycle	8.90	9.40	12.19	12.70	13.24	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76
Combustion Turbine/ Diesel	6.14	6.03	6.27	6.27	6.43	6.43	6.43	6.43	6.43	6.38	6.38	6.38	6.38	6.38	6.38
Nuclear Power	5.37	5.37	5.39	5.40	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42
Pumped Storage/Other 2/	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Renewable Sources 3/	14.54	14.71	15.00	15.98	17.96	18.15	18.16	18.16	18.17	18.17	18.18	18.31	18.39	18.49	18.65
Total	59.59	59.40	62.73	64.23	66.93	67.65	70.74	71.02	71.91	69.74	67.63	67.68	68.33	69.63	71.01

Table 75. Electricity Generation Capacity by Electricity Market Module Region and Source  
(gigawatts)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>East Central Area Reliability Coordination Agreement</b>														
Coal Steam	82.31	82.31	82.31	82.31	82.31	82.31	82.31	82.96	83.93	84.34	85.09	85.56	86.71	0.1%
Other Fossil Steam 1/	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	-12.7%
Combined Cycle	15.85	16.97	18.10	18.84	19.22	19.40	19.58	19.58	19.58	19.58	19.58	19.73	19.73	2.0%
Combustion Turbine/ Diesel	20.19	20.42	20.64	20.88	21.52	22.48	23.52	24.19	24.74	25.83	26.84	28.02	28.74	1.3%
Nuclear Power	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	7.88	0.1%
Pumped Storage/Other 2/	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	2.25	2.28	2.31	2.33	2.37	2.39	2.42	2.42	2.42	2.44	2.47	2.50	2.51	1.6%
Total	132.11	133.48	134.87	135.86	136.93	138.08	139.33	140.66	142.18	143.70	145.49	147.32	149.21	0.4%
<b>Electric Reliability Council of Texas</b>														
Coal Steam	15.99	15.99	15.99	15.99	15.99	15.99	16.40	16.40	16.40	17.23	19.15	21.17	21.81	1.4%
Other Fossil Steam 1/	14.39	14.29	14.29	14.29	14.29	14.29	13.54	13.34	12.72	12.65	9.83	9.38	9.38	-4.3%
Combined Cycle	31.96	32.62	33.34	33.91	34.49	35.22	36.38	37.21	38.27	38.41	39.62	39.62	39.79	1.9%
Combustion Turbine/ Diesel	13.16	13.16	13.16	13.31	13.41	13.41	13.59	13.83	14.09	14.18	14.72	14.72	14.72	4.6%
Nuclear Power	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	5.24	0.3%
Pumped Storage/Other 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	5.51	5.51	5.51	5.51	5.57	5.61	5.73	5.80	5.91	5.98	6.19	6.20	6.24	4.7%
Total	86.89	87.50	88.26	89.03	89.81	90.64	91.82	92.90	93.89	95.14	96.40	98.03	98.94	0.8%
<b>Mid-Atlantic Area Council</b>														
Coal Steam	20.42	20.42	20.42	20.42	20.42	21.05	21.98	22.85	23.89	24.94	26.06	27.23	28.28	1.2%
Other Fossil Steam 1/	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	6.76	-0.7%
Combined Cycle	16.87	17.43	18.27	19.03	19.82	20.02	20.02	20.02	20.02	20.02	20.02	20.02	20.19	2.0%
Combustion Turbine/ Diesel	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	12.04	0.1%
Nuclear Power	13.33	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	13.60	0.1%
Pumped Storage/Other 2/	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	2.09	2.09	2.13	2.13	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	0.4%
Total	73.25	74.12	75.04	75.84	76.75	77.62	78.60	79.51	80.60	81.70	82.87	84.10	85.36	0.8%
<b>Mid-America Interconnected Network</b>														
Coal Steam	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	31.89	0.4%
Other Fossil Steam 1/	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	-2.7%
Combined Cycle	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	1.3%
Combustion Turbine/ Diesel	14.39	14.67	15.28	15.78	16.33	16.97	17.63	18.17	18.90	19.62	20.36	21.07	21.81	1.0%
Nuclear Power	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	14.43	0.0%
Pumped Storage/Other 2/	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.10	1.12	1.19	1.19	1.23	1.23	1.0%
Total	68.74	69.06	69.70	70.23	70.81	71.48	72.18	72.83	73.61	74.44	75.32	76.20	77.05	0.5%

Table 75. Electricity Generation Capacity by Electricity Market Module Region and Source (gigawatts)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Mid-Continent Area Power Pool														
Coal Steam	19.56	19.56	19.56	19.74	19.99	20.24	20.33	20.56	20.93	21.42	21.91	22.39	22.83	0.8%
Other Fossil Steam 1/	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	-1.5%
Combined Cycle	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	0.7%
Combustion Turbine/ Diesel	10.68	11.08	11.47	11.76	11.87	11.98	12.29	12.44	12.44	12.44	12.44	12.44	12.48	2.1%
Nuclear Power	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	3.25	0.0%
Pumped Storage/Other 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	0.6%
Total	40.77	41.18	41.59	42.07	42.47	42.84	43.26	43.66	44.05	44.57	45.08	45.59	46.09	1.0%
Northeast Power Coordinating Council/ New York														
Coal Steam	3.15	3.15	3.15	3.15	3.37	3.62	3.91	4.17	4.53	4.87	5.25	5.65	6.03	2.5%
Other Fossil Steam 1/	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	8.93	-1.1%
Combined Cycle	8.05	8.23	8.48	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	8.69	1.6%
Combustion Turbine/ Diesel	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	0.9%
Nuclear Power	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	0.1%
Pumped Storage/Other 2/	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	0.2%
Total	38.31	38.49	38.74	38.95	39.17	39.42	39.71	39.97	40.33	40.67	41.05	41.45	41.84	0.4%
Northeast Power Coordinating Council/ New England														
Coal Steam	3.64	3.64	3.64	3.64	4.00	4.40	4.83	5.19	5.51	5.81	6.13	6.55	6.89	2.4%
Other Fossil Steam 1/	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	5.04	-1.4%
Combined Cycle	10.77	11.19	11.64	12.01	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	12.11	0.6%
Combustion Turbine/ Diesel	2.35	2.35	2.35	2.35	2.35	2.35	2.35	2.37	2.47	2.57	2.63	2.63	2.70	0.5%
Nuclear Power	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	0.2%
Pumped Storage/Other 2/	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	1.65	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	1.6%
Total	31.73	32.17	32.65	33.03	33.51	33.93	34.37	34.76	35.21	35.63	36.08	36.52	37.01	0.6%
Southeastern Electric Reliability Council/ Florida														
Coal Steam	11.77	12.10	12.48	13.28	14.52	15.44	16.45	17.10	18.09	19.52	21.10	22.82	23.97	3.3%
Other Fossil Steam 1/	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	10.26	-1.1%
Combined Cycle	23.64	24.58	25.52	25.92	25.92	26.20	26.48	27.01	27.42	27.42	27.42	27.42	27.85	2.7%
Combustion Turbine/ Diesel	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.79	10.90	0.3%
Nuclear Power	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	3.96	0.1%
Pumped Storage/Other 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	0.69	0.75	0.82	0.89	0.89	1.00	1.13	1.20	1.31	1.31	1.31	1.31	1.42	3.1%
Total	61.11	62.44	63.83	65.10	66.34	67.65	69.06	70.32	71.83	73.26	74.84	76.57	78.41	1.8%
Southeastern Electric Reliability Council/ excluding Florida														
Coal Steam	78.49	81.51	84.79	87.85	91.21	94.84	98.94	102.78	107.16	111.64	116.35	121.31	124.46	2.2%
Other Fossil Steam 1/	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	14.94	-0.8%
Combined Cycle	38.71	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	38.89	39.44	0.6%
Combustion Turbine/ Diesel	32.80	33.01	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10	33.10	34.28	0.3%
Nuclear Power	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	40.09	0.8%
Pumped Storage/Other 2/	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	7.04	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	12.84	12.90	12.90	12.90	12.90	12.90	12.90	12.91	12.91	12.91	12.91	12.91	13.12	0.2%
Total	224.92	228.38	231.76	234.81	238.17	241.80	245.90	249.74	254.12	258.60	263.31	268.28	273.38	1.1%

Table 75. Electricity Generation Capacity by Electricity Market Module Region and Source  
(gigawatts)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Southwest Power Pool</b>														
Coal Steam	20.83	20.93	21.29	21.48	21.78	22.38	22.80	22.81	22.97	23.79	24.66	25.58	26.25	0.8%
Other Fossil Steam 1/	7.87	7.87	7.87	7.87	7.87	7.87	7.81	7.81	7.81	7.81	7.81	7.81	7.81	-2.0%
Combined Cycle	12.03	12.03	12.03	12.03	12.03	12.03	12.17	12.32	12.48	12.48	12.48	12.48	12.65	0.6%
Combustion Turbine/ Diesel	8.90	9.58	9.94	10.44	10.84	10.91	11.25	11.70	12.14	12.14	12.14	12.14	12.14	2.0%
Nuclear Power	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	1.17	N/A
Pumped Storage/Other 2/	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	3.53	3.53	3.53	3.53	3.54	3.54	3.54	3.61	3.68	3.68	3.68	3.69	3.73	0.9%
<b>Total</b>	<b>54.83</b>	<b>55.62</b>	<b>56.34</b>	<b>57.03</b>	<b>57.73</b>	<b>58.40</b>	<b>59.24</b>	<b>59.91</b>	<b>60.74</b>	<b>61.57</b>	<b>62.43</b>	<b>63.36</b>	<b>64.24</b>	<b>0.4%</b>
<b>Western Electricity Coordinating Council/ Northwest Power Pool Area</b>														
Coal Steam	11.21	11.21	11.74	12.71	13.70	13.87	14.04	14.21	14.85	15.71	16.22	16.62	17.06	1.7%
Other Fossil Steam 1/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-9.6%
Combined Cycle	6.94	6.94	6.94	6.94	6.94	7.69	8.47	9.34	9.63	9.63	9.63	9.63	9.63	2.4%
Combustion Turbine/ Diesel	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.16	2.22	2.84	3.40	4.11	2.1%
Nuclear Power	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	1.11	N/A
Pumped Storage/Other 2/	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	38.63	38.74	39.24	39.47	40.13	40.39	40.73	40.87	41.06	41.25	41.31	41.43	41.44	0.5%
<b>Total</b>	<b>60.34</b>	<b>60.45</b>	<b>61.50</b>	<b>62.72</b>	<b>64.39</b>	<b>65.62</b>	<b>66.92</b>	<b>68.13</b>	<b>69.51</b>	<b>70.80</b>	<b>72.19</b>	<b>73.44</b>	<b>74.78</b>	<b>1.0%</b>
<b>Western Electricity Coordinating Council/ Rocky Mountain Power Area and Arizona-New Mexico-Southern Nevada Power Area</b>														
Coal Steam	20.49	21.54	22.64	23.76	24.98	26.32	27.61	28.91	30.29	31.74	33.17	34.68	36.13	3.1%
Other Fossil Steam 1/	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	-10.7%
Combined Cycle	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	19.25	0.9%
Combustion Turbine/ Diesel	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	5.78	0.8%
Nuclear Power	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	0.2%
Pumped Storage/Other 2/	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	6.61	6.66	6.72	6.77	6.77	6.83	6.88	6.93	7.04	7.04	7.05	7.05	7.05	0.5%
<b>Total</b>	<b>55.96</b>	<b>57.07</b>	<b>58.23</b>	<b>59.39</b>	<b>60.62</b>	<b>62.01</b>	<b>63.36</b>	<b>64.71</b>	<b>66.20</b>	<b>67.65</b>	<b>69.09</b>	<b>70.62</b>	<b>72.10</b>	<b>1.5%</b>
<b>Western Electricity Coordinating Council/ California</b>														
Coal Steam	13.08	14.06	15.34	15.67	16.66	17.79	19.05	20.27	21.40	22.41	23.41	24.22	25.11	7.2%
Other Fossil Steam 1/	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	11.11	-1.4%
Combined Cycle	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	13.76	1.5%
Combustion Turbine/ Diesel	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.38	6.57	6.84	7.06	7.39	8.03	1.1%
Nuclear Power	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	5.42	0.0%
Pumped Storage/Other 2/	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	N/A
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	18.86	19.06	19.24	19.40	19.56	19.71	19.81	19.98	20.06	20.15	20.24	20.25	20.29	1.2%
<b>Total</b>	<b>72.30</b>	<b>73.48</b>	<b>74.94</b>	<b>75.43</b>	<b>76.58</b>	<b>77.86</b>	<b>79.23</b>	<b>80.60</b>	<b>82.08</b>	<b>83.52</b>	<b>84.89</b>	<b>86.11</b>	<b>87.76</b>	<b>1.5%</b>

Table 75. Electricity Generation Capacity by Electricity Market Module Region and Source  
(gigawatts)

1/ Includes oil-, gas-, and dual-fired capacity.

2/ Other includes methane, propane, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

3/ Renewable sources include conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators. Values represent net summer capacity, which is the steady hourly output that generating equipment is expected to supply to system load as demonstrated by tests during summer peak load.

Sources: 2003 and 2004 electric power sector: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report" (preliminary). Other 2004 and projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 76. Renewable Energy Generation by Fuel  
 East Central Area Reliability Coordination Agreement

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity</b> (gigawatts)														
Conventional Hydropower	1.17	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Wood and Other Biomass 4/	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.14	0.15	0.15	0.15	0.15	0.15	0.17	0.17	0.17	0.17	0.17	0.17	0.65	0.67
Total	1.65	1.66	1.66	1.66	1.67	1.67	1.69	1.69	1.69	1.69	1.69	1.69	2.17	2.19
<b>Electricity Generation</b> (billion kilowatthours)														
Conventional Hydropower	4.21	3.69	2.44	2.70	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.94	0.81	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Wood and Other Biomass 4/	1.07	1.17	2.41	2.62	3.88	4.04	4.68	7.18	6.98	6.54	7.77	8.11	9.20	8.99
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.21	0.32	0.48	0.48	0.49	0.49	0.54	0.56	0.56	0.56	0.56	0.56	2.25	2.32
Total	6.43	5.99	6.53	7.02	8.37	8.53	9.22	11.73	11.54	11.10	12.32	12.66	15.45	15.31
<b>Energy Consumption</b> (quadrillion Btu)														
Conventional Hydropower	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wood and Other Biomass 4/	0.01	0.01	0.03	0.04	0.05	0.05	0.05	0.08	0.08	0.07	0.09	0.09	0.10	0.10
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Total	0.07	0.06	0.08	0.09	0.10	0.10	0.11	0.13	0.13	0.13	0.14	0.14	0.17	0.17

Table 76. Renewable Energy Generation by Fuel  
 East Central Area Reliability Coordination Agreement

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.18
Solar Photovoltaic 5/	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	0.17	0.17	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22	0.22	0.22	0.23
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.10	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Wood and Other Biomass 4/	1.24	1.23	1.23	1.28	1.32	1.35	1.38	1.41	1.44	1.47	1.49	1.51	1.53	1.56
Solar Photovoltaic 5/	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07
Total	1.54	1.54	1.55	1.60	1.65	1.69	1.72	1.77	1.80	1.83	1.85	1.87	1.89	1.92
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Table 76. Renewable Energy Generation by Fuel  
East Central Area Reliability Coordination Agreement

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	1.18	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.17	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	1.1%
Wood and Other Biomass 4/	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.69	0.69	0.72	0.75	0.77	0.80	0.83	0.86	0.86	0.86	0.88	0.90	0.93	0.95	7.4%
Total	2.21	2.25	2.28	2.31	2.33	2.37	2.39	2.42	2.42	2.42	2.44	2.47	2.50	2.51	1.6%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	2.79	-1.1%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	1.21	1.57	1.57	1.57	1.57	1.57	1.58	1.58	1.58	1.59	1.59	1.60	1.60	1.60	2.7%
Wood and Other Biomass 4/	8.27	8.89	9.05	10.81	11.77	11.74	11.75	11.54	8.88	8.75	8.51	7.94	7.95	8.15	7.8%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	2.38	2.38	2.47	2.55	2.61	2.72	2.80	2.88	2.88	2.88	2.95	3.02	3.11	3.16	9.3%
Total	14.66	15.62	15.87	17.71	18.73	18.82	18.91	18.78	16.13	16.01	15.84	15.35	15.45	15.71	3.8%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-1.1%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	2.7%
Wood and Other Biomass 4/	0.09	0.10	0.10	0.12	0.13	0.13	0.13	0.13	0.10	0.10	0.10	0.09	0.09	0.09	8.3%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	9.3%
Total	0.16	0.17	0.18	0.20	0.21	0.21	0.21	0.21	0.18	0.18	0.18	0.17	0.17	0.18	4.0%



Table 76. Renewable Energy Generation by Fuel  
East Central Area Reliability Coordination Agreement

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 4/	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.20	0.21	0.21	0.22	0.22	0.23	0.23	2.0%
Solar Photovoltaic 5/	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.05	10.6%
Total	0.23	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.28	0.29	0.30	0.31	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.2%
Wood and Other Biomass 4/	1.59	1.62	1.65	1.67	1.70	1.73	1.76	1.79	1.82	1.86	1.89	1.93	1.96	2.00	1.9%
Solar Photovoltaic 5/	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.10	0.12	0.14	0.16	10.7%
Total	1.95	1.98	2.01	2.04	2.07	2.10	2.13	2.17	2.20	2.24	2.29	2.34	2.40	2.46	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.5%

Table 76. Renewable Energy Generation by Fuel  
East Central Area Reliability Coordination Agreement

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 77. Renewable Energy Generation by Fuel  
Electric Reliability Council of Texas

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity</b> (gigawatts)														
Conventional Hydropower	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Wind	1.27	1.27	1.86	2.34	3.58	3.73	3.88	4.03	4.17	4.32	4.47	4.61	4.76	4.76
Total	1.91	1.90	2.49	2.98	4.23	4.38	4.53	4.69	4.84	4.99	5.14	5.30	5.45	5.50
<b>Electricity Generation</b> (billion kilowatthours)														
Conventional Hydropower	0.66	0.77	0.68	0.75	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.15	0.05	0.39	0.43	0.46	0.50	0.53	0.57	0.60	0.64	0.67	0.71	0.74	0.74
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.50	0.51	0.50	0.19	0.23	0.25	0.44	0.59	0.72	0.94
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02
Wind	2.30	2.87	4.72	7.31	11.45	11.95	12.46	12.97	13.48	13.99	14.51	15.03	15.55	15.55
Total	3.11	3.70	5.79	8.50	13.19	13.74	14.28	14.51	15.09	15.66	16.41	17.12	17.81	18.03
<b>Energy Consumption</b> (quadrillion Btu)														
Conventional Hydropower	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.02	0.03	0.05	0.08	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.16
Total	0.03	0.04	0.06	0.09	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.18	0.19	0.19

Table 77. Renewable Energy Generation by Fuel  
Electric Reliability Council of Texas

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.18	0.18	0.19
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.18	0.18	0.18	0.19	0.20	0.20	0.21	0.21	0.21	0.22	0.22	0.22	0.23	0.23
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 77. Renewable Energy Generation by Fuel  
 Electric Reliability Council of Texas

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	1.9%
Wood and Other Biomass 4/	0.05	0.05	0.05	0.05	0.05	0.10	0.15	0.27	0.33	0.44	0.50	0.72	0.72	0.76	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	21.5%
Wind	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	5.2%
Total	5.51	5.51	5.51	5.51	5.51	5.57	5.61	5.73	5.80	5.91	5.98	6.19	6.20	6.24	4.7%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.78	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	10.6%
Wood and Other Biomass 4/	0.95	1.01	1.16	1.25	1.22	1.66	2.14	3.17	3.71	4.66	4.71	7.00	6.78	6.64	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	N/A
Wind	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	15.55	6.7%
Total	18.05	18.11	18.26	18.36	18.33	18.78	19.26	20.30	20.84	21.80	21.85	24.15	23.93	23.79	7.4%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.6%
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.06	0.06	0.06	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	6.7%
Total	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.24	0.24	0.24	7.3%

Table 77. Renewable Energy Generation by Fuel  
Electric Reliability Council of Texas

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.2%
Wood and Other Biomass 4/	0.19	0.19	0.20	0.20	0.20	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.24	1.9%
Solar Photovoltaic 5/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	10.7%
Total	0.23	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.27	0.28	0.29	0.29	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5%

Table 77. Renewable Energy Generation by Fuel  
Electric Reliability Council of Texas

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.5

Table 78. Renewable Energy Generation by Fuel  
Mid-Atlantic Area Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.66	0.66	0.67	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.74	0.74	0.74
Wood and Other Biomass 4/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.07	0.07	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total	1.98	1.98	2.02	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.04	2.09	2.09	2.09
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	5.47	4.99	4.03	4.47	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	3.79	3.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	4.78	5.15	5.15	5.15
Wood and Other Biomass 4/	0.24	0.20	2.96	3.04	3.34	2.75	3.12	2.48	1.98	1.62	1.73	1.75	1.52	1.49
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.07	0.15	0.20	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Total	9.58	9.11	11.98	12.58	13.02	12.42	12.79	12.15	11.65	11.30	11.40	11.79	11.56	11.53
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.06	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.05	0.05	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Wood and Other Biomass 4/	0.00	0.00	0.03	0.03	0.04	0.03	0.04	0.03	0.03	0.02	0.02	0.03	0.03	0.03
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.11	0.11	0.14	0.15	0.15	0.15	0.15	0.15	0.14	0.14	0.14	0.15	0.15	0.15



Table 78. Renewable Energy Generation by Fuel  
Mid-Atlantic Area Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.10	0.10	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.14
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Wood and Other Biomass 4/	0.59	0.58	0.58	0.61	0.63	0.64	0.65	0.67	0.68	0.69	0.70	0.71	0.72	0.74
Solar Photovoltaic 5/	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total	0.73	0.73	0.73	0.76	0.78	0.80	0.82	0.84	0.85	0.86	0.87	0.88	0.90	0.91
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 78. Renewable Energy Generation by Fuel  
Mid-Atlantic Area Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	1.22	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.4%
Wood and Other Biomass 4/	0.03	0.03	0.03	0.07	0.07	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	6.4%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	1.5%
Total	2.09	2.09	2.09	2.13	2.13	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	0.4%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	4.61	-0.3%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.16	5.16	5.17	5.17	5.18	1.2%
Wood and Other Biomass 4/	1.49	1.50	1.56	1.88	2.06	2.60	2.59	2.61	2.55	2.79	2.83	3.14	3.12	3.10	11.0%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	2.5%
Total	11.53	11.54	11.60	11.92	12.10	12.64	12.63	12.65	12.59	12.84	12.88	13.20	13.18	13.17	1.4%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-0.3%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	1.2%
Wood and Other Biomass 4/	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	13.6%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5%
Total	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	1.9%

Table 78. Renewable Energy Generation by Fuel  
Mid-Atlantic Area Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 4/	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.14	2.0%
Solar Photovoltaic 5/	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	10.6%
Total	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2%
Wood and Other Biomass 4/	0.75	0.77	0.78	0.79	0.80	0.82	0.83	0.85	0.86	0.88	0.90	0.91	0.93	0.95	1.9%
Solar Photovoltaic 5/	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.06	0.07	0.08	10.7%
Total	0.92	0.94	0.95	0.96	0.98	0.99	1.01	1.02	1.04	1.06	1.08	1.11	1.13	1.16	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.5%

Table 78. Renewable Energy Generation by Fuel  
Mid-Atlantic Area Council

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 79. Renewable Energy Generation by Fuel  
Mid-America Interconnected Network

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.04	0.04	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10
Total	0.94	0.96	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	2.61	3.64	2.02	2.24	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	1.30	1.12	1.68	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69
Wood and Other Biomass 4/	0.02	0.05	0.17	0.45	0.86	1.06	2.11	2.25	2.12	2.30	2.55	3.33	4.99	5.89
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.10	0.23	0.23	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Total	4.03	5.05	4.10	4.67	5.14	5.34	6.39	6.53	6.40	6.58	6.83	7.61	9.27	10.17
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.03	0.04	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wood and Other Biomass 4/	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.04	0.05	0.06
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.05	0.06	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.09	0.10	0.11

Table 79. Renewable Energy Generation by Fuel  
Mid-America Interconnected Network

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.16	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.19	0.19	0.20	0.20
Solar Photovoltaic 5/	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03
Total	0.19	0.19	0.20	0.20	0.21	0.22	0.23	0.24	0.24	0.25	0.25	0.25	0.26	0.26
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.09	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
Wood and Other Biomass 4/	1.12	1.11	1.11	1.15	1.19	1.22	1.24	1.27	1.30	1.32	1.34	1.36	1.38	1.40
Solar Photovoltaic 5/	0.01	0.01	0.01	0.02	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.06	0.06	0.06
Total	1.38	1.38	1.39	1.44	1.48	1.52	1.55	1.59	1.62	1.64	1.66	1.68	1.70	1.72
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Table 79. Renewable Energy Generation by Fuel  
Mid-America Interconnected Network

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.32	0.32	0.32	0.32	0.32	0.32	1.2%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.07	0.07	0.11	0.11	6.7%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.12	0.14	0.14	0.14	0.14	5.1%
Total	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.10	1.12	1.19	1.19	1.23	1.23	1.0%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	2.31	-1.7%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	1.69	1.69	1.69	1.69	1.69	1.69	1.69	1.69	2.29	2.29	2.30	2.31	2.32	2.32	2.8%
Wood and Other Biomass 4/	6.18	6.52	6.42	4.76	4.14	3.68	3.42	3.16	2.32	1.99	2.29	2.37	2.71	2.66	16.1%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.35	0.41	0.41	0.41	0.41	2.2%
Total	10.46	10.80	10.70	9.04	8.42	7.96	7.70	7.45	7.20	6.94	7.31	7.40	7.75	7.69	1.6%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-1.7%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	2.8%
Wood and Other Biomass 4/	0.07	0.07	0.07	0.05	0.04	0.04	0.04	0.03	0.03	0.02	0.02	0.03	0.03	0.03	16.3%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.2%
Total	0.12	0.12	0.12	0.10	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	1.8%

Table 79. Renewable Energy Generation by Fuel  
Mid-America Interconnected Network

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 4/	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.26	2.0%
Solar Photovoltaic 5/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.06	10.6%
Total	0.26	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.32	0.33	0.34	0.36	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.2%
Wood and Other Biomass 4/	1.43	1.46	1.48	1.50	1.53	1.56	1.58	1.61	1.64	1.67	1.70	1.73	1.77	1.80	1.9%
Solar Photovoltaic 5/	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.11	0.13	0.14	10.7%
Total	1.75	1.78	1.81	1.83	1.86	1.89	1.92	1.95	1.98	2.02	2.06	2.11	2.16	2.21	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	1.5%



Table 79. Renewable Energy Generation by Fuel  
Mid-America Interconnected Network

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 80. Renewable Energy Generation by Fuel  
Mid-Continent Area Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	2.88	2.88	2.88	2.88	2.88	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Wood and Other Biomass 4/	0.17	0.17	0.17	0.17	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	1.18	1.39	1.83	1.89	2.05	2.06	2.08	2.10	2.10	2.10	2.10	2.10	2.10	2.10
Total	4.41	4.62	5.06	5.12	5.34	5.36	5.38	5.40	5.40	5.40	5.40	5.40	5.40	5.40
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	9.70	9.29	11.75	13.03	13.42	13.44	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.98	0.89	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
Wood and Other Biomass 4/	0.14	0.15	1.41	1.46	1.71	1.75	1.50	1.65	1.63	1.61	1.51	1.52	1.56	1.37
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	2.09	2.34	4.13	5.36	5.81	5.88	5.94	6.00	6.01	6.01	6.01	6.01	6.01	6.01
Total	12.90	12.66	18.30	20.86	21.96	22.07	21.89	22.10	22.10	22.08	21.98	21.99	22.04	21.84
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.10	0.10	0.12	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.00	0.00	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.02	0.02	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Total	0.14	0.13	0.20	0.23	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23

Table 80. Renewable Energy Generation by Fuel  
Mid-Continent Area Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16	0.16
Solar Photovoltaic 5/	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	0.16	0.16	0.16	0.17	0.17	0.18	0.19	0.19	0.20	0.20	0.20	0.21	0.21	0.21
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Wood and Other Biomass 4/	0.68	0.68	0.68	0.70	0.72	0.74	0.76	0.77	0.79	0.80	0.82	0.83	0.84	0.85
Solar Photovoltaic 5/	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04
Total	0.84	0.84	0.85	0.87	0.90	0.92	0.94	0.97	0.98	1.00	1.01	1.02	1.04	1.05
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

Table 80. Renewable Energy Generation by Fuel  
Mid-Continent Area Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	2.89	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	N/A
Wood and Other Biomass 4/	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	1.1%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	2.10	1.6%
Total	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	0.6%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45	13.45	1.4%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	0.5%
Wood and Other Biomass 4/	1.41	1.47	1.57	1.76	1.81	1.90	1.51	1.55	1.78	1.75	1.83	1.83	1.46	1.36	8.8%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	6.01	3.7%
Total	21.88	21.94	22.04	22.23	22.28	22.38	21.98	22.02	22.25	22.23	22.30	22.30	21.93	21.84	2.1%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	1.4%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.5%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	9.7%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	3.7%
Total	0.23	0.23	0.23	0.24	0.24	0.24	0.23	0.23	0.24	0.24	0.24	0.24	0.23	0.23	2.1%

Table 80. Renewable Energy Generation by Fuel  
Mid-Continent Area Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 4/	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.21	2.0%
Solar Photovoltaic 5/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	10.6%
Total	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.27	0.28	0.29	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2%
Wood and Other Biomass 4/	0.87	0.89	0.90	0.92	0.93	0.95	0.96	0.98	1.00	1.02	1.04	1.06	1.08	1.10	1.9%
Solar Photovoltaic 5/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.08	0.09	10.7%
Total	1.07	1.09	1.10	1.12	1.13	1.15	1.17	1.19	1.21	1.23	1.25	1.28	1.31	1.35	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	1.5%

Table 80. Renewable Energy Generation by Fuel  
Mid-Continent Area Power Pool

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 81. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New York

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electric Power Sector 1/														
Generating Capacity (gigawatts)														
Conventional Hydropower	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Wood and Other Biomass 4/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.05	0.05	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Total	4.85	4.85	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05	5.05
Electricity Generation (billion kilowatthours)														
Conventional Hydropower	24.17	27.41	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	1.99	1.86	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14	2.14
Wood and Other Biomass 4/	0.24	0.24	0.83	0.93	1.32	1.70	1.80	1.35	1.40	1.42	1.34	1.26	1.30	1.28
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.04	0.11	0.30	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Total	26.43	29.62	28.42	29.06	29.45	29.83	29.93	29.48	29.53	29.55	29.47	29.39	29.42	29.41
Energy Consumption (quadrillion Btu)														
Conventional Hydropower	0.25	0.28	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Wood and Other Biomass 4/	0.00	0.00	0.01	0.02	0.02	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.28	0.31	0.30	0.31	0.32	0.32	0.33	0.32	0.32	0.32	0.32	0.32	0.32	0.32

Table 81. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New York

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Wood and Other Biomass 4/	0.34	0.34	0.34	0.35	0.36	0.37	0.38	0.38	0.39	0.40	0.41	0.41	0.42	0.42
Solar Photovoltaic 5/	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	0.42	0.42	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.50	0.51	0.52	0.52
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01



Table 81. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New York

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	4.48	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.29	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.4%
Wood and Other Biomass 4/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	6.5%
Total	5.05	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	5.08	0.2%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	25.15	-0.3%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	2.14	2.35	2.35	2.35	2.35	2.35	2.36	2.36	2.37	2.37	2.37	2.38	2.38	2.39	1.0%
Wood and Other Biomass 4/	1.31	1.30	1.34	1.13	0.77	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	3.1%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	8.0%
Total	29.44	29.64	29.68	29.46	29.11	28.86	28.86	28.87	28.87	28.87	28.88	28.88	28.89	28.89	-0.1%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	-0.3%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.0%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.6%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	8.0%
Total	0.32	0.32	0.32	0.32	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.0%

Table 81. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New York

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	2.0%
Solar Photovoltaic 5/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	10.6%
Total	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.2%
Wood and Other Biomass 4/	0.43	0.44	0.45	0.46	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55	1.9%
Solar Photovoltaic 5/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.04	0.04	10.7%
Total	0.53	0.54	0.55	0.56	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.64	0.65	0.67	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.5%

Table 81. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New York

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 82. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Electric Power Sector 1/														
Generating Capacity (gigawatts)														
Conventional Hydropower	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.53	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.58	0.58
Wood and Other Biomass 4/	0.64	0.64	0.67	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.01	0.01	0.01	0.23	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.73
Total	2.87	2.87	2.91	3.18	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.62	3.65	3.71
Electricity Generation (billion kilowatthours)														
Conventional Hydropower	6.11	6.20	4.27	4.73	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	3.99	3.88	4.18	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.19	4.43	4.43
Wood and Other Biomass 4/	2.67	2.61	4.33	3.98	3.82	3.55	3.55	3.45	3.40	3.35	3.32	3.32	3.32	3.45
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.01	0.01	0.02	0.75	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.22	2.42
Total	12.78	12.70	12.80	13.66	15.11	14.84	14.84	14.74	14.69	14.64	14.61	14.61	14.85	15.18
Energy Consumption (quadrillion Btu)														
Conventional Hydropower	0.06	0.06	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Wood and Other Biomass 4/	0.03	0.03	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.05
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	0.14	0.14	0.17	0.18	0.19	0.18	0.18	0.18	0.18	0.18	0.17	0.17	0.18	0.18

Table 82. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Wood and Other Biomass 4/	0.50	0.50	0.50	0.52	0.54	0.55	0.57	0.58	0.59	0.61	0.62	0.62	0.64	0.65
Solar Photovoltaic 5/	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.07	0.08	0.08	0.08	0.08	0.08
Total	0.62	0.62	0.63	0.66	0.69	0.71	0.73	0.76	0.78	0.79	0.80	0.81	0.82	0.83
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.21	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Wood and Other Biomass 4/	2.60	2.58	2.58	2.68	2.77	2.83	2.89	2.96	3.02	3.07	3.12	3.16	3.21	3.26
Solar Photovoltaic 5/	0.02	0.02	0.03	0.05	0.07	0.08	0.10	0.12	0.13	0.13	0.13	0.13	0.14	0.14
Total	3.22	3.22	3.24	3.34	3.45	3.53	3.61	3.70	3.76	3.82	3.87	3.91	3.96	4.01
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05

Table 82. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.3%
Wood and Other Biomass 4/	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.4%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	22.7%
Total	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	1.6%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	-0.9%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.44	4.44	4.44	4.45	4.45	4.45	0.5%
Wood and Other Biomass 4/	3.45	3.56	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.34	3.34	3.37	3.34	1.0%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	26.2%
Total	17.38	17.49	17.25	17.25	17.25	17.25	17.25	17.25	17.26	17.26	17.29	17.29	17.32	17.29	1.2%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-0.9%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.5%
Wood and Other Biomass 4/	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	2.2%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	26.2%
Total	0.20	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	1.4%

Table 82. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
<b>Generating Capacity</b> (gigawatts)															
Conventional Hydropower 7/	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Wood and Other Biomass 4/	0.66	0.67	0.69	0.70	0.71	0.72	0.74	0.75	0.76	0.78	0.80	0.81	0.83	0.84	2.0%
Solar Photovoltaic 5/	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.11	0.12	0.14	0.17	0.19	10.6%
Total	0.85	0.86	0.88	0.89	0.91	0.92	0.94	0.95	0.97	1.00	1.03	1.06	1.10	1.15	2.4%
<b>Electricity Generation</b> (billion kilowatthours)															
Conventional Hydropower 7/	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.2%
Wood and Other Biomass 4/	3.32	3.39	3.45	3.50	3.56	3.62	3.68	3.75	3.81	3.89	3.96	4.04	4.11	4.19	1.9%
Solar Photovoltaic 5/	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.17	0.18	0.19	0.21	0.25	0.29	0.34	10.7%
Total	4.08	4.15	4.21	4.27	4.33	4.39	4.46	4.53	4.61	4.69	4.79	4.90	5.02	5.14	1.8%
<b>Energy Consumption</b> (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	1.5%

Table 82. Renewable Energy Generation by Fuel  
Northeast Power Coordinating Council/New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	1.68	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.3%
Wood and Other Biomass 4/	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.4%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	1.35	22.7%
Total	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	4.33	1.6%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	4.88	-0.9%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.43	4.44	4.44	4.44	4.45	4.45	4.45	0.5%
Wood and Other Biomass 4/	3.45	3.56	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.32	3.34	3.34	3.37	3.34	1.0%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	4.62	26.2%
Total	17.38	17.49	17.25	17.25	17.25	17.25	17.25	17.25	17.26	17.26	17.29	17.29	17.32	17.29	1.2%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-0.9%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.5%
Wood and Other Biomass 4/	0.05	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	2.2%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	26.2%
Total	0.20	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	1.4%



