





**Table 1. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020-2020
<b>Total Energy Consumption</b>																						
Distillate Fuel	0.548	0.584	0.575	0.585	0.592	0.594	0.595	0.596	0.599	0.599	0.600	0.604	0.607	0.608	0.607	0.607	0.609	0.610	0.612	0.614	0.616	0.616
Kerosene	0.016	0.017	0.016	0.015	0.015	0.014	0.014	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	0.012	0.012
Jet Fuel #2	0.079	0.077	0.079	0.081	0.082	0.084	0.085	0.087	0.089	0.091	0.093	0.096	0.098	0.100	0.102	0.104	0.107	0.109	0.111	0.114	0.116	0.116
Liquefied Petroleum Gas	0.035	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.032	0.031	0.031	0.031	0.030	0.030	0.030	0.029	0.029	0.029	0.029	0.029
Motor Gasoline 2/	0.786	0.794	0.810	0.832	0.845	0.857	0.867	0.878	0.891	0.904	0.916	0.929	0.941	0.951	0.961	0.969	0.968	0.976	0.984	0.991	0.999	1.005
Petrochemical Feedstocks	0.051	0.045	0.050	0.051	0.052	0.053	0.053	0.054	0.055	0.056	0.056	0.058	0.058	0.059	0.059	0.059	0.060	0.060	0.060	0.060	0.060	0.060
Residual Fuel	0.300	0.257	0.102	0.126	0.153	0.135	0.144	0.131	0.130	0.134	0.135	0.130	0.134	0.148	0.147	0.150	0.152	0.155	0.159	0.161	0.162	-3.0%
Other Petroleum 12/	0.043	0.042	0.047	0.047	0.047	0.047	0.046	0.046	0.046	0.047	0.047	0.047	0.047	0.048	0.048	0.049	0.049	0.049	0.049	0.050	0.050	0.051
Petroleum Subtotal	1.659	1.847	1.710	1.769	1.816	1.815	1.836	1.836	1.855	1.876	1.893	1.907	1.929	1.957	1.996	1.996	1.996	1.994	2.005	2.040	2.056	0.5%
Natural Gas	0.741	0.746	0.890	0.895	0.870	0.882	0.894	0.916	0.941	0.953	0.975	1.002	1.019	1.053	1.074	1.083	1.102	1.118	1.133	1.148	1.151	2.2%
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	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Steam Coal	0.187	0.187	0.186	0.191	0.196	0.199	0.203	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.207	0.207	0.207	0.5%
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	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Coal Subtotal	0.187	0.187	0.186	0.191	0.196	0.199	0.203	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.206	0.207	0.207	0.207	0.5%
Nuclear Power	0.334	0.338	0.337	0.338	0.340	0.341	0.342	0.343	0.344	0.345	0.346	0.347	0.347	0.299	0.300	0.300	0.301	0.301	0.301	0.301	0.301	-0.5%
Renewable Energy 17/	0.369	0.360	0.377	0.395	0.389	0.397	0.403	0.409	0.412	0.427	0.427	0.431	0.434	0.438	0.442	0.446	0.449	0.452	0.454	0.454	0.456	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports 16/	0.231	0.231	0.214	0.296	0.289	0.326	0.271	0.245	0.226	0.222	0.228	0.238	0.244	0.251	0.248	0.274	0.269	0.262	0.263	0.259	0.263	0.7%
<b>Total</b>	<b>3.720</b>	<b>3.709</b>	<b>3.704</b>	<b>3.848</b>	<b>3.900</b>	<b>3.961</b>	<b>3.940</b>	<b>3.957</b>	<b>3.984</b>	<b>4.019</b>	<b>4.070</b>	<b>4.128</b>	<b>4.176</b>	<b>4.200</b>	<b>4.232</b>	<b>4.286</b>	<b>4.320</b>	<b>4.346</b>	<b>4.380</b>	<b>4.409</b>	<b>4.429</b>	<b>0.9%</b>
<b>Energy Use &amp; Related Statistics</b>																						
Delivered Energy Use	2.811	2.794	2.855	2.924	2.968	3.004	3.036	3.072	3.108	3.138	3.170	3.209	3.244	3.272	3.296	3.321	3.348	3.372	3.399	3.425	3.450	1.0%
Total Energy Use	3.720	3.709	3.704	3.848	3.900	3.961	3.940	3.957	3.984	4.019	4.070	4.128	4.176	4.200	4.232	4.286	4.320	4.346	4.380	4.409	4.429	0.9%
Population (millions)	13.590	13.670	13.755	13.837	13.906	13.968	14.029	14.089	14.147	14.205	14.262	14.319	14.376	14.434	14.491	14.549	14.606	14.664	14.721	14.778	14.835	0.4%
US GDP (billion 1996 dollars)	9224	9319	9523	9826	10103	10418	10719	11046	11442	11867	12312	12777	13166	13560	13973	14399	14835	15287	15717	16138	16525	3.0%
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.2	1662.2	1693.5	1724.4	1755.8	1780.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.8	2039.3	2064.3	2087.8	1.5%