Table 83. Renewable Energy Generation by Fuel  
 Florida Reliability Coordinating Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.44	0.44	0.44	0.44	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46
Wood and Other Biomass 4/	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.18
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.64	0.64	0.64	0.64	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.69
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	0.26	0.20	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	3.35	3.24	2.94	2.94	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08
Wood and Other Biomass 4/	0.49	0.46	1.18	1.39	2.17	2.08	1.69	2.99	2.58	2.65	2.87	2.86	2.84	4.11
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	4.10	3.90	4.14	4.34	5.26	5.17	4.79	6.09	5.67	5.75	5.96	5.95	5.93	7.20
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Wood and Other Biomass 4/	0.00	0.00	0.03	0.03	0.04	0.04	0.03	0.06	0.05	0.05	0.05	0.05	0.06	0.07
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.05	0.05	0.07	0.07	0.08	0.08	0.08	0.10	0.09	0.09	0.09	0.10	0.10	0.11

Table 83. Renewable Energy Generation by Fuel  
 Florida Reliability Coordinating Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16
Solar Photovoltaic 5/	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Total	0.15	0.16	0.16	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	0.21	0.21
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Wood and Other Biomass 4/	0.80	0.79	0.79	0.82	0.85	0.87	0.89	0.91	0.93	0.94	0.96	0.97	0.98	1.00
Solar Photovoltaic 5/	0.00	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Total	0.99	0.99	0.99	1.03	1.06	1.08	1.11	1.13	1.15	1.17	1.19	1.20	1.22	1.23
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02

Table 83. Renewable Energy Generation by Fuel  
 Florida Reliability Coordinating Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.46	0.2%
Wood and Other Biomass 4/	0.18	0.18	0.24	0.31	0.37	0.37	0.49	0.62	0.69	0.79	0.79	0.79	0.79	0.91	7.4%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.69	0.69	0.75	0.82	0.89	0.89	1.00	1.13	1.20	1.31	1.31	1.31	1.31	1.42	3.1%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	-9.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	3.08	-0.2%
Wood and Other Biomass 4/	4.11	3.08	3.47	4.30	4.02	4.47	5.08	6.15	6.79	7.56	8.20	8.20	8.17	9.19	12.2%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	7.20	6.17	6.57	7.39	7.11	7.56	8.17	9.25	9.88	10.65	11.29	11.29	11.26	12.29	4.5%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-9.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-0.2%
Wood and Other Biomass 4/	0.07	0.06	0.06	0.07	0.07	0.07	0.07	0.09	0.09	0.10	0.10	0.10	0.10	0.11	13.2%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.11	0.10	0.10	0.11	0.11	0.11	0.12	0.13	0.13	0.14	0.14	0.14	0.14	0.15	4.3%

Table 83. Renewable Energy Generation by Fuel  
 Florida Reliability Coordinating Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 4/	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.20	0.20	0.20	0.21	0.21	2.0%
Solar Photovoltaic 5/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	10.6%
Total	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.25	0.26	0.27	0.28	0.29	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.2%
Wood and Other Biomass 4/	1.02	1.04	1.06	1.07	1.09	1.11	1.13	1.15	1.17	1.19	1.22	1.24	1.26	1.29	1.9%
Solar Photovoltaic 5/	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.08	0.09	0.10	10.7%
Total	1.25	1.27	1.29	1.31	1.33	1.35	1.37	1.39	1.41	1.44	1.47	1.50	1.54	1.58	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.5%

Table 83. Renewable Energy Generation by Fuel  
Florida Reliability Coordinating Council

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 84. Renewable Energy Generation by Fuel  
Southeastern Electric Reliability Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	12.02	12.04	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.18	0.19	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.24	0.24	0.24
Wood and Other Biomass 4/	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.03	0.03	0.08	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.30	0.32
Total	12.36	12.41	12.38	12.44	12.55	12.55	12.55	12.55	12.55	12.55	12.55	12.58	12.68	12.71
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	41.88	34.41	30.45	33.75	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	1.31	1.14	1.23	1.24	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.50	1.50	1.50
Wood and Other Biomass 4/	0.92	1.03	3.47	4.86	8.80	9.84	11.15	18.08	16.71	12.63	13.14	13.71	13.62	17.13
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.10	0.29	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.65	1.04	1.12
Total	44.11	36.59	35.26	40.14	45.51	46.55	47.87	54.79	53.42	49.34	49.85	50.66	50.96	54.55
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.43	0.35	0.31	0.35	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wood and Other Biomass 4/	0.01	0.01	0.04	0.06	0.10	0.11	0.12	0.20	0.18	0.14	0.15	0.15	0.15	0.19
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.46	0.38	0.37	0.42	0.48	0.49	0.51	0.58	0.57	0.53	0.53	0.54	0.54	0.58

Table 84. Renewable Energy Generation by Fuel  
Southeastern Electric Reliability Council

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Wood and Other Biomass 4/	2.40	2.41	2.41	2.51	2.60	2.66	2.73	2.79	2.86	2.91	2.96	3.00	3.05	3.10
Solar Photovoltaic 5/	0.04	0.07	0.10	0.14	0.19	0.23	0.28	0.35	0.36	0.36	0.37	0.37	0.38	0.39
Total	2.96	2.99	3.02	3.16	3.31	3.41	3.52	3.66	3.73	3.79	3.84	3.89	3.95	4.00
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	2.49	2.58	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	1.29	1.23	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Wood and Other Biomass 4/	16.26	16.15	16.15	16.74	17.29	17.69	18.08	18.48	18.88	19.21	19.49	19.75	20.05	20.36
Solar Photovoltaic 5/	0.10	0.15	0.21	0.31	0.43	0.52	0.62	0.78	0.79	0.80	0.82	0.83	0.85	0.86
Total	20.15	20.11	20.23	20.91	21.59	22.08	22.56	23.12	23.53	23.88	24.17	24.45	24.76	25.09
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Wood and Other Biomass 4/	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.24	0.24	0.25	0.25	0.25	0.26	0.26
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.26	0.26	0.26	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.30	0.31	0.31	0.32

Table 84. Renewable Energy Generation by Fuel  
Southeastern Electric Reliability Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.9%
Wood and Other Biomass 4/	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	3.4%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.40	0.45	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	11.7%
Total	12.79	12.84	12.90	12.90	12.90	12.90	12.90	12.90	12.91	12.91	12.91	12.91	12.91	13.12	0.2%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	34.80	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.51	1.51	1.52	1.52	1.1%
Wood and Other Biomass 4/	16.97	14.20	14.43	13.65	13.00	13.62	13.19	13.81	13.95	14.39	12.60	12.27	11.61	12.88	10.2%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	1.36	1.51	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	1.74	26.3%
Total	54.63	52.01	52.47	51.69	51.04	51.65	51.23	51.85	51.99	52.43	50.65	50.33	49.66	50.94	1.3%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.36	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.1%
Wood and Other Biomass 4/	0.19	0.16	0.16	0.15	0.15	0.15	0.15	0.16	0.16	0.17	0.14	0.14	0.13	0.14	10.7%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	26.3%
Total	0.58	0.55	0.56	0.55	0.54	0.55	0.55	0.55	0.56	0.56	0.54	0.54	0.53	0.54	1.4%



Table 84. Renewable Energy Generation by Fuel  
Southeastern Electric Reliability Council

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
<b>Generating Capacity</b> (gigawatts)															
Conventional Hydropower 7/	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.37	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.0%
Wood and Other Biomass 4/	3.17	3.24	3.30	3.35	3.41	3.48	3.54	3.60	3.67	3.75	3.83	3.90	3.98	4.06	2.0%
Solar Photovoltaic 5/	0.40	0.40	0.41	0.42	0.43	0.43	0.44	0.46	0.49	0.52	0.59	0.69	0.81	0.93	10.6%
Total	4.08	4.15	4.22	4.29	4.35	4.42	4.50	4.58	4.67	4.78	4.93	5.11	5.30	5.50	2.4%
<b>Electricity Generation</b> (billion kilowatthours)															
Conventional Hydropower 7/	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	2.57	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	1.30	0.2%
Wood and Other Biomass 4/	20.77	21.19	21.54	21.89	22.26	22.64	23.03	23.42	23.84	24.30	24.77	25.23	25.70	26.19	1.9%
Solar Photovoltaic 5/	0.88	0.90	0.91	0.93	0.95	0.97	0.99	1.04	1.09	1.17	1.33	1.57	1.82	2.11	10.7%
Total	25.51	25.95	26.32	26.68	27.07	27.47	27.88	28.32	28.80	29.33	29.97	30.66	31.39	32.16	1.8%
<b>Energy Consumption</b> (quadrillion Btu)															
Conventional Hydropower 7/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Wood and Other Biomass 4/	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.32	0.32	0.33	0.34	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.32	0.33	0.33	0.33	0.34	0.34	0.35	0.35	0.36	0.37	0.37	0.38	0.38	0.39	1.5%

Table 84. Renewable Energy Generation by Fuel  
Southeastern Electric Reliability Council

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 85. Renewable Energy Generation by Fuel  
Southwest Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02
Wind	0.38	0.38	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Total	2.93	2.93	3.50	3.50	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.52	3.52	3.52
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	5.05	6.93	4.58	5.07	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.06	0.06	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.54	0.55	0.71	1.52	1.44	1.04	1.72	1.88	2.26	2.10
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04
Wind	0.69	1.19	1.86	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20
Total	5.80	8.19	6.46	8.30	9.00	9.02	9.17	9.99	9.91	9.52	10.21	10.37	10.75	10.60
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.05	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.01	0.02	0.02	0.02	0.02
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total	0.06	0.08	0.07	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11	0.11	0.11

Table 85. Renewable Energy Generation by Fuel  
Southwest Power Pool

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wood and Other Biomass 4/	0.28	0.28	0.28	0.29	0.30	0.31	0.32	0.32	0.33	0.34	0.34	0.35	0.35	0.36
Solar Photovoltaic 5/	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05
Total	0.34	0.35	0.35	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.45	0.46	0.47
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.29	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.15	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Wood and Other Biomass 4/	1.86	1.85	1.85	1.92	1.98	2.03	2.07	2.12	2.16	2.20	2.24	2.26	2.30	2.34
Solar Photovoltaic 5/	0.01	0.02	0.02	0.04	0.05	0.06	0.07	0.09	0.09	0.09	0.09	0.10	0.10	0.10
Total	2.31	2.31	2.32	2.40	2.48	2.53	2.59	2.65	2.70	2.74	2.77	2.80	2.84	2.88
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04

Table 85. Renewable Energy Generation by Fuel  
Southwest Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	2.55	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.4%
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.09	0.09	0.09	0.09	0.14	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	N/A
Wind	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.97	0.99	0.99	0.99	0.99	0.99	3.7%
Total	3.52	3.53	3.53	3.53	3.53	3.54	3.54	3.54	3.61	3.68	3.68	3.68	3.69	3.73	0.9%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	5.23	-1.1%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-1.5%
Wood and Other Biomass 4/	2.19	2.16	1.71	1.63	1.83	1.72	1.54	1.59	1.77	2.14	2.50	1.91	2.43	3.09	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.04	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.11	0.11	0.12	0.12	N/A
Wind	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.20	3.26	3.31	3.31	3.31	3.31	3.31	4.0%
Total	10.71	10.69	10.24	10.17	10.37	10.27	10.10	10.15	10.39	10.83	11.19	10.61	11.14	11.80	1.4%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-1.1%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-1.5%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	4.0%
Total	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.12	1.4%

Table 85. Renewable Energy Generation by Fuel  
Southwest Power Pool

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Wood and Other Biomass 4/	0.37	0.38	0.38	0.39	0.40	0.40	0.41	0.42	0.43	0.44	0.44	0.45	0.46	0.47	2.0%
Solar Photovoltaic 5/	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.07	0.08	0.09	0.11	10.6%
Total	0.47	0.48	0.49	0.50	0.51	0.51	0.52	0.53	0.54	0.56	0.57	0.59	0.62	0.64	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.2%
Wood and Other Biomass 4/	2.38	2.43	2.47	2.51	2.55	2.60	2.64	2.69	2.73	2.79	2.84	2.89	2.95	3.00	1.9%
Solar Photovoltaic 5/	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.12	0.13	0.13	0.15	0.18	0.21	0.24	10.7%
Total	2.92	2.98	3.02	3.06	3.10	3.15	3.20	3.25	3.30	3.36	3.44	3.52	3.60	3.69	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	1.5%

Table 85. Renewable Energy Generation by Fuel  
Southwest Power Pool

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 86. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	35.31	35.24	35.26	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28	35.28
Geothermal 2/	0.18	0.18	0.18	0.24	0.27	0.28	0.42	0.56	0.68	0.79	0.88	0.97	1.04	1.09
Municipal Solid Waste 3/	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Wood and Other Biomass 4/	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03
Wind	0.78	0.78	1.22	1.34	1.53	1.55	1.58	1.60	1.63	1.65	1.68	1.70	1.73	1.73
Total	36.59	36.52	36.98	37.18	37.40	37.45	37.61	37.78	37.93	38.07	38.19	38.31	38.41	38.47
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	121.16	120.62	129.84	144.05	148.52	148.52	148.52	148.52	148.52	148.52	148.52	148.52	148.52	148.52
Geothermal 2/	1.19	1.32	1.69	1.99	2.34	2.52	3.44	4.49	5.54	6.55	7.38	8.18	8.82	9.31
Municipal Solid Waste 3/	0.34	0.31	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
Wood and Other Biomass 4/	1.22	1.13	0.10	0.11	0.11	0.13	0.24	1.34	1.40	1.44	1.49	1.57	1.49	1.66
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.03
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.06	0.07	0.08
Wind	1.24	1.38	3.03	4.58	5.20	5.29	5.38	5.46	5.55	5.64	5.73	5.81	5.90	5.90
Total	125.16	124.76	135.23	151.30	156.76	157.05	158.17	160.42	161.62	162.77	163.75	164.74	165.39	166.07
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	1.25	1.24	1.33	1.48	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53
Geothermal 2/	0.03	0.03	0.04	0.04	0.05	0.06	0.09	0.12	0.16	0.19	0.22	0.25	0.27	0.28
Municipal Solid Waste 3/	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	0.03	0.02	0.03
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.01	0.01	0.03	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Total	1.30	1.30	1.41	1.58	1.64	1.65	1.68	1.74	1.77	1.81	1.84	1.87	1.89	1.91



Table 86. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wood and Other Biomass 4/	0.31	0.31	0.31	0.32	0.33	0.34	0.35	0.36	0.36	0.37	0.38	0.38	0.39	0.39
Solar Photovoltaic 5/	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05
Total	0.38	0.38	0.38	0.40	0.42	0.43	0.45	0.47	0.47	0.48	0.49	0.49	0.50	0.51
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.21	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.11	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
Wood and Other Biomass 4/	1.36	1.35	1.35	1.40	1.45	1.48	1.51	1.55	1.58	1.61	1.63	1.65	1.68	1.70
Solar Photovoltaic 5/	0.01	0.01	0.02	0.03	0.04	0.04	0.05	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Total	1.69	1.68	1.69	1.75	1.81	1.85	1.89	1.93	1.97	2.00	2.02	2.05	2.07	2.10
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03

Table 86. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	35.28	35.28	35.28	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	35.44	0.0%
Geothermal 2/	1.14	1.25	1.32	1.54	1.64	1.74	1.88	2.06	2.12	2.26	2.35	2.38	2.42	2.42	10.6%
Municipal Solid Waste 3/	0.08	0.08	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	1.4%
Wood and Other Biomass 4/	0.24	0.24	0.24	0.24	0.24	0.28	0.34	0.39	0.39	0.39	0.44	0.44	0.48	0.48	2.8%
Solar Thermal	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	N/A
Solar Photovoltaic 5/	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.10	38.6%
Wind	1.73	1.73	1.73	1.84	1.97	2.47	2.53	2.63	2.70	2.75	2.80	2.82	2.85	2.85	5.1%
Total	38.52	38.63	38.74	39.24	39.47	40.13	40.39	40.73	40.87	41.06	41.25	41.31	41.43	41.44	0.5%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	148.52	148.52	148.52	149.39	149.39	149.39	149.39	149.39	149.39	149.39	149.39	149.39	149.39	149.39	0.8%
Geothermal 2/	9.75	10.52	11.17	12.73	13.68	14.71	15.81	17.19	17.98	19.07	19.89	20.36	20.74	20.83	11.2%
Municipal Solid Waste 3/	0.57	0.57	0.82	0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84	0.85	0.85	4.0%
Wood and Other Biomass 4/	1.78	1.73	1.74	1.75	1.75	2.08	2.55	2.89	2.94	3.06	3.39	3.51	3.88	3.77	4.7%
Solar Thermal	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.10	0.11	N/A
Solar Photovoltaic 5/	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	N/A
Wind	5.90	5.90	5.90	6.34	6.85	8.80	8.99	9.35	9.61	9.79	9.96	10.04	10.17	10.17	8.0%
Total	166.64	167.37	168.30	171.20	172.68	176.01	177.79	179.89	181.00	182.41	183.75	184.44	185.34	185.33	1.5%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	1.53	1.53	1.53	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	1.54	0.8%
Geothermal 2/	0.30	0.33	0.35	0.40	0.43	0.47	0.51	0.56	0.59	0.63	0.66	0.68	0.69	0.69	13.2%
Municipal Solid Waste 3/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	4.0%
Wood and Other Biomass 4/	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	5.8%
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.06	0.06	0.06	0.07	0.07	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	8.0%
Total	1.92	1.95	1.98	2.04	2.08	2.14	2.19	2.24	2.28	2.32	2.35	2.37	2.39	2.40	2.4%

Table 86. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/Northwest Power Pool Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
<b>Generating Capacity</b> (gigawatts)															
Conventional Hydropower 7/	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Wood and Other Biomass 4/	0.40	0.41	0.42	0.43	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	2.0%
Solar Photovoltaic 5/	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.08	0.09	0.10	0.12	10.6%
Total	0.52	0.53	0.54	0.54	0.55	0.56	0.57	0.58	0.59	0.61	0.63	0.65	0.67	0.70	2.4%
<b>Electricity Generation</b> (billion kilowatthours)															
Conventional Hydropower 7/	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.2%
Wood and Other Biomass 4/	1.74	1.77	1.80	1.83	1.86	1.89	1.93	1.96	2.00	2.03	2.07	2.11	2.15	2.19	1.9%
Solar Photovoltaic 5/	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.11	0.13	0.15	0.18	10.7%
Total	2.13	2.17	2.20	2.23	2.27	2.30	2.33	2.37	2.41	2.45	2.51	2.57	2.63	2.69	1.8%
<b>Energy Consumption</b> (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.5%

Table 86. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/Northwest Power Pool Area

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 87. Renewable Energy Generation by Fuel  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona- New Mexico-Southern Nevada Power Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	5.38	5.38	5.37	5.37	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38
Geothermal 2/	0.13	0.13	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Municipal Solid Waste 3/	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Solar Thermal	0.00	0.00	0.00	0.00	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08
Solar Photovoltaic 5/	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05
Wind	0.57	0.63	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Total	6.13	6.20	6.43	6.44	6.52	6.52	6.52	6.53	6.53	6.54	6.54	6.54	6.55	6.55
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	12.08	11.78	13.00	14.41	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86
Geothermal 2/	0.87	0.81	1.21	1.34	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36	1.36
Municipal Solid Waste 3/	0.10	0.10	0.16	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
Wood and Other Biomass 4/	0.00	0.00	0.01	0.03	0.03	0.05	0.07	0.21	0.21	0.22	0.22	0.20	0.19	0.24
Solar Thermal	0.00	0.00	0.00	0.00	0.17	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.25	0.25
Solar Photovoltaic 5/	0.00	0.00	0.04	0.04	0.05	0.06	0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.12
Wind	0.72	1.34	2.20	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62
Total	13.76	14.02	16.62	18.61	19.27	19.35	19.38	19.53	19.54	19.56	19.57	19.57	19.57	19.63
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.12	0.12	0.13	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Geothermal 2/	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Municipal Solid Waste 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.01	0.01	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Total	0.15	0.15	0.18	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22

Table 87. Renewable Energy Generation by Fuel  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona- New Mexico-Southern Nevada Power Area

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 87. Renewable Energy Generation by Fuel  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona- New Mexico-Southern Nevada Power Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	5.38	0.0%
Geothermal 2/	0.17	0.22	0.27	0.32	0.37	0.37	0.42	0.47	0.52	0.57	0.57	0.57	0.57	0.57	5.9%
Municipal Solid Waste 3/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.4%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.07	0.07	0.07	0.07	0.07	5.5%
Solar Thermal	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	N/A
Solar Photovoltaic 5/	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.08	0.08	0.08	6.5%
Wind	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	1.1%
Total	6.56	6.61	6.66	6.72	6.77	6.77	6.83	6.88	6.93	7.04	7.04	7.05	7.05	7.05	0.5%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	14.86	0.9%
Geothermal 2/	1.36	1.67	2.04	2.47	2.89	3.02	3.38	3.75	4.18	4.61	4.73	4.78	4.78	4.78	7.1%
Municipal Solid Waste 3/	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.4%
Wood and Other Biomass 4/	0.22	0.24	0.24	0.25	0.24	0.23	0.23	0.22	0.21	0.60	0.60	0.60	0.60	0.60	N/A
Solar Thermal	0.25	0.26	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28	0.29	0.29	0.29	0.30	N/A
Solar Photovoltaic 5/	0.13	0.13	0.14	0.15	0.16	0.16	0.17	0.18	0.19	0.19	0.20	0.21	0.21	0.22	N/A
Wind	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.62	2.6%
Total	19.62	19.96	20.34	20.79	21.22	21.34	21.72	22.09	22.52	23.34	23.48	23.54	23.55	23.56	2.0%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.9%
Geothermal 2/	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.12	0.13	0.13	0.13	8.0%
Municipal Solid Waste 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.4%
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	N/A
Solar Thermal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	2.6%
Total	0.22	0.23	0.24	0.25	0.26	0.26	0.28	0.29	0.30	0.31	0.32	0.32	0.32	0.32	2.9%

Table 87. Renewable Energy Generation by Fuel  
 Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona- New Mexico-Southern Nevada Power Area

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2%
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.7%
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5%



Table 87. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/Rocky Mountain Power Area and Arizona- New Mexico-Southern Nevada Power Area

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 88. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/California

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	9.71	9.71	9.74	9.74	9.74	9.74	9.74	9.74	9.74	9.74	9.74	9.79	9.79	9.79
Geothermal 2/	1.81	1.81	1.82	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.83	1.90	1.98	2.08
Municipal Solid Waste 3/	0.32	0.33	0.32	0.32	0.32	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52
Wood and Other Biomass 4/	0.39	0.39	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Solar Thermal	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.40	0.40	0.40	0.40
Solar Photovoltaic 5/	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05
Wind	1.90	2.07	2.32	3.30	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27
Total	14.54	14.71	15.00	15.98	17.96	18.15	18.16	18.16	18.17	18.17	18.18	18.31	18.39	18.49
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	35.28	32.89	33.03	36.62	37.74	37.74	37.74	37.74	37.74	37.74	37.74	37.99	37.99	37.99
Geothermal 2/	12.19	12.02	11.29	11.36	11.42	11.42	11.42	11.42	11.42	11.42	11.42	11.86	12.41	13.19
Municipal Solid Waste 3/	2.04	2.13	2.31	2.31	2.31	3.81	3.82	3.83	3.83	3.83	3.83	3.83	3.83	3.83
Wood and Other Biomass 4/	2.53	2.45	0.00	0.00	0.00	0.00	0.00	1.99	1.73	1.83	1.94	2.05	1.78	1.66
Solar Thermal	0.53	0.58	0.58	0.58	0.59	0.59	0.60	0.60	0.60	0.61	0.61	0.62	0.62	0.63
Solar Photovoltaic 5/	0.00	0.00	0.02	0.02	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.10	0.11
Wind	3.70	4.21	5.94	9.25	15.76	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79
Total	56.27	54.28	53.18	60.15	67.84	69.39	69.41	71.41	71.17	71.29	71.41	72.23	72.53	73.20
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	0.36	0.34	0.34	0.38	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Geothermal 2/	0.26	0.25	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.27	0.29
Municipal Solid Waste 3/	0.03	0.03	0.03	0.03	0.03	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Wood and Other Biomass 4/	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Solar Thermal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.04	0.04	0.06	0.10	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Total	0.72	0.69	0.68	0.75	0.83	0.85	0.85	0.88	0.88	0.88	0.88	0.90	0.91	0.93

Table 88. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/California

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Wood and Other Biomass 4/	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	0.20	0.21
Solar Photovoltaic 5/	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03
Total	0.20	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.25	0.26	0.26	0.27	0.27
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Wood and Other Biomass 4/	0.99	0.99	0.99	1.02	1.06	1.08	1.10	1.13	1.15	1.17	1.19	1.21	1.23	1.24
Solar Photovoltaic 5/	0.01	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Total	1.23	1.23	1.24	1.28	1.32	1.35	1.38	1.41	1.44	1.46	1.48	1.49	1.51	1.53
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wood and Other Biomass 4/	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

Table 88. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/California

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	9.79	0.0%
Geothermal 2/	2.18	2.38	2.57	2.75	2.90	3.05	3.19	3.29	3.38	3.46	3.54	3.61	3.61	3.65	2.7%
Municipal Solid Waste 3/	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.53	1.9%
Wood and Other Biomass 4/	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.51	0.51	0.51	0.51	0.51	0.51	1.1%
Solar Thermal	0.40	0.40	0.40	0.41	0.41	0.41	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.42	0.3%
Solar Photovoltaic 5/	0.05	0.05	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.13	9.6%
Wind	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	5.27	3.7%
Total	18.65	18.86	19.06	19.24	19.40	19.56	19.71	19.81	19.98	20.06	20.15	20.24	20.25	20.29	1.2%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	37.99	0.6%
Geothermal 2/	13.99	15.43	16.96	18.54	19.91	21.23	22.46	23.42	24.27	24.97	25.62	26.27	26.45	26.76	3.1%
Municipal Solid Waste 3/	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.83	3.84	3.86	3.89	3.91	2.4%
Wood and Other Biomass 4/	2.02	2.02	2.11	2.11	2.11	2.06	2.00	2.07	2.57	2.52	2.52	2.52	2.33	2.53	0.1%
Solar Thermal	0.63	0.64	0.65	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.69	0.70	0.71	0.8%
Solar Photovoltaic 5/	0.12	0.13	0.15	0.16	0.18	0.20	0.21	0.23	0.24	0.26	0.27	0.29	0.31	0.32	21.6%
Wind	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	15.79	5.2%
Total	74.38	75.83	77.47	79.07	80.47	81.76	82.95	84.01	85.38	86.05	86.73	87.41	87.45	88.00	1.9%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.6%
Geothermal 2/	0.32	0.36	0.41	0.46	0.50	0.54	0.58	0.61	0.63	0.66	0.68	0.70	0.71	0.72	4.1%
Municipal Solid Waste 3/	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	2.4%
Wood and Other Biomass 4/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.03	0.03	0.04	1.4%
Solar Thermal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.8%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.6%
Wind	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	5.2%
Total	0.96	1.01	1.06	1.10	1.15	1.19	1.23	1.26	1.29	1.31	1.33	1.35	1.35	1.37	2.7%

Table 88. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/California

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 4/	0.21	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.26	0.27	0.27	2.0%
Solar Photovoltaic 5/	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.05	0.05	0.06	10.6%
Total	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.32	0.33	0.34	0.36	0.37	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.2%
Wood and Other Biomass 4/	1.27	1.30	1.32	1.34	1.36	1.38	1.41	1.43	1.46	1.49	1.51	1.54	1.57	1.60	1.9%
Solar Photovoltaic 5/	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.10	0.11	0.13	10.7%
Total	1.56	1.59	1.61	1.63	1.65	1.68	1.70	1.73	1.76	1.79	1.83	1.87	1.92	1.97	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 4/	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.5%

Table 88. Renewable Energy Generation by Fuel  
Western Electricity Coordinating Council/California

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 89. Renewable Energy Generation by Fuel  
United States

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Electric Power Sector 1/</b>														
<b>Generating Capacity (gigawatts)</b>														
Conventional Hydropower	77.69	77.64	77.64	77.65	77.66	77.67	77.67	77.67	77.67	77.67	77.67	77.72	77.72	77.72
Geothermal 2/	2.11	2.11	2.15	2.23	2.26	2.28	2.42	2.56	2.67	2.79	2.88	3.04	3.19	3.34
Municipal Solid Waste 3/	3.19	3.22	3.25	3.29	3.31	3.50	3.51	3.52	3.52	3.53	3.53	3.62	3.65	3.65
Wood and Other Biomass 4/	2.00	2.00	2.04	2.09	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.24
Solar Thermal	0.39	0.39	0.39	0.39	0.46	0.46	0.46	0.47	0.47	0.47	0.48	0.48	0.48	0.49
Solar Photovoltaic 5/	0.03	0.03	0.03	0.03	0.04	0.05	0.06	0.07	0.09	0.10	0.11	0.12	0.14	0.15
Wind	6.39	6.87	9.65	11.56	15.68	15.87	16.08	16.27	16.44	16.61	16.78	16.95	17.71	17.81
Total	91.80	92.26	95.14	97.24	101.55	101.98	102.34	102.69	103.00	103.31	103.59	104.08	105.03	105.39
<b>Electricity Generation (billion kilowatthours)</b>														
Conventional Hydropower	270.26	264.50	262.93	288.71	296.85	296.91	296.95	296.98	297.02	297.05	297.09	297.37	297.40	297.44
Geothermal 2/	14.42	14.36	14.40	14.91	15.34	15.53	16.45	17.51	18.56	19.58	20.41	21.66	22.84	24.12
Municipal Solid Waste 3/	20.84	19.86	22.96	23.05	23.25	24.79	24.84	24.89	24.94	24.98	25.02	25.68	25.96	25.97
Wood and Other Biomass 4/	9.53	9.49	16.87	18.87	27.09	28.01	31.13	44.67	41.81	36.90	40.03	42.15	44.80	50.30
Solar Thermal	0.53	0.58	0.59	0.59	0.76	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.91
Solar Photovoltaic 5/	0.00	0.00	0.07	0.07	0.10	0.12	0.15	0.18	0.21	0.23	0.27	0.30	0.34	0.38
Wind	11.19	14.15	23.22	35.25	48.82	49.50	50.20	50.87	51.49	52.09	52.70	53.30	55.98	56.33
Total	326.78	322.93	341.04	381.45	412.20	415.68	420.55	435.94	434.86	431.68	436.39	441.35	448.23	455.45
<b>Energy Consumption (quadrillion Btu)</b>														
Conventional Hydropower	2.78	2.72	2.70	2.97	3.05	3.05	3.05	3.05	3.05	3.05	3.05	3.06	3.06	3.06
Geothermal 2/	0.30	0.30	0.30	0.31	0.32	0.33	0.36	0.39	0.43	0.46	0.49	0.53	0.57	0.61
Municipal Solid Waste 3/	0.28	0.27	0.31	0.31	0.32	0.34	0.34	0.34	0.34	0.34	0.34	0.35	0.35	0.35
Wood and Other Biomass 4/	0.09	0.09	0.25	0.27	0.35	0.36	0.39	0.55	0.51	0.47	0.51	0.53	0.56	0.62
Solar Thermal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.12	0.15	0.24	0.36	0.50	0.51	0.52	0.52	0.53	0.54	0.54	0.55	0.58	0.58
Total	3.58	3.54	3.81	4.23	4.55	4.59	4.66	4.87	4.88	4.88	4.95	5.03	5.13	5.23

Table 89. Renewable Energy Generation by Fuel  
United States

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Commercial and Industrial Generators 6/														
Generating Capacity (gigawatts)														
Conventional Hydropower 7/	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Wood and Other Biomass 4/	4.32	4.33	4.33	4.50	4.67	4.78	4.90	5.01	5.13	5.23	5.31	5.39	5.48	5.57
Solar Photovoltaic 5/	0.08	0.12	0.17	0.25	0.35	0.42	0.50	0.63	0.64	0.65	0.66	0.67	0.68	0.70
Total	5.32	5.38	5.43	5.68	5.94	6.13	6.33	6.57	6.70	6.81	6.90	6.99	7.09	7.19
Electricity Generation (billion kilowatthours)														
Conventional Hydropower 7/	4.29	4.45	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	2.22	2.12	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24
Wood and Other Biomass 4/	28.00	27.81	27.81	28.82	29.78	30.46	31.13	31.81	32.50	33.08	33.56	34.01	34.52	35.06
Solar Photovoltaic 5/	0.17	0.26	0.37	0.53	0.74	0.89	1.07	1.34	1.36	1.38	1.41	1.43	1.46	1.48
Total	34.69	34.63	34.82	36.00	37.17	38.01	38.85	39.80	40.51	41.12	41.62	42.09	42.63	43.20
Energy Consumption (quadrillion Btu)														
Conventional Hydropower 7/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Wood and Other Biomass 4/	0.36	0.36	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.42	0.43	0.44	0.44	0.45
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.45	0.45	0.45	0.46	0.48	0.48	0.49	0.50	0.51	0.52	0.52	0.53	0.54	0.54



Table 89. Renewable Energy Generation by Fuel  
United States

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Electric Power Sector 1/</b>															
<b>Generating Capacity (gigawatts)</b>															
Conventional Hydropower	77.72	77.72	77.72	77.87	77.87	77.87	77.87	77.87	77.87	77.87	77.87	77.87	77.87	77.87	0.0%
Geothermal 2/	3.48	3.84	4.16	4.61	4.90	5.16	5.49	5.82	6.02	6.28	6.45	6.56	6.60	6.64	4.5%
Municipal Solid Waste 3/	3.65	3.72	3.76	3.76	3.76	3.76	3.76	3.76	3.84	3.84	3.85	3.86	3.86	3.87	0.7%
Wood and Other Biomass 4/	2.29	2.29	2.35	2.46	2.52	2.69	2.91	3.21	3.45	3.77	3.92	4.14	4.22	4.63	3.3%
Solar Thermal	0.49	0.50	0.50	0.50	0.51	0.51	0.52	0.52	0.53	0.53	0.54	0.54	0.54	0.55	1.3%
Solar Photovoltaic 5/	0.17	0.18	0.20	0.22	0.24	0.25	0.27	0.29	0.31	0.32	0.34	0.36	0.38	0.39	10.5%
Wind	18.53	18.58	18.67	18.81	18.97	19.50	19.58	19.71	19.80	19.89	19.98	20.02	20.09	20.10	4.2%
Total	106.34	106.83	107.35	108.23	108.76	109.75	110.40	111.17	111.81	112.51	112.95	113.35	113.56	114.06	0.8%
<b>Electricity Generation (billion kilowatthours)</b>															
Conventional Hydropower	297.48	297.51	297.55	298.46	298.49	298.53	298.56	298.60	298.64	298.68	298.72	298.77	298.81	298.85	0.5%
Geothermal 2/	25.37	27.89	30.44	34.01	36.77	39.25	41.95	44.67	46.74	48.96	50.56	51.74	52.31	52.70	5.1%
Municipal Solid Waste 3/	25.99	26.56	26.82	26.83	26.84	26.85	26.87	26.89	27.52	27.56	27.60	27.67	27.73	27.79	1.3%
Wood and Other Biomass 4/	50.36	47.67	48.13	48.59	48.03	49.60	49.84	52.62	51.30	54.07	53.85	55.16	54.92	57.83	7.2%
Solar Thermal	0.92	0.93	0.95	0.96	0.98	0.99	1.00	1.02	1.03	1.05	1.06	1.08	1.09	1.11	2.5%
Solar Photovoltaic 5/	0.41	0.45	0.49	0.54	0.58	0.63	0.67	0.72	0.76	0.80	0.85	0.89	0.94	0.98	26.9%
Wind	58.84	58.99	59.30	59.82	60.40	62.46	62.73	63.17	63.48	63.78	64.09	64.23	64.45	64.51	6.0%
Total	459.37	460.01	463.68	469.21	472.08	478.31	481.63	487.69	489.47	494.90	496.74	499.53	500.25	503.77	1.7%
<b>Energy Consumption (quadrillion Btu)</b>															
Conventional Hydropower	3.06	3.06	3.06	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	3.07	0.5%
Geothermal 2/	0.65	0.73	0.80	0.92	1.01	1.09	1.17	1.27	1.33	1.41	1.46	1.50	1.52	1.54	6.5%
Municipal Solid Waste 3/	0.35	0.36	0.37	0.37	0.37	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.38	0.38	1.3%
Wood and Other Biomass 4/	0.62	0.59	0.60	0.61	0.60	0.61	0.60	0.64	0.63	0.65	0.64	0.65	0.64	0.68	7.9%
Solar Thermal	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.5%
Solar Photovoltaic 5/	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	26.9%
Wind	0.60	0.61	0.61	0.61	0.62	0.64	0.64	0.65	0.65	0.66	0.66	0.66	0.66	0.66	6.0%
Total	5.30	5.36	5.45	5.59	5.68	5.79	5.88	6.01	6.07	6.18	6.23	6.29	6.30	6.35	2.3%

Table 89. Renewable Energy Generation by Fuel  
United States

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Commercial and Industrial Generators 6/															
Generating Capacity (gigawatts)															
Conventional Hydropower 7/	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.0%
Wood and Other Biomass 4/	5.69	5.82	5.92	6.02	6.13	6.24	6.36	6.47	6.60	6.73	6.87	7.01	7.15	7.29	2.0%
Solar Photovoltaic 5/	0.71	0.72	0.74	0.75	0.77	0.78	0.80	0.83	0.87	0.93	1.06	1.25	1.45	1.68	10.6%
Total	7.32	7.46	7.58	7.70	7.82	7.95	8.08	8.23	8.40	8.59	8.86	9.18	9.52	9.89	2.4%
Electricity Generation (billion kilowatthours)															
Conventional Hydropower 7/	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	2.24	0.2%
Wood and Other Biomass 4/	35.75	36.48	37.09	37.69	38.33	38.98	39.65	40.33	41.05	41.83	42.65	43.44	44.26	45.09	1.9%
Solar Photovoltaic 5/	1.51	1.54	1.57	1.60	1.63	1.67	1.70	1.79	1.89	2.02	2.29	2.70	3.14	3.62	10.7%
Total	43.92	44.68	45.31	45.94	46.62	47.30	48.00	48.77	49.59	50.51	51.60	52.79	54.05	55.37	1.8%
Energy Consumption (quadrillion Btu)															
Conventional Hydropower 7/	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0%
Geothermal 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0%
Wood and Other Biomass 4/	0.46	0.47	0.48	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.57	0.58	1.9%
Solar Photovoltaic 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.55	0.56	0.57	0.58	0.58	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.67	1.5%

Table 89. Renewable Energy Generation by Fuel  
United States

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes landfill gas.

4/ Includes projections for energy crops after 2010.

5/ Does not include off-grid photovoltaics (PV). Based on annual PV shipments from 1989 through 2003, EIA estimates that as much as 149 megawatts of remote electricity generation PV applications (i.e., off-grid power systems) were in service in 2003, plus an additional 414 megawatts in communications, transportation, and assorted other non-grid-connected, specialized applications. See Annual Energy Review 2004, Table 10.6 (annual PV shipments, 1989-2003). The approach used to develop the estimate, based on shipment data, provides an upper estimate of the size of the PV stock, including both grid-based and off-grid PV. It will overestimate the size of the stock, because shipments include a substantial number of units that are exported, and each year some of the PV units installed earlier will be retired from service or abandoned.

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

7/ Represents own-use industrial hydroelectric power.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 are model results and may differ slightly from official EIA data reports.

Sources: 2003 and 2004: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, September 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 90. Domestic Refinery Distillation Base Capacity, Expansion, and Utilization  
(million barrels per day)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
PAD District I														
Base Capacity	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Capacity Additions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Capacity	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Utilization	93.0	90.0	91.0	93.0	84.3	83.5	86.9	88.9	87.5	90.3	90.0	88.5	90.1	92.2
PAD District II														
Base Capacity	3.5	3.5	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Capacity Additions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Capacity	3.5	3.5	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Utilization	92.0	94.0	94.0	96.0	93.5	91.9	90.4	90.3	88.6	90.2	88.3	87.8	88.4	88.6
PAD District III														
Base Capacity	7.8	7.9	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Capacity Additions	0.0	0.0	0.0	0.0	0.1	0.2	0.4	0.6	0.6	0.6	0.7	0.8	0.8	0.9
Total Capacity	7.8	7.9	8.0	8.0	8.1	8.3	8.5	8.6	8.6	8.7	8.7	8.8	8.9	9.0
Utilization	94.0	94.0	95.0	97.0	95.3	95.3	95.3	94.4	94.9	94.8	95.3	94.6	94.4	95.2
PAD District IV														
Base Capacity	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Capacity Additions	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total Capacity	0.6	0.6	0.6	0.6	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9
Utilization	92.0	96.0	97.0	98.0	95.3	93.5	93.4	94.7	94.5	93.4	95.3	94.1	95.3	94.8
PAD District V														
Base Capacity	3.1	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Capacity Additions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Capacity	3.1	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1
Utilization	91.0	90.0	91.0	93.0	87.0	87.8	89.1	87.5	88.2	88.5	89.4	91.3	90.0	88.4
United States														
Base Capacity	16.8	16.9	17.0	17.0	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8
Capacity Additions	0.0	0.0	0.0	0.0	0.3	0.5	0.6	0.8	0.9	0.9	1.0	1.1	1.2	1.3
Total Capacity	16.8	16.9	17.0	17.0	17.1	17.2	17.4	17.6	17.6	17.7	17.8	17.9	17.9	18.0
Utilization	93.0	93.0	93.0	94.0	92.4	92.1	92.4	91.9	91.8	92.3	92.4	92.2	92.2	92.5

Table 90. Domestic Refinery Distillation Base Capacity, Expansion, and Utilization  
(million barrels per day)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
PAD District I															
Base Capacity	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-0.4%
Capacity Additions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total Capacity	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-0.4%
Utilization	93.3	94.4	93.4	95.3	91.0	90.9	95.3	93.1	94.4	94.6	92.3	91.2	88.6	88.6	-0.1%
PAD District II															
Base Capacity	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	0.0%
Capacity Additions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	N/A
Total Capacity	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.6	3.7	0.2%
Utilization	89.2	89.7	92.0	91.0	91.8	90.7	91.8	93.6	94.9	95.3	95.3	95.3	95.3	95.3	0.1%
PAD District III															
Base Capacity	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	0.1%
Capacity Additions	0.9	0.9	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.3	1.4	1.5	1.6	1.7	N/A
Total Capacity	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	0.8%
Utilization	95.3	95.0	95.3	95.3	95.3	95.3	94.7	95.3	95.2	94.6	94.5	95.2	95.3	95.3	0.1%
PAD District IV															
Base Capacity	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.1%
Capacity Additions	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.7	0.7	N/A
Total Capacity	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	3.0%
Utilization	94.8	94.6	95.3	95.3	95.3	95.3	95.1	95.3	95.2	93.2	92.7	95.0	95.3	95.3	0.0%
PAD District V															
Base Capacity	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	-0.1%
Capacity Additions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	N/A
Total Capacity	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	0.0%
Utilization	90.5	93.3	92.6	92.9	93.6	94.3	94.3	95.1	95.2	95.0	95.0	95.2	95.3	95.3	0.2%
United States															
Base Capacity	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	16.8	0.0%
Capacity Additions	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.6	1.7	1.9	2.0	2.2	2.4	2.6	N/A
Total Capacity	18.1	18.1	18.1	18.1	18.2	18.2	18.3	18.4	18.5	18.6	18.8	19.0	19.2	19.3	0.5%
Utilization	93.1	93.6	94.0	94.1	94.0	93.9	94.2	94.8	95.1	94.7	94.4	94.9	94.8	94.8	0.1%

Table 90. Domestic Refinery Distillation Base Capacity, Expansion, and Utilization  
(million barrels per day)

PAD = Petroleum Administration for Defense.

N/A = Not applicable.

Note: Base capacity is operable capacity for the beginning of the year. Capacity additions are cumulative additions after December 31, 2004.

Source: 2004: Energy Information Administration (EIA), Petroleum Supply Annual 2004, DOE/EIA-0340(2004)/1 (Washington, DC, June 2005). 2003: EIA, Petroleum Supply Annual 2003, DOE/EIA-0340(2003)/1 (Washington, DC, June 2004). Projections: AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 91. Components of Selected Petroleum Project Prices  
(2004 dollars per gallon)  
New England

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.69	1.99	2.55	2.57	2.25	2.21	2.14	2.10	2.13	2.12	2.13	2.11	2.13	2.14
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Distribution Costs	0.25	0.25	0.25	0.30	0.29	0.30	0.29	0.28	0.29	0.29	0.30	0.29	0.30	0.30
Wholesale Price	0.92	1.23	1.80	1.77	1.48	1.42	1.37	1.34	1.37	1.36	1.38	1.36	1.39	1.39
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.69	1.95	2.37	2.40	2.32	2.25	2.17	2.09	2.07	2.06	2.05	2.04	2.04	2.06
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.27	0.27	0.27	0.27	0.27	0.27
Distribution Costs	0.26	0.26	0.26	0.26	0.28	0.28	0.27	0.27	0.26	0.26	0.26	0.26	0.26	0.26
Wholesale Price	0.97	1.23	1.65	1.69	1.58	1.51	1.45	1.38	1.38	1.37	1.37	1.36	1.36	1.39
<b>Jet Fuel</b>														
End-User Price	0.94	1.28	1.79	1.84	1.49	1.46	1.40	1.36	1.38	1.39	1.37	1.38	1.39	1.41
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Distribution Costs	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
Wholesale Price	0.87	1.20	1.72	1.77	1.42	1.39	1.33	1.29	1.31	1.33	1.30	1.32	1.32	1.35
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.34	1.85	1.95	2.12	1.93	1.88	1.82	1.75	1.75	1.76	1.74	1.74	1.73	1.78
Distribution Costs	0.42	0.47	0.42	0.42	0.58	0.57	0.55	0.54	0.54	0.54	0.53	0.53	0.53	0.54
Wholesale Price	0.93	1.38	1.53	1.71	1.35	1.32	1.27	1.22	1.21	1.23	1.21	1.21	1.20	1.24
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 91. Components of Selected Petroleum Project Prices  
(2004 dollars per gallon)  
New England

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	2.13	2.15	2.16	2.18	2.15	2.15	2.22	2.23	2.21	2.26	2.29	2.31	2.28	2.31	0.6%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.0%
Distribution Costs	0.30	0.30	0.30	0.31	0.31	0.31	0.32	0.32	0.32	0.33	0.33	0.34	0.33	0.33	1.1%
Wholesale Price	1.39	1.41	1.43	1.44	1.42	1.43	1.49	1.50	1.48	1.53	1.55	1.58	1.55	1.58	1.0%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	2.07	2.08	2.10	2.13	2.14	2.15	2.16	2.18	2.19	2.20	2.21	2.22	2.23	2.24	0.5%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	-0.1%
Distribution Costs	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.28	0.28	0.3%
Wholesale Price	1.39	1.41	1.44	1.46	1.48	1.49	1.50	1.52	1.53	1.54	1.55	1.57	1.58	1.59	1.0%
<b>Jet Fuel</b>															
End-User Price	1.40	1.44	1.45	1.48	1.49	1.51	1.51	1.52	1.53	1.54	1.56	1.59	1.60	1.61	0.9%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	N/A
Distribution Costs	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	N/A
Wholesale Price	1.34	1.37	1.39	1.41	1.43	1.45	1.45	1.47	1.47	1.49	1.51	1.53	1.54	1.56	1.0%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.77	1.81	1.83	1.85	1.86	1.89	1.90	1.92	1.94	1.95	1.95	1.96	1.97	1.99	0.3%
Distribution Costs	0.54	0.55	0.56	0.56	0.57	0.58	0.58	0.59	0.59	0.60	0.60	0.60	0.60	0.61	1.0%
Wholesale Price	1.23	1.26	1.27	1.28	1.29	1.31	1.32	1.34	1.35	1.35	1.35	1.36	1.37	1.38	0.0%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%



Table 91. Components of Selected Petroleum Project Prices  
(2004 dollars per gallon)  
New England

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 92. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Middle Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.62	1.90	2.44	2.46	2.22	2.17	2.11	2.06	2.09	2.08	2.10	2.07	2.10	2.10
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.31	0.31	0.31	0.31	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30
Distribution Costs	0.19	0.19	0.19	0.24	0.22	0.23	0.22	0.22	0.22	0.22	0.23	0.22	0.23	0.23
Wholesale Price	0.88	1.17	1.72	1.69	1.47	1.42	1.36	1.33	1.36	1.35	1.37	1.35	1.38	1.39
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.69	1.95	2.36	2.39	2.29	2.22	2.14	2.07	2.06	2.05	2.04	2.03	2.03	2.05
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Distribution Costs	0.24	0.24	0.24	0.24	0.26	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Wholesale Price	0.98	1.24	1.66	1.70	1.58	1.52	1.45	1.39	1.38	1.38	1.37	1.37	1.37	1.40
<b>Jet Fuel</b>														
End-User Price	0.90	1.22	1.70	1.75	1.43	1.40	1.34	1.31	1.33	1.35	1.33	1.34	1.35	1.38
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Distribution Costs	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Wholesale Price	0.81	1.13	1.62	1.66	1.35	1.32	1.26	1.23	1.25	1.27	1.25	1.27	1.27	1.30
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.41	1.95	2.04	2.23	2.01	1.96	1.90	1.82	1.82	1.83	1.81	1.81	1.80	1.85
Distribution Costs	0.49	0.55	0.49	0.49	0.68	0.67	0.65	0.63	0.63	0.63	0.63	0.62	0.62	0.63
Wholesale Price	0.92	1.40	1.55	1.73	1.32	1.29	1.24	1.19	1.19	1.21	1.18	1.19	1.18	1.22
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 92. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Middle Atlantic

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	2.09	2.11	2.12	2.14	2.11	2.11	2.18	2.19	2.17	2.22	2.24	2.27	2.23	2.26	0.7%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.0%
Distribution Costs	0.23	0.23	0.23	0.24	0.23	0.23	0.24	0.24	0.25	0.25	0.25	0.26	0.25	0.26	1.2%
Wholesale Price	1.38	1.40	1.42	1.43	1.41	1.42	1.48	1.49	1.47	1.52	1.54	1.57	1.55	1.57	1.1%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	2.05	2.07	2.09	2.12	2.13	2.14	2.15	2.16	2.18	2.19	2.20	2.21	2.22	2.23	0.5%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	-0.1%
Distribution Costs	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.3%
Wholesale Price	1.40	1.42	1.45	1.48	1.49	1.50	1.52	1.53	1.54	1.55	1.56	1.58	1.59	1.60	1.0%
<b>Jet Fuel</b>															
End-User Price	1.37	1.40	1.42	1.45	1.46	1.48	1.48	1.50	1.50	1.52	1.54	1.57	1.57	1.59	1.0%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	N/A
Distribution Costs	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	N/A
Wholesale Price	1.29	1.33	1.35	1.37	1.39	1.41	1.41	1.43	1.44	1.45	1.47	1.50	1.51	1.53	1.2%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.84	1.88	1.91	1.92	1.93	1.97	1.98	2.00	2.02	2.03	2.03	2.05	2.05	2.07	0.2%
Distribution Costs	0.63	0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.70	0.70	0.70	0.71	0.70	0.72	1.0%
Wholesale Price	1.21	1.24	1.25	1.26	1.27	1.29	1.30	1.31	1.32	1.33	1.33	1.34	1.35	1.35	-0.1%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 92. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Middle Atlantic

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 93. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
East North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.56	1.83	2.35	2.37	2.09	2.04	1.98	1.93	1.96	1.95	1.96	1.94	1.97	1.97
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Distribution Costs	0.15	0.15	0.15	0.19	0.16	0.17	0.17	0.16	0.16	0.16	0.17	0.17	0.17	0.17
Wholesale Price	0.94	1.22	1.75	1.72	1.48	1.42	1.37	1.34	1.37	1.36	1.37	1.36	1.39	1.39
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.58	1.83	2.22	2.25	2.21	2.14	2.06	1.99	1.98	1.97	1.96	1.95	1.95	1.97
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.27	0.27	0.27	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Distribution Costs	0.23	0.23	0.23	0.23	0.24	0.25	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23
Wholesale Price	0.90	1.15	1.55	1.58	1.53	1.46	1.40	1.34	1.33	1.33	1.32	1.32	1.32	1.35
<b>Jet Fuel</b>														
End-User Price	0.87	1.19	1.66	1.70	1.38	1.34	1.28	1.25	1.27	1.28	1.27	1.27	1.29	1.31
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Distribution Costs	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
Wholesale Price	0.84	1.16	1.63	1.68	1.36	1.32	1.26	1.22	1.25	1.26	1.25	1.25	1.27	1.30
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.27	1.75	1.84	2.00	1.88	1.83	1.75	1.69	1.69	1.72	1.66	1.69	1.70	1.71
Distribution Costs	0.35	0.41	0.35	0.35	0.51	0.50	0.48	0.46	0.46	0.47	0.46	0.46	0.47	0.47
Wholesale Price	0.91	1.34	1.48	1.65	1.37	1.33	1.27	1.22	1.23	1.25	1.21	1.23	1.23	1.25
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 93. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
East North Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	1.96	1.97	1.99	2.00	2.01	2.02	2.04	2.05	2.03	2.06	2.08	2.10	2.06	2.08	0.5%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.0%
Distribution Costs	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.18	0.19	1.0%
Wholesale Price	1.39	1.41	1.43	1.44	1.45	1.46	1.48	1.50	1.48	1.51	1.53	1.56	1.52	1.55	0.9%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	1.98	2.00	2.02	2.04	2.05	2.07	2.08	2.09	2.10	2.11	2.12	2.13	2.14	2.15	0.6%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	-0.1%
Distribution Costs	0.23	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.3%
Wholesale Price	1.35	1.37	1.39	1.42	1.43	1.45	1.46	1.47	1.49	1.50	1.51	1.52	1.53	1.55	1.1%
<b>Jet Fuel</b>															
End-User Price	1.31	1.34	1.35	1.39	1.40	1.41	1.43	1.42	1.42	1.44	1.46	1.50	1.51	1.53	1.0%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Distribution Costs	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	N/A
Wholesale Price	1.30	1.33	1.33	1.37	1.39	1.40	1.42	1.41	1.41	1.43	1.46	1.50	1.51	1.52	1.1%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.74	1.77	1.76	1.80	1.81	1.85	1.86	1.88	1.87	1.87	1.87	1.87	1.84	1.85	0.2%
Distribution Costs	0.47	0.49	0.49	0.49	0.49	0.51	0.51	0.51	0.52	0.51	0.52	0.51	0.50	0.51	0.9%
Wholesale Price	1.26	1.29	1.28	1.31	1.31	1.34	1.35	1.36	1.35	1.36	1.35	1.35	1.34	1.34	0.0%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 93. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
East North Central

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 94. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
West North Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.53	1.80	2.31	2.33	2.06	2.00	1.94	1.90	1.93	1.92	1.93	1.91	1.93	1.93
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Distribution Costs	0.12	0.12	0.12	0.17	0.13	0.14	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14
Wholesale Price	0.96	1.24	1.75	1.73	1.50	1.44	1.39	1.35	1.39	1.38	1.39	1.37	1.40	1.41
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.71	1.97	2.39	2.42	2.16	2.09	2.01	1.94	1.93	1.92	1.91	1.90	1.90	1.92
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Distribution Costs	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Wholesale Price	1.02	1.29	1.71	1.75	1.49	1.43	1.36	1.30	1.30	1.29	1.28	1.28	1.28	1.31
<b>Jet Fuel</b>														
End-User Price	0.92	1.25	1.75	1.80	1.43	1.38	1.33	1.29	1.30	1.32	1.30	1.30	1.32	1.34
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Distribution Costs	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04
Wholesale Price	0.88	1.21	1.71	1.76	1.39	1.35	1.29	1.25	1.27	1.28	1.27	1.27	1.29	1.31
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.21	1.67	1.75	1.91	1.77	1.72	1.65	1.59	1.59	1.62	1.57	1.59	1.60	1.61
Distribution Costs	0.28	0.33	0.28	0.28	0.40	0.39	0.38	0.36	0.36	0.37	0.36	0.36	0.37	0.37
Wholesale Price	0.93	1.33	1.47	1.63	1.37	1.33	1.27	1.23	1.23	1.25	1.21	1.23	1.23	1.25
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03



Table 94. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
West North Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	1.92	1.94	1.96	1.97	1.97	1.98	2.00	2.01	2.00	2.02	2.04	2.06	2.02	2.04	0.5%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.0%
Distribution Costs	0.14	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.9%
Wholesale Price	1.41	1.42	1.44	1.45	1.47	1.48	1.50	1.51	1.50	1.52	1.55	1.57	1.54	1.56	0.9%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	1.92	1.94	1.96	1.99	2.00	2.01	2.02	2.04	2.05	2.06	2.07	2.08	2.09	2.10	0.3%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	-0.1%
Distribution Costs	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.26	0.1%
Wholesale Price	1.31	1.33	1.36	1.39	1.40	1.41	1.43	1.44	1.45	1.46	1.47	1.49	1.50	1.51	0.6%
<b>Jet Fuel</b>															
End-User Price	1.34	1.37	1.37	1.41	1.42	1.43	1.45	1.44	1.44	1.46	1.48	1.52	1.53	1.55	0.8%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	N/A
Distribution Costs	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	N/A
Wholesale Price	1.31	1.34	1.34	1.38	1.39	1.41	1.42	1.41	1.42	1.44	1.46	1.50	1.51	1.53	0.9%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.63	1.67	1.66	1.69	1.70	1.71	1.72	1.71	1.71	1.73	1.73	1.74	1.73	1.74	0.2%
Distribution Costs	0.37	0.38	0.38	0.38	0.39	0.39	0.40	0.39	0.39	0.39	0.39	0.40	0.39	0.39	0.6%
Wholesale Price	1.26	1.29	1.28	1.31	1.32	1.32	1.32	1.32	1.32	1.34	1.34	1.34	1.34	1.34	0.0%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 94. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
West North Central

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 95. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
South Atlantic

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.48	1.74	2.24	2.25	2.04	1.99	1.93	1.88	1.91	1.90	1.91	1.89	1.92	1.92
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20
Distribution Costs	0.15	0.15	0.15	0.20	0.17	0.18	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Wholesale Price	0.89	1.16	1.66	1.63	1.45	1.40	1.34	1.31	1.34	1.33	1.35	1.33	1.36	1.37
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.58	1.82	2.21	2.24	2.11	2.05	1.98	1.91	1.90	1.89	1.88	1.87	1.87	1.90
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Distribution Costs	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Wholesale Price	0.96	1.21	1.60	1.63	1.51	1.45	1.38	1.32	1.32	1.32	1.31	1.31	1.31	1.34
<b>Jet Fuel</b>														
End-User Price	0.91	1.24	1.73	1.78	1.42	1.39	1.33	1.29	1.31	1.33	1.31	1.32	1.33	1.35
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
Distribution Costs	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
Wholesale Price	0.85	1.18	1.67	1.72	1.36	1.33	1.27	1.24	1.26	1.28	1.26	1.27	1.28	1.31
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.37	1.90	1.99	2.17	1.99	1.94	1.86	1.80	1.79	1.82	1.75	1.77	1.78	1.83
Distribution Costs	0.47	0.52	0.47	0.47	0.66	0.64	0.62	0.60	0.59	0.60	0.59	0.59	0.59	0.61
Wholesale Price	0.91	1.38	1.53	1.71	1.33	1.30	1.24	1.20	1.19	1.21	1.16	1.19	1.19	1.23
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 95. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)

South Atlantic	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	1.91	1.92	1.94	1.95	1.96	1.97	1.99	2.00	2.01	2.03	2.05	2.08	2.05	2.07	0.7%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.0%
Distribution Costs	0.17	0.18	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20	0.19	0.20	1.1%
Wholesale Price	1.36	1.38	1.40	1.41	1.42	1.43	1.46	1.47	1.48	1.50	1.52	1.55	1.53	1.55	1.1%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	1.90	1.92	1.94	1.97	1.98	1.99	2.00	2.02	2.03	2.03	2.04	2.06	2.06	2.08	0.5%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	-0.1%
Distribution Costs	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.2%
Wholesale Price	1.34	1.36	1.39	1.42	1.43	1.45	1.46	1.47	1.49	1.50	1.51	1.52	1.53	1.54	0.9%
<b>Jet Fuel</b>															
End-User Price	1.35	1.38	1.40	1.42	1.44	1.45	1.46	1.47	1.48	1.49	1.51	1.54	1.55	1.56	0.9%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	N/A
Distribution Costs	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	N/A
Wholesale Price	1.30	1.33	1.35	1.38	1.39	1.41	1.42	1.43	1.44	1.46	1.47	1.50	1.51	1.53	1.0%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.82	1.87	1.89	1.91	1.92	1.95	1.97	1.99	2.00	2.01	2.02	2.04	2.04	2.07	0.3%
Distribution Costs	0.60	0.62	0.63	0.64	0.65	0.65	0.66	0.67	0.67	0.67	0.68	0.69	0.68	0.69	1.1%
Wholesale Price	1.22	1.25	1.26	1.27	1.27	1.30	1.31	1.32	1.33	1.34	1.34	1.35	1.36	1.38	0.0%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 95. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
South Atlantic

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 96. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
East South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.48	1.74	2.24	2.25	2.05	1.99	1.93	1.89	1.92	1.91	1.92	1.89	1.92	1.92
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Distribution Costs	0.16	0.16	0.16	0.21	0.19	0.19	0.19	0.18	0.19	0.19	0.19	0.19	0.19	0.19
Wholesale Price	0.89	1.17	1.66	1.63	1.47	1.41	1.35	1.32	1.35	1.34	1.36	1.34	1.37	1.38
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.62	1.88	2.27	2.31	2.15	2.08	2.00	1.93	1.93	1.92	1.91	1.90	1.90	1.92
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.24	0.24	0.24	0.24	0.24	0.24	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Distribution Costs	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Wholesale Price	0.94	1.19	1.59	1.63	1.48	1.41	1.35	1.28	1.28	1.28	1.27	1.27	1.27	1.30
<b>Jet Fuel</b>														
End-User Price	0.89	1.20	1.68	1.73	1.42	1.38	1.32	1.28	1.31	1.32	1.30	1.32	1.33	1.36
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03
State Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Distribution Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wholesale Price	0.80	1.12	1.60	1.65	1.33	1.30	1.24	1.20	1.23	1.25	1.23	1.25	1.25	1.28
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.19	1.65	1.74	1.89	1.81	1.76	1.69	1.63	1.62	1.65	1.59	1.61	1.62	1.67
Distribution Costs	0.32	0.37	0.32	0.32	0.46	0.45	0.44	0.42	0.42	0.43	0.42	0.42	0.42	0.43
Wholesale Price	0.88	1.28	1.42	1.58	1.35	1.31	1.25	1.21	1.20	1.22	1.17	1.19	1.20	1.24
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 96. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
East South Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	1.91	1.93	1.95	1.96	1.97	1.97	2.00	2.01	2.01	2.04	2.06	2.09	2.05	2.08	0.7%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.0%
Distribution Costs	0.19	0.20	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.22	0.22	0.21	0.22	1.1%
Wholesale Price	1.37	1.39	1.41	1.42	1.43	1.44	1.47	1.48	1.49	1.51	1.53	1.56	1.54	1.56	1.1%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	1.92	1.94	1.97	1.99	2.00	2.02	2.03	2.04	2.05	2.06	2.07	2.08	2.09	2.10	0.4%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	-0.1%
Distribution Costs	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.28	0.2%
Wholesale Price	1.30	1.32	1.35	1.38	1.39	1.40	1.42	1.43	1.44	1.45	1.46	1.48	1.49	1.50	0.9%
<b>Jet Fuel</b>															
End-User Price	1.35	1.38	1.40	1.43	1.44	1.46	1.47	1.48	1.49	1.51	1.53	1.55	1.56	1.58	1.1%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	-2.4%
State Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	N/A
Distribution Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wholesale Price	1.28	1.31	1.33	1.36	1.38	1.40	1.40	1.42	1.42	1.44	1.46	1.49	1.50	1.52	1.2%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.66	1.70	1.71	1.73	1.74	1.77	1.78	1.80	1.82	1.82	1.82	1.82	1.80	1.82	0.4%
Distribution Costs	0.43	0.44	0.45	0.45	0.45	0.46	0.46	0.47	0.47	0.47	0.47	0.47	0.47	0.47	1.0%
Wholesale Price	1.23	1.26	1.27	1.28	1.28	1.31	1.32	1.33	1.34	1.35	1.34	1.34	1.33	1.34	0.2%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 96. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
East South Central

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 97. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
West South Central

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.48	1.74	2.24	2.25	2.00	1.95	1.88	1.84	1.87	1.86	1.87	1.85	1.87	1.88
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Distribution Costs	0.13	0.13	0.13	0.18	0.15	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Wholesale Price	0.91	1.18	1.68	1.65	1.44	1.38	1.33	1.29	1.32	1.32	1.33	1.31	1.34	1.35
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.54	1.78	2.16	2.19	2.17	2.10	2.03	1.95	1.94	1.94	1.93	1.92	1.92	1.94
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.25	0.25	0.25	0.25	0.25	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Distribution Costs	0.27	0.27	0.27	0.27	0.30	0.30	0.29	0.28	0.28	0.28	0.28	0.28	0.28	0.28
Wholesale Price	0.83	1.08	1.47	1.50	1.46	1.40	1.33	1.27	1.27	1.26	1.26	1.25	1.26	1.28
<b>Jet Fuel</b>														
End-User Price	0.83	1.13	1.58	1.63	1.37	1.33	1.27	1.24	1.26	1.28	1.26	1.27	1.28	1.31
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Distribution Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wholesale Price	0.77	1.07	1.53	1.57	1.31	1.28	1.22	1.19	1.21	1.23	1.21	1.22	1.23	1.26
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.06	1.47	1.54	1.68	1.65	1.60	1.53	1.48	1.47	1.50	1.44	1.46	1.47	1.51
Distribution Costs	0.22	0.27	0.22	0.22	0.33	0.32	0.31	0.30	0.30	0.30	0.29	0.29	0.30	0.30
Wholesale Price	0.84	1.20	1.32	1.46	1.32	1.28	1.22	1.18	1.18	1.20	1.15	1.17	1.17	1.21
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 97. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
West South Central

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	1.87	1.88	1.90	1.91	1.92	1.92	1.95	1.96	1.96	1.99	2.01	2.03	2.00	2.03	0.6%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.0%
Distribution Costs	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.17	1.0%
Wholesale Price	1.34	1.36	1.38	1.39	1.40	1.41	1.44	1.45	1.46	1.48	1.50	1.53	1.51	1.53	1.0%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	1.94	1.96	1.98	2.01	2.02	2.04	2.05	2.06	2.07	2.08	2.09	2.10	2.11	2.13	0.7%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	-0.1%
Distribution Costs	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.4%
Wholesale Price	1.29	1.31	1.33	1.36	1.37	1.39	1.40	1.41	1.43	1.44	1.45	1.46	1.47	1.49	1.2%
<b>Jet Fuel</b>															
End-User Price	1.30	1.34	1.36	1.38	1.40	1.41	1.42	1.43	1.44	1.46	1.47	1.50	1.51	1.53	1.2%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	N/A
Distribution Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wholesale Price	1.25	1.29	1.31	1.33	1.35	1.37	1.38	1.39	1.40	1.41	1.43	1.46	1.47	1.49	1.3%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.50	1.54	1.55	1.57	1.58	1.61	1.62	1.64	1.65	1.66	1.66	1.68	1.68	1.70	0.6%
Distribution Costs	0.30	0.31	0.32	0.32	0.32	0.33	0.33	0.33	0.34	0.34	0.34	0.34	0.34	0.35	0.9%
Wholesale Price	1.20	1.23	1.24	1.25	1.26	1.28	1.29	1.30	1.32	1.32	1.32	1.33	1.35	1.36	0.5%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 97. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
West South Central

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 98. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Mountain

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.61	1.89	2.43	2.45	2.30	2.34	2.28	2.13	2.21	2.17	2.16	2.13	2.21	2.15
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23
Distribution Costs	0.15	0.15	0.15	0.20	0.18	0.20	0.19	0.18	0.18	0.18	0.18	0.18	0.19	0.18
Wholesale Price	0.98	1.27	1.81	1.79	1.67	1.69	1.65	1.51	1.60	1.56	1.56	1.53	1.61	1.56
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.59	1.83	2.22	2.25	2.45	2.46	2.39	2.22	2.25	2.20	2.19	2.16	2.21	2.19
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27
Distribution Costs	0.26	0.26	0.26	0.26	0.30	0.31	0.30	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Wholesale Price	0.87	1.11	1.51	1.54	1.71	1.72	1.66	1.50	1.54	1.50	1.49	1.47	1.52	1.51
<b>Jet Fuel</b>														
End-User Price	0.98	1.33	1.87	1.92	1.61	1.65	1.60	1.45	1.50	1.47	1.45	1.46	1.52	1.49
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Distribution Costs	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02
Wholesale Price	0.92	1.27	1.80	1.85	1.55	1.59	1.54	1.39	1.44	1.41	1.39	1.40	1.47	1.44
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.27	1.75	1.84	2.01	1.93	1.89	1.83	1.73	1.78	1.75	1.68	1.69	1.72	1.73
Distribution Costs	0.30	0.35	0.30	0.30	0.43	0.43	0.41	0.40	0.40	0.39	0.38	0.38	0.39	0.39
Wholesale Price	0.97	1.40	1.55	1.71	1.49	1.46	1.42	1.34	1.38	1.36	1.30	1.31	1.33	1.34
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 98. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Mountain

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	2.19	2.18	2.18	2.18	2.21	2.20	2.23	2.21	2.21	2.24	2.24	2.27	2.26	2.29	0.7%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.0%
Distribution Costs	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.20	0.21	1.2%
Wholesale Price	1.60	1.59	1.60	1.60	1.63	1.63	1.66	1.65	1.64	1.67	1.68	1.71	1.70	1.73	1.2%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	2.24	2.24	2.23	2.25	2.29	2.29	2.30	2.29	2.28	2.31	2.31	2.33	2.34	2.35	1.0%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	-0.1%
Distribution Costs	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.5%
Wholesale Price	1.55	1.55	1.55	1.57	1.61	1.62	1.63	1.62	1.61	1.64	1.64	1.66	1.68	1.69	1.6%
<b>Jet Fuel</b>															
End-User Price	1.52	1.53	1.52	1.53	1.57	1.57	1.58	1.56	1.55	1.57	1.58	1.61	1.62	1.64	0.8%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	N/A
Distribution Costs	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	N/A
Wholesale Price	1.47	1.48	1.47	1.48	1.52	1.52	1.53	1.51	1.50	1.53	1.54	1.57	1.58	1.59	0.9%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.72	1.75	1.74	1.77	1.78	1.79	1.80	1.79	1.79	1.81	1.81	1.81	1.81	1.81	0.1%
Distribution Costs	0.39	0.40	0.40	0.40	0.40	0.41	0.41	0.41	0.41	0.41	0.40	0.41	0.41	0.41	0.6%
Wholesale Price	1.33	1.35	1.35	1.37	1.38	1.38	1.39	1.38	1.38	1.41	1.40	1.40	1.40	1.41	0.0%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 98. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Mountain

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 99. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Pacific

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.69	1.98	2.55	2.57	2.18	2.20	2.16	2.14	2.16	2.16	2.20	2.19	2.18	2.17
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Distribution Costs	0.21	0.21	0.21	0.26	0.23	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25
Wholesale Price	1.02	1.32	1.89	1.87	1.52	1.53	1.49	1.48	1.51	1.50	1.54	1.54	1.53	1.53
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.87	2.16	2.62	2.65	2.42	2.49	2.39	2.25	2.28	2.26	2.24	2.19	2.24	2.21
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Distribution Costs	0.22	0.22	0.22	0.22	0.23	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22
Wholesale Price	1.21	1.50	1.96	2.00	1.75	1.83	1.74	1.61	1.65	1.63	1.62	1.58	1.63	1.61
<b>Jet Fuel</b>														
End-User Price	0.94	1.28	1.79	1.83	1.44	1.45	1.42	1.37	1.37	1.36	1.36	1.35	1.34	1.35
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Distribution Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wholesale Price	0.86	1.20	1.71	1.76	1.37	1.37	1.34	1.30	1.30	1.29	1.29	1.28	1.28	1.29
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.40	1.93	2.03	2.21	2.03	1.97	1.89	1.86	1.87	1.89	1.85	1.85	1.89	1.89
Distribution Costs	0.43	0.49	0.43	0.43	0.61	0.59	0.57	0.56	0.57	0.57	0.56	0.56	0.57	0.57
Wholesale Price	0.96	1.44	1.59	1.77	1.42	1.38	1.32	1.29	1.30	1.31	1.29	1.29	1.32	1.32
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 99. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Pacific

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	2.18	2.27	2.14	2.21	2.22	2.20	2.20	2.22	2.31	2.34	2.33	2.34	2.35	2.39	0.7%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.0%
Distribution Costs	0.25	0.27	0.25	0.26	0.26	0.26	0.26	0.26	0.28	0.28	0.28	0.28	0.28	0.29	1.3%
Wholesale Price	1.53	1.62	1.51	1.58	1.59	1.58	1.58	1.60	1.68	1.71	1.70	1.72	1.73	1.76	1.1%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	2.25	2.24	2.24	2.26	2.29	2.30	2.32	2.32	2.33	2.35	2.35	2.36	2.37	2.38	0.4%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	-0.1%
Distribution Costs	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.23	0.2%
Wholesale Price	1.65	1.65	1.65	1.67	1.70	1.72	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80	0.7%
<b>Jet Fuel</b>															
End-User Price	1.35	1.41	1.37	1.41	1.43	1.43	1.43	1.44	1.49	1.50	1.51	1.53	1.55	1.55	0.8%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Distribution Costs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wholesale Price	1.29	1.35	1.31	1.35	1.36	1.37	1.37	1.38	1.43	1.45	1.45	1.47	1.50	1.50	0.8%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.90	1.93	1.94	1.99	2.00	2.04	2.06	2.07	2.12	2.13	2.16	2.19	2.22	2.21	0.5%
Distribution Costs	0.57	0.58	0.58	0.60	0.61	0.62	0.62	0.63	0.66	0.66	0.66	0.67	0.67	0.67	1.3%
Wholesale Price	1.33	1.35	1.36	1.39	1.40	1.42	1.44	1.44	1.46	1.48	1.50	1.52	1.54	1.54	0.3%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%



Table 99. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
Pacific

1/ Includes a 2 cent average local tax.