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes commercial sector electricity cogenerated by using wood and wood waste, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes consumption for cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy, 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 cogeneration. Excludes net electricity imports.  
16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
17/ 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.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99/1) (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B: "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/bc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d1020010.





**Table 2. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
Middle Atlantic**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020- 2020	
<b>Total Energy Consumption</b>																							
Distillate Fuel	1,012	1,050	1,056	1,077	1,093	1,104	1,110	1,119	1,128	1,136	1,144	1,156	1,166	1,171	1,174	1,178	1,182	1,186	1,190	1,194	1,197	0.8%	
Kerosene	0.034	0.034	0.034	0.032	0.031	0.030	0.030	0.029	0.028	0.028	0.027	0.027	0.027	0.027	0.026	0.026	0.026	0.025	0.025	0.025	0.025	-1.2%	
Jet Fuel 1/2	0.360	0.351	0.360	0.370	0.377	0.385	0.393	0.400	0.410	0.421	0.433	0.445	0.455	0.465	0.475	0.485	0.495	0.500	0.517	0.528	0.537	2.0%	
Liquefied Petroleum Gas	0.071	0.066	0.069	0.068	0.068	0.068	0.072	0.088	0.084	0.098	0.108	0.109	0.109	0.109	0.109	0.109	0.110	0.109	0.116	0.118	0.117	2.5%	
Motor Gasoline 2/	1,812	1,828	1,866	1,909	1,932	1,955	1,972	1,992	2,017	2,042	2,066	2,089	2,110	2,129	2,143	2,156	2,170	2,182	2,193	2,206	2,214	1.0%	
Petrochemical Feedstocks	0.148	0.130	0.144	0.148	0.150	0.152	0.153	0.156	0.158	0.160	0.162	0.166	0.168	0.169	0.170	0.171	0.171	0.171	0.172	0.173	0.174	0.8%	
Residual Fuel	0.458	0.443	0.312	0.291	0.290	0.280	0.275	0.273	0.274	0.273	0.273	0.265	0.263	0.267	0.268	0.271	0.273	0.273	0.274	0.284	0.288	-2.3%	
Other Petroleum 12/	0.407	0.408	0.429	0.470	0.474	0.471	0.478	0.475	0.480	0.479	0.481	0.484	0.497	0.500	0.499	0.506	0.509	0.511	0.515	0.519	0.521	1.2%	
Petroleum Subtotal	4,391	4,311	4,270	4,366	4,415	4,446	4,463	4,532	4,589	4,638	4,691	4,750	4,794	4,837	4,894	4,901	4,938	4,964	5,002	5,046	5,072	0.8%	
Natural Gas	2,347	2,275	2,500	2,833	2,881	2,721	2,744	2,774	2,804	2,847	2,902	2,979	3,028	3,084	3,135	3,202	3,228	3,274	3,313	3,313	3,338	3,369	1.8%