2/ Weighted average price delivered to U.S. refiners.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 100. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)

United States	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Diesel (Transportation Sector)</b>														
End-User Price	1.55	1.82	2.34	2.36	2.10	2.07	2.01	1.96	1.99	1.98	1.99	1.97	1.99	1.99
Federal Taxes	0.25	0.24	0.24	0.23	0.23	0.22	0.22	0.21	0.21	0.20	0.20	0.19	0.19	0.18
State Taxes	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21
Distribution Costs	0.16	0.16	0.16	0.21	0.18	0.19	0.18	0.18	0.18	0.18	0.19	0.18	0.19	0.19
Wholesale Price	0.93	1.21	1.73	1.71	1.49	1.45	1.39	1.36	1.39	1.38	1.40	1.38	1.41	1.41
<b>Motor Gasoline (All Sectors)</b>														
End-User Price	1.65	1.90	2.31	2.34	2.24	2.20	2.12	2.03	2.03	2.01	2.00	1.99	2.00	2.01
Federal Taxes	0.19	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14
State Taxes 1/	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Distribution Costs	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Wholesale Price	0.98	1.23	1.64	1.68	1.56	1.53	1.46	1.38	1.39	1.38	1.37	1.36	1.37	1.39
<b>Jet Fuel</b>														
End-User Price	0.90	1.22	1.71	1.75	1.42	1.40	1.35	1.31	1.33	1.33	1.32	1.32	1.33	1.35
Federal Taxes	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03
State Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Distribution Costs	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01
Wholesale Price	0.83	1.15	1.64	1.69	1.36	1.34	1.29	1.25	1.27	1.27	1.26	1.27	1.28	1.30
<b>Residential Distillate Fuel/ Heating Oil</b>														
End-User Price	1.37	1.89	1.98	2.16	1.97	1.92	1.85	1.78	1.78	1.80	1.76	1.77	1.77	1.81
Distribution Costs	0.45	0.50	0.45	0.45	0.63	0.61	0.59	0.57	0.57	0.57	0.57	0.57	0.57	0.58
Wholesale Price	0.92	1.39	1.54	1.71	1.36	1.32	1.26	1.22	1.21	1.23	1.20	1.21	1.21	1.24
<b>Imported Low Sulfur Light Crude Oil Price 2/</b>														
Imported Low Sulfur Light Crude Oil Price 2/	0.76	0.96	1.33	1.41	1.32	1.25	1.19	1.13	1.13	1.13	1.13	1.12	1.14	1.15
<b>Imported Crude Oil Price 2/</b>														
Imported Crude Oil Price 2/	0.68	0.86	1.18	1.28	1.23	1.17	1.11	1.05	1.04	1.04	1.03	1.03	1.02	1.03

Table 100. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)

United States	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Diesel (Transportation Sector)</b>															
End-User Price	1.99	2.01	2.01	2.03	2.03	2.03	2.06	2.07	2.08	2.10	2.12	2.14	2.12	2.14	0.6%
Federal Taxes	0.18	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.13	-2.4%
State Taxes	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.0%
Distribution Costs	0.19	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	1.1%
Wholesale Price	1.41	1.43	1.44	1.45	1.47	1.47	1.50	1.51	1.52	1.55	1.56	1.59	1.57	1.59	1.1%
<b>Motor Gasoline (All Sectors)</b>															
End-User Price	2.02	2.03	2.05	2.08	2.09	2.10	2.11	2.12	2.13	2.15	2.15	2.17	2.18	2.19	0.5%
Federal Taxes	0.13	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	0.10	-2.5%
State Taxes 1/	0.25	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	-0.1%
Distribution Costs	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.3%
Wholesale Price	1.40	1.42	1.44	1.46	1.48	1.50	1.51	1.52	1.53	1.54	1.55	1.57	1.58	1.59	1.0%
<b>Jet Fuel</b>															
End-User Price	1.35	1.39	1.39	1.42	1.43	1.44	1.45	1.46	1.47	1.49	1.51	1.53	1.54	1.56	0.9%
Federal Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	-2.4%
State Taxes	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Distribution Costs	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.1%
Wholesale Price	1.30	1.33	1.33	1.36	1.38	1.40	1.40	1.41	1.43	1.44	1.46	1.49	1.50	1.51	1.0%
<b>Residential Distillate Fuel/ Heating Oil</b>															
End-User Price	1.80	1.84	1.86	1.88	1.89	1.92	1.94	1.96	1.97	1.98	1.99	2.00	2.00	2.02	0.3%
Distribution Costs	0.58	0.59	0.60	0.61	0.61	0.62	0.62	0.63	0.64	0.64	0.64	0.65	0.64	0.65	1.0%
Wholesale Price	1.24	1.26	1.27	1.28	1.29	1.31	1.33	1.34	1.34	1.35	1.35	1.36	1.37	1.38	0.0%
Imported Low Sulfur Light Crude Oil Price 2/	1.15	1.17	1.15	1.21	1.20	1.25	1.27	1.24	1.29	1.30	1.33	1.34	1.35	1.36	1.3%
Imported Crude Oil Price 2/	1.04	1.05	1.06	1.07	1.09	1.10	1.11	1.13	1.14	1.15	1.16	1.17	1.18	1.19	1.3%

Table 100. Components of Selected Petroleum Product Prices  
(2004 dollars per gallon)  
United States

1/ Includes a 2 cent average local tax.

N/A = Not applicable.

Sources: 2004 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-782A, "Refiners'/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Resellers'/Retailers' Monthly Petroleum Product Sales Report." 2004 diesel and gasoline taxes: Table EN1, Petroleum Marketing Monthly, DOE/EIA-0380(2003/09) (Washington, DC, September 2003). 2004 jet fuel taxes: EIA, Office of Oil and Gas. 2003 and 2004 end-user prices: estimated as the sum of the components. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 101. Lower 48 Crude Oil Production and Wellhead Prices by Supply Region

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production 1/ (million barrels per day)														
Lower 48 Total	4.71	4.51	4.44	4.65	4.71	4.82	4.99	5.05	5.01	5.01	5.00	4.98	4.95	4.99
Lower 48 Onshore														
Northeast	0.09	0.09	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07
Gulf Coast	0.58	0.56	0.53	0.50	0.47	0.43	0.39	0.36	0.32	0.30	0.27	0.25	0.23	0.21
Midcontinent	0.32	0.29	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.33	0.33	0.33	0.33
Southwest	0.98	0.96	0.91	0.94	0.94	0.94	0.92	0.91	0.90	0.90	0.90	0.90	0.91	0.91
Rocky Mountain	0.38	0.40	0.40	0.41	0.42	0.43	0.43	0.44	0.45	0.45	0.46	0.47	0.48	0.48
West Coast	0.64	0.61	0.61	0.60	0.58	0.55	0.53	0.51	0.50	0.49	0.48	0.47	0.47	0.46
Lower 48 Offshore														
Gulf	1.59	1.48	1.48	1.67	1.80	1.97	2.23	2.34	2.35	2.39	2.41	2.41	2.41	2.47
Shallow	0.49	0.45	0.39	0.42	0.39	0.38	0.35	0.33	0.32	0.30	0.29	0.29	0.29	0.30
Deep	1.10	1.03	1.09	1.26	1.41	1.59	1.88	2.01	2.03	2.09	2.12	2.12	2.11	2.17
Pacific	0.13	0.12	0.12	0.11	0.10	0.10	0.09	0.09	0.08	0.08	0.07	0.07	0.06	0.06
Atlantic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wellhead Prices (2004 dollars per barrel)														
Lower 48 Average	29.68	38.06	48.76	50.33	46.88	45.82	43.92	43.49	43.92	44.26	43.73	43.92	44.98	45.08
Lower 48 Onshore														
Northeast	29.21	38.21	48.98	50.62	47.60	46.40	44.67	43.76	44.56	44.65	44.21	44.43	45.37	45.74
Gulf Coast	31.90	41.37	53.03	54.80	46.40	45.20	43.35	42.70	43.03	43.40	42.91	43.16	44.30	44.20
Midcontinent	29.91	39.39	50.50	52.18	47.37	46.18	44.45	43.58	44.23	44.44	44.03	44.19	45.19	45.50
Southwest	30.03	38.95	49.93	51.59	47.06	45.89	44.19	43.43	44.03	44.56	43.83	43.93	44.95	45.20
Rocky Mountain	29.01	37.63	48.24	49.84	47.36	46.01	44.47	43.53	44.19	44.24	43.95	44.22	45.22	45.31
West Coast	28.97	36.81	47.18	48.76	43.21	42.60	39.32	40.78	40.78	40.71	40.01	39.73	40.27	40.75
Lower 48 Offshore														
Gulf	29.40	37.00	47.43	49.01	48.25	47.01	45.09	44.41	44.75	45.14	44.62	44.89	46.07	45.97
Pacific	25.67	33.01	42.32	43.72	40.18	39.62	36.57	37.92	37.93	37.86	37.21	36.95	37.45	37.90
Atlantic	0.00	0.00	0.00	0.00	47.60	46.40	44.67	43.76	44.56	44.65	44.21	44.43	45.37	45.74

Table 101. Lower 48 Crude Oil Production and Wellhead Prices by Supply Region

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Production 1/ (million barrels per day)															
Lower 48 Total	4.93	4.87	4.83	4.79	4.75	4.67	4.64	4.55	4.52	4.49	4.42	4.40	4.33	4.30	-0.2%
Lower 48 Onshore															
Northeast	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.04	0.04	-2.8%
Gulf Coast	0.20	0.18	0.17	0.16	0.15	0.14	0.13	0.13	0.12	0.11	0.11	0.10	0.10	0.09	-6.6%
Midcontinent	0.33	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.31	0.31	0.30	0.29	0.28	0.27	-0.3%
Southwest	0.91	0.91	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.91	0.91	-0.2%
Rocky Mountain	0.49	0.49	0.50	0.50	0.51	0.51	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.53	1.1%
West Coast	0.46	0.45	0.45	0.45	0.44	0.44	0.44	0.44	0.44	0.43	0.43	0.43	0.43	0.43	-1.4%
Lower 48 Offshore															
Gulf	2.42	2.38	2.35	2.32	2.29	2.23	2.22	2.14	2.12	2.11	2.06	2.06	2.01	2.00	1.2%
Shallow	0.30	0.31	0.31	0.30	0.30	0.29	0.29	0.29	0.29	0.31	0.31	0.31	0.31	0.31	-1.4%
Deep	2.12	2.06	2.04	2.02	1.99	1.94	1.93	1.84	1.83	1.80	1.76	1.75	1.71	1.70	1.9%
Pacific	0.06	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.02	-6.0%
Atlantic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wellhead Prices (2004 dollars per barrel)															
Lower 48 Average	45.75	46.52	46.75	47.50	48.23	49.50	50.57	49.78	50.41	51.41	52.10	52.79	53.07	53.16	1.3%
Lower 48 Onshore															
Northeast	46.14	47.11	47.29	48.45	48.91	50.11	50.94	50.35	50.86	51.85	52.46	53.08	53.40	53.84	1.3%
Gulf Coast	45.05	45.86	46.04	46.56	47.34	48.77	49.79	48.89	49.58	50.51	51.15	51.79	52.00	52.05	0.9%
Midcontinent	45.97	46.90	47.08	48.19	48.66	49.89	50.75	50.12	50.65	51.63	52.24	52.86	53.15	53.13	1.2%
Southwest	45.75	46.65	46.82	47.87	48.38	49.64	50.52	49.83	50.39	51.37	52.00	52.64	52.84	52.81	1.2%
Rocky Mountain	46.11	46.83	46.97	47.91	48.63	49.71	50.71	49.90	50.51	51.44	52.07	52.74	53.00	52.84	1.3%
West Coast	40.58	40.62	41.33	42.06	42.96	43.51	45.18	44.89	45.36	46.57	47.74	48.67	49.51	50.34	1.2%
Lower 48 Offshore															
Gulf	46.85	47.69	47.88	48.42	49.24	50.72	51.78	50.84	51.56	52.53	53.20	53.86	54.08	54.13	1.5%
Pacific	37.74	37.78	38.43	39.12	39.95	40.46	42.02	41.74	42.18	43.31	44.40	45.26	46.04	46.82	1.4%
Atlantic	46.14	47.11	47.29	48.45	48.91	50.11	50.94	50.35	50.86	51.85	52.46	53.08	53.40	53.84	N/A

Table 101. Lower 48 Crude Oil Production and Wellhead Prices by Supply Region

1/ Includes lease condensate.

N/A = Not applicable.

Note: Supply regions are defined in "Documentation of the Oil and Gas Supply Module," Energy Information Administration (EIA), DOE/EIA-MO63(2005) (Washington, DC, May 2005). Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 may differ slightly from official EIA data reports due to internal conversion factors within the AEO2006 National Energy Modeling System.

Sources: 2003: Energy Information Administration (EIA), Petroleum Supply Annual 2003, DOE/EIA-0340(2003)/1 (Washington, DC, July 2004); EIA, Petroleum Marketing Annual 2004, DOE/EIA-0487(2004) (Washington, DC, August 2005); and EIA, Office of Integrated Analysis and Forecasting (OIAF). 2004: EIA, Petroleum Supply Annual 2004, DOE/EIA-0340(2004)/1 (Washington, DC, June 2005) and EIA, OIAF. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 102. Lower 48 Natural Gas Production and Wellhead Prices by Supply Region

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Dry Production (trillion cubic feet) 1/														
Lower 48 Total	18.58	18.03	17.77	17.81	17.68	18.06	18.21	18.33	18.68	18.89	19.34	19.46	19.30	19.18
Lower 48 Onshore														
Northeast	0.87	0.88	0.96	0.97	1.00	1.05	1.08	1.10	1.11	1.14	1.18	1.19	1.22	1.23
Gulf Coast	4.73	4.60	4.18	4.07	4.02	4.03	4.00	3.97	3.89	3.90	3.93	3.89	3.85	3.82
Midcontinent	2.36	2.44	2.48	2.53	2.53	2.56	2.57	2.55	2.52	2.53	2.55	2.53	2.48	2.45
Southwest	1.79	1.72	1.63	1.66	1.71	1.80	1.86	1.91	1.94	1.99	2.05	2.08	2.11	2.13
Rocky Mountain	3.81	3.86	4.14	4.18	4.16	4.24	4.24	4.29	4.28	4.35	4.45	4.50	4.39	4.32
West Coast	0.27	0.25	0.24	0.23	0.22	0.22	0.21	0.20	0.20	0.20	0.19	0.19	0.18	0.18
Lower 48 Offshore														
Gulf	4.71	4.21	4.08	4.11	4.00	4.14	4.23	4.28	4.71	4.76	4.96	5.05	5.06	5.02
Shallow	2.69	2.40	2.28	2.48	2.21	2.20	1.92	1.98	1.90	1.83	1.87	1.88	1.90	1.99
Deep	2.01	1.81	1.80	1.64	1.79	1.93	2.31	2.30	2.81	2.92	3.09	3.17	3.15	3.03
Pacific	0.05	0.05	0.06	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02
Atlantic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wellhead Prices (2004 dollars per thousand cubic feet)														
Lower 48 Average	5.08	5.49	7.62	6.85	6.13	5.78	5.34	5.03	4.78	4.72	4.80	4.71	4.52	4.46
Lower 48 Onshore														
Northeast	5.42	5.84	7.97	7.24	6.57	6.25	5.94	5.53	5.32	5.24	5.31	5.19	5.12	5.13
Gulf Coast	5.51	5.96	8.11	7.04	6.11	5.74	5.35	4.96	4.77	4.72	4.81	4.71	4.61	4.62
Midcontinent	5.05	5.47	7.39	6.74	6.08	5.75	5.38	5.01	4.80	4.74	4.83	4.73	4.58	4.55
Southwest	5.17	5.60	8.03	6.81	5.85	5.46	5.08	4.75	4.61	4.59	4.67	4.58	4.44	4.43
Rocky Mountain	4.44	4.80	6.94	6.78	6.22	5.89	5.35	4.98	4.80	4.76	4.82	4.76	4.27	3.98
West Coast	5.29	5.73	7.44	7.29	6.89	6.61	5.96	5.56	5.31	5.30	5.35	5.30	4.52	4.09
Lower 48 Offshore														
Gulf	5.07	5.49	7.69	6.69	6.07	5.67	5.24	5.11	4.68	4.58	4.66	4.56	4.53	4.58
Pacific	4.58	4.96	7.68	7.75	7.29	6.98	6.27	5.82	5.53	5.50	5.55	5.50	4.65	4.17
Atlantic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00



Table 102. Lower 48 Natural Gas Production and Wellhead Prices by Supply Region

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Dry Production (trillion cubic feet) 1/ Lower 48 Total	19.26	19.29	19.36	19.24	19.20	19.16	19.20	19.17	18.98	18.95	18.86	18.77	18.69	18.69	0.1%
Lower 48 Onshore															
Northeast	1.24	1.27	1.29	1.30	1.33	1.34	1.36	1.38	1.39	1.40	1.42	1.43	1.45	1.47	2.0%
Gulf Coast	3.80	3.82	3.81	3.78	3.78	3.75	3.74	3.72	3.70	3.66	3.64	3.59	3.56	3.54	-1.0%
Midcontinent	2.44	2.45	2.44	2.41	2.39	2.37	2.34	2.32	2.29	2.26	2.23	2.19	2.16	2.14	-0.5%
Southwest	2.16	2.20	2.22	2.23	2.25	2.25	2.25	2.26	2.26	2.25	2.24	2.22	2.20	2.19	0.9%
Rocky Mountain	4.40	4.48	4.59	4.63	4.70	4.74	4.80	4.88	4.94	4.99	5.05	5.10	5.16	5.25	1.2%
West Coast	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	-2.3%
Lower 48 Offshore															
Gulf	5.02	4.89	4.83	4.69	4.57	4.53	4.54	4.44	4.23	4.23	4.12	4.08	3.99	3.95	-0.2%
Shallow	1.95	1.89	1.85	1.81	1.80	1.80	1.82	1.88	1.88	1.96	1.95	1.93	1.88	1.85	-1.0%
Deep	3.07	3.00	2.97	2.89	2.77	2.73	2.72	2.55	2.35	2.27	2.17	2.15	2.11	2.10	0.6%
Pacific	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.02	0.02	-3.5%
Atlantic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wellhead Prices (2004 dollars per thousand cubic feet)															
Lower 48 Average	4.53	4.71	4.85	4.90	5.03	5.12	5.19	5.30	5.43	5.51	5.61	5.67	5.75	5.92	0.3%
Lower 48 Onshore															
Northeast	5.09	5.21	5.30	5.30	5.42	5.51	5.58	5.70	5.82	5.90	6.00	6.04	6.11	6.23	0.2%
Gulf Coast	4.65	4.79	4.90	4.93	5.05	5.14	5.22	5.33	5.46	5.54	5.64	5.69	5.76	5.91	0.0%
Midcontinent	4.63	4.80	4.95	5.00	5.12	5.22	5.30	5.42	5.55	5.64	5.74	5.79	5.87	6.03	0.4%
Southwest	4.49	4.65	4.78	4.83	4.96	5.05	5.13	5.24	5.37	5.45	5.55	5.60	5.68	5.83	0.2%
Rocky Mountain	4.08	4.25	4.53	4.60	4.73	4.81	4.88	5.00	5.13	5.23	5.33	5.43	5.53	5.75	0.7%
West Coast	4.35	4.63	5.09	5.19	5.35	5.43	5.51	5.63	5.77	5.88	5.98	6.11	6.23	6.52	0.5%
Lower 48 Offshore															
Gulf	4.66	4.91	4.97	5.03	5.19	5.27	5.33	5.45	5.58	5.65	5.75	5.78	5.85	6.00	0.3%
Pacific	4.45	4.73	5.20	5.30	5.45	5.53	5.62	5.75	5.90	6.01	6.12	6.24	6.36	6.65	1.1%
Atlantic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

Table 102. Lower 48 Natural Gas Production and Wellhead Prices by Supply Region

1/ Marketed production (wet) minus extraction losses.

N/A = Not applicable.

Note: Supply regions are defined in "Documentation of the Oil and Gas Supply Module," Energy Information Administration, DOE/EIA-MO63(2005) (Washington, DC, May 2005). Totals may not equal sum of components due to independent rounding.

Sources: 2003: Mineral Management Service, and Energy Information Administration (EIA), Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004); EIA, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, DOE/EIA-0216(2003) (Washington, DC, November 2004); and EIA, Office of Integrated Analysis and Forecasting (OIAF). 2004: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005), subtracting 1 billion cubic feet per day to account for carbon dioxide included in production in Texas; and EIA, OIAF. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 103. Oil and Gas End-of-Year Reserves and Annual Reserve Additions

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Lower 48 Reserves</b>														
Crude Oil (billion barrels) 1/	18.66	18.21	18.35	18.02	18.27	18.71	19.51	19.83	19.85	19.98	20.02	20.00	19.98	20.15
Onshore	12.91	12.91	12.68	12.48	12.33	12.23	12.17	12.13	12.11	12.11	12.11	12.12	12.13	12.14
Offshore	5.75	5.31	5.67	5.54	5.94	6.48	7.34	7.70	7.73	7.87	7.91	7.88	7.85	8.01
Dry Natural Gas (trillion cubic feet)	180.8	183.6	189.9	195.2	200.8	206.3	212.4	214.4	218.1	221.3	224.8	227.7	228.9	229.6
Onshore	154.2	158.5	164.0	169.3	174.2	178.8	183.1	186.3	188.7	190.9	193.0	195.0	196.3	197.2
Associated-Dissolved 2/	13.7	13.5	13.3	13.1	12.9	12.8	12.6	12.5	12.3	12.2	12.1	12.0	11.9	11.8
Non-Associated	140.5	145.0	150.7	156.2	161.3	166.1	170.5	173.8	176.3	178.6	180.9	183.0	184.4	185.4
Conventional	52.5	53.5	55.5	57.5	58.9	60.0	60.6	60.7	60.6	60.3	60.0	59.5	58.8	58.1
Unconventional	88.0	91.5	95.2	98.7	102.4	106.1	109.9	113.1	115.7	118.3	120.9	123.5	125.6	127.3
Offshore	26.6	25.1	25.9	25.8	26.6	27.4	29.2	28.1	29.5	30.4	31.8	32.7	32.6	32.4
Associated-Dissolved 2/	7.4	7.4	7.4	7.3	7.4	7.4	7.7	8.1	8.0	8.0	8.0	8.0	7.9	8.0
Non-Associated	19.2	17.7	18.5	18.5	19.2	20.0	21.6	20.0	21.5	22.4	23.8	24.7	24.7	24.4
<b>Lower 48 Reserve Additions</b>														
Crude Oil (billion barrels) 1/	1.03	1.20	1.76	1.37	1.97	2.20	2.62	2.16	1.84	1.96	1.87	1.80	1.78	2.00
Onshore	0.44	1.06	0.81	0.85	0.88	0.90	0.91	0.92	0.92	0.93	0.92	0.92	0.92	0.91
Offshore	0.60	0.14	0.95	0.52	1.09	1.30	1.71	1.24	0.92	1.04	0.94	0.88	0.87	1.09
Dry Natural Gas (trillion cubic feet)	20.9	20.9	24.0	23.1	23.3	23.5	24.3	20.3	22.5	22.0	22.9	22.3	20.6	19.8
Onshore	18.4	18.1	19.1	19.0	18.5	18.5	18.2	17.2	16.3	16.3	16.5	16.4	15.6	15.0
Associated-Dissolved 2/	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1
Non-Associated	17.1	16.7	17.9	17.8	17.3	17.3	17.0	16.0	15.2	15.1	15.3	15.2	14.4	13.9
Conventional	4.9	5.7	6.7	6.8	6.3	6.0	5.6	5.2	4.8	4.7	4.6	4.5	4.2	4.0
Unconventional	12.2	11.0	11.2	11.0	11.0	11.2	11.4	10.8	10.3	10.4	10.7	10.8	10.2	9.8
Offshore	2.4	2.8	4.9	4.1	4.8	5.0	6.1	3.2	6.1	5.7	6.4	6.0	5.0	4.8
Associated-Dissolved 2/	0.3	0.9	0.8	0.7	0.8	0.8	1.1	1.5	1.4	1.4	1.4	1.4	1.4	1.4
Non-Associated	2.1	2.0	4.1	3.4	4.0	4.2	5.0	1.7	4.7	4.3	5.0	4.6	3.7	3.4

Table 103. Oil and Gas End-of-Year Reserves and Annual Reserve Additions

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Lower 48 Reserves</b>															
Crude Oil (billion barrels) 1/	20.00	19.82	19.71	19.61	19.51	19.27	19.18	18.86	18.74	18.61	18.38	18.27	18.04	17.91	-0.1%
Onshore	12.15	12.15	12.15	12.15	12.14	12.12	12.09	12.05	11.99	11.93	11.86	11.78	11.70	11.61	-0.4%
Offshore	7.85	7.66	7.56	7.45	7.36	7.14	7.09	6.81	6.75	6.68	6.52	6.49	6.33	6.30	0.7%
Dry Natural Gas (trillion cubic feet)	229.9	229.4	229.8	229.5	228.8	228.9	229.3	228.3	226.9	226.6	225.2	224.8	223.7	222.7	0.7%
Onshore	197.8	198.4	199.0	199.5	199.8	200.0	200.1	200.0	199.9	199.7	199.3	198.9	198.3	197.6	0.9%
Associated-Dissolved 2/	11.7	11.6	11.5	11.4	11.4	11.3	11.2	11.1	11.0	10.9	10.8	10.8	10.7	10.6	-0.9%
Non-Associated	186.1	186.8	187.5	188.0	188.4	188.7	188.9	188.9	188.9	188.7	188.4	188.1	187.6	187.0	1.0%
Conventional	57.3	56.5	55.8	55.0	54.3	53.5	52.8	52.0	51.3	50.5	49.8	49.0	48.2	47.3	-0.5%
Unconventional	128.8	130.3	131.7	133.0	134.1	135.2	136.2	136.9	137.6	138.2	138.7	139.1	139.4	139.7	1.6%
Offshore	32.1	30.9	30.8	30.1	29.1	28.9	29.2	28.2	26.9	26.9	25.9	26.0	25.4	25.1	0.0%
Associated-Dissolved 2/	8.0	7.9	7.9	7.9	7.9	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	0.1%
Non-Associated	24.1	23.0	22.9	22.2	21.2	21.1	21.4	20.5	19.2	19.2	18.2	18.3	17.7	17.4	-0.1%
<b>Lower 48 Reserve Additions</b>															
Crude Oil (billion barrels) 1/	1.65	1.59	1.66	1.64	1.63	1.47	1.61	1.34	1.54	1.51	1.38	1.50	1.35	1.44	0.7%
Onshore	0.90	0.90	0.89	0.88	0.87	0.86	0.84	0.82	0.81	0.79	0.78	0.77	0.75	0.74	-1.4%
Offshore	0.75	0.70	0.77	0.76	0.76	0.61	0.77	0.51	0.73	0.71	0.60	0.73	0.59	0.70	6.4%
Dry Natural Gas (trillion cubic feet)	19.6	18.8	19.8	19.0	18.5	19.3	19.6	18.1	17.6	18.7	17.5	18.4	17.5	17.7	-0.6%
Onshore	14.8	15.0	15.1	15.0	14.9	14.8	14.8	14.6	14.6	14.4	14.4	14.2	14.1	14.0	-1.0%
Associated-Dissolved 2/	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.0	1.0	-1.0%
Non-Associated	13.7	13.9	14.0	13.9	13.8	13.7	13.7	13.6	13.6	13.4	13.3	13.2	13.1	13.0	-1.0%
Conventional	4.0	4.0	4.0	3.9	3.9	3.8	3.8	3.7	3.7	3.6	3.6	3.5	3.4	3.3	-2.1%
Unconventional	9.7	9.9	10.0	10.0	9.9	9.9	9.9	9.8	9.9	9.7	9.7	9.7	9.7	9.7	-0.5%
Offshore	4.7	3.8	4.7	4.0	3.6	4.4	4.8	3.5	2.9	4.3	3.1	4.2	3.4	3.7	1.0%
Associated-Dissolved 2/	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.0%
Non-Associated	3.4	2.4	3.4	2.7	2.3	3.2	3.6	2.3	1.8	3.1	2.0	3.0	2.3	2.5	1.0%

Table 103. Oil and Gas End-of-Year Reserves and Annual Reserve Additions

1/ Includes lease condensate.

2/ Gas which occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved).

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2003: Energy Information Administration (EIA), U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, EIA/DOE-0216(2003) (Washington, DC, November 2004) and EIA, Office of Integrated Analysis and Forecasting (OIAF). 2004: EIA, OIAF. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 104. Natural Gas Imports and Exports

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Volumes (trillion cubic feet)														
Total Net Imports	3.29	3.40	3.39	3.65	4.00	4.09	4.16	4.35	4.49	4.86	4.90	5.17	5.10	4.83
Total Imports	4.00	4.26	4.24	4.54	4.67	4.75	4.77	4.90	5.02	5.40	5.45	5.74	5.68	5.43
Pipeline Imports from Canada	3.49	3.61	3.54	3.46	3.22	3.09	2.90	2.68	2.54	2.60	2.55	2.50	2.48	2.23
Pipeline Imports from Mexico	0.00	0.00	0.00	0.00	0.00	0.05	0.10	0.15	0.15	0.15	0.15	0.15	0.15	0.15
Pipeline Imports from Bahamas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Liquefied Natural Gas Imports	0.51	0.65	0.71	1.08	1.44	1.61	1.78	2.07	2.34	2.65	2.76	3.09	3.05	3.06
Total Exports	0.70	0.86	0.85	0.89	0.67	0.66	0.61	0.55	0.53	0.54	0.55	0.56	0.58	0.60
Pipeline Exports to Canada	0.29	0.39	0.32	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29
Pipeline Exports to Mexico	0.34	0.40	0.46	0.54	0.31	0.31	0.31	0.26	0.24	0.25	0.26	0.27	0.29	0.31
Liquefied Natural Gas Exports	0.06	0.06	0.06	0.06	0.06	0.06	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Border Prices (2004 dollars per thousand cubic feet)														
Average Import Price	5.32	5.81	8.00	7.26	6.67	6.37	5.97	5.60	5.46	5.27	5.34	5.21	4.87	4.93
Pipeline Import Prices														
From Canada	5.37	5.81	7.98	7.31	6.80	6.57	6.23	5.89	5.89	5.64	5.71	5.59	4.97	5.08
From Mexico	N/A	N/A	N/A	N/A	6.07	6.58	5.95	5.55	5.30	5.29	5.35	5.29	4.51	4.09
From Bahamas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LNG Price (including regasification)	4.96	5.82	8.11	7.13	6.38	5.99	5.55	5.23	5.00	4.91	4.99	4.91	4.79	4.82

Table 104. Natural Gas Imports and Exports

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Volumes (trillion cubic feet)</b>															
Total Net Imports	4.74	4.71	4.83	5.02	5.08	5.12	5.14	5.18	5.37	5.40	5.42	5.44	5.43	5.57	1.9%
Total Imports	5.35	5.35	5.46	5.70	5.80	5.86	5.93	6.01	6.22	6.30	6.37	6.39	6.43	6.57	1.7%
Pipeline Imports from Canada	2.05	1.92	1.81	1.85	1.87	1.89	1.91	1.93	1.94	1.96	1.98	1.99	2.00	2.06	-2.1%
Pipeline Imports from Mexico	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	N/A
Pipeline Imports from Bahamas	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Liquefied Natural Gas Imports	3.15	3.28	3.51	3.70	3.78	3.82	3.87	3.94	4.13	4.19	4.23	4.25	4.28	4.36	7.6%
Total Exports	0.62	0.64	0.63	0.68	0.72	0.74	0.79	0.84	0.86	0.90	0.95	0.95	1.00	1.00	0.6%
Pipeline Exports to Canada	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	-1.2%
Pipeline Exports to Mexico	0.33	0.35	0.34	0.39	0.43	0.45	0.50	0.54	0.57	0.61	0.66	0.66	0.71	0.71	2.2%
Liquefied Natural Gas Exports	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Border Prices</b>															
<b>(2004 dollars per thousand cubic feet)</b>															
Average Import Price	4.97	5.13	5.26	5.20	5.33	5.41	5.49	5.61	5.75	5.83	5.92	5.98	6.06	6.12	0.2%
Pipeline Import Prices															
From Canada	5.13	5.29	5.49	5.29	5.39	5.46	5.55	5.69	5.82	5.89	5.98	6.06	6.15	6.04	0.2%
From Mexico	4.36	4.63	5.09	5.19	5.35	5.43	5.51	5.64	5.77	5.89	5.99	6.11	6.23	6.52	3.8%
From Bahamas	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LNG Price (including regasification)	4.86	5.03	5.14	5.16	5.30	5.39	5.45	5.58	5.72	5.80	5.90	5.95	6.02	6.16	0.2%

Table 104. Natural Gas Imports and Exports

LNG = Liquefied natural gas.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 may differ slightly from official EIA data reports due to internal conversion factors within the AEO2006 National Energy Modeling System.

Sources: 2003 and 2004: Energy Information Administration (EIA), Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005) and EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 105. Natural Gas Consumption by End-Use Sector and Census Division  
(trillion cubic feet)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Residential</b>														
New England	0.19	0.19	0.19	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.20
Middle Atlantic	0.92	0.87	0.87	0.87	0.86	0.87	0.87	0.87	0.88	0.88	0.88	0.88	0.88	0.88
East North Central	1.47	1.39	1.38	1.40	1.39	1.40	1.41	1.42	1.42	1.43	1.42	1.42	1.42	1.43
West North Central	0.46	0.44	0.44	0.46	0.46	0.46	0.46	0.46	0.47	0.47	0.47	0.47	0.47	0.48
South Atlantic	0.47	0.46	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.56	0.57	0.58	0.59	0.60
East South Central	0.21	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.22	0.22	0.22
West South Central	0.37	0.35	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.40	0.40	0.41	0.41
Mountain	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43	0.43	0.44	0.45	0.47
Pacific	0.64	0.63	0.65	0.66	0.66	0.67	0.68	0.69	0.70	0.70	0.71	0.71	0.72	0.73
Total	5.08	4.88	4.93	5.00	5.01	5.08	5.12	5.17	5.22	5.27	5.28	5.31	5.36	5.41
<b>Commercial</b>														
New England	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15
Middle Atlantic	0.67	0.62	0.63	0.58	0.58	0.59	0.59	0.60	0.61	0.61	0.62	0.62	0.63	0.64
East North Central	0.74	0.68	0.68	0.66	0.66	0.67	0.68	0.69	0.71	0.72	0.73	0.74	0.75	0.76
West North Central	0.30	0.28	0.28	0.27	0.28	0.28	0.28	0.29	0.29	0.30	0.30	0.31	0.31	0.32
South Atlantic	0.36	0.34	0.34	0.34	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	0.43
East South Central	0.15	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16
West South Central	0.29	0.27	0.27	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.31	0.31	0.32	0.32
Mountain	0.21	0.21	0.21	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.24	0.24	0.25	0.26
Pacific	0.35	0.34	0.34	0.33	0.33	0.34	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.38
Total	3.22	3.00	3.01	2.92	2.93	2.98	3.03	3.08	3.15	3.20	3.25	3.30	3.36	3.41
<b>Industrial 1/</b>														
New England	0.13	0.13	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14
Middle Atlantic	0.35	0.35	0.33	0.34	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
East North Central	1.15	1.20	1.13	1.16	1.19	1.20	1.22	1.23	1.24	1.25	1.25	1.27	1.28	1.28
West North Central	0.40	0.42	0.40	0.41	0.44	0.47	0.49	0.51	0.54	0.56	0.57	0.57	0.57	0.57
South Atlantic	0.55	0.58	0.55	0.57	0.59	0.60	0.61	0.61	0.62	0.62	0.62	0.63	0.63	0.64
East South Central	0.46	0.48	0.46	0.47	0.48	0.49	0.50	0.50	0.51	0.51	0.51	0.51	0.52	0.52
West South Central	3.01	3.12	2.97	3.07	3.14	3.22	3.26	3.28	3.31	3.31	3.33	3.33	3.35	3.34
Mountain	0.24	0.25	0.24	0.24	0.25	0.25	0.26	0.27	0.27	0.27	0.27	0.27	0.27	0.28
Pacific	0.86	0.88	0.84	0.87	0.85	0.87	0.89	0.90	0.90	0.90	0.89	0.90	0.92	0.95
Total	7.14	7.41	7.03	7.27	7.46	7.61	7.76	7.82	7.90	7.94	7.97	8.00	8.08	8.11
<b>Electric Power 2/</b>														
New England	0.34	0.37	0.37	0.35	0.33	0.34	0.34	0.35	0.36	0.38	0.40	0.41	0.42	0.43
Middle Atlantic	0.43	0.46	0.53	0.50	0.48	0.50	0.51	0.53	0.59	0.62	0.65	0.68	0.77	0.82
East North Central	0.20	0.20	0.46	0.43	0.42	0.42	0.42	0.43	0.45	0.49	0.53	0.55	0.59	0.61
West North Central	0.06	0.06	0.09	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.12
South Atlantic	0.66	0.76	0.60	0.57	0.64	0.67	0.68	0.74	0.76	0.79	0.85	0.90	0.94	0.99
East South Central	0.19	0.23	0.40	0.39	0.39	0.40	0.41	0.41	0.46	0.50	0.55	0.57	0.57	0.59
West South Central	1.94	1.84	1.57	1.58	1.59	1.65	1.66	1.70	1.82	1.90	1.99	2.05	2.09	2.09
Mountain	0.42	0.50	0.62	0.60	0.59	0.61	0.58	0.58	0.62	0.67	0.71	0.75	0.80	0.81
Pacific	0.84	0.90	0.75	0.67	0.68	0.74	0.67	0.68	0.65	0.73	0.78	0.82	0.86	0.85
Total	5.10	5.32	5.40	5.16	5.20	5.41	5.36	5.51	5.79	6.19	6.57	6.84	7.14	7.32

Table 105. Natural Gas Consumption by End-Use Sector and Census Division  
(trillion cubic feet)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Transportation 3/														
New England	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
Middle Atlantic	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
East North Central	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
West North Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
South Atlantic	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
East South Central	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
West South Central	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Mountain	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01
Pacific	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Total	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08
All Sectors 4/														
New England	0.81	0.82	0.81	0.79	0.77	0.79	0.80	0.81	0.83	0.85	0.87	0.88	0.90	0.91
Middle Atlantic	2.37	2.30	2.36	2.29	2.31	2.35	2.37	2.40	2.46	2.51	2.55	2.58	2.68	2.74
East North Central	3.57	3.48	3.65	3.65	3.67	3.70	3.74	3.78	3.83	3.89	3.94	3.99	4.05	4.09
West North Central	1.23	1.21	1.21	1.23	1.26	1.29	1.32	1.35	1.39	1.42	1.44	1.45	1.47	1.49
South Atlantic	2.05	2.14	1.98	1.98	2.07	2.14	2.17	2.26	2.31	2.38	2.46	2.53	2.60	2.68
East South Central	1.01	1.04	1.20	1.21	1.22	1.24	1.27	1.27	1.33	1.38	1.44	1.46	1.47	1.49
West South Central	5.61	5.58	5.18	5.29	5.38	5.53	5.59	5.67	5.81	5.92	6.03	6.10	6.18	6.18
Mountain	1.22	1.31	1.43	1.42	1.42	1.46	1.46	1.48	1.53	1.61	1.66	1.71	1.78	1.82
Pacific	2.68	2.75	2.59	2.53	2.53	2.63	2.59	2.62	2.61	2.70	2.75	2.81	2.89	2.93
Total	20.55	20.63	20.40	20.39	20.64	21.13	21.32	21.64	22.10	22.67	23.13	23.52	24.01	24.33

Table 105. Natural Gas Consumption by End-Use Sector and Census Division  
(trillion cubic feet)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Residential</b>															
New England	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.3%
Middle Atlantic	0.88	0.88	0.88	0.88	0.87	0.87	0.87	0.87	0.87	0.86	0.86	0.86	0.86	0.85	0.0%
East North Central	1.42	1.42	1.41	1.41	1.40	1.40	1.39	1.39	1.38	1.37	1.37	1.36	1.35	1.34	-0.1%
West North Central	0.48	0.48	0.48	0.48	0.48	0.48	0.47	0.48	0.47	0.47	0.47	0.47	0.47	0.47	0.2%
South Atlantic	0.61	0.62	0.63	0.64	0.65	0.66	0.67	0.68	0.68	0.69	0.70	0.71	0.72	0.73	1.8%
East South Central	0.22	0.22	0.22	0.22	0.22	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.2%
West South Central	0.42	0.42	0.43	0.43	0.43	0.44	0.45	0.45	0.46	0.46	0.47	0.48	0.48	0.49	1.2%
Mountain	0.48	0.48	0.49	0.50	0.50	0.51	0.52	0.53	0.53	0.54	0.55	0.56	0.56	0.57	1.9%
Pacific	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.77	0.77	0.77	0.78	0.78	0.79	0.79	0.9%
Total	5.43	5.45	5.47	5.51	5.51	5.53	5.54	5.57	5.57	5.59	5.60	5.63	5.63	5.64	0.6%
<b>Commercial</b>															
New England	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	1.1%
Middle Atlantic	0.64	0.65	0.65	0.65	0.65	0.66	0.66	0.66	0.67	0.67	0.67	0.67	0.68	0.68	0.4%
East North Central	0.76	0.77	0.78	0.78	0.79	0.79	0.80	0.81	0.81	0.82	0.82	0.83	0.84	0.84	0.8%
West North Central	0.32	0.32	0.33	0.33	0.33	0.33	0.34	0.34	0.34	0.35	0.35	0.35	0.35	0.36	1.0%
South Atlantic	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.50	0.51	0.52	0.53	0.54	0.55	0.56	2.0%
East South Central	0.16	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	1.4%
West South Central	0.33	0.33	0.33	0.34	0.34	0.35	0.35	0.36	0.36	0.36	0.37	0.37	0.38	0.39	1.4%
Mountain	0.27	0.27	0.27	0.28	0.28	0.29	0.30	0.30	0.31	0.31	0.32	0.32	0.33	0.34	1.9%
Pacific	0.39	0.39	0.40	0.40	0.41	0.41	0.42	0.42	0.43	0.43	0.44	0.45	0.45	0.45	1.1%
Total	3.46	3.50	3.53	3.57	3.61	3.65	3.70	3.73	3.77	3.81	3.86	3.90	3.95	3.99	1.1%
<b>Industrial 1/</b>															
New England	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.8%
Middle Atlantic	0.39	0.39	0.40	0.40	0.40	0.40	0.40	0.40	0.41	0.41	0.41	0.42	0.42	0.42	0.8%
East North Central	1.26	1.27	1.27	1.27	1.28	1.28	1.29	1.30	1.31	1.32	1.33	1.33	1.33	1.33	0.4%
West North Central	0.57	0.57	0.57	0.57	0.57	0.58	0.58	0.58	0.58	0.59	0.59	0.59	0.59	0.59	1.3%
South Atlantic	0.65	0.65	0.65	0.66	0.66	0.67	0.67	0.68	0.68	0.69	0.70	0.70	0.71	0.72	0.8%
East South Central	0.52	0.53	0.53	0.53	0.53	0.54	0.54	0.55	0.55	0.55	0.56	0.56	0.56	0.57	0.7%
West South Central	3.36	3.37	3.38	3.42	3.41	3.44	3.48	3.47	3.49	3.51	3.51	3.52	3.54	3.60	0.6%
Mountain	0.28	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.30	0.30	0.30	0.31	0.31	0.9%
Pacific	0.95	0.95	0.98	0.98	1.00	1.00	1.02	1.03	1.04	1.05	1.06	1.07	1.09	1.10	0.9%
Total	8.12	8.15	8.21	8.26	8.28	8.33	8.42	8.45	8.51	8.58	8.61	8.65	8.71	8.81	0.7%
<b>Electric Power 2/</b>															
New England	0.42	0.44	0.45	0.44	0.46	0.46	0.45	0.44	0.43	0.42	0.42	0.41	0.40	0.39	0.2%
Middle Atlantic	0.85	0.87	0.87	0.90	0.92	0.93	0.94	0.92	0.89	0.84	0.81	0.79	0.76	0.77	2.0%
East North Central	0.62	0.64	0.66	0.68	0.69	0.71	0.72	0.73	0.73	0.72	0.73	0.74	0.74	0.74	5.1%
West North Central	0.12	0.13	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	2.8%
South Atlantic	1.04	1.09	1.12	1.12	1.12	1.09	1.08	1.07	1.07	1.06	1.03	1.00	0.95	0.94	0.8%
East South Central	0.59	0.57	0.57	0.54	0.52	0.50	0.50	0.49	0.47	0.47	0.47	0.47	0.45	0.46	2.7%
West South Central	2.10	2.11	2.14	2.14	2.15	2.15	2.14	2.13	2.13	2.15	2.11	2.02	1.92	1.91	0.1%
Mountain	0.79	0.76	0.73	0.69	0.65	0.59	0.55	0.52	0.49	0.46	0.44	0.43	0.41	0.40	-0.8%
Pacific	0.84	0.83	0.84	0.80	0.78	0.74	0.74	0.73	0.71	0.68	0.65	0.64	0.64	0.64	-1.3%
Total	7.37	7.43	7.51	7.46	7.42	7.31	7.23	7.15	7.05	6.94	6.79	6.61	6.42	6.38	0.7%

Table 105. Natural Gas Consumption by End-Use Sector and Census Division  
(trillion cubic feet)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Transportation 3/</b>															
New England	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	7.1%
Middle Atlantic	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	5.0%
East North Central	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	4.8%
West North Central	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.5%
South Atlantic	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	5.9%
East South Central	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.9%
West South Central	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	6.5%
Mountain	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	7.6%
Pacific	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	5.7%
Total	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	6.0%
<b>All Sectors 4/</b>															
New England	0.91	0.93	0.95	0.95	0.96	0.96	0.96	0.95	0.95	0.95	0.94	0.94	0.93	0.93	0.5%
Middle Atlantic	2.78	2.80	2.81	2.85	2.86	2.87	2.88	2.87	2.84	2.80	2.77	2.75	2.73	2.74	0.7%
East North Central	4.08	4.11	4.13	4.16	4.18	4.20	4.21	4.23	4.24	4.24	4.26	4.27	4.28	4.27	0.8%
West North Central	1.50	1.50	1.51	1.51	1.52	1.52	1.53	1.53	1.54	1.54	1.55	1.55	1.55	1.55	1.0%
South Atlantic	2.76	2.83	2.88	2.91	2.92	2.92	2.93	2.95	2.97	2.99	2.98	2.98	2.96	2.96	1.3%
East South Central	1.50	1.48	1.49	1.47	1.45	1.44	1.44	1.44	1.43	1.43	1.43	1.44	1.43	1.45	1.3%
West South Central	6.21	6.25	6.29	6.34	6.35	6.39	6.42	6.42	6.45	6.50	6.47	6.39	6.34	6.40	0.5%
Mountain	1.81	1.80	1.78	1.75	1.73	1.69	1.66	1.64	1.63	1.62	1.62	1.62	1.62	1.63	0.8%
Pacific	2.93	2.92	2.98	2.96	2.96	2.93	2.95	2.97	2.96	2.95	2.95	2.96	2.98	3.00	0.3%
Total	24.47	24.62	24.81	24.89	24.92	24.92	24.98	25.00	25.01	25.02	24.96	24.90	24.81	24.93	0.7%

Table 105. Natural Gas Consumption by End-Use Sector and Census Division  
(trillion cubic feet)

1/ Includes consumption for combined heat and power, which produces electricity and other useful thermal energy. Excludes lease and plant fuel.

2/ Includes consumption of energy by electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

3/ Compressed natural gas used as a vehicle fuel.

4/ Excludes lease and plant fuel and natural gas used for pipeline compressor station fuel.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 may differ slightly from official EIA data reports due to internal conversion factors in the AEO2006 National Energy Modeling System.

Sources: 2003 and 2004 electric power fuel consumption: Energy Information Administration (EIA), Electric Power Annual 2003, DOE/EIA-0348(2003) (Washington, DC, December 2004). Other 2003 and 2004 consumption: EIA, Annual Energy Review 2004, DOE/EIA-0384(2004) (Washington, DC, August 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 106. Natural Gas Delivered Prices by End-Use Sector and Census Division  
(2004 dollars per thousand cubic feet)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Residential</b>														
New England	12.72	13.77	16.06	15.44	14.91	14.67	14.38	14.11	14.00	13.85	13.96	13.86	13.48	13.52
Middle Atlantic	10.84	12.16	14.39	13.67	13.08	12.80	12.49	12.21	12.01	11.89	11.99	11.88	11.68	11.70
East North Central	8.78	9.55	11.69	11.03	10.41	10.11	9.75	9.48	9.24	9.14	9.22	9.11	8.93	8.93
West North Central	9.08	10.13	11.95	11.50	11.02	10.78	10.45	10.18	10.00	9.88	9.96	9.85	9.55	9.50
South Atlantic	11.85	13.15	14.00	13.29	12.65	12.35	12.02	11.74	11.47	11.38	11.47	11.35	11.27	11.28
East South Central	10.27	11.27	12.86	12.10	11.46	11.18	10.87	10.67	10.42	10.36	10.46	10.37	10.31	10.35
West South Central	9.66	10.59	12.33	11.56	10.91	10.62	10.31	10.10	9.84	9.77	9.86	9.75	9.68	9.69
Mountain	7.95	9.14	10.85	10.89	10.44	10.20	9.76	9.47	9.29	9.25	9.32	9.26	8.77	8.48
Pacific	9.22	9.87	12.17	12.03	11.60	11.39	10.95	10.65	10.54	10.47	10.55	10.49	10.06	9.95
Average	9.74	10.72	12.68	12.12	11.55	11.28	10.93	10.65	10.45	10.36	10.44	10.35	10.11	10.07
<b>Commercial</b>														
New England	10.71	11.65	13.10	12.39	11.82	11.60	11.30	11.03	10.87	10.68	10.72	10.58	10.14	10.16
Middle Atlantic	9.03	10.28	11.77	11.03	10.42	10.18	9.88	9.62	9.40	9.25	9.31	9.17	8.93	8.94
East North Central	8.09	8.81	10.64	10.02	9.42	9.16	8.83	8.60	8.34	8.22	8.28	8.14	7.94	7.93
West North Central	8.04	8.95	10.37	9.93	9.45	9.25	8.95	8.72	8.52	8.38	8.43	8.30	7.98	7.92
South Atlantic	9.75	10.65	11.70	10.94	10.31	10.05	9.75	9.52	9.22	9.12	9.18	9.04	8.93	8.93
East South Central	9.07	9.72	11.38	10.61	9.99	9.74	9.47	9.29	9.02	8.93	9.00	8.88	8.79	8.79
West South Central	7.99	8.67	10.10	9.31	8.67	8.42	8.14	7.98	7.71	7.63	7.71	7.60	7.51	7.52
Mountain	6.79	7.83	9.31	9.36	8.91	8.71	8.30	8.04	7.84	7.79	7.83	7.75	7.24	6.93
Pacific	8.07	8.49	10.72	10.46	10.04	9.89	9.53	9.28	9.16	9.07	9.12	9.03	8.59	8.48
Average	8.53	9.38	10.98	10.38	9.82	9.59	9.27	9.03	8.80	8.69	8.75	8.62	8.37	8.33
<b>Industrial 1/</b>														
New England	6.57	8.74	10.72	9.86	9.18	8.86	8.45	8.05	7.91	7.74	7.80	7.67	7.24	7.28
Middle Atlantic	6.95	7.73	9.72	8.78	8.02	7.65	7.23	6.83	6.62	6.48	6.55	6.41	6.19	6.20
East North Central	6.36	6.89	9.34	8.49	7.73	7.33	6.87	6.49	6.25	6.13	6.20	6.08	5.87	5.87
West North Central	5.66	6.17	8.94	8.31	7.67	7.33	6.88	6.51	6.31	6.18	6.24	6.12	5.78	5.74
South Atlantic	6.30	7.13	9.48	8.47	7.67	7.26	6.83	6.46	6.18	6.11	6.19	6.06	5.98	5.99
East South Central	6.09	6.30	9.15	8.12	7.29	6.88	6.45	6.13	5.86	5.79	5.87	5.76	5.68	5.70
West South Central	5.25	5.69	8.10	7.03	6.19	5.76	5.33	5.02	4.75	4.69	4.77	4.67	4.58	4.60
Mountain	5.55	6.07	8.05	7.79	7.13	6.77	6.22	5.83	5.63	5.59	5.64	5.58	5.08	4.77
Pacific	5.81	6.20	8.35	8.06	7.61	7.29	6.80	6.42	6.29	6.21	6.27	6.20	5.72	5.63
Average	5.77	6.29	8.67	7.80	7.05	6.65	6.21	5.86	5.63	5.55	5.62	5.51	5.32	5.31
<b>Electric Power 2/</b>														
New England	6.34	6.76	8.55	7.66	7.03	6.79	6.47	6.15	6.10	6.01	6.15	6.09	5.66	5.72
Middle Atlantic	6.58	6.88	8.47	7.45	6.69	6.36	5.95	5.59	5.43	5.34	5.43	5.32	5.15	5.22
East North Central	4.98	5.20	8.46	7.45	6.67	6.30	5.88	5.54	5.41	5.36	5.47	5.37	5.16	5.17
West North Central	5.80	6.19	8.38	7.35	6.63	6.22	5.79	5.47	5.34	5.33	5.50	5.45	5.20	5.21
South Atlantic	6.20	6.46	8.42	7.40	6.65	6.28	5.87	5.59	5.33	5.30	5.42	5.32	5.25	5.30
East South Central	6.11	6.19	8.28	7.29	6.48	6.11	5.71	5.40	5.21	5.21	5.36	5.26	5.18	5.21
West South Central	5.81	6.03	7.94	6.93	6.15	5.78	5.38	5.10	4.87	4.83	4.94	4.84	4.76	4.79
Mountain	5.22	5.66	8.13	7.88	7.24	6.93	6.35	5.98	5.82	5.83	5.93	5.90	5.40	5.08
Pacific	5.29	5.53	8.69	8.14	7.63	7.39	6.78	6.42	6.25	6.29	6.41	6.37	5.93	5.83
Average	5.81	6.07	8.29	7.43	6.71	6.38	5.92	5.60	5.40	5.38	5.49	5.41	5.21	5.19

Table 106. Natural Gas Delivered Prices by End-Use Sector and Census Division  
(2004 dollars per thousand cubic feet)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Transportation 3/														
New England	10.18	11.53	14.08	13.26	12.65	12.38	12.03	11.68	11.58	11.43	11.52	11.42	11.00	11.06
Middle Atlantic	10.74	11.70	14.20	13.35	12.69	12.39	12.02	11.67	11.46	11.33	11.39	11.25	11.02	11.02
East North Central	9.67	10.63	12.94	12.20	11.54	11.22	10.83	10.52	10.30	10.21	10.29	10.18	9.99	9.99
West North Central	8.23	9.32	11.72	11.21	10.69	10.46	10.12	9.83	9.68	9.59	9.68	9.59	9.26	9.24
South Atlantic	9.55	10.61	12.79	11.98	11.33	11.05	10.72	10.44	10.20	10.17	10.28	10.19	10.13	10.16
East South Central	11.43	12.07	14.50	13.56	12.79	12.42	12.02	11.71	11.44	11.37	11.45	11.33	11.23	11.24
West South Central	9.56	10.36	12.85	11.94	11.20	10.86	10.48	10.21	9.96	9.90	9.99	9.88	9.80	9.82
Mountain	6.65	7.99	10.44	10.43	9.95	9.75	9.31	9.02	8.89	8.90	9.01	8.99	8.51	8.22
Pacific	6.97	8.29	10.52	10.37	9.95	9.79	9.36	9.07	9.01	9.01	9.14	9.11	8.69	8.63
Average	9.20	10.25	12.61	11.97	11.36	11.09	10.71	10.40	10.22	10.15	10.25	10.16	9.91	9.88
All Sectors 4/														
New England	8.68	9.47	11.37	10.63	10.09	9.83	9.48	9.16	9.03	8.86	8.90	8.79	8.36	8.39
Middle Atlantic	8.98	9.93	11.72	10.92	10.24	9.92	9.56	9.23	8.96	8.79	8.83	8.67	8.36	8.33
East North Central	7.63	8.23	10.36	9.62	8.93	8.60	8.20	7.89	7.65	7.53	7.58	7.45	7.24	7.22
West North Central	7.53	8.27	10.32	9.80	9.20	8.91	8.50	8.18	7.97	7.82	7.87	7.75	7.42	7.38
South Atlantic	8.17	8.76	10.66	9.78	9.00	8.65	8.29	7.95	7.68	7.60	7.65	7.52	7.42	7.42
East South Central	7.39	7.66	9.75	8.83	8.07	7.71	7.31	7.04	6.74	6.66	6.73	6.61	6.54	6.55
West South Central	5.88	6.27	8.46	7.44	6.63	6.24	5.84	5.55	5.29	5.23	5.32	5.22	5.14	5.17
Mountain	6.33	7.03	8.99	8.88	8.33	8.04	7.56	7.23	7.05	7.00	7.06	7.00	6.49	6.19
Pacific	6.76	7.12	9.73	9.44	8.99	8.71	8.26	7.92	7.81	7.74	7.80	7.72	7.26	7.16
Average	7.20	7.74	9.89	9.15	8.46	8.12	7.72	7.41	7.17	7.08	7.14	7.03	6.80	6.78

Table 106. Natural Gas Delivered Prices by End-Use Sector and Census Division  
(2004 dollars per thousand cubic feet)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Residential</b>															
New England	13.58	13.75	13.93	13.80	13.94	14.01	14.11	14.25	14.41	14.51	14.62	14.70	14.83	14.65	0.2%
Middle Atlantic	11.76	11.94	12.08	12.06	12.22	12.32	12.42	12.57	12.74	12.84	12.96	13.04	13.15	13.18	0.3%
East North Central	9.00	9.18	9.34	9.36	9.50	9.60	9.69	9.83	9.99	10.10	10.22	10.30	10.41	10.61	0.4%
West North Central	9.58	9.74	9.94	9.91	10.03	10.12	10.21	10.35	10.52	10.62	10.74	10.84	10.95	11.17	0.4%
South Atlantic	11.31	11.49	11.59	11.61	11.77	11.87	11.95	12.08	12.23	12.32	12.43	12.48	12.57	12.73	-0.1%
East South Central	10.42	10.62	10.74	10.81	10.98	11.10	11.21	11.36	11.53	11.65	11.78	11.85	11.96	12.14	0.3%
West South Central	9.76	9.94	10.03	10.07	10.20	10.29	10.35	10.47	10.60	10.68	10.77	10.81	10.88	11.03	0.2%
Mountain	8.58	8.76	9.05	9.12	9.26	9.34	9.43	9.57	9.72	9.83	9.95	10.06	10.18	10.42	0.5%
Pacific	9.98	10.12	10.35	10.30	10.41	10.48	10.57	10.70	10.85	10.96	11.06	11.16	11.28	11.58	0.6%
Average	10.13	10.30	10.48	10.48	10.62	10.71	10.80	10.94	11.10	11.20	11.31	11.39	11.50	11.67	0.3%
<b>Commercial</b>															
New England	10.16	10.28	10.41	10.25	10.33	10.36	10.41	10.51	10.61	10.66	10.72	10.77	10.84	10.62	-0.4%
Middle Atlantic	8.95	9.10	9.21	9.17	9.28	9.35	9.43	9.54	9.67	9.74	9.83	9.88	9.95	9.95	-0.1%
East North Central	7.96	8.12	8.26	8.26	8.37	8.45	8.52	8.64	8.77	8.85	8.94	9.00	9.08	9.26	0.2%
West North Central	7.97	8.11	8.29	8.24	8.33	8.40	8.47	8.59	8.73	8.81	8.91	8.98	9.07	9.26	0.1%
South Atlantic	8.94	9.09	9.18	9.19	9.32	9.39	9.45	9.56	9.69	9.75	9.84	9.88	9.94	10.07	-0.2%
East South Central	8.83	9.00	9.09	9.12	9.25	9.34	9.40	9.52	9.65	9.72	9.82	9.86	9.93	10.08	0.1%
West South Central	7.58	7.75	7.85	7.88	8.02	8.10	8.17	8.28	8.41	8.48	8.58	8.62	8.69	8.83	0.1%
Mountain	7.01	7.17	7.44	7.49	7.60	7.66	7.73	7.85	7.97	8.06	8.15	8.24	8.33	8.55	0.3%
Pacific	8.48	8.59	8.79	8.71	8.78	8.83	8.89	8.99	9.10	9.17	9.25	9.33	9.41	10.03	0.6%
Average	8.36	8.50	8.64	8.63	8.74	8.80	8.87	8.98	9.11	9.18	9.27	9.33	9.40	9.58	0.1%
<b>Industrial 1/</b>															
New England	7.30	7.43	7.58	7.43	7.53	7.57	7.63	7.73	7.84	7.90	7.97	8.03	8.10	7.91	-0.4%
Middle Atlantic	6.22	6.37	6.49	6.45	6.58	6.65	6.72	6.83	6.96	7.03	7.12	7.17	7.24	7.26	-0.2%
East North Central	5.92	6.08	6.22	6.23	6.35	6.43	6.50	6.61	6.74	6.82	6.92	6.98	7.06	7.24	0.2%
West North Central	5.80	5.95	6.14	6.09	6.20	6.26	6.34	6.45	6.58	6.66	6.76	6.83	6.92	7.12	0.6%
South Atlantic	6.01	6.18	6.28	6.30	6.45	6.53	6.61	6.72	6.85	6.93	7.03	7.07	7.14	7.28	0.1%
East South Central	5.74	5.92	6.01	6.06	6.20	6.29	6.36	6.48	6.62	6.69	6.79	6.84	6.91	7.06	0.4%
West South Central	4.66	4.84	4.94	4.97	5.12	5.20	5.26	5.38	5.51	5.58	5.68	5.72	5.79	5.93	0.2%
Mountain	4.88	5.05	5.33	5.39	5.52	5.59	5.67	5.79	5.91	6.01	6.11	6.21	6.31	6.53	0.3%
Pacific	5.64	5.78	5.99	5.92	6.01	6.07	6.14	6.25	6.37	6.45	6.53	6.62	6.72	7.02	0.5%
Average	5.36	5.52	5.66	5.66	5.79	5.87	5.93	6.05	6.18	6.26	6.36	6.41	6.49	6.65	0.2%
<b>Electric Power 2/</b>															
New England	5.73	5.88	6.04	5.89	6.01	6.04	6.09	6.19	6.29	6.34	6.40	6.45	6.51	6.32	-0.3%
Middle Atlantic	5.25	5.41	5.53	5.52	5.65	5.74	5.81	5.92	6.02	6.07	6.14	6.17	6.23	6.26	-0.4%
East North Central	5.21	5.39	5.55	5.56	5.70	5.78	5.85	5.97	6.09	6.17	6.26	6.32	6.40	6.57	0.9%
West North Central	5.28	5.44	5.62	5.59	5.72	5.78	5.85	5.96	6.08	6.17	6.25	6.31	6.37	6.54	0.2%
South Atlantic	5.35	5.53	5.63	5.66	5.80	5.88	5.95	6.06	6.19	6.26	6.34	6.37	6.42	6.57	0.1%
East South Central	5.25	5.41	5.51	5.54	5.66	5.73	5.80	5.91	6.03	6.10	6.20	6.24	6.29	6.46	0.2%
West South Central	4.86	5.04	5.15	5.19	5.34	5.43	5.49	5.61	5.74	5.82	5.91	5.94	5.99	6.15	0.1%
Mountain	5.16	5.31	5.58	5.61	5.72	5.77	5.83	5.94	6.04	6.10	6.18	6.27	6.37	6.60	0.6%
Pacific	5.82	5.93	6.14	5.99	6.06	6.09	6.13	6.21	6.30	6.36	6.43	6.50	6.59	6.88	0.8%
Average	5.23	5.40	5.54	5.53	5.66	5.73	5.79	5.90	6.02	6.08	6.17	6.21	6.28	6.41	0.2%



Table 106. Natural Gas Delivered Prices by End-Use Sector and Census Division  
(2004 dollars per thousand cubic feet)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Transportation 3/</b>															
New England	11.08	11.23	11.38	11.23	11.33	11.37	11.43	11.53	11.63	11.68	11.74	11.79	11.86	11.66	0.0%
Middle Atlantic	11.02	11.15	11.24	11.17	11.27	11.31	11.35	11.43	11.52	11.56	11.61	11.63	11.68	11.66	0.0%
East North Central	10.03	10.19	10.32	10.31	10.42	10.47	10.53	10.62	10.72	10.78	10.85	10.89	10.95	11.11	0.2%
West North Central	9.31	9.46	9.64	9.59	9.69	9.74	9.79	9.89	10.00	10.06	10.13	10.19	10.25	10.44	0.4%
South Atlantic	10.19	10.36	10.46	10.48	10.62	10.70	10.77	10.87	10.99	11.05	11.14	11.17	11.22	11.35	0.3%
East South Central	11.26	11.42	11.50	11.52	11.64	11.71	11.76	11.86	11.97	12.03	12.11	12.13	12.18	12.32	0.1%
West South Central	9.86	10.03	10.11	10.14	10.26	10.32	10.37	10.47	10.58	10.64	10.72	10.74	10.79	10.92	0.2%
Mountain	8.34	8.52	8.82	8.88	9.01	9.08	9.16	9.27	9.39	9.48	9.56	9.65	9.75	9.97	0.9%
Pacific	8.67	8.83	9.07	9.02	9.12	9.18	9.25	9.36	9.48	9.55	9.63	9.71	9.80	10.09	0.8%
Average	9.93	10.08	10.23	10.21	10.32	10.38	10.44	10.53	10.64	10.70	10.78	10.82	10.88	11.01	0.3%
<b>All Sectors 4/</b>															
New England	8.42	8.53	8.66	8.54	8.61	8.67	8.76	8.90	9.03	9.12	9.22	9.30	9.42	9.23	-0.1%
Middle Atlantic	8.33	8.47	8.59	8.53	8.66	8.72	8.80	8.93	9.09	9.21	9.33	9.41	9.51	9.52	-0.2%
East North Central	7.28	7.44	7.57	7.57	7.69	7.77	7.84	7.95	8.08	8.17	8.27	8.33	8.41	8.59	0.2%
West North Central	7.44	7.59	7.77	7.74	7.84	7.91	7.99	8.11	8.24	8.33	8.43	8.51	8.60	8.81	0.2%
South Atlantic	7.43	7.58	7.68	7.72	7.88	8.00	8.09	8.23	8.38	8.47	8.60	8.68	8.79	8.96	0.1%
East South Central	6.60	6.79	6.89	6.96	7.12	7.22	7.30	7.43	7.58	7.66	7.77	7.82	7.90	8.05	0.2%
West South Central	5.24	5.42	5.52	5.56	5.71	5.80	5.86	5.99	6.12	6.20	6.31	6.35	6.43	6.57	0.2%
Mountain	6.31	6.50	6.81	6.90	7.06	7.18	7.30	7.45	7.61	7.73	7.86	7.98	8.10	8.35	0.7%
Pacific	7.18	7.32	7.52	7.45	7.55	7.62	7.69	7.80	7.93	8.03	8.13	8.22	8.32	8.66	0.8%
Average	6.82	6.99	7.13	7.14	7.27	7.36	7.43	7.56	7.69	7.78	7.89	7.97	8.06	8.22	0.2%

Table 106. Natural Gas Delivered Prices by End-Use Sector and Census Division  
(2004 dollars per thousand cubic feet)

1/ Includes consumption for combined heat and power, which produces electricity and other useful thermal energy. Excludes lease and plant fuel.

2/ Includes consumption of energy by electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public. Includes small power producers and exempt wholesale generators.

3/ Compressed natural gas used as a vehicle fuel, including federal and state fuel taxes. Excludes dispensing charges for fleet vehicles.

4/ Weighted average price. Weights used are the sector consumption values.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2003 and 2004 may differ slightly from official EIA data reports due to internal conversion factors in the AEO2006 National Energy Modeling System.

Sources: 2003 and 2004 industrial natural gas delivered prices are based on Energy Information Administration (EIA), Manufacturing Energy Consumption Survey 1994 and industrial and wellhead prices from the Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and the Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). 2003 and 2004 transportation values based on EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004) and assumed fuel taxes. Other 2003 values: EIA, Natural Gas Annual 2003, DOE/EIA-0131(2003) (Washington, DC, December 2004). Other 2004 values: EIA, Natural Gas Monthly, DOE/EIA-0130(2005/06) (Washington, DC, June 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 107. Natural Gas Pipeline Capacity by Census Division  
(design capacity in billion cubic feet per year)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Capacity Entering Region 1/</b>														
New England	1364	1401	1457	1457	1493	1874	1874	1874	1874	1874	2184	2184	2184	2184
Middle Atlantic	4723	4881	4990	5010	5050	5050	5050	5050	5050	5050	5050	5050	5050	5050
East North Central	9341	9341	9341	9341	9341	9341	9341	9341	9383	9533	9639	9729	9858	9957
West North Central	7485	7580	7800	7959	8000	8000	8000	8000	8000	8000	8000	8000	8418	8835
South Atlantic	6653	6925	7029	7032	7032	7129	7324	7324	7324	7324	7324	7324	7324	7324
East South Central	9286	9404	9561	9855	9855	9855	9855	9855	9855	9855	9855	9855	9855	10010
West South Central	2110	2111	2126	2151	2151	2151	2151	2151	2151	2151	2151	2151	2151	2151
Mountain	2694	2743	2821	2821	2821	2821	2821	2821	2821	2821	2821	2821	2831	2840
Pacific	4208	4512	4594	4594	4609	4651	4678	4678	4678	4678	4678	4678	4963	5248
Total	47865	48897	49720	50221	50353	50873	51096	51096	51138	51288	51703	51793	52634	53600
United States (Pipeline Imports)	6459	6622	6701	6701	6715	7068	7095	7095	7095	7095	7405	7405	8116	8828
<b>Capacity Exiting Region 2/</b>														
New England	133	133	133	133	133	133	133	133	133	133	133	133	133	133
Middle Atlantic	2111	2167	2281	2284	2319	2487	2683	2683	2683	2683	2683	2683	2683	2683
East North Central	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663
West North Central	5612	5612	5612	5613	5613	5613	5613	5613	5613	5613	5613	5613	5613	5613
South Atlantic	3394	3420	3473	3493	3532	3532	3532	3532	3532	3532	3532	3532	3532	3532
East South Central	8319	8563	8610	8610	8610	8610	8610	8610	8652	8802	8907	8997	9126	9226
West South Central	14679	15008	15256	15682	15927	15927	15927	15927	15927	15927	15927	15927	15927	16082
Mountain	5537	5930	6233	6417	6458	6458	6458	6458	6458	6458	6458	6458	6458	6458
Pacific	517	517	517	517	517	517	517	517	517	517	517	517	517	517
Total	43966	45014	45778	46412	46773	46941	47137	47137	47179	47329	47434	47524	47653	47907
United States (Pipeline Exports)	2560	2738	2759	2891	3136	3136	3136	3136	3136	3136	3136	3136	3136	3136

Table 107. Natural Gas Pipeline Capacity by Census Division  
(design capacity in billion cubic feet per year)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Capacity Entering Region 1/</b>															
New England	2184	2184	2184	2184	2184	2184	2184	2184	2184	2184	2184	2184	2184	2184	1.7%
Middle Atlantic	5050	5050	5050	5050	5050	5050	5050	5050	5050	5050	5050	5050	5050	5050	0.1%
East North Central	9975	10048	10088	10123	10174	10219	10254	10272	10272	10272	10272	10272	10272	10272	0.4%
West North Central	8927	9019	9019	9019	9019	9019	9019	9019	9019	9019	9019	9019	9020	9060	0.7%
South Atlantic	7324	7324	7324	7324	7324	7324	7324	7324	7324	7324	7324	7324	7324	7324	0.2%
East South Central	10035	10115	10118	10118	10118	10118	10118	10118	10118	10118	10118	10118	10118	10118	0.3%
West South Central	2151	2151	2151	2151	2151	2151	2151	2151	2151	2151	2151	2151	2151	2151	0.1%
Mountain	2842	2844	2844	2844	2844	2844	2844	2844	2844	2844	2844	2844	2844	2844	0.1%
Pacific	5311	5374	5374	5374	5374	5374	5374	5374	5374	5374	5385	5401	5420	5457	0.7%
Total	53800	54110	54153	54188	54238	54284	54318	54337	54337	54337	54349	54365	54425	54498	0.4%
United States (Pipeline Imports)	8985	9141	9141	9141	9141	9141	9141	9141	9141	9141	9141	9141	9141	9141	1.2%
<b>Capacity Exiting Region 2/</b>															
New England	133	133	133	133	133	133	133	133	133	133	133	133	133	133	N/A
Middle Atlantic	2683	2683	2683	2683	2683	2683	2683	2683	2683	2683	2683	2683	2683	2683	0.8%
East North Central	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	3663	N/A
West North Central	5613	5613	5613	5613	5613	5613	5615	5634	5634	5634	5634	5634	5634	5634	0.0%
South Atlantic	3532	3532	3532	3532	3532	3532	3532	3532	3532	3532	3532	3532	3532	3532	0.1%
East South Central	9243	9317	9357	9392	9442	9488	9520	9520	9520	9520	9520	9520	9520	9520	0.4%
West South Central	16107	16188	16191	16191	16191	16191	16191	16191	16191	16191	16191	16191	16191	16191	0.3%
Mountain	6458	6458	6458	6458	6458	6458	6458	6458	6458	6458	6470	6486	6546	6619	0.4%
Pacific	517	517	517	517	517	517	517	517	517	517	517	517	517	517	0.0%
Total	47951	48104	48147	48182	48233	48278	48313	48332	48332	48332	48343	48359	48419	48492	0.3%
United States (Pipeline Exports)	3136	3136	3136	3136	3136	3136	3136	3136	3136	3136	3136	3136	3136	3136	0.5%

Table 107. Natural Gas Pipeline Capacity by Census Division  
(design capacity in billion cubic feet per year)

1/ Includes only the sum of capacity levels for the States bounding the respective regions including pipeline import capacity.