Metallurgical Coal	0.215	0.196	0.199	0.196	0.194	0.192	0.190	0.188	0.186	0.182	0.179	0.176	0.172	0.169	0.166	0.163	0.160	0.157	0.154	0.152	0.149	-1.8%	
Steam Coal	1,512	1,523	1,536	1,612	1,660	1,689	1,729	1,781	1,784	1,788	1,802	1,804	1,803	1,821	1,823	1,829	1,831	1,834	1,837	1,848	1,850	1.0%	
Net Coal Coke Imports	0.004	0.002	0.003	0.004	0.004	0.005	0.005	0.006	0.006	0.007	0.007	0.008	0.008	0.009	0.009	0.009	0.010	0.010	0.010	0.011	0.011	5.5%	
Coal Subtotal	1,730	1,722	1,737	1,812	1,868	1,886	1,924	1,975	1,976	1,977	1,989	1,987	1,989	1,999	1,998	2,002	2,001	2,002	2,002	2,010	2,009	0.8%	
Nuclear Power	1,478	1,498	1,503	1,494	1,496	1,498	1,500	1,419	1,421	1,422	1,378	1,380	1,381	1,383	1,384	1,314	1,315	1,295	1,295	1,295	1,295	-0.8%	
Renewable Energy 17/	0.619	0.588	0.644	0.681	0.695	0.738	0.720	0.720	0.736	0.743	0.755	0.764	0.772	0.778	0.784	0.791	0.798	0.802	0.805	0.808	0.811	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A	
Electricity Imports 16/	0.080	0.080	0.074	0.102	0.100	0.113	0.094	0.085	0.078	0.077	0.079	0.082	0.084	0.087	0.086	0.095	0.093	0.091	0.091	0.090	0.091	0.7%	
<b>Total</b>	<b>10,557</b>	<b>10,474</b>	<b>10,729</b>	<b>11,088</b>	<b>11,246</b>	<b>11,373</b>	<b>11,466</b>	<b>11,516</b>	<b>11,604</b>	<b>11,705</b>	<b>11,795</b>	<b>11,943</b>	<b>12,047</b>	<b>12,168</b>	<b>12,253</b>	<b>12,304</b>	<b>12,371</b>	<b>12,389</b>	<b>12,469</b>	<b>12,547</b>	<b>12,608</b>	<b>0.9%</b>	
<b>Energy Use &amp; Related Statistics</b>																							
Delivered Energy Use	8,277	8,190	8,445	8,675	8,782	8,853	8,920	8,982	9,063	9,139	9,218	9,319	9,399	9,468	9,524	9,584	9,644	9,692	9,747	9,806	9,861	0.9%	
Total Energy Use	10,557	10,474	10,729	11,088	11,246	11,373	11,466	11,516	11,604	11,705	11,795	11,943	12,047	12,168	12,253	12,304	12,371	12,389	12,469	12,547	12,608	0.9%	
Population (millions)	38,441	38,532	38,624	38,714	38,797	38,877	38,953	39,025	39,093	39,158	39,219	39,278	39,338	39,398	39,459	39,519	39,578	39,637	39,696	39,755	39,813	0.2%	
US GDP (billion 1996 dollars)	9224	9319	9523	9826	10103	10418	10719	11046	11442	11867	12312	12777	13166	13560	13973	14399	14835	15287	15717	16138	16525	3.2%	
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.2	1662.2	1693.5	1724.4	1755.8	1780.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.8	2039.3	2064.3	2087.8	1.5%	