2/ Includes only the sum of capacity levels for the States bounding the respective regions including pipeline export capacity.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 108. Natural Gas Pipeline Capacity Utilization 1/ by Census Division  
(fraction)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Utilization Entering Region</b>														
New England	0.56	0.51	0.49	0.48	0.39	0.32	0.36	0.34	0.33	0.33	0.30	0.30	0.33	0.34
Middle Atlantic	0.64	0.58	0.58	0.57	0.55	0.56	0.57	0.57	0.58	0.59	0.59	0.60	0.62	0.63
East North Central	0.60	0.57	0.58	0.57	0.56	0.57	0.57	0.57	0.57	0.57	0.56	0.56	0.56	0.56
West North Central	0.61	0.57	0.57	0.55	0.53	0.52	0.52	0.51	0.50	0.50	0.49	0.48	0.47	0.45
South Atlantic	0.57	0.49	0.44	0.42	0.43	0.44	0.45	0.45	0.44	0.44	0.45	0.45	0.47	0.48
East South Central	0.61	0.56	0.54	0.52	0.54	0.56	0.59	0.60	0.62	0.64	0.67	0.65	0.67	0.68
West South Central	0.32	0.22	0.24	0.22	0.19	0.18	0.17	0.15	0.14	0.13	0.13	0.12	0.13	0.14
Mountain	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13
Pacific	0.59	0.60	0.50	0.51	0.50	0.52	0.51	0.52	0.52	0.54	0.55	0.56	0.55	0.53
Average 2/	0.56	0.52	0.50	0.49	0.48	0.49	0.49	0.49	0.49	0.50	0.50	0.50	0.51	0.51
United States (Pipeline Imports)	0.64	0.63	0.61	0.60	0.56	0.52	0.50	0.47	0.45	0.46	0.43	0.42	0.47	0.48
<b>Utilization Exiting Region</b>														
New England	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
Middle Atlantic	0.33	0.31	0.29	0.28	0.24	0.22	0.23	0.22	0.21	0.21	0.21	0.21	0.22	0.22
East North Central	0.61	0.56	0.53	0.49	0.48	0.48	0.48	0.47	0.46	0.46	0.46	0.46	0.47	0.47
West North Central	0.65	0.62	0.63	0.61	0.59	0.57	0.56	0.55	0.53	0.52	0.51	0.49	0.50	0.51
South Atlantic	0.57	0.51	0.51	0.50	0.49	0.50	0.52	0.52	0.55	0.56	0.57	0.58	0.59	0.60
East South Central	0.60	0.53	0.50	0.49	0.51	0.54	0.57	0.58	0.59	0.60	0.61	0.62	0.63	0.63
West South Central	0.50	0.45	0.44	0.43	0.43	0.45	0.47	0.48	0.49	0.50	0.52	0.51	0.51	0.51
Mountain	0.55	0.51	0.48	0.46	0.45	0.45	0.45	0.46	0.45	0.44	0.45	0.45	0.42	0.40
Pacific	0.10	0.13	0.18	0.21	0.13	0.13	0.13	0.11	0.10	0.11	0.11	0.11	0.12	0.13
Average 2/	0.55	0.50	0.48	0.47	0.46	0.47	0.48	0.49	0.49	0.50	0.50	0.50	0.50	0.50
United States (Pipeline Exports)	0.48	0.47	0.46	0.45	0.35	0.34	0.34	0.32	0.32	0.32	0.32	0.32	0.32	0.33

Table 108. Natural Gas Pipeline Capacity Utilization 1/ by Census Division  
(fraction)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Utilization Entering Region</b>															
New England	0.34	0.35	0.35	0.36	0.37	0.37	0.37	0.36	0.36	0.36	0.35	0.35	0.35	0.36	-1.3%
Middle Atlantic	0.64	0.64	0.64	0.64	0.64	0.64	0.63	0.63	0.61	0.60	0.59	0.58	0.57	0.57	0.0%
East North Central	0.56	0.56	0.56	0.56	0.55	0.55	0.55	0.55	0.55	0.54	0.54	0.54	0.54	0.54	-0.2%
West North Central	0.44	0.44	0.44	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.47	0.47	0.47	0.47	-0.7%
South Atlantic	0.48	0.48	0.47	0.46	0.45	0.44	0.43	0.42	0.41	0.40	0.39	0.39	0.37	0.37	-1.1%
East South Central	0.68	0.67	0.67	0.65	0.63	0.62	0.62	0.60	0.58	0.57	0.55	0.55	0.54	0.53	-0.2%
West South Central	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.12	0.12	0.11	0.11	-2.5%
Mountain	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.0%
Pacific	0.52	0.52	0.53	0.52	0.53	0.52	0.53	0.53	0.53	0.53	0.53	0.53	0.54	0.54	-0.4%
Average 2/	0.51	0.51	0.50	0.50	0.50	0.49	0.49	0.49	0.48	0.47	0.47	0.47	0.46	0.46	-0.4%
United States (Pipeline Imports)	0.47	0.47	0.45	0.46	0.46	0.46	0.46	0.46	0.47	0.47	0.47	0.47	0.47	0.48	-1.1%
<b>Utilization Exiting Region</b>															
New England	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	N/A
Middle Atlantic	0.21	0.21	0.21	0.20	0.20	0.19	0.18	0.18	0.17	0.16	0.15	0.15	0.14	0.14	-3.1%
East North Central	0.47	0.47	0.46	0.46	0.45	0.45	0.44	0.44	0.43	0.42	0.42	0.41	0.40	0.40	-1.3%
West North Central	0.51	0.51	0.51	0.51	0.52	0.52	0.53	0.53	0.54	0.54	0.55	0.55	0.56	0.56	-0.4%
South Atlantic	0.60	0.59	0.59	0.59	0.58	0.57	0.56	0.54	0.52	0.51	0.49	0.48	0.47	0.46	-0.4%
East South Central	0.63	0.63	0.63	0.61	0.60	0.59	0.58	0.57	0.56	0.54	0.53	0.53	0.51	0.50	-0.2%
West South Central	0.50	0.50	0.50	0.49	0.48	0.47	0.47	0.46	0.45	0.44	0.44	0.43	0.43	0.42	-0.3%
Mountain	0.42	0.43	0.45	0.46	0.47	0.48	0.50	0.51	0.52	0.53	0.53	0.54	0.54	0.55	0.3%
Pacific	0.13	0.14	0.14	0.16	0.17	0.18	0.20	0.21	0.22	0.24	0.25	0.25	0.27	0.27	2.9%
Average 2/	0.50	0.50	0.50	0.50	0.49	0.49	0.49	0.48	0.48	0.47	0.47	0.46	0.46	0.45	-0.3%
United States (Pipeline Exports)	0.33	0.34	0.33	0.35	0.36	0.36	0.38	0.39	0.39	0.41	0.42	0.42	0.43	0.43	-0.3%

Table 108. Natural Gas Pipeline Capacity Utilization 1/ by Census Division  
(fraction)

1/ Capacity utilization is defined as the annual throughput volume divided by the design capacity (Table 107).

2/ Weighted average utilization. Weights used are the regional pipeline capacity levels provided in Table 107.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 109. Coal Production and Minemouth Prices by Region  
(production in million short tons; prices in 2004 dollars per short ton)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Production</b>														
Appalachia 2/	388.38	403.17	397.35	401.81	418.15	416.20	420.72	426.08	413.54	412.52	404.15	396.20	389.16	382.68
Interior	146.29	146.26	155.07	153.20	165.33	173.63	180.74	189.88	192.22	195.24	197.01	200.94	208.89	216.00
West	548.70	575.18	592.66	610.65	620.31	632.96	650.89	644.93	660.14	669.33	675.39	677.04	674.15	682.75
Northern Great Plains	444.04	466.41	490.87	505.82	515.08	527.40	537.95	533.10	549.87	559.21	565.13	565.68	560.78	565.01
Other West and Non-Contiguous	104.66	108.77	101.79	104.83	105.23	105.56	112.94	111.83	110.26	110.12	110.26	111.36	113.36	117.74
East of Mississippi River	480.86	497.31	499.28	503.36	530.67	536.22	542.98	558.85	549.03	551.21	545.08	541.82	538.11	533.99
West of Mississippi River	602.51	627.30	645.79	662.31	673.12	686.56	709.37	702.04	716.87	725.89	731.47	732.36	734.09	747.42
United States Total	1083.37	1124.61	1145.07	1165.67	1203.79	1222.79	1252.35	1260.89	1265.90	1277.10	1276.54	1274.17	1272.19	1281.42
<b>Minemouth Prices</b>														
Appalachia	29.36	33.79	35.76	36.65	37.23	37.55	37.44	37.58	36.44	35.94	35.38	34.57	34.27	33.98
Interior	20.46	20.78	23.46	23.14	23.75	24.40	24.26	26.11	25.52	25.44	25.11	25.00	24.96	25.08
West	10.10	10.27	10.84	11.05	10.90	10.86	11.01	10.95	10.89	10.85	10.90	10.90	10.97	11.07
Northern Great Plains	7.49	7.73	8.57	8.80	8.67	8.67	8.67	8.58	8.67	8.70	8.78	8.78	8.81	8.84
Other West and Non-Contiguous	21.16	21.17	21.76	21.93	21.81	21.78	22.16	22.26	21.99	21.82	21.79	21.62	21.63	21.78
East of Mississippi River	28.25	31.93	34.07	34.72	35.22	35.52	35.41	35.91	34.75	34.30	33.68	32.95	32.68	32.45
West of Mississippi River	10.55	10.67	11.24	11.39	11.24	11.20	11.39	11.34	11.28	11.23	11.28	11.26	11.39	11.57
United States Total	18.40	20.07	21.20	21.46	21.81	21.87	21.80	22.23	21.46	21.19	20.84	20.48	20.39	20.27

Table 109. Coal Production and Minemouth Prices by Region  
(production in million short tons; prices in 2004 dollars per short ton)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Production</b>															
Appalachia 2/ Interior	381.51	376.62	375.87	378.87	376.76	376.70	379.41	386.16	390.54	395.42	397.61	403.36	406.93	411.98	0.1%
West	218.68	211.47	213.55	218.51	219.01	226.64	230.95	231.42	236.09	244.40	252.69	266.91	277.42	280.81	2.5%
Northern Great Plains	694.16	710.67	721.30	757.81	792.41	821.27	846.80	877.62	903.62	931.26	959.10	976.76	997.34	1009.87	2.2%
Other West and Non-Contiguous	573.62	584.32	591.08	621.43	653.65	676.69	695.71	719.85	738.72	759.92	781.13	792.67	808.02	814.58	2.2%
East of Mississippi River	120.54	126.35	130.22	136.38	138.76	144.58	151.09	157.77	164.90	171.34	177.97	184.09	189.32	195.30	2.3%
West of Mississippi River	537.81	532.19	532.40	541.83	540.97	543.96	551.69	561.57	570.10	582.52	592.78	610.41	622.33	632.61	0.9%
United States Total	756.53	766.57	778.31	813.37	847.21	880.65	905.47	933.63	960.15	988.56	1016.62	1036.61	1059.35	1070.05	2.1%
<b>Minemouth Prices</b>															
Appalachia	33.69	33.62	33.64	33.75	33.82	33.93	34.01	34.31	34.46	34.64	34.76	34.88	34.99	35.21	0.2%
Interior	25.39	25.86	25.73	26.05	26.17	26.16	26.48	26.89	27.10	27.51	28.14	28.99	29.50	29.96	1.4%
West	11.16	11.39	11.51	11.74	11.88	12.13	12.43	12.65	12.97	13.25	13.45	13.68	13.82	13.95	1.2%
Northern Great Plains	8.89	8.95	9.00	9.16	9.39	9.60	9.77	9.91	10.05	10.26	10.38	10.52	10.61	10.70	1.3%
Other West and Non-Contiguous	21.98	22.70	22.88	23.51	23.61	24.00	24.65	25.14	26.03	26.53	26.93	27.28	27.52	27.47	1.0%
East of Mississippi River	32.27	32.30	32.26	32.37	32.43	32.54	32.68	32.97	33.13	33.36	33.57	33.92	34.17	34.44	0.3%
West of Mississippi River	11.63	11.79	11.90	12.10	12.21	12.46	12.72	12.92	13.21	13.48	13.71	13.95	14.11	14.22	1.1%
United States Total	20.21	20.19	20.17	20.20	20.09	20.13	20.27	20.45	20.63	20.85	21.02	21.35	21.53	21.73	0.3%

Table 109. Coal Production and Minemouth Prices by Region  
(production in million short tons; prices in 2004 dollars per short ton)

1/ Coal Production Regions:

Appalachia: Pennsylvania, Ohio, Maryland, West Virginia, Virginia, Tennessee, Alabama, Eastern Kentucky.

Interior: Western Kentucky, Illinois, Indiana, Iowa, Missouri, Mississippi, Kansas, Oklahoma, Arkansas, Texas, Louisiana.

West:

Northern Great Plains = North Dakota, Montana, Wyoming.

Other West and Non-Contiguous = Colorado, Utah, Arizona, New Mexico, Washington, Alaska.

2/ Includes waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal production tables. The totals for this table include this waste coal tonnage.

N/A = Not applicable

Note: Totals may not equal sum of components due to independent rounding.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 110. Coal Production by Region and Type  
(million short tons)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Northern Appalachia 1/ Medium Sulfur (Premium) 2/ Medium Sulfur (Bituminous) High Sulfur (Bituminous) High Sulfur (Gob) 3/	137.41 2.30 64.33 59.18 11.60	147.62 3.55 73.61 57.96 12.50	160.76 3.05 80.42 64.90 12.40	155.51 3.05 81.45 59.30 11.70	172.11 3.07 82.35 71.83 14.86	182.14 3.04 87.99 75.09 16.02	195.33 3.02 96.31 78.85 17.15	201.61 3.00 97.60 84.02 16.98	203.34 3.00 97.22 86.27 16.85	209.13 2.97 99.14 89.80 17.22	209.73 2.94 96.50 93.11 17.19	208.17 2.92 94.09 94.50 16.66	206.86 2.91 92.79 96.74 14.42	203.46 2.88 90.53 96.68 13.36
Central Appalachia Medium Sulfur (Premium) 2/ Low Sulfur (Bituminous) Medium Sulfur (Bituminous)	230.76 36.00 52.16 142.60	233.22 37.65 49.99 145.58	214.45 38.88 42.69 132.87	223.88 39.88 49.15 134.86	222.93 39.86 46.65 136.41	212.51 39.53 44.71 128.26	204.62 39.24 44.38 121.00	201.63 36.76 42.35 122.52	189.83 34.37 44.38 111.08	184.15 31.89 42.84 109.43	176.90 29.38 41.02 106.50	171.23 27.49 38.11 105.63	166.67 25.86 36.55 104.27	162.49 24.25 36.60 101.65
Southern Appalachia Low Sulfur (Premium) 2/ Low Sulfur (Bituminous) Medium Sulfur (Bituminous)	20.21 5.28 2.98 11.95	22.33 7.26 1.50 13.57	22.14 7.76 0.24 14.14	22.42 8.20 0.42 13.80	23.12 8.18 1.02 13.91	21.55 8.15 1.04 12.36	20.78 8.11 0.47 12.20	22.84 7.25 1.19 14.41	20.37 6.40 0.95 13.01	19.24 5.55 0.91 12.78	17.51 4.71 0.86 11.94	16.80 3.88 0.83 12.08	15.62 3.07 0.79 11.76	16.72 3.82 0.77 12.13
Eastern Interior Medium Sulfur (Bituminous) High Sulfur (Bituminous) Medium Sulfur (Lignite)	92.48 30.13 58.65 3.70	94.14 31.69 58.86 3.59	101.93 36.93 61.69 3.32	101.54 37.31 60.85 3.38	112.52 38.29 70.80 3.43	120.03 41.73 74.82 3.48	122.26 41.47 77.26 3.52	132.77 46.64 82.59 3.54	135.49 46.31 85.63 3.54	138.69 48.63 86.51 3.54	140.93 49.14 88.25 3.54	145.62 50.14 91.93 3.54	148.95 51.29 94.12 3.54	151.32 51.43 96.35 3.54
Western Interior High Sulfur (Bituminous)	2.30	2.49	1.89	1.80	1.92	1.98	2.02	2.44	2.45	2.42	2.47	2.49	2.70	3.33
Gulf Medium Sulfur (Lignite) High Sulfur (Lignite)	51.51 18.34 33.17	49.63 22.17 27.46	51.24 18.78 32.46	49.87 17.53 32.33	50.89 18.18 32.71	51.62 18.52 33.10	56.46 21.11 35.35	54.66 20.10 34.56	54.28 20.28 34.00	54.14 20.10 34.04	53.61 20.15 33.46	52.83 19.37 33.46	57.24 21.30 35.94	61.35 22.33 39.02
Dakota Medium Sulfur (Lignite)	31.14	30.32	31.50	31.93	32.40	32.54	32.86	33.18	36.14	39.05	41.78	43.13	44.36	45.56
Western Montana Low Sulfur (Sub-Bituminous) Medium Sulfur (Sub-Bituminous)	36.63 18.28 18.35	39.61 21.11 18.50	37.51 19.97 17.54	33.76 16.48 17.29	32.48 15.25 17.23	32.94 15.73 17.21	33.76 18.77 14.99	28.55 14.33 14.22	31.55 16.39 15.16	31.34 15.90 15.43	31.37 15.37 16.00	31.59 15.06 16.53	34.33 17.46 16.86	34.31 17.24 17.06
Wyoming, Powder River Basin Low Sulfur (Sub-Bituminous) Medium Sulfur (Sub-Bituminous)	363.36 357.56 5.80	381.54 377.29 4.25	408.28 404.97 3.31	426.36 423.08 3.28	436.17 432.84 3.33	447.68 444.28 3.40	457.06 453.63 3.43	457.11 453.69 3.42	469.29 465.89 3.40	475.77 472.38 3.39	478.94 474.03 4.90	477.99 473.06 4.93	469.28 464.51 4.77	471.32 466.66 4.66
Western Wyoming Low Sulfur (Sub-Bituminous) Medium Sulfur (Sub-Bituminous)	12.91 7.21 5.70	14.94 9.92 5.02	13.58 8.98 4.60	13.76 9.00 4.76	14.03 8.57 5.46	14.24 9.10 5.14	14.27 9.12 5.15	14.25 9.05 5.20	12.89 8.14 4.75	13.05 8.70 4.36	13.04 8.18 4.85	12.96 8.26 4.71	12.82 8.22 4.60	13.82 8.91 4.91
Rocky Mountain Low Sulfur (Bituminous) Low Sulfur (Sub-Bituminous)	58.90 50.22 8.68	61.61 51.35 10.26	56.36 47.54 8.82	59.19 50.47 8.71	57.62 49.09 8.54	57.18 48.60 8.58	62.74 54.75 7.99	64.05 56.49 7.57	63.78 56.22 7.56	63.62 56.03 7.59	63.86 56.27 7.59	65.06 56.48 8.58	67.24 57.67 9.57	71.16 61.60 9.56

Table 110. Coal Production by Region and Type  
(million short tons)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Arizona/New Mexico	38.45	39.99	38.85	39.08	40.67	41.37	42.93	40.49	39.19	39.20	39.09	39.00	38.81	39.26
Low Sulfur (Bituminous)	18.00	18.59	19.70	19.99	20.51	21.01	22.09	22.68	21.05	21.28	21.62	21.05	21.58	21.83
Medium Sulfur (Bituminous)	5.89	7.69	6.34	6.32	6.36	6.40	6.48	6.48	6.48	6.48	6.48	6.46	6.46	6.46
Medium Sulfur (Sub-Bituminous)	14.56	13.71	12.80	12.77	13.80	13.96	14.36	11.33	11.65	11.44	10.99	11.49	10.77	10.98
Washington/Alaska														
Medium Sulfur (Sub-Bituminous)	7.31	7.17	6.58	6.56	6.94	7.01	7.27	7.29	7.30	7.30	7.30	7.31	7.31	7.31
Subtotals: All Regions														
Premium Metallurgical 2/ Bituminous	43.58	48.46	49.69	51.13	51.11	50.72	50.37	47.01	43.76	40.41	37.02	34.29	31.83	30.95
Sub-Bituminous	498.39	512.88	509.35	515.73	539.15	544.00	557.28	579.42	571.07	576.25	574.17	573.80	576.73	579.35
Lignite	443.45	467.23	487.58	501.93	511.97	524.41	534.71	526.10	540.24	546.48	549.23	549.92	544.08	547.29
Low Sulfur	97.95	96.04	98.45	96.88	101.57	103.66	109.99	108.37	110.82	113.95	116.12	116.16	119.56	123.82
Medium Sulfur	520.37	547.27	560.68	585.49	590.65	601.19	619.30	614.60	626.99	631.17	629.67	625.31	619.43	626.99
High Sulfur	398.10	418.07	411.07	414.19	421.03	420.59	422.41	425.70	413.70	415.93	412.40	409.82	408.85	405.68
Underground	164.90	159.27	173.33	165.99	192.11	201.01	210.64	220.59	225.21	229.99	234.47	239.04	243.92	248.74
Surface	352.39	367.16	354.96	361.85	373.80	381.44	396.15	407.45	405.38	407.71	406.75	404.17	404.28	405.22
United States Total	730.98	757.45	790.11	803.81	829.99	841.35	856.21	853.44	860.52	869.39	869.80	870.01	867.91	876.19
	1083.37	1124.61	1145.07	1165.67	1203.79	1222.79	1252.35	1260.89	1265.90	1277.10	1276.54	1274.17	1272.19	1281.42

Table 110. Coal Production by Region and Type  
(million short tons)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Northern Appalachia 1/	206.06	203.15	203.76	204.55	205.51	206.61	208.64	211.19	216.18	221.33	225.03	230.44	235.00	240.66	1.9%
Medium Sulfur (Premium) 2/	2.87	2.89	2.91	2.93	2.95	2.98	3.02	3.05	3.10	3.15	3.20	3.25	3.31	3.37	-0.2%
Medium Sulfur (Bituminous)	91.20	89.17	90.51	91.03	91.28	91.52	91.82	93.42	93.56	93.98	96.58	97.79	99.29	101.68	1.3%
High Sulfur (Bituminous)	96.73	96.26	96.00	96.50	96.84	98.01	99.60	101.46	105.30	109.56	110.55	113.72	116.17	119.18	2.8%
High Sulfur (Gob) 3/	15.26	14.83	14.34	14.09	14.43	14.10	14.20	13.25	14.22	14.65	14.71	15.68	16.22	16.43	1.1%
Central Appalachia	157.78	155.38	154.09	155.97	153.49	152.56	152.75	156.51	155.84	155.73	154.46	154.14	153.53	152.96	-1.6%
Medium Sulfur (Premium) 2/	24.03	24.34	24.37	24.62	24.79	24.87	24.45	24.40	24.38	24.08	23.60	22.64	21.60	21.66	-2.1%
Low Sulfur (Bituminous)	34.03	32.75	31.53	32.87	31.57	31.12	30.76	30.21	29.30	28.89	28.71	28.09	27.89	27.38	-2.3%
Medium Sulfur (Bituminous)	99.72	98.29	98.19	98.48	97.13	96.57	97.54	101.90	102.17	102.76	102.16	103.41	104.04	103.91	-1.3%
Southern Appalachia	17.66	18.09	18.02	18.35	17.77	17.53	18.01	18.46	18.52	18.35	18.11	18.78	18.40	18.37	-0.7%
Low Sulfur (Premium) 2/	4.38	4.35	4.44	4.22	4.01	3.81	4.08	4.03	3.97	3.62	3.45	3.75	3.29	3.10	-3.2%
Low Sulfur (Bituminous)	0.74	0.71	0.69	0.73	0.69	0.76	0.79	0.82	0.83	0.85	0.86	0.85	0.87	0.85	-2.2%
Medium Sulfur (Bituminous)	12.54	13.03	12.88	13.40	13.07	12.96	13.14	13.61	13.72	13.89	13.80	14.18	14.25	14.42	0.2%
Eastern Interior	156.30	155.58	156.53	162.95	164.20	167.26	172.29	175.40	179.56	187.10	195.17	207.06	215.40	220.63	3.3%
Medium Sulfur (Bituminous)	52.69	52.21	52.52	53.15	53.09	53.36	54.24	55.03	57.35	58.80	61.40	63.78	65.84	67.37	2.9%
High Sulfur (Bituminous)	100.07	99.82	100.46	106.26	107.57	110.36	114.51	116.83	118.66	124.76	130.23	139.73	146.01	149.71	3.7%
Medium Sulfur (Lignite)	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	3.54	-0.1%
Western Interior High Sulfur (Bituminous)	3.51	3.51	3.50	3.48	3.50	3.46	3.07	3.54	3.46	3.46	4.32	5.25	5.57	5.32	3.0%
Gulf	58.87	52.39	53.52	52.08	51.31	55.92	55.60	52.48	53.07	53.83	53.20	54.60	56.45	54.85	0.4%
Medium Sulfur (Lignite)	22.54	18.12	19.25	17.40	17.04	21.16	21.01	19.22	19.80	20.56	19.92	21.31	21.30	20.70	-0.3%
High Sulfur (Lignite)	36.33	34.26	34.27	34.68	34.27	34.76	34.59	33.26	33.27	33.27	33.28	33.29	35.15	34.16	0.8%
Dakota Medium Sulfur (Lignite)	47.24	49.64	49.39	50.17	53.29	55.73	56.58	58.63	61.64	62.29	63.49	66.05	67.30	67.38	3.1%
Western Montana	34.80	35.24	37.19	41.83	45.59	49.15	51.04	53.93	56.95	60.82	64.17	66.61	69.17	71.28	2.3%
Low Sulfur (Sub-Bituminous)	17.41	17.63	19.34	23.15	25.72	28.23	29.08	31.16	33.49	36.17	38.75	41.01	43.75	45.74	3.0%
Medium Sulfur (Sub-Bituminous)	17.39	17.61	17.86	18.68	19.86	20.91	21.96	22.78	23.47	24.65	25.42	25.60	25.43	25.54	1.2%
Wyoming, Powder River Basin	477.32	484.95	490.40	515.08	539.97	555.60	571.76	590.75	603.63	619.77	636.38	642.84	653.25	657.02	2.1%
Low Sulfur (Sub-Bituminous)	472.56	480.26	485.46	510.15	534.78	549.90	565.72	584.47	596.98	612.85	629.05	635.21	645.33	648.86	2.1%
Medium Sulfur (Sub-Bituminous)	4.76	4.69	4.93	4.93	5.19	5.70	6.04	6.28	6.66	6.93	7.33	7.63	7.92	8.16	2.5%
Western Wyoming	14.26	14.49	14.10	14.34	14.81	16.21	16.33	16.53	16.49	17.05	17.08	17.17	18.29	18.88	0.9%
Low Sulfur (Sub-Bituminous)	9.20	9.33	9.06	9.23	9.57	10.49	10.62	10.87	10.80	11.38	11.40	11.47	12.55	13.08	1.1%
Medium Sulfur (Sub-Bituminous)	5.06	5.16	5.03	5.11	5.24	5.72	5.72	5.67	5.69	5.67	5.68	5.70	5.74	5.80	0.6%
Rocky Mountain	73.43	79.75	83.54	89.60	92.11	97.94	103.29	108.75	114.13	120.61	127.42	133.74	136.91	142.60	3.3%
Low Sulfur (Bituminous)	63.87	70.21	73.72	78.94	81.62	87.03	91.38	95.95	100.75	106.99	113.33	119.43	122.46	128.58	3.6%
Low Sulfur (Sub-Bituminous)	9.56	9.54	9.82	10.66	10.49	10.91	11.91	12.80	13.38	13.61	14.10	14.31	14.45	14.02	1.2%

Table 110. Coal Production by Region and Type  
(million short tons)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Arizona/New Mexico	39.80	39.51	39.58	39.47	39.33	39.33	40.49	41.71	43.48	43.41	43.24	43.21	45.33	45.64	0.5%
Low Sulfur (Bituminous)	22.01	22.61	21.88	22.00	21.85	22.03	22.37	23.15	22.42	22.88	22.79	22.73	24.09	24.29	1.0%
Medium Sulfur (Bituminous)	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.46	6.45	6.46	6.45	6.45	-0.7%
Medium Sulfur (Sub-Bituminous)	11.34	10.45	11.25	11.02	11.02	10.84	11.66	12.11	14.61	14.08	13.99	14.03	14.78	14.89	0.3%
Washington/Alaska															
Medium Sulfur (Sub-Bituminous)	7.31	7.09	7.09	7.32	7.31	7.31	7.31	7.31	7.29	7.32	7.31	7.14	7.08	7.05	-0.1%
Subtotals: All Regions															
Premium Metallurgical 2/ Bituminous	31.28	31.57	31.72	31.77	31.75	31.66	31.55	31.49	31.44	30.84	30.25	29.64	28.19	28.13	-2.1%
Sub-Bituminous	583.57	585.03	588.35	603.29	604.67	613.64	625.66	642.37	653.97	673.28	691.18	715.42	732.94	749.16	1.5%
Lignite	124.91	120.40	120.80	119.88	122.57	129.29	129.93	127.90	132.47	134.31	134.94	139.87	143.51	142.21	1.5%
Low Sulfur	633.76	647.39	655.95	691.96	720.31	744.28	766.70	793.44	811.90	837.23	862.44	876.84	894.68	905.92	2.0%
Medium Sulfur	408.68	402.68	406.19	408.23	411.26	419.64	424.48	433.41	443.43	448.16	453.87	462.52	467.88	471.94	0.5%
High Sulfur	251.90	248.69	248.57	255.01	256.61	260.69	265.97	268.35	274.92	285.69	293.09	307.67	319.13	324.80	2.8%
Underground	411.96	418.15	422.77	434.34	438.55	447.77	458.22	470.19	482.40	499.93	515.00	533.11	545.42	561.71	1.6%
Surface	882.38	880.62	887.94	920.86	949.63	976.84	998.94	1025.01	1047.84	1071.15	1094.40	1113.91	1136.26	1140.95	1.6%
United States Total	1294.34	1298.76	1310.71	1355.19	1388.18	1424.62	1457.16	1495.20	1530.25	1571.08	1609.40	1647.02	1681.68	1702.66	1.6%

Table 110. Coal Production by Region and Type  
(million short tons)

1/ Includes Pennsylvania anthracite.  
2/ "Premium" coal is used to make metallurgical coke.  
3/ Waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal production tables. The totals for this table include this waste coal tonnage.

Northern Appalachia: Pennsylvania, Maryland, Ohio, Northern West Virginia.  
Central Appalachia: Southern West Virginia, Virginia, Eastern Kentucky, Northern Tennessee.  
Southern Appalachia: Alabama, Southern Tennessee.  
Eastern Interior: Illinois, Indiana, Mississippi, Western Kentucky.  
Western Interior: Iowa, Missouri, Kansas, Oklahoma, Arkansas, Texas (bituminous).  
Gulf (lignite Only): Texas, Louisiana, Arkansas.  
Dakota: North Dakota, Montana (lignite).  
Western Montana: Montana (subbituminous).  
Wyoming, Powder River Basin: Wyoming portion of Powder River Basin.  
Western Wyoming: Wyoming other than Powder River Basin.  
Rocky Mountain: Colorado, Utah.

Sulfur Definitions:  
Low Sulfur: 0 - 0.60 pounds of sulfur per million British thermal unit.  
Medium Sulfur: 0.61 - 1.67 pounds of sulfur per million British thermal unit.  
High Sulfur: Over 1.67 pounds of sulfur per million British thermal unit.

Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 111. Coal Prices by Region and Type  
(2004 dollars per short ton)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Northern Appalachia 1/ Medium Sulfur (Premium) 2/ Medium Sulfur (Bituminous) High Sulfur (Bituminous) High Sulfur (Gob) 3/	25.17 39.45 27.29 24.94 11.78	27.56 49.34 30.49 25.96 11.50	31.43 44.06 34.65 30.53 12.20	30.73 43.39 34.71 28.33 11.85	31.92 42.51 33.66 33.27 13.55	33.50 43.90 34.85 35.52 14.65	34.02 44.30 36.08 35.14 15.45	34.92 44.29 36.49 36.88 14.50	33.35 44.37 35.21 34.63 14.10	33.10 44.63 34.65 34.65 14.14	32.57 44.62 34.13 34.01 13.98	31.71 44.64 33.50 32.72 13.67	31.46 44.75 33.12 32.25 12.76	30.95 45.07 32.83 31.33 12.33
Central Appalachia Medium Sulfur (Premium) 2/ Low Sulfur (Bituminous) Medium Sulfur (Bituminous)	31.38 35.68 31.33 30.32	36.97 44.59 36.96 35.00	38.00 48.13 36.66 35.46	39.87 49.52 40.11 36.93	40.49 49.72 40.17 37.90	40.27 49.72 39.88 37.49	39.91 49.82 39.82 36.73	39.38 48.58 39.36 36.63	39.00 47.85 39.97 35.87	38.50 46.92 39.92 35.48	38.07 45.66 39.63 35.37	37.39 44.94 38.66 34.97	37.16 44.45 38.17 35.00	37.05 44.13 38.22 34.94
Southern Appalachia Low Sulfur (Premium) 2/ Low Sulfur (Bituminous) Medium Sulfur (Bituminous)	34.79 37.91 34.64 33.45	41.84 50.10 43.60 37.22	45.60 52.65 39.27 41.84	45.44 53.10 37.28 41.14	45.40 53.34 38.16 41.27	45.05 53.49 38.43 40.04	45.20 53.77 36.36 39.83	45.18 53.60 39.30 41.44	43.52 50.77 38.71 40.30	42.39 48.87 38.28 39.86	41.82 47.97 38.05 39.67	41.12 46.28 37.91 39.69	40.57 45.38 36.45 39.59	40.94 45.26 36.60 39.86
Eastern Interior Medium Sulfur (Bituminous) High Sulfur (Bituminous) Medium Sulfur (Lignite)	W 25.26 23.29 W	W 26.25 23.23 W	27.49 30.21 26.51 15.36	27.08 30.70 25.51 15.57	27.74 30.61 26.77 15.67	28.47 30.80 27.77 15.76	28.42 30.66 27.80 15.69	30.57 32.70 30.00 15.72	29.60 31.83 28.97 15.80	29.40 31.50 28.78 15.79	28.82 31.25 27.99 15.82	28.53 30.94 27.71 15.76	28.52 30.99 27.66 15.77	28.59 30.89 27.83 15.79
Western Interior High Sulfur (Bituminous)	27.98	28.92	26.12	25.46	25.54	25.81	26.00	29.31	28.91	28.84	29.19	29.29	30.88	34.72
Gulf Medium Sulfur (Lignite) High Sulfur (Lignite)	W W W	W W W	15.36 15.80 15.10	15.02 15.73 14.64	14.86 15.56 14.47	14.86 15.57 14.47	15.19 15.94 14.73	15.15 15.89 14.72	15.18 15.96 14.71	15.14 15.95 14.66	15.15 15.99 14.65	15.06 15.87 14.59	15.42 16.22 14.95	15.90 16.73 15.42
Dakota Medium Sulfur (Lignite)	W	W	10.35	10.57	10.49	10.48	10.42	10.41	10.98	11.02	11.52	11.39	11.61	11.74
Western Montana Low Sulfur (Sub-Bituminous) Medium Sulfur (Sub-Bituminous)	W 10.32 W	W 10.26 W	11.46 11.71 11.18	11.14 11.10 11.18	10.78 10.53 11.00	10.76 10.58 10.92	10.76 10.83 10.66	10.09 10.17 10.01	10.33 10.59 10.04	10.33 10.59 10.05	10.24 10.39 10.10	10.18 10.22 10.15	10.20 10.20 10.20	10.18 10.17 10.20
Wyoming, Powder River Basin Low Sulfur (Sub-Bituminous) Medium Sulfur (Sub-Bituminous)	6.67 6.68 6.33	6.85 6.85 6.69	7.83 7.83 7.18	8.14 8.15 7.27	8.03 8.04 7.23	8.05 8.06 7.18	8.07 8.08 7.10	8.03 8.03 7.02	8.10 8.11 6.98	8.13 8.14 6.92	8.19 8.19 7.70	8.20 8.21 7.68	8.20 8.21 7.54	8.18 8.19 7.42
Western Wyoming Low Sulfur (Sub-Bituminous) Medium Sulfur (Sub-Bituminous)	20.51 19.53 21.76	20.50 20.55 20.40	18.97 19.01 18.88	19.32 19.34 19.28	19.35 19.13 19.69	19.09 18.89 19.44	18.99 18.80 19.33	18.89 18.68 19.27	18.65 18.44 19.01	18.34 18.16 18.70	18.23 18.05 18.55	18.14 17.97 18.44	18.01 17.84 18.31	18.18 18.02 18.47
Rocky Mountain Low Sulfur (Bituminous) Low Sulfur (Sub-Bituminous)	18.94 18.87 19.30	18.64 18.45 19.59	19.37 19.40 19.23	19.62 19.67 19.34	19.23 19.26 19.08	19.00 19.00 18.99	19.60 19.72 18.72	19.79 19.96 18.52	19.59 19.73 18.52	19.38 19.51 18.45	19.34 19.46 18.43	19.31 19.42 18.56	19.40 19.47 19.02	19.78 19.86 19.22

Table 111. Coal Prices by Region and Type  
(2004 dollars per short ton)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Arizona/New Mexico	W	W	24.49	24.69	24.64	24.76	25.01	25.20	24.82	24.66	24.68	24.35	24.34	24.31
Low Sulfur (Bituminous)	W	W	25.21	25.61	25.61	25.80	26.24	26.55	26.17	25.98	26.03	25.83	25.90	25.98
Medium Sulfur (Bituminous)	W	W	28.81	28.35	27.81	27.51	27.28	27.02	26.80	26.63	26.61	26.50	26.25	26.05
Medium Sulfur (Sub-Bituminous)	W	W	21.23	21.44	21.74	21.93	22.09	21.44	21.27	21.09	20.88	20.44	20.06	19.97
Washington/Alaska														
Medium Sulfur (Sub-Bituminous)	W	W	26.07	26.29	26.57	26.87	27.43	27.64	27.83	27.79	27.81	27.64	27.74	27.66
Average by Type: All Regions														
Premium Metallurgical 2/ Bituminous	36.15	45.76	48.58	49.73	49.87	49.98	50.12	49.08	48.04	47.02	45.87	45.06	44.57	44.36
Sub-Bituminous	26.96	29.54	31.51	31.94	32.61	32.93	32.78	33.55	32.55	32.27	31.81	31.21	30.97	30.74
Lignite	8.35	8.57	9.22	9.42	9.32	9.32	9.33	9.14	9.18	9.18	9.20	9.23	9.24	9.25
Low Sulfur	12.46	12.47	13.36	13.19	13.30	13.49	13.82	13.62	13.66	13.60	13.69	13.52	13.70	13.98
Low Sulfur	11.92	12.56	12.75	13.49	13.18	12.98	13.03	12.91	12.82	12.63	12.50	12.27	12.21	12.33
Medium Sulfur	25.75	29.32	31.18	31.94	31.97	31.91	31.90	32.18	31.06	30.47	29.82	29.28	28.99	28.72
High Sulfur	21.13	21.60	24.85	23.44	26.07	27.41	27.33	29.02	27.87	27.89	27.46	26.89	26.76	26.50
United States Average	18.40	20.07	21.20	21.46	21.81	21.87	21.80	22.23	21.46	21.19	20.84	20.48	20.39	20.27

Table 111. Coal Prices by Region and Type  
(2004 dollars per short ton)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Northern Appalachia 1/ Medium Sulfur (Premium) 2/ Medium Sulfur (Bituminous)	30.49	30.34	30.37	30.32	30.39	30.49	30.53	30.76	30.89	31.11	31.32	31.49	31.70	31.98	0.6%
High Sulfur (Bituminous)	45.36	45.76	46.15	46.40	46.81	47.15	47.46	47.84	48.23	48.52	48.87	49.18	49.62	50.09	0.1%
High Sulfur (Gob) 3/	32.67	32.59	32.64	32.54	32.66	32.70	32.66	32.77	32.89	32.92	33.13	33.26	33.46	33.73	0.4%
Central Appalachia	30.79	30.50	30.39	30.33	30.38	30.50	30.61	30.79	31.07	31.50	31.67	31.95	32.18	32.45	0.9%
Medium Sulfur (Premium) 2/ Low Sulfur (Bituminous)	12.78	12.78	12.68	12.57	12.67	12.60	12.59	12.40	12.56	12.77	12.94	13.43	13.78	14.03	0.8%
Medium Sulfur (Bituminous)	37.00	36.89	36.95	37.21	37.38	37.56	37.68	38.01	38.31	38.55	38.69	38.80	38.90	39.18	0.2%
Low Sulfur (Bituminous)	44.40	44.53	45.15	45.73	46.33	46.81	46.90	47.18	47.50	47.77	47.85	47.68	47.54	47.80	0.3%
Medium Sulfur (Bituminous)	37.93	37.44	37.43	37.65	37.68	37.81	37.92	37.92	37.95	37.95	38.18	38.27	38.40	38.56	0.2%
Southern Appalachia	34.90	34.82	34.75	34.93	35.00	35.09	35.29	35.84	36.23	36.55	36.72	37.00	37.25	37.54	0.3%
Low Sulfur (Premium) 2/ Low Sulfur (Bituminous)	41.49	42.26	42.35	42.59	42.83	42.94	43.17	43.51	43.83	43.99	44.06	44.39	44.42	44.50	0.2%
Medium Sulfur (Bituminous)	45.53	45.85	46.47	47.11	47.70	48.18	48.27	48.55	48.86	49.07	48.95	48.79	48.25	47.22	-0.2%
Eastern Interior	36.69	35.73	35.85	36.38	36.52	36.84	37.53	38.05	38.64	39.11	39.51	39.80	40.10	40.19	-0.3%
Medium Sulfur (Bituminous)	40.36	41.42	41.28	41.50	41.67	41.76	41.92	42.34	42.68	42.96	43.11	43.50	43.81	44.17	0.7%
Medium Sulfur (Bituminous)	28.81	29.10	28.97	29.17	29.24	29.42	29.75	30.02	30.24	30.66	31.14	32.05	32.61	33.01	1.2%
Medium Sulfur (Bituminous)	30.96	30.95	31.02	30.99	31.06	31.14	31.29	31.53	31.87	32.19	32.68	33.20	33.69	34.08	1.0%
High Sulfur (Bituminous)	28.13	28.60	28.35	28.71	28.78	29.02	29.45	29.73	29.88	30.36	30.83	31.92	32.52	32.93	1.4%
Medium Sulfur (Lignite)	15.84	15.90	15.87	15.88	15.95	15.93	15.95	15.97	16.04	16.09	16.07	16.12	16.12	16.12	0.1%
Western Interior High Sulfur (Bituminous)	32.66	33.78	34.27	34.36	34.64	34.55	33.73	34.58	34.69	34.90	40.58	41.10	42.67	43.02	1.5%
Gulf	15.88	15.71	15.71	15.72	15.75	15.89	15.96	15.91	15.96	16.07	16.10	16.24	16.35	16.42	0.5%
Medium Sulfur (Lignite)	16.70	16.66	16.69	16.72	16.77	16.82	16.91	16.82	16.87	17.01	17.01	17.23	17.33	17.40	0.3%
High Sulfur (Lignite)	15.37	15.20	15.16	15.22	15.24	15.33	15.39	15.38	15.42	15.49	15.55	15.61	15.76	15.83	0.8%
Dakota Medium Sulfur (Lignite)	12.02	11.93	11.99	12.04	12.40	12.51	12.61	12.92	13.04	13.15	13.21	13.28	13.37	13.42	1.4%
Western Montana	10.18	10.20	10.34	11.12	11.50	11.98	12.71	12.68	12.81	13.65	13.86	14.06	14.18	14.38	1.4%
Low Sulfur (Sub-Bituminous)	10.15	10.18	10.43	11.71	12.17	12.81	13.99	13.85	13.97	15.21	15.41	15.69	15.87	16.12	1.8%
Medium Sulfur (Sub-Bituminous)	10.21	10.21	10.24	10.39	10.65	10.86	11.02	11.09	11.17	11.37	11.49	11.45	11.27	11.28	0.6%
Wyoming, Powder River Basin	8.20	8.27	8.33	8.46	8.67	8.81	8.96	9.10	9.24	9.39	9.52	9.64	9.72	9.79	1.4%
Low Sulfur (Sub-Bituminous)	8.21	8.27	8.34	8.47	8.68	8.82	8.97	9.11	9.25	9.40	9.53	9.65	9.73	9.80	1.4%
Medium Sulfur (Sub-Bituminous)	7.42	7.38	7.47	7.45	7.56	7.88	8.04	8.18	8.32	8.48	8.62	8.78	8.87	8.96	1.1%
Western Wyoming	18.35	18.47	18.37	18.47	18.60	19.24	19.26	19.21	19.27	19.12	19.07	19.04	18.81	18.84	-0.3%
Low Sulfur (Sub-Bituminous)	18.19	18.32	18.23	18.33	18.46	19.09	19.10	19.06	19.11	18.92	18.87	18.80	18.50	18.50	-0.4%
Medium Sulfur (Sub-Bituminous)	18.64	18.75	18.63	18.72	18.87	19.51	19.55	19.51	19.55	19.54	19.48	19.53	19.49	19.61	-0.2%
Rocky Mountain	20.11	21.27	21.72	22.68	22.86	23.47	24.41	25.05	26.25	26.88	27.41	27.88	28.11	27.94	1.6%
Low Sulfur (Bituminous)	20.23	21.52	22.00	22.97	23.13	23.74	24.70	25.34	26.54	27.29	27.82	28.28	28.51	28.32	1.7%
Low Sulfur (Sub-Bituminous)	19.37	19.47	19.69	20.57	20.72	21.27	22.15	22.89	24.03	23.62	24.09	24.50	24.71	24.53	0.9%

Table 111. Coal Prices by Region and Type  
(2004 dollars per short ton)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Arizona/New Mexico	24.35	24.72	24.54	24.60	24.56	24.59	24.65	24.87	25.11	25.27	25.28	25.34	25.68	25.95	0.3%
Low Sulfur (Bituminous)	26.08	26.42	26.34	26.40	26.36	26.40	26.58	26.90	26.89	27.04	27.06	27.13	27.56	27.88	0.6%
Medium Sulfur (Bituminous)	26.04	26.03	26.10	26.08	25.99	25.89	25.86	25.87	25.85	25.79	25.75	25.69	25.65	25.68	-0.6%
Medium Sulfur (Sub-Bituminous)	20.03	20.25	20.14	20.14	20.15	20.13	20.28	20.47	22.06	22.17	22.17	22.26	22.63	22.91	0.3%
Washington/Alaska															
Medium Sulfur (Sub-Bituminous)	27.76	27.44	27.32	27.84	27.97	28.03	28.06	28.11	28.14	28.26	28.28	27.90	27.74	27.65	0.1%
Average by Type: All Regions															
Premium Metallurgical 2/ Bituminous	44.64	44.83	45.43	45.98	46.55	47.01	47.13	47.42	47.74	48.00	48.08	47.99	47.86	48.01	0.2%
Sub-Bituminous	30.60	30.63	30.57	30.71	30.73	30.83	31.05	31.36	31.68	31.98	32.28	32.70	33.01	33.19	0.4%
Lignite	9.28	9.31	9.37	9.55	9.73	9.93	10.13	10.28	10.49	10.67	10.79	10.92	11.02	11.10	1.0%
Low Sulfur	14.04	13.79	13.83	13.82	13.94	14.08	14.14	14.18	14.24	14.35	14.40	14.53	14.66	14.72	0.6%
Medium Sulfur	12.30	12.46	12.53	12.77	12.80	13.01	13.29	13.46	13.71	13.97	14.16	14.40	14.51	14.61	0.6%
High Sulfur	28.63	28.65	28.64	28.76	28.71	28.53	28.54	28.83	28.90	29.02	29.13	29.20	29.33	29.59	0.0%
United States Average	26.44	26.62	26.50	26.67	26.75	26.93	27.20	27.56	27.75	28.22	28.66	29.38	29.77	30.16	1.3%
United States Average	20.21	20.19	20.17	20.20	20.09	20.13	20.27	20.45	20.63	20.85	21.02	21.35	21.53	21.73	0.3%

Table 111. Coal Prices by Region and Type  
(2004 dollars per short ton)

1/ Includes Pennsylvania anthracite.  
2/ "Premium" coal is used to make metallurgical coke.  
3/ Waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal tables. The averages for this table include this waste coal tonnage in the forecast years.

Northern Appalachia: Pennsylvania, Maryland, Ohio, Northern West Virginia.  
Central Appalachia: Southern West Virginia, Virginia, Eastern Kentucky, Northern Tennessee.  
Southern Appalachia: Alabama, Southern Tennessee.  
Eastern Interior: Illinois, Indiana, Mississippi, Western Kentucky.  
Western Interior: Iowa, Missouri, Kansas, Oklahoma, Arkansas, Texas (bituminous).  
Gulf (lignite Only): Texas, Louisiana, Arkansas.  
Dakota: North Dakota, Montana (lignite).  
Western Montana: Montana (bituminous and subbituminous).  
Wyoming, Powder River Basin: Wyoming portion of Powder River Basin.  
Western Wyoming: Wyoming other than Powder River Basin.  
Rocky Mountain: Colorado, Utah.

Sulfur Definitions:  
Low Sulfur: 0 - 0.60 pounds of sulfur per million British thermal unit.  
Medium Sulfur: 0.61 - 1.67 pounds of sulfur per million British thermal unit.  
High Sulfur: Over 1.67 pounds of sulfur per million British thermal unit.

W = Withheld to avoid disclosure of individual company data.  
Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 112. World Steam Coal Flows by Importing Regions and Exporting Countries 1, 2/  
(million short tons)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Steam Coal Exports to Europe 3/</b>														
Australia	12.5	6.3	18.7	20.1	12.7	12.9	12.0	5.1	4.8	5.8	4.4	4.3	4.5	5.3
United States	3.0	3.6	4.1	4.5	4.5	4.6	4.7	4.4	4.0	3.6	3.1	2.6	2.9	2.9
South Africa	70.2	68.6	64.4	63.6	61.5	62.5	63.6	64.5	65.0	65.5	65.9	66.4	66.9	67.0
Former Soviet Union	24.2	36.0	37.5	38.8	40.1	41.4	42.7	44.0	44.0	44.0	44.0	44.0	44.0	44.0
Poland	15.1	15.1	13.5	12.6	11.8	10.9	10.0	9.0	8.5	8.1	7.7	7.2	6.6	6.4
Canada	0.0	0.0	0.8	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
China	6.2	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South America	32.5	37.0	47.2	47.0	57.8	57.4	60.8	68.6	68.6	67.4	68.5	68.4	67.5	65.7
Indonesia 4/	16.9	17.9	4.3	4.3	4.2	4.2	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	180.7	188.8	190.6	191.8	192.7	194.0	194.8	195.7	195.0	194.4	193.7	193.0	192.4	191.2
<b>Steam Coal Exports to Asia</b>														
Australia	96.1	109.8	95.2	99.9	103.7	108.0	109.5	112.8	116.3	119.9	123.6	127.2	130.6	133.8
United States	0.2	2.3	0.8	0.9	1.2	1.4	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6
South Africa	5.5	2.4	10.9	11.4	12.0	12.6	13.1	13.7	14.3	15.0	15.7	16.3	17.0	17.4
Former Soviet Union	9.5	11.7	15.1	16.6	18.0	19.4	20.9	22.3	22.6	22.9	23.1	23.4	23.7	23.9
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canada	0.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
China	81.2	84.2	89.3	89.3	89.3	89.3	89.3	89.3	89.5	89.7	90.0	90.2	90.4	91.1
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia 4/	70.6	91.7	106.1	107.8	110.4	112.6	118.0	121.3	122.6	123.9	125.0	126.2	127.6	129.0
Total	263.9	302.5	317.4	326.0	334.7	343.3	352.3	361.0	367.0	372.9	378.9	384.9	390.9	396.8
<b>Steam Coal Exports to America</b>														
Australia	6.8	3.3	4.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
United States	18.5	16.1	16.8	15.9	12.7	10.5	8.9	8.6	8.3	7.9	7.6	7.2	6.0	4.8
South Africa	0.4	0.7	4.3	4.4	4.5	4.6	4.8	5.0	5.0	5.0	5.0	4.9	4.9	4.9
Former Soviet Union	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1
Canada	0.7	1.6	4.0	3.2	3.3	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
China	1.1	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South America	25.2	28.5	31.9	36.0	23.5	26.9	25.0	21.8	24.3	28.0	29.4	32.0	35.5	39.6
Indonesia 4/	2.9	3.4	0.9	1.4	1.1	1.2	1.3	1.1	1.1	1.1	1.3	1.3	1.1	1.1
Total	55.6	54.8	62.2	65.3	45.1	46.6	43.3	39.9	42.1	45.5	46.5	48.8	50.9	53.9
<b>Total Steam Coal Exports 5/</b>														
Australia	115.8	119.4	118.1	124.4	116.4	120.9	121.4	117.9	121.2	125.7	127.9	131.5	135.1	139.1
United States	21.8	22.0	21.8	21.3	18.5	16.5	15.2	14.6	13.9	13.1	12.3	11.4	10.4	9.3
South Africa	77.2	73.7	79.6	79.5	78.0	79.7	81.4	83.1	84.3	85.4	86.6	87.7	88.9	89.2
Former Soviet Union	33.8	47.9	52.6	55.4	58.1	60.9	63.6	66.4	66.6	66.9	67.1	67.4	67.7	68.0
Poland	15.1	15.2	13.5	12.6	11.8	10.9	10.0	9.1	8.7	8.2	7.7	7.2	6.7	6.5
Canada	1.5	2.2	4.9	4.0	3.3	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3
China	89.0	89.2	89.3	89.3	89.3	89.3	89.3	89.3	89.5	89.7	90.0	90.2	90.4	91.1
South America	57.8	65.9	79.0	83.0	81.3	84.3	85.8	90.4	92.9	95.4	98.0	100.5	103.0	105.3
Indonesia 4/	91.8	113.8	111.3	113.6	115.8	118.0	120.2	122.5	123.7	125.0	126.2	127.5	128.7	130.1
Total	503.7	549.2	570.1	583.0	572.4	583.9	590.4	596.5	604.0	612.8	619.1	626.7	634.2	641.8

Table 112. World Steam Coal Flows by Importing Regions and Exporting Countries 1, 2/  
(million short tons)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Steam Coal Exports to Europe 3/</b>															
Australia	4.8	10.6	13.5	13.5	13.4	13.4	13.4	13.4	11.0	7.4	7.1	8.1	10.8	11.3	2.3%
United States	2.5	1.0	1.1	1.1	1.2	1.3	1.4	1.4	1.5	1.6	1.7	1.8	1.7	1.6	-3.1%
South Africa	67.0	67.0	67.0	67.0	67.6	68.2	68.7	69.2	68.8	67.0	66.6	66.3	66.3	65.8	-0.2%
Former Soviet Union	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	44.0	0.8%
Poland	6.2	6.0	5.8	5.5	5.3	5.1	4.9	4.6	4.4	4.4	4.3	4.1	4.1	4.1	-4.9%
Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	62.5	60.3	56.4	52.8	50.3	47.9	45.5	45.3	46.0	50.0	49.6	47.7	44.1	43.1	0.6%
Indonesia 4/	3.4	0.0	0.0	3.0	2.9	2.8	2.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total	190.4	188.8	187.7	186.9	184.8	182.7	180.6	178.1	175.8	174.4	173.2	172.1	171.1	169.9	-0.4%
<b>Steam Coal Exports to Asia</b>															
Australia	140.1	140.4	143.7	149.5	153.6	157.8	162.1	164.1	167.5	170.1	174.0	178.0	182.4	186.2	2.1%
United States	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	-1.4%
South Africa	17.8	18.2	18.6	18.9	19.3	19.7	20.1	20.5	21.8	24.2	25.3	26.1	26.7	27.8	9.8%
Former Soviet Union	24.2	24.5	24.8	25.1	25.4	25.7	26.0	26.3	26.6	27.0	27.4	27.9	28.3	28.8	3.5%
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
China	91.7	92.4	93.0	93.7	94.1	94.6	95.0	95.5	95.9	96.3	96.8	97.2	97.7	98.1	0.6%
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia 4/	126.8	131.5	132.7	131.1	132.1	132.9	133.7	137.0	137.8	138.5	139.4	140.3	141.0	141.9	1.7%
Total	402.2	408.5	414.4	419.9	426.1	432.3	438.5	445.0	451.2	457.8	464.5	471.1	477.7	484.4	1.8%
<b>Steam Coal Exports to America</b>															
Australia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
United States	4.0	3.9	3.9	4.0	4.0	4.1	4.2	4.2	4.3	4.4	4.4	4.5	4.6	4.7	-4.7%
South Africa	4.9	4.8	4.8	4.8	4.8	4.9	4.9	5.0	5.0	5.1	5.2	5.3	5.3	5.4	8.1%
Former Soviet Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	3.8%
Canada	3.3	3.5	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	2.8%
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	45.2	58.6	66.7	65.4	75.2	83.7	88.9	92.0	94.1	93.2	96.6	101.4	108.0	111.9	5.4%
Indonesia 4/	1.3	1.5	1.6	1.6	1.6	1.7	1.9	2.1	2.3	2.4	2.5	2.4	2.6	2.6	-1.0%
Total	58.7	72.2	80.5	79.1	88.9	97.7	103.2	106.7	109.1	108.4	112.1	117.2	124.1	128.2	3.3%
<b>Total Steam Coal Exports 5/</b>															
Australia	144.9	151.0	157.1	162.9	167.0	171.3	175.5	177.5	178.5	177.5	181.0	186.1	193.2	197.4	2.0%
United States	8.1	6.5	6.6	6.7	6.9	7.0	7.1	7.3	7.4	7.6	7.8	7.9	7.9	7.8	-3.9%
South Africa	89.6	90.0	90.4	90.7	91.7	92.7	93.7	94.7	95.7	96.4	97.0	97.7	98.4	99.0	1.1%
Former Soviet Union	68.2	68.5	68.8	69.1	69.4	69.7	70.0	70.3	70.6	71.0	71.4	71.9	72.3	72.8	1.6%
Poland	6.2	6.0	5.8	5.5	5.3	5.1	4.9	4.6	4.4	4.4	4.4	4.4	4.4	4.4	-4.6%
Canada	3.3	3.5	3.5	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	1.5%
China	91.7	92.4	93.0	93.7	94.1	94.6	95.0	95.5	95.9	96.3	96.8	97.2	97.7	98.1	0.4%
South America	107.7	118.9	123.1	118.2	125.5	131.6	134.4	137.3	140.2	143.1	146.1	149.1	152.1	155.0	3.3%
Indonesia 4/	131.5	132.9	134.3	135.7	136.6	137.5	138.3	139.2	140.1	141.0	141.9	142.7	143.6	144.5	0.9%
Total	651.4	669.6	682.6	685.9	699.8	712.6	722.3	729.7	736.1	740.7	749.8	760.4	772.9	782.4	1.4%

Table 112. World Steam Coal Flows by Importing Regions and Exporting Countries 1, 2/  
(million short tons)

1/ Import Regions:

Europe: Algeria, Austria, Belgium, Bulgaria, Croatia, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, Malta,  
Morocco, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Tunisia, Turkey, United Kingdom

Asia: Bangladesh, China, Hong Kong, India, Iran, Japan, Malaysia, North Korea, Pakistan, Philippines, South Korea, Sri Lanka, Taiwan, Thailand

America: Argentina, Brazil, Canada, Chile, Mexico, United States

2/ Excludes non-seaborne shipments of coal to Europe and Asia.

3/ Coal exports to Europe include exports to the Middle East and Northern Africa.

4/ In 2004, steam coal exports from Indonesia include an additional 13.3 million short tons of exports from other countries not included in the forecast period.

5/ In 2004, total world coal flows include a balancing item term used to reconcile discrepancies between reported exports and imports. For 2004, the balancing item for steam coal amounted to 3.2 million short tons.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2004 data: SSY Consultancy and Research Ltd, SSY's Coal Trade Forecast, Vol. 14, No. 3 (London, United Kingdom, September 2005); and Energy Information Administration (EIA), Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.



Table 113. World Metallurgical Coal Flows by Importing Regions and Exporting Countries 1,2/  
(million short tons)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Metallurgical Coal Exports to Europe 3/</b>														
Australia	29.0	30.6	24.1	20.1	20.5	18.3	17.9	19.4	22.2	24.9	27.6	29.7	30.8	32.0
United States	14.0	13.4	15.5	17.0	16.4	16.3	16.2	14.1	11.9	9.8	7.7	5.6	3.6	3.0
South Africa	1.0	0.8	0.7	0.7	0.8	0.9	1.0	1.0	1.0	1.0	0.9	0.9	0.9	0.8
Former Soviet Union	2.7	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.5	2.7	2.9	3.2	3.2
Poland	1.3	1.0	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Canada	8.1	9.2	13.1	14.8	14.5	16.1	16.1	16.4	15.4	14.4	13.3	12.9	13.4	12.8
China	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia 4/	0.1	0.2	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4
Total	56.3	57.3	57.3	56.5	56.0	55.4	54.9	54.6	54.4	54.1	53.9	53.6	53.4	53.3
<b>Metallurgical Coal Exports to Asia 5/</b>														
Australia	85.1	88.5	96.5	98.9	101.3	103.6	106.0	108.4	111.1	113.8	116.5	119.2	121.9	123.7
United States	0.0	5.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.3	1.3	1.0
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Former Soviet Union	4.5	5.6	5.7	6.4	5.7	7.6	7.6	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Poland	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canada	13.9	12.8	13.5	13.2	14.3	13.0	13.4	12.1	12.5	12.9	13.2	13.6	14.0	14.5
China	12.6	6.3	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia 4/	15.8	17.3	14.9	14.9	14.9	14.9	14.9	14.9	14.9	14.9	15.0	15.0	15.0	15.0
Total	131.9	135.7	138.0	140.9	143.8	146.7	149.7	152.6	155.8	158.9	162.1	165.3	168.4	170.5
<b>Metallurgical Coal Exports to America</b>														
Australia	8.1	9.1	8.3	8.7	9.1	9.5	9.9	10.3	10.6	10.9	11.2	11.5	12.7	12.9
United States	7.2	7.4	11.5	11.9	12.3	12.2	12.1	11.0	9.9	8.7	7.6	7.1	6.7	6.8
South Africa	0.5	0.4	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.8	0.8	0.8
Former Soviet Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canada	4.1	4.4	3.5	3.0	3.1	3.6	4.2	5.9	7.5	9.0	10.6	11.5	11.4	11.5
China	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia 4/	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	21.8	21.5	23.8	24.2	25.0	25.9	26.8	27.8	28.6	29.4	30.2	30.9	31.6	32.0
<b>Total Metallurgical Coal Exports 6/</b>														
Australia	122.3	128.2	128.9	127.7	130.9	131.5	133.8	138.0	143.8	149.6	155.3	160.5	165.3	168.5
United States	21.2	26.0	28.0	30.0	29.8	29.7	29.5	26.2	23.0	19.8	16.6	13.9	11.5	10.8
South Africa	1.6	1.2	1.2	1.3	1.4	1.5	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.6
Former Soviet Union	7.2	7.8	7.7	8.5	7.8	9.6	9.7	11.4	11.7	11.9	12.1	12.3	12.5	12.5
Poland	1.3	1.1	1.3	1.3	1.2	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Canada	26.2	26.6	30.1	31.0	31.8	32.7	33.6	34.5	35.4	36.2	37.1	38.0	38.9	38.9
China	14.4	6.3	6.3	6.4	6.4	6.5	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia 4/	16.0	17.6	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4
Total	210.1	214.8	219.1	221.6	224.8	228.1	231.3	235.0	238.7	242.4	246.1	249.8	253.4	255.8

Table 113. World Metallurgical Coal Flows by Importing Regions and Exporting Countries 1,2/  
(million short tons)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Metallurgical Coal Exports to Europe 3/</b>															
Australia	31.9	31.7	31.6	31.5	31.6	31.6	31.7	31.7	31.8	31.8	31.8	31.8	31.8	31.8	0.2%
United States	2.9	2.9	2.8	2.9	3.2	3.3	3.0	3.0	2.9	2.7	2.7	2.7	2.7	2.7	-5.9%
South Africa	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	-1.0%
Former Soviet Union	3.2	3.2	3.2	3.2	3.4	3.6	3.8	4.0	4.3	4.7	5.1	5.6	6.0	6.5	4.4%
Poland	1.1	1.1	1.1	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	-2.2%
Canada	12.9	12.9	12.9	12.8	12.4	12.2	12.5	12.5	12.4	12.3	11.8	11.4	10.9	10.5	0.5%
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia 4/	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	2.3%
Total	53.1	52.9	52.7	52.5	52.6	52.7	52.8	52.9	53.0	53.0	53.0	53.0	53.0	53.0	-0.3%
<b>Metallurgical Coal Exports to Asia 5/</b>															
Australia	125.4	127.2	129.0	130.8	132.8	134.9	137.0	139.1	141.1	143.2	145.4	147.5	149.6	151.7	2.1%
United States	0.9	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	0.4	0.0	0.0	N/A
South Africa	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Former Soviet Union	9.4	9.4	9.4	9.4	9.5	9.6	9.7	9.8	9.9	10.1	10.4	10.6	10.8	11.0	2.6%
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	14.8	14.6	14.8	15.0	15.3	15.5	15.7	16.0	16.2	16.3	16.5	17.7	18.4	18.5	1.4%
China	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.6	7.6	7.7	7.7	0.8%
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia 4/	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	-0.5%
Total	172.6	174.6	176.6	178.7	181.2	183.7	186.1	188.6	191.1	193.7	196.2	198.9	201.5	204.1	1.6%
<b>Metallurgical Coal Exports to America</b>															
Australia	13.1	13.4	13.6	13.8	13.9	13.9	14.0	14.0	14.1	14.2	14.3	14.3	14.4	14.5	1.8%
United States	7.3	7.3	7.6	7.8	7.6	7.5	7.8	7.8	7.8	7.4	6.8	7.2	6.1	6.1	-0.8%
South Africa	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	3.5%
Former Soviet Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	11.2	11.4	11.2	11.2	11.4	11.6	11.3	11.3	11.4	11.8	12.5	12.2	13.4	13.5	4.4%
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia 4/	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Total	32.4	32.9	33.3	33.7	33.8	33.9	33.9	34.0	34.1	34.3	34.5	34.6	34.9	35.0	1.9%
<b>Total Metallurgical Coal Exports 6/</b>															
Australia	170.4	172.3	174.2	176.1	178.3	180.5	182.7	184.8	187.0	189.2	191.4	193.6	195.9	198.1	1.7%
United States	11.1	11.5	11.8	12.0	12.1	12.2	12.1	12.1	12.1	11.5	10.9	10.3	8.9	8.8	-4.1%
South Africa	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8%
Former Soviet Union	12.5	12.5	12.5	12.5	12.9	13.2	13.5	13.9	14.2	14.8	15.5	16.2	16.8	17.5	3.2%
Poland	1.1	1.1	1.1	1.1	1.0	0.9	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	-2.6%
Canada	38.9	38.9	39.0	39.1	39.2	39.3	39.6	39.8	40.0	40.4	40.9	41.3	42.7	42.5	1.8%
China	7.0	7.1	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.6	7.6	7.7	7.7	0.8%
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia 4/	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	15.4	-0.5%
Total	258.1	260.3	262.6	264.9	267.6	270.2	272.9	275.5	278.2	281.0	283.8	286.5	289.4	292.1	1.2%

Table 113. World Metallurgical Coal Flows by Importing Regions and Exporting Countries 1,2/  
(million short tons)

1/ Import Regions:

Europe: Algeria, Austria, Belgium, Bulgaria, Croatia, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, Malta,  
Morocco, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Tunisia, Turkey, United Kingdom

Asia: Bangladesh, China, Hong Kong, India, Iran, Japan, Malaysia, North Korea, Pakistan, Philippines, South Korea, Sri Lanka, Taiwan, Thailand

America: Argentina, Brazil, Canada, Chile, Mexico, United States

2/ Excludes non-seaborne shipments of coal to Europe and Asia.

3/ Coal exports to Europe include exports to the Middle East and Northern Africa.

4/ In 2004, metallurgical coal exports from Indonesia include an additional 2.2 million short tons of exports from other countries not included in the forecast period.

5/ For 2004, includes 15.4 million short tons of coal for pulverized coal injection at blast furnaces shipped to Japanese steelmakers.