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes commercial sector electricity generated by using wood and wood waste, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes consumption for cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy; 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 cogeneration. Excludes net electricity imports.  
16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
17/ 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.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B: "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/oc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.







**Table 3. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
East North Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020- 2020
<b>Total Energy Consumption</b>																						
Distillate Fuel	1,168	1,202	1,219	1,257	1,286	1,314	1,330	1,350	1,374	1,401	1,427	1,458	1,479	1,498	1,513	1,527	1,542	1,557	1,573	1,587	1,596	1.6%
Kerosene	0.013	0.014	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.013	0.012	0.012	0.012	0.012	0.012	0.012	0.012	-0.3%
Jet Fuel 16	0.343	0.334	0.343	0.351	0.357	0.364	0.371	0.377	0.387	0.397	0.408	0.420	0.429	0.438	0.448	0.458	0.468	0.479	0.490	0.500	0.509	2.0%
Liquefied Petroleum Gas	0.235	0.219	0.228	0.230	0.232	0.234	0.236	0.238	0.240	0.242	0.243	0.245	0.246	0.248	0.248	0.248	0.248	0.248	0.248	0.248	0.255	0.5%
Motor Gasoline 2/	2,606	2,629	2,683	2,749	2,788	2,827	2,858	2,893	2,934	2,976	3,014	3,051	3,087	3,118	3,143	3,166	3,190	3,212	3,233	3,255	3,271	1.1%
Petrochemical Feedstocks	0.204	0.179	0.198	0.205	0.208	0.212	0.216	0.219	0.222	0.226	0.229	0.234	0.237	0.239	0.241	0.243	0.245	0.246	0.248	0.249	0.251	1.0%
Residual Fuel	0.112	0.039	0.028	0.018	0.018	0.018	0.018	0.018	0.018	0.019	0.019	0.019	0.020	0.020	0.019	0.019	0.019	0.019	0.019	0.019	0.019	-8.4%
Other Petroleum 12/	0.692	0.680	0.724	0.753	0.760	0.775	0.784	0.805	0.811	0.824	0.842	0.855	0.854	0.861	0.869	0.876	0.880	0.884	0.891	0.900	0.906	1.4%
Petroleum Subtotal	5,373	5,307	5,437	5,577	5,663	5,757	5,825	5,914	6,000	6,087	6,195	6,294	6,363	6,432	6,494	6,547	6,602	6,654	6,714	6,778	6,825	1.2%
Natural Gas	4,132	3,877	4,323	4,452	4,555	4,596	4,668	4,734	4,817	4,873	4,969	5,087	5,198	5,298	5,353	5,447	5,544	5,662	5,790	5,860	6,001	1.9%
Metallurgical Coal	0.370	0.338	0.341	0.338	0.334	0.330	0.326	0.323	0.319	0.313	0.307	0.302	0.296	0.291	0.286	0.280	0.275	0.270	0.265	0.260	0.256	-1.8%
Steam Coal	4,934	5,066	5,010	5,200	5,309	5,443	5,516	5,680	5,741	5,790	5,832	5,874	5,907	5,944	5,972	5,992	6,022	6,054	6,017	6,031	6,046	1.0%
Net Coal Coke Imports	0.044	0.034	0.031	0.038	0.040	0.043	0.046	0.049	0.051	0.054	0.058	0.062	0.064	0.066	0.069	0.071	0.073	0.076	0.078	0.080	0.081	3.1%
Coal Subtotal	5,348	5,438	5,382	5,575	5,682	5,816	5,888	6,051	6,111	6,157	6,198	6,238	6,267	6,301	6,326	6,343	6,370	6,400	6,361	6,371	6,382	0.9%
Nuclear Power	1,452	1,484	1,452	1,456	1,458	1,481	1,484	1,349	1,331	1,334	1,307	1,276	1,216	1,218	1,221	1,222	1,222	1,222	1,222	1,222	1,222	-0.9%
Renewable Energy 17/	0.550	0.558	0.558	0.606	0.627	0.644	0.655	0.671	0.678	0.689	0.716	0.727	0.741	0.749	0.756	0.778	0.779	0.792	0.805	0.818	0.827	2.1%
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports 16/	0.095	0.095	0.089	0.122	0.119	0.135	0.112	0.101	0.093	0.092	0.094	0.099	0.101	0.104	0.102	0.113	0.111	0.108	0.109	0.107	0.107	0.7%
<b>Total</b>	<b>16,950</b>	<b>16,739</b>	<b>17,278</b>	<b>17,828</b>	<b>18,106</b>	<b>18,401</b>	<b>18,612</b>	<b>18,821</b>	<b>19,032</b>	<b>19,243</b>	<b>19,510</b>	<b>19,732</b>	<b>19,885</b>	<b>20,073</b>	<b>20,254</b>	<b>20,451</b>	<b>20,629</b>	<b>20,839</b>	<b>20,991</b>	<b>21,187</b>	<b>21,368</b>	<b>1.2%</b>
<b>Energy Use &amp; Related Statistics</b>																						
Delivered Energy Use	12,313	12,112	12,546	12,933	13,125	13,296	13,450	13,626	13,778	13,937	14,115	14,300	14,441	14,568	14,691	14,816	14,945	15,062	15,191	15,319	15,438	1.1%
Total Energy Use	16,950	16,739	17,278	17,829	18,106	18,401	18,612	18,821	19,032	19,243	19,510	19,732	19,885	20,073	20,254	20,451	20,629	20,839	20,991	21,187	21,368	1.2%
Population (millions)	44,698	44,904	45,110	45,302	45,491	45,680	45,868	46,046	46,202	46,336	46,464	46,591	46,719	46,848	46,977	47,105	47,233	47,359	47,485	47,610	47,733	0.3%
US GDP (billion 1996 dollars)	9,224	9,319	9,523	9,826	10,103	10,418	10,719	11,046	11,442	11,867	12,312	12,777	13,166	13,560	13,973	14,399	14,835	15,267	15,717	16,138	16,525	3.0%
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.2	1662.2	1693.5	1724.4	1755.8	1780.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.6	2039.3	2064.3	2087.8	1.5%

1/ Includes wood used for residential heating.