6/ In 2004, total world coal flows include a balancing item term used to reconcile discrepancies between reported exports and imports. For 2004, the balancing item for metallurgical coal amounted to 0.3 million short tons.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2004 data: SSY Consultancy and Research Ltd, SSY's Coal Trade Forecast, Vol. 14, No. 3 (London, United Kingdom, September 2005); and Energy Information Administration (EIA), Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 114. World Total Coal Flows by Importing Regions and Exporting Countries 1,2/  
(million short tons)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Total Coal Exports to Europe 3/</b>														
Australia	41.5	36.9	42.7	40.2	33.2	31.2	29.9	24.5	27.0	30.7	32.0	34.0	35.2	37.2
United States	17.0	17.0	19.6	21.4	21.0	20.9	20.9	18.5	15.9	13.4	10.8	8.2	6.5	5.8
South Africa	71.2	69.3	65.0	64.4	62.3	63.4	64.5	65.5	66.0	66.4	66.9	67.3	67.8	67.8
Former Soviet Union	26.9	38.1	39.6	40.9	42.2	43.5	44.8	46.1	46.3	46.5	46.7	47.0	47.2	47.2
Poland	16.4	16.0	14.8	13.9	13.0	12.1	11.2	10.1	9.6	9.2	8.8	8.3	7.7	7.5
Canada	8.1	9.2	14.0	15.6	14.5	16.1	16.1	16.4	15.4	14.4	13.3	12.9	13.4	12.8
China	6.3	4.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South America	32.5	37.0	47.2	47.0	57.8	57.4	60.8	68.6	68.6	67.4	68.5	68.4	67.5	65.7
Indonesia 4/	17.0	18.1	4.9	4.8	4.8	4.7	1.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total	237.0	246.0	247.9	248.3	248.7	249.5	249.7	250.3	249.4	248.5	247.5	246.6	245.8	244.4
<b>Total Coal Exports to Asia</b>														
Australia	181.3	198.3	191.7	198.8	205.0	211.6	215.5	221.2	227.4	233.7	240.1	246.3	252.5	257.5
United States	0.3	7.4	1.9	2.0	2.4	2.5	2.7	2.7	2.8	2.8	2.8	2.8	2.9	2.6
South Africa	5.5	2.4	10.9	11.4	12.0	12.6	13.1	13.7	14.3	15.0	15.7	16.3	17.0	17.4
Former Soviet Union	14.0	17.3	20.8	23.0	23.7	27.0	28.5	31.7	32.0	32.2	32.5	32.8	33.0	33.3
Poland	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canada	14.7	13.3	13.5	13.2	14.3	13.0	13.4	12.1	12.5	12.9	13.2	13.6	14.0	14.5
China	93.8	90.4	95.6	95.7	95.7	95.8	95.9	95.9	96.2	96.5	96.7	97.0	97.3	98.0
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Indonesia 4/	86.4	109.0	120.9	122.7	125.3	127.5	132.9	136.3	137.5	138.8	139.9	141.2	142.6	144.0
Total	395.9	438.3	455.4	466.9	478.4	490.0	501.9	513.6	522.7	531.9	541.0	550.2	559.3	567.3
<b>Total Coal Exports to America</b>														
Australia	14.9	12.4	12.6	13.1	9.1	9.5	9.9	10.3	10.6	10.9	11.2	11.5	12.7	12.9
United States	25.7	23.6	28.3	27.8	24.9	22.7	21.0	19.5	18.1	16.7	15.2	14.3	12.6	11.6
South Africa	1.0	1.1	4.9	5.0	5.1	5.3	5.4	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Former Soviet Union	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Poland	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.1	0.1
Canada	4.7	6.1	7.5	6.1	6.4	7.0	7.5	9.3	10.8	12.3	13.9	14.8	14.8	14.9
China	2.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South America	25.2	28.5	31.9	36.0	23.5	26.9	25.0	21.8	24.3	28.0	29.4	32.0	35.5	39.6
Indonesia 4/	3.0	3.5	0.9	1.4	1.1	1.2	1.3	1.1	1.1	1.1	1.3	1.3	1.1	1.1
Total	77.4	76.3	86.0	89.4	70.1	72.5	70.1	67.7	70.7	74.9	76.7	79.6	82.5	85.9
<b>Total Coal Exports 5/</b>														
Australia	238.1	247.6	247.1	252.1	247.3	252.3	255.3	255.9	265.0	275.3	283.3	291.9	300.4	307.6
United States	43.0	48.0	49.8	51.2	48.3	46.2	44.7	40.8	36.8	32.9	28.9	25.3	22.0	20.0
South Africa	78.7	74.9	80.8	80.8	79.5	81.3	83.1	84.9	86.0	87.1	88.3	89.4	90.5	90.8
Former Soviet Union	41.0	55.7	60.4	63.9	65.9	70.5	73.3	77.8	78.3	78.8	79.2	79.7	80.2	80.5
Poland	16.4	16.3	14.8	13.9	13.0	12.1	11.2	10.3	9.8	9.3	8.8	8.3	7.8	7.6
Canada	27.7	28.8	34.9	35.0	35.1	36.1	36.9	37.8	38.7	39.6	40.4	41.3	42.2	42.2
China	103.4	95.5	95.6	95.7	95.7	95.8	95.9	95.9	96.2	96.5	96.7	97.0	97.3	98.0
South America	57.8	65.9	79.0	83.0	81.3	84.3	85.8	90.4	92.9	95.4	98.0	100.5	103.0	105.3
Indonesia 4/	107.8	131.4	126.8	129.0	131.2	133.4	135.7	137.9	139.2	140.4	141.7	142.9	144.2	145.6
Total	713.9	764.0	789.2	804.6	797.3	812.0	821.7	831.5	842.8	855.2	865.2	876.4	887.6	897.6

Table 114. World Total Coal Flows by Importing Regions and Exporting Countries 1,2/  
(million short tons)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Total Coal Exports to Europe 3/</b>															
Australia	36.6	42.3	45.1	45.0	45.0	45.1	45.1	45.1	42.8	39.2	38.9	39.9	42.6	43.1	0.6%
United States	5.4	3.9	3.9	4.0	4.4	4.6	4.3	4.4	4.5	4.3	4.4	4.5	4.4	4.3	-5.1%
South Africa	67.7	67.7	67.6	67.7	68.2	68.8	69.3	69.8	69.4	67.6	67.2	66.9	66.9	66.4	-0.2%
Former Soviet Union	47.2	47.2	47.2	47.2	47.4	47.6	47.8	48.1	48.3	48.7	49.2	49.6	50.0	50.5	1.1%
Poland	7.3	7.1	6.9	6.6	6.3	6.0	5.6	5.3	5.0	5.0	4.9	4.7	4.7	4.7	-4.6%
Canada	12.9	12.9	12.9	12.8	12.4	12.2	12.5	12.5	12.4	12.3	11.8	11.4	10.9	10.5	0.5%
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	62.5	60.3	56.4	52.8	50.3	47.9	45.5	45.3	46.0	50.0	49.6	47.7	44.1	43.1	0.6%
Indonesia 4/	3.9	0.4	0.4	3.4	3.3	3.2	3.2	0.5	0.4	0.4	0.4	0.4	0.4	0.4	-13.6%
<b>Total</b>	<b>243.5</b>	<b>241.7</b>	<b>240.4</b>	<b>239.5</b>	<b>237.4</b>	<b>235.3</b>	<b>233.4</b>	<b>231.0</b>	<b>228.8</b>	<b>227.5</b>	<b>226.3</b>	<b>225.1</b>	<b>224.1</b>	<b>222.9</b>	<b>-0.4%</b>
<b>Total Coal Exports to Asia</b>															
Australia	265.6	267.6	272.7	280.2	286.4	292.7	299.1	303.2	308.6	313.3	319.4	325.5	332.0	337.9	2.1%
United States	2.5	2.9	2.9	2.9	2.9	3.0	3.0	3.0	3.0	3.0	3.0	2.0	1.6	1.6	-5.8%
South Africa	17.8	18.2	18.6	18.9	19.3	19.7	20.1	20.5	21.8	24.2	25.3	26.1	26.7	27.8	9.8%
Former Soviet Union	33.6	33.9	34.2	34.4	34.8	35.3	35.7	36.1	36.5	37.1	37.8	38.5	39.1	39.8	3.3%
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	14.8	14.6	14.8	15.0	15.3	15.5	15.7	16.0	16.2	16.3	16.5	17.7	18.4	18.5	1.3%
China	98.7	99.4	100.2	100.9	101.4	101.9	102.4	102.9	103.3	103.8	104.3	104.8	105.3	105.8	0.6%
South America	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia 4/	141.8	146.5	147.7	146.1	147.1	147.9	148.7	152.0	152.9	153.6	154.4	155.3	156.1	157.0	1.4%
<b>Total</b>	<b>574.8</b>	<b>583.1</b>	<b>591.0</b>	<b>598.6</b>	<b>607.3</b>	<b>616.0</b>	<b>624.6</b>	<b>633.6</b>	<b>642.3</b>	<b>651.5</b>	<b>660.7</b>	<b>670.0</b>	<b>679.2</b>	<b>688.4</b>	<b>1.8%</b>
<b>Total Coal Exports to America</b>															
Australia	13.1	13.4	13.6	13.8	13.9	13.9	14.0	14.0	14.1	14.2	14.3	14.3	14.4	14.5	0.6%
United States	11.3	11.2	11.6	11.8	11.7	11.6	12.0	12.0	12.1	11.8	11.3	11.7	10.7	10.8	-3.0%
South Africa	5.7	5.7	5.6	5.6	5.7	5.7	5.8	5.8	5.9	6.0	6.1	6.1	6.2	6.3	7.0%
Former Soviet Union	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Poland	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	2.6%
Canada	14.5	14.8	14.7	14.5	14.8	14.9	14.6	14.6	14.7	15.1	15.9	15.5	16.7	16.8	4.0%
China	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	45.2	58.6	66.7	65.4	75.2	83.7	88.9	92.0	94.1	93.2	96.6	101.4	108.0	111.9	5.4%
Indonesia 4/	1.3	1.5	1.6	1.6	1.6	1.7	1.9	2.1	2.3	2.4	2.5	2.4	2.6	2.6	-1.1%
<b>Total</b>	<b>91.1</b>	<b>105.1</b>	<b>113.8</b>	<b>112.8</b>	<b>122.7</b>	<b>131.6</b>	<b>137.2</b>	<b>140.7</b>	<b>143.2</b>	<b>142.7</b>	<b>146.6</b>	<b>151.8</b>	<b>158.9</b>	<b>163.2</b>	<b>3.0%</b>
<b>Total Coal Exports 5/</b>															
Australia	315.3	323.3	331.4	339.1	345.3	351.7	358.2	362.3	365.5	366.7	372.5	379.7	389.1	395.5	1.8%
United States	19.3	18.0	18.4	18.7	19.0	19.1	19.3	19.4	19.6	19.1	18.7	18.3	16.8	16.7	-4.0%
South Africa	91.2	91.5	91.8	92.2	93.2	94.2	95.2	96.2	97.2	97.8	98.5	99.2	99.8	100.5	1.1%
Former Soviet Union	80.8	81.0	81.3	81.6	82.2	82.9	83.5	84.1	84.8	85.9	87.0	88.1	89.2	90.3	1.9%
Poland	7.3	7.1	6.9	6.6	6.3	6.0	5.6	5.3	5.0	5.0	5.0	5.0	5.0	5.0	-4.5%
Canada	42.2	42.4	42.4	42.4	42.5	42.6	42.9	43.1	43.3	43.7	44.2	44.6	46.0	45.8	1.8%
China	98.7	99.4	100.2	100.9	101.4	101.9	102.4	102.9	103.3	103.8	104.3	104.8	105.3	105.8	0.4%
South America	107.7	118.9	123.1	118.2	125.5	131.6	134.4	137.3	140.2	143.1	146.1	149.1	152.1	155.0	3.3%
Indonesia 4/	147.0	148.3	149.7	151.1	152.0	152.9	153.8	154.7	155.5	156.4	157.3	158.2	159.1	159.9	0.8%
<b>Total</b>	<b>909.4</b>	<b>929.9</b>	<b>945.2</b>	<b>950.8</b>	<b>967.4</b>	<b>982.9</b>	<b>995.2</b>	<b>1005.2</b>	<b>1014.3</b>	<b>1021.6</b>	<b>1033.5</b>	<b>1046.9</b>	<b>1062.3</b>	<b>1074.5</b>	<b>1.3%</b>

Table 114. World Total Coal Flows by Importing Regions and Exporting Countries 1,2/  
(million short tons)

1/ Import Regions:

Europe: Algeria, Austria, Belgium, Bulgaria, Croatia, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, Israel, Italy, Luxembourg, Malta, Morocco, Netherlands, Norway, Portugal, Romania, Spain, Sweden, Tunisia, Turkey, United Kingdom

Asia: Bangladesh, China, Hong Kong, India, Iran, Japan, Malaysia, North Korea, Pakistan, Philippines, South Korea, Sri Lanka, Taiwan, Thailand

America: Argentina, Brazil, Canada, Chile, Mexico, United States

2/ Excludes non-seaborne shipments of coal to Europe and Asia.

3/ Coal exports to Europe include exports to the Middle East and Northern Africa.

4/ In 2004, exports from Indonesia include an additional 15.5 million short tons of exports from other countries not included in the forecast period.

5/ In 2004, total world coal flows include a balancing item term used to reconcile discrepancies between reported exports and imports. For 2004, the balancing item amounted to 3.4 million short tons.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2004 data: SSY Consultancy and Research Ltd, SSY's Coal Trade Forecast, Vol. 14, No. 3 (London, United Kingdom, September 2005); and Energy Information Administration (EIA), Quarterly Coal Report, October-December 2004, DOE/EIA-0121(2004/4Q) (Washington, DC, March 2005). Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 115. Indicators of Macroeconomic Activity

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Value of Shipments, National (billion 2000 \$)														
Total Industrial	5378	5643	5765	5896	6015	6132	6238	6355	6489	6620	6745	6886	7036	7190
Total Nonmanufacturing	1393	1439	1486	1509	1519	1542	1552	1572	1593	1610	1630	1657	1689	1724
Coal Mining	23	23	24	24	25	25	26	26	26	26	26	26	26	27
Oil and Gas Extraction	145	148	147	149	148	151	153	154	156	157	159	160	163	166
Total Manufacturing	3985	4204	4279	4387	4495	4590	4686	4783	4896	5010	5115	5229	5347	5466
Petroleum Refineries	212	231	232	236	239	242	245	248	251	254	256	258	260	263
Paper Products	162	169	167	171	175	177	180	182	185	187	188	190	192	193
Chemicals	436	445	434	445	457	464	471	480	490	500	509	518	529	538
Stone, Clay, and Glass	84	84	87	92	96	97	98	100	103	105	107	108	110	112
Primary Metals	137	145	141	147	153	154	156	158	162	164	164	166	167	169
Iron and Steel Mills and Products	66	71	65	69	71	72	73	74	76	77	77	78	79	80
Alumina and Aluminum Products	29	30	30	30	31	32	32	32	33	34	33	33	34	34
Fabricated Metals	241	251	252	260	268	273	276	279	286	292	296	301	306	310
Machinery	250	283	302	313	323	327	330	334	342	349	356	364	372	380
Other Electronic/Electric Products	490	551	612	646	675	712	744	776	816	861	904	946	990	1035
Transportation Equipment	616	636	632	642	655	671	692	705	712	719	727	741	753	764
Other Manufacturing	1359	1409	1422	1436	1456	1474	1496	1521	1550	1579	1607	1637	1669	1702
Employment (million)														
Total Industrial	24.93	24.96	25.11	25.03	25.09	25.10	25.08	24.97	24.90	24.83	24.76	24.75	24.77	24.82
Total Nonmanufacturing	10.42	10.63	10.84	10.80	10.88	10.91	10.94	10.99	11.04	11.05	11.08	11.15	11.24	11.35
Coal Mining	0.07	0.07	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08
Oil and Gas Extraction	0.30	0.32	0.33	0.34	0.33	0.32	0.31	0.30	0.28	0.28	0.27	0.27	0.26	0.25
Total Manufacturing	14.51	14.33	14.27	14.23	14.21	14.19	14.13	13.98	13.86	13.79	13.68	13.60	13.53	13.47
Petroleum Refineries	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06
Paper Products	0.52	0.50	0.50	0.50	0.51	0.51	0.50	0.50	0.49	0.49	0.49	0.48	0.47	0.47
Chemicals	0.91	0.89	0.87	0.86	0.85	0.84	0.82	0.81	0.79	0.78	0.77	0.76	0.75	0.74
Stone, Clay, and Glass	0.49	0.50	0.50	0.52	0.53	0.51	0.50	0.50	0.50	0.50	0.49	0.49	0.48	0.48
Primary Metals	0.48	0.47	0.45	0.46	0.46	0.45	0.44	0.42	0.42	0.42	0.41	0.40	0.39	0.38
Iron and Steel Mills and Products	0.16	0.16	0.14	0.15	0.15	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.12
Alumina and Aluminum Products	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06
Fabricated Metals	1.48	1.50	1.52	1.54	1.59	1.61	1.63	1.63	1.63	1.64	1.63	1.61	1.59	1.58
Machinery	1.15	1.14	1.15	1.16	1.18	1.17	1.16	1.16	1.16	1.16	1.16	1.15	1.15	1.14
Other Electronic/Electric Products	1.39	1.34	1.36	1.36	1.37	1.39	1.39	1.38	1.38	1.38	1.38	1.38	1.38	1.39
Transportation Equipment	1.77	1.76	1.76	1.72	1.67	1.65	1.64	1.58	1.52	1.47	1.43	1.42	1.41	1.39
Other Manufacturing	6.26	6.16	6.08	6.03	6.00	5.99	5.97	5.93	5.91	5.89	5.87	5.85	5.84	5.85
Real Disposable Income by Census Division (billion 2000 dollars)														
New England	451	464	474	493	508	526	542	558	571	586	602	621	640	659
Middle Atlantic	1209	1246	1267	1311	1345	1385	1423	1457	1484	1516	1550	1590	1631	1673
East North Central	1200	1233	1251	1292	1323	1361	1395	1427	1452	1480	1511	1547	1585	1623
West North Central	505	520	529	549	564	582	599	614	627	642	658	676	695	714
South Atlantic	1394	1451	1490	1558	1615	1681	1744	1805	1859	1919	1984	2057	2134	2213
East South Central	388	400	408	423	435	450	463	476	486	498	511	526	542	557
West South Central	799	827	847	884	915	951	985	1017	1045	1076	1111	1149	1190	1232
Mountain	463	482	495	518	537	559	580	600	618	638	660	684	710	737
Pacific	1333	1381	1411	1467	1514	1569	1620	1669	1711	1758	1809	1867	1929	1992
United States	7742	8004	8172	8493	8756	9063	9351	9622	9854	10113	10395	10717	11058	11401

Table 115. Indicators of Macroeconomic Activity

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Nonfarm Employment by Census Division</b> (millions)														
New England	6.8	6.9	7.0	7.1	7.1	7.2	7.3	7.3	7.3	7.3	7.3	7.4	7.4	7.4
Middle Atlantic	17.9	18.0	18.2	18.4	18.5	18.6	18.6	18.6	18.6	18.5	18.5	18.5	18.6	18.6
East North Central	21.2	21.4	21.7	22.0	22.2	22.4	22.6	22.6	22.7	22.7	22.8	22.8	22.9	23.1
West North Central	9.6	9.7	9.8	10.0	10.1	10.2	10.3	10.3	10.3	10.4	10.4	10.5	10.5	10.6
South Atlantic	24.8	25.2	25.8	26.4	26.9	27.5	28.0	28.5	28.9	29.3	29.7	30.2	30.7	31.2
East South Central	7.5	7.6	7.7	7.8	7.8	7.9	8.0	8.0	8.1	8.1	8.2	8.2	8.3	8.4
West South Central	14.0	14.3	14.6	14.9	15.1	15.3	15.6	15.7	15.9	16.0	16.2	16.4	16.6	16.9
Mountain	8.4	8.6	8.8	8.9	9.1	9.3	9.4	9.5	9.6	9.7	9.9	10.0	10.1	10.3
Pacific	19.6	19.8	20.1	20.4	20.7	21.0	21.3	21.5	21.6	21.8	22.0	22.2	22.4	22.7
United States	129.9	131.4	133.6	135.8	137.6	139.5	141.0	142.1	143.0	143.9	145.0	146.2	147.6	149.1



Table 115. Indicators of Macroeconomic Activity

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
Value of Shipments, National (billion 2000 \$)															
Total Industrial	7347	7503	7640	7778	7921	8071	8230	8401	8589	8790	8984	9171	9366	9578	2.1%
Total Nonmanufacturing	1747	1769	1788	1808	1825	1843	1864	1891	1926	1962	1990	2010	2035	2069	1.4%
Coal Mining	27	27	27	28	29	29	30	31	31	32	33	33	34	35	1.6%
Oil and Gas Extraction	167	167	167	165	164	163	162	160	158	158	156	155	154	153	0.1%
Total Manufacturing	5600	5734	5852	5969	6096	6228	6366	6510	6664	6828	6995	7161	7331	7509	2.3%
Petroleum Refineries	265	267	270	272	275	276	279	283	286	289	291	296	299	301	1.0%
Paper Products	196	198	200	202	204	206	208	210	212	215	217	219	222	224	1.1%
Chemicals	546	556	564	573	582	591	601	610	621	632	643	654	665	676	1.6%
Stone, Clay, and Glass	114	117	119	121	122	124	126	128	130	132	135	137	139	141	2.0%
Primary Metals	172	174	175	176	178	179	181	183	185	188	191	193	196	198	1.2%
Iron and Steel Mills and Products	81	82	82	82	83	83	84	84	85	86	87	87	88	89	0.9%
Alumina and Aluminum Products	35	35	35	35	35	35	35	35	35	36	36	36	37	37	0.8%
Fabricated Metals	315	321	326	331	337	343	349	355	362	370	378	386	394	403	1.8%
Machinery	389	398	406	414	424	435	445	455	467	481	493	506	521	536	2.5%
Other Electronic/Electric Products	1091	1146	1191	1237	1288	1339	1392	1447	1505	1567	1631	1697	1766	1841	4.7%
Transportation Equipment	774	785	794	803	812	824	837	853	870	887	905	921	935	950	1.6%
Other Manufacturing	1736	1772	1806	1840	1875	1910	1947	1985	2025	2068	2111	2152	2194	2237	1.8%
Employment (million)															
Total Industrial	24.90	24.98	24.99	24.92	24.86	24.81	24.77	24.78	24.83	24.91	24.97	24.98	25.00	25.03	0.0%
Total Nonmanufacturing	11.44	11.53	11.60	11.65	11.67	11.72	11.75	11.83	11.95	12.08	12.17	12.22	12.29	12.38	0.6%
Coal Mining	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	1.2%
Oil and Gas Extraction	0.24	0.24	0.24	0.23	0.23	0.22	0.22	0.22	0.21	0.21	0.21	0.20	0.20	0.20	-1.8%
Total Manufacturing	13.46	13.45	13.38	13.28	13.18	13.09	13.02	12.95	12.88	12.83	12.80	12.76	12.72	12.65	-0.5%
Petroleum Refineries	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	-1.9%
Paper Products	0.47	0.47	0.47	0.46	0.46	0.46	0.45	0.45	0.44	0.44	0.44	0.43	0.43	0.43	-0.6%
Chemicals	0.73	0.72	0.71	0.70	0.69	0.68	0.67	0.67	0.66	0.65	0.64	0.63	0.62	0.61	-1.4%
Stone, Clay, and Glass	0.48	0.48	0.48	0.48	0.48	0.47	0.47	0.47	0.46	0.46	0.46	0.46	0.46	0.46	-0.4%
Primary Metals	0.37	0.37	0.36	0.36	0.35	0.34	0.33	0.33	0.32	0.32	0.31	0.31	0.30	0.30	-1.7%
Iron and Steel Mills and Products	0.12	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.10	0.10	-1.6%
Alumina and Aluminum Products	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04	0.04	-2.3%
Fabricated Metals	1.57	1.57	1.56	1.54	1.53	1.52	1.51	1.50	1.49	1.48	1.47	1.47	1.46	1.46	-0.1%
Machinery	1.14	1.14	1.13	1.12	1.11	1.11	1.10	1.10	1.10	1.10	1.09	1.09	1.09	1.09	-0.2%
Other Electronic/Electric Products	1.41	1.41	1.41	1.40	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.40	1.41	1.41	0.2%
Transportation Equipment	1.38	1.36	1.34	1.31	1.28	1.25	1.24	1.22	1.21	1.20	1.19	1.18	1.17	1.16	-1.6%
Other Manufacturing	5.86	5.87	5.87	5.85	5.84	5.82	5.80	5.79	5.77	5.76	5.76	5.74	5.73	5.69	-0.3%
Real Disposable Income by Census Division (billion 2000 dollars)															
New England	682	706	729	752	775	797	820	843	867	892	917	942	967	992	3.0%
Middle Atlantic	1723	1776	1825	1874	1922	1969	2016	2064	2114	2165	2216	2267	2318	2368	2.5%
East North Central	1668	1717	1761	1805	1848	1890	1932	1974	2018	2062	2107	2152	2196	2240	2.3%
West North Central	737	761	783	806	828	850	872	895	918	942	966	990	1014	1038	2.7%
South Atlantic	2304	2402	2497	2594	2691	2790	2891	2996	3106	3220	3337	3455	3577	3699	3.7%
East South Central	576	596	615	634	653	672	691	711	731	753	774	796	818	840	2.9%
West South Central	1280	1332	1382	1433	1484	1536	1590	1645	1703	1764	1826	1888	1953	2018	3.5%
Mountain	767	800	832	864	897	930	964	999	1036	1074	1113	1153	1193	1234	3.7%
Pacific	2065	2143	2218	2294	2370	2447	2524	2605	2689	2776	2864	2953	3044	3134	3.2%
United States	11803	12233	12643	13057	13468	13880	14300	14733	15182	15647	16120	16596	17079	17562	3.1%

Table 115. Indicators of Macroeconomic Activity

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Nonfarm Employment by Census Division</b>															
<b>(millions)</b>															
New England	7.5	7.5	7.6	7.6	7.6	7.7	7.7	7.7	7.7	7.7	7.8	7.8	7.8	7.8	0.5%
Middle Atlantic	18.7	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	19.0	19.0	19.0	19.0	0.2%
East North Central	23.2	23.4	23.6	23.7	23.8	23.9	24.0	24.1	24.2	24.4	24.5	24.6	24.8	24.9	0.6%
West North Central	10.7	10.8	10.9	11.0	11.0	11.1	11.1	11.2	11.3	11.4	11.4	11.5	11.6	11.7	0.7%
South Atlantic	31.8	32.5	33.1	33.6	34.2	34.7	35.3	35.9	36.5	37.2	37.9	38.5	39.2	39.9	1.8%
East South Central	8.5	8.6	8.6	8.7	8.8	8.9	9.0	9.1	9.1	9.2	9.3	9.5	9.6	9.7	0.9%
West South Central	17.1	17.4	17.7	17.9	18.1	18.4	18.6	18.9	19.1	19.4	19.7	20.0	20.3	20.6	1.4%
Mountain	10.5	10.7	10.8	11.0	11.1	11.3	11.5	11.6	11.8	12.0	12.2	12.4	12.5	12.7	1.5%
Pacific	23.0	23.3	23.6	23.9	24.2	24.5	24.8	25.1	25.4	25.8	26.1	26.5	26.8	27.2	1.2%
United States	151.0	153.0	154.7	156.2	157.7	159.2	160.8	162.5	164.2	166.0	167.9	169.8	171.6	173.6	1.1%

Table 115. Indicators of Macroeconomic Activity

Note: Totals may not equal sum of components due to independent rounding.

Source: 2003 and 2004: Global Insight macroeconomic model CTL0805, modified by Energy Information Administration (EIA); Global Insight industry model, July 2005; and EIA regional economic and industry model, 2004. Projections: EIA, AEO2006 National Energy Modeling System run aeo2006.d111905a.

Table 116. Imported Petroleum by Source  
(million barrels per day)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Crude Oil</b>														
Canada	1.55	1.58	1.61	1.61	1.61	1.61	1.61	1.61	1.63	1.65	1.66	1.68	1.70	1.75
Mexico	1.57	1.60	1.55	1.50	1.42	1.43	1.43	1.44	1.46	1.47	1.48	1.49	1.49	1.50
North Sea	0.55	0.38	0.40	0.41	0.41	0.40	0.41	0.41	0.40	0.40	0.40	0.41	0.41	0.41
OPEC	4.58	5.07	5.14	5.18	5.13	5.10	5.09	5.10	5.13	5.18	5.19	5.21	5.27	5.30
Latin America	1.18	1.32	1.38	1.43	1.49	1.44	1.45	1.45	1.44	1.44	1.45	1.46	1.48	1.49
North Africa	0.11	0.23	0.17	0.18	0.08	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.13	0.13
West Africa	0.83	1.08	0.97	0.86	0.81	0.82	0.82	0.82	0.81	0.82	0.82	0.81	0.81	0.82
Indonesia	0.03	0.03	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.10	0.10	0.09	0.09
Persian Gulf	2.43	2.41	2.52	2.61	2.65	2.65	2.62	2.63	2.66	2.71	2.71	2.72	2.76	2.78
Other Middle East	0.05	0.02	0.03	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Other Latin America	0.51	0.62	0.59	0.55	0.51	0.52	0.53	0.53	0.54	0.56	0.57	0.58	0.59	0.60
Other Africa	0.54	0.56	0.67	0.70	0.72	0.73	0.72	0.72	0.73	0.74	0.74	0.75	0.76	0.78
Other Asia	0.33	0.26	0.23	0.23	0.22	0.23	0.23	0.23	0.24	0.25	0.25	0.24	0.25	0.26
<b>Total Crude Oil</b>	<b>9.67</b>	<b>10.09</b>	<b>10.23</b>	<b>10.21</b>	<b>10.05</b>	<b>10.05</b>	<b>10.05</b>	<b>10.08</b>	<b>10.16</b>	<b>10.28</b>	<b>10.33</b>	<b>10.38</b>	<b>10.50</b>	<b>10.62</b>
<b>Light Refined Products 1/</b>														
Canada	0.44	0.44	0.49	0.49	0.48	0.48	0.49	0.49	0.51	0.52	0.53	0.55	0.56	0.57
Northern Europe	0.22	0.31	0.33	0.33	0.33	0.34	0.34	0.34	0.35	0.36	0.36	0.37	0.38	0.39
Southern Europe	0.09	0.11	0.11	0.13	0.12	0.12	0.12	0.12	0.13	0.14	0.15	0.15	0.15	0.16
OPEC	0.21	0.28	0.35	0.36	0.34	0.37	0.38	0.39	0.45	0.48	0.48	0.53	0.56	0.61
Latin America	0.11	0.13	0.16	0.17	0.16	0.17	0.17	0.18	0.20	0.21	0.21	0.24	0.25	0.26
North Africa	0.05	0.05	0.05	0.05	0.04	0.04	0.05	0.05	0.07	0.07	0.07	0.07	0.08	0.08
West Africa	0.01	0.04	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09
Indonesia	0.00	0.00	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Persian Gulf	0.04	0.06	0.06	0.06	0.06	0.07	0.07	0.08	0.10	0.11	0.11	0.13	0.13	0.15
Caribbean Basin	0.28	0.37	0.35	0.37	0.37	0.38	0.38	0.38	0.41	0.42	0.42	0.44	0.45	0.47
Asian Exporters	0.13	0.12	0.15	0.15	0.15	0.15	0.16	0.17	0.19	0.20	0.20	0.20	0.21	0.22
Other	0.20	0.15	0.18	0.18	0.18	0.19	0.20	0.21	0.23	0.24	0.24	0.26	0.26	0.27
<b>Total Light Refined Products</b>	<b>1.56</b>	<b>1.78</b>	<b>1.97</b>	<b>2.00</b>	<b>1.96</b>	<b>2.02</b>	<b>2.07</b>	<b>2.09</b>	<b>2.25</b>	<b>2.37</b>	<b>2.36</b>	<b>2.49</b>	<b>2.57</b>	<b>2.69</b>
<b>Heavy Refined Products 2/</b>														
Canada	0.08	0.07	0.07	0.06	0.05	0.06	0.06	0.07	0.07	0.06	0.07	0.07	0.08	0.07
Northern Europe	0.17	0.21	0.20	0.19	0.18	0.17	0.15	0.16	0.16	0.15	0.16	0.16	0.16	0.15
Southern Europe	0.03	0.03	0.03	0.03	0.02	0.02	0.02	0.02	0.02	0.01	0.03	0.02	0.02	0.01
OPEC	0.38	0.39	0.39	0.37	0.30	0.32	0.37	0.42	0.43	0.39	0.43	0.45	0.46	0.43
Latin America	0.09	0.13	0.13	0.12	0.08	0.08	0.08	0.09	0.10	0.08	0.10	0.10	0.10	0.09
North Africa	0.22	0.19	0.20	0.20	0.17	0.19	0.20	0.23	0.23	0.22	0.23	0.23	0.23	0.23
West Africa	0.02	0.02	0.02	0.02	0.01	0.02	0.03	0.03	0.03	0.02	0.03	0.04	0.04	0.04
Indonesia	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Persian Gulf	0.04	0.03	0.03	0.03	0.02	0.02	0.03	0.05	0.05	0.04	0.05	0.06	0.06	0.05
Caribbean Basin	0.14	0.24	0.27	0.27	0.21	0.20	0.20	0.23	0.24	0.23	0.23	0.22	0.21	0.19
Asian Exporters	0.08	0.10	0.11	0.11	0.07	0.08	0.08	0.11	0.11	0.11	0.11	0.11	0.11	0.10
Other	0.17	0.16	0.16	0.16	0.14	0.15	0.15	0.16	0.15	0.14	0.16	0.16	0.16	0.14
<b>Total Heavy Refined Products</b>	<b>1.04</b>	<b>1.19</b>	<b>1.24</b>	<b>1.20</b>	<b>0.97</b>	<b>0.99</b>	<b>1.02</b>	<b>1.17</b>	<b>1.17</b>	<b>1.10</b>	<b>1.19</b>	<b>1.19</b>	<b>1.19</b>	<b>1.08</b>

Table 116. Imported Petroleum by Source  
(million barrels per day)

	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2004-2030
<b>Crude Oil</b>															
Canada	1.80	1.85	1.90	1.95	2.01	2.07	2.13	2.20	2.26	2.34	2.43	2.52	2.61	2.69	2.1%
Mexico	1.51	1.53	1.55	1.56	1.57	1.58	1.59	1.63	1.65	1.67	1.69	1.74	1.77	1.80	0.4%
North Sea	0.41	0.41	0.40	0.41	0.40	0.41	0.41	0.41	0.41	0.40	0.41	0.41	0.41	0.42	0.3%
OPEC	5.40	5.47	5.52	5.55	5.56	5.60	5.67	5.81	5.84	5.87	5.93	6.03	6.11	6.17	0.8%
Latin America	1.51	1.55	1.56	1.57	1.58	1.59	1.61	1.66	1.68	1.69	1.70	1.74	1.77	1.79	1.2%
North Africa	0.14	0.15	0.14	0.14	0.13	0.14	0.16	0.16	0.16	0.16	0.17	0.17	0.18	0.18	-1.1%
West Africa	0.83	0.84	0.85	0.85	0.84	0.85	0.87	0.90	0.90	0.90	0.91	0.94	0.96	0.97	-0.4%
Indonesia	0.09	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	4.6%
Persian Gulf	2.82	2.84	2.87	2.88	2.90	2.91	2.93	2.98	3.00	3.02	3.04	3.08	3.10	3.13	1.0%
Other Middle East	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.05	0.05	3.3%
Other Latin America	0.62	0.63	0.64	0.65	0.67	0.68	0.71	0.75	0.81	0.82	0.83	0.86	0.89	0.92	1.5%
Other Africa	0.80	0.82	0.84	0.85	0.86	0.88	0.90	0.95	0.98	0.99	1.01	1.04	1.07	1.09	2.6%
Other Asia	0.27	0.28	0.29	0.30	0.31	0.32	0.33	0.36	0.37	0.38	0.38	0.39	0.39	0.40	1.7%
<b>Total Crude Oil</b>	<b>10.83</b>	<b>11.02</b>	<b>11.17</b>	<b>11.28</b>	<b>11.41</b>	<b>11.57</b>	<b>11.78</b>	<b>12.13</b>	<b>12.35</b>	<b>12.52</b>	<b>12.73</b>	<b>13.03</b>	<b>13.29</b>	<b>13.53</b>	<b>1.1%</b>
<b>Light Refined Products 1/</b>															
Canada	0.57	0.59	0.59	0.61	0.61	0.61	0.61	0.61	0.62	0.63	0.63	0.63	0.63	0.64	1.4%
Northern Europe	0.39	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.45	1.4%
Southern Europe	0.16	0.18	0.18	0.20	0.20	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.22	2.8%
OPEC	0.59	0.65	0.66	0.75	0.74	0.77	0.75	0.75	0.76	0.79	0.84	0.80	0.82	0.83	4.3%
Latin America	0.26	0.28	0.28	0.31	0.31	0.32	0.31	0.31	0.32	0.33	0.35	0.33	0.34	0.34	3.8%
North Africa	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	3.1%
West Africa	0.09	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	4.4%
Indonesia	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	4.8%
Persian Gulf	0.15	0.17	0.18	0.21	0.21	0.22	0.21	0.21	0.21	0.23	0.25	0.23	0.24	0.25	5.8%
Caribbean Basin	0.47	0.49	0.49	0.53	0.53	0.53	0.53	0.53	0.54	0.54	0.55	0.53	0.54	0.54	1.5%
Asian Exporters	0.22	0.24	0.24	0.26	0.26	0.26	0.25	0.26	0.27	0.27	0.28	0.27	0.27	0.28	3.2%
Other	0.26	0.28	0.28	0.30	0.30	0.30	0.29	0.30	0.31	0.31	0.32	0.31	0.31	0.31	2.9%
<b>Total Light Refined Products</b>	<b>2.66</b>	<b>2.86</b>	<b>2.87</b>	<b>3.07</b>	<b>3.06</b>	<b>3.09</b>	<b>3.05</b>	<b>3.07</b>	<b>3.12</b>	<b>3.21</b>	<b>3.26</b>	<b>3.18</b>	<b>3.22</b>	<b>3.27</b>	<b>2.4%</b>
<b>Heavy Refined Products 2/</b>															
Canada	0.09	0.08	0.09	0.08	0.09	0.09	0.10	0.09	0.09	0.09	0.09	0.10	0.10	0.10	1.5%
Northern Europe	0.15	0.15	0.16	0.14	0.16	0.16	0.18	0.17	0.17	0.19	0.19	0.19	0.19	0.20	-0.2%
Southern Europe	0.02	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.6%
OPEC	0.47	0.45	0.49	0.44	0.47	0.49	0.53	0.52	0.53	0.54	0.57	0.58	0.61	0.63	1.9%
Latin America	0.10	0.09	0.10	0.09	0.10	0.10	0.12	0.12	0.12	0.12	0.14	0.14	0.15	0.16	0.8%
North Africa	0.24	0.23	0.24	0.22	0.23	0.25	0.26	0.26	0.26	0.26	0.26	0.26	0.27	0.27	1.3%
West Africa	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	2.5%
Indonesia	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	5.2%
Persian Gulf	0.07	0.06	0.08	0.06	0.07	0.07	0.08	0.07	0.08	0.09	0.10	0.11	0.12	0.13	5.4%
Caribbean Basin	0.19	0.18	0.19	0.17	0.18	0.20	0.20	0.19	0.20	0.21	0.22	0.23	0.23	0.24	0.0%
Asian Exporters	0.12	0.11	0.12	0.11	0.11	0.12	0.12	0.11	0.11	0.11	0.12	0.13	0.13	0.14	1.5%
Other	0.17	0.16	0.17	0.16	0.16	0.18	0.16	0.15	0.14	0.15	0.15	0.16	0.16	0.17	0.2%
<b>Total Heavy Refined Products</b>	<b>1.21</b>	<b>1.16</b>	<b>1.25</b>	<b>1.12</b>	<b>1.20</b>	<b>1.27</b>	<b>1.32</b>	<b>1.25</b>	<b>1.27</b>	<b>1.31</b>	<b>1.38</b>	<b>1.42</b>	<b>1.46</b>	<b>1.52</b>	<b>0.9%</b>

Table 116. Imported Petroleum by Source  
(million barrels per day)

1/ Includes gasoline, gasoline blending components, jet fuel, distillate fuel oil, liquefied petroleum gases, and kerosene.

2/ Includes residual fuel oil, unfinished oils, and other refined products.

OPEC = Organization of Petroleum Exporting Countries - Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

Caribbean Basin = Bahama Islands, Colombia, Ecuador, Guatemala, Jamaica, Mexico, Netherlands Antilles, Panama, Puerto Rico, Trinidad and Tobago, and the Virgin Islands.

N/A = Not applicable.

Source: Energy Information Administration, AEO2006 National Energy Modeling System run aeo2006.d111905a.