2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.

3/ Includes conventional sector electricity cogenerated by using wood and wood waste, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.

4/ Fuel consumption includes consumption for cogeneration.

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

6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.

7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.

8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.

9/ Includes only kerosene type.

10/ Includes aviation gas and lubricants.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy; 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 cogeneration. Excludes net electricity imports.

16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.

17/ 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.

NA = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.

Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B, "Annual Electric Generator Report - Nonutility," Other 2000 values: EIA, Short-Term Energy Outlook, October 2001.

http://www.eia.doe.gov/pub/forecasting/sectors/etoc/toc1.pdf. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.





**Table 4. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
West North Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020-2020	
<b>Total Energy Consumption</b>																							
Distillate Fuel	0.765	0.787	0.793	0.819	0.839	0.860	0.871	0.884	0.901	0.919	0.937	0.958	0.973	0.987	0.999	1.010	1.021	1.033	1.045	1.056	1.065	1.076	
Kerosene	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	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.003	
Jet Fuel 16	0.190	0.196	0.190	0.195	0.198	0.202	0.206	0.210	0.215	0.220	0.226	0.232	0.237	0.242	0.247	0.252	0.258	0.264	0.269	0.275	0.280	0.284	
Liquefied Petroleum Gas	0.256	0.237	0.248	0.252	0.254	0.257	0.258	0.259	0.261	0.263	0.265	0.268	0.269	0.270	0.271	0.271	0.272	0.272	0.274	0.277	0.279	0.281	
Motor Gasoline 2/	1.283	1.294	1.320	1.357	1.380	1.401	1.418	1.438	1.460	1.484	1.506	1.528	1.549	1.568	1.584	1.599	1.614	1.628	1.642	1.656	1.667	1.679	
Petrochemical Feedstocks	0.025	0.022	0.025	0.025	0.026	0.026	0.027	0.027	0.028	0.028	0.028	0.029	0.029	0.029	0.030	0.030	0.030	0.031	0.031	0.031	0.031	0.031	
Residual Fuel	0.016	0.021	0.010	0.007	0.009	0.010	0.009	0.008	0.008	0.008	0.008	0.009	0.009	0.010	0.010	0.010	0.010	0.011	0.011	0.011	0.012	0.012	
Other Petroleum 12/	0.272	0.273	0.281	0.295	0.298	0.304	0.308	0.316	0.319	0.324	0.331	0.335	0.335	0.338	0.342	0.345	0.347	0.349	0.352	0.356	0.359	0.362	
Petroleum Subtotal	2.911	2.824	2.870	2.953	3.008	3.064	3.101	3.145	3.195	3.250	3.305	3.362	3.406	3.448	3.486	3.521	3.555	3.590	3.627	3.666	3.697	3.732	
Natural Gas	1.507	1.475	1.565	1.634	1.647	1.647	1.661	1.655	1.683	1.690	1.727	1.761	1.794	1.818	1.851	1.885	1.922	1.963	1.996	2.016	2.042	2.073	
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Steam Coal	2.534	2.571	2.574	2.704	2.806	2.882	2.954	3.023	3.028	3.019	3.026	3.032	3.039	3.044	3.050	3.054	3.056	3.062	3.066	3.069	3.073	3.076	
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Coal Subtotal	2.534	2.571	2.574	2.704	2.806	2.882	2.954	3.023	3.028	3.019	3.026	3.032	3.039	3.044	3.050	3.054	3.056	3.062	3.066	3.069	3.073	3.076	
Nuclear Power	0.482	0.487	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.482	0.481	0.385	0.385	0.385	0.385	0.385	0.385	0.385	
Renewable Energy 17/	0.346	0.330	0.372	0.387	0.394	0.400	0.403	0.408	0.410	0.413	0.418	0.423	0.426	0.431	0.437	0.440	0.444	0.447	0.451	0.454	0.458	0.461	
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
Electricity Imports 16/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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>7.680</b>	<b>7.690</b>	<b>7.867</b>	<b>8.160</b>	<b>8.336</b>	<b>8.475</b>	<b>8.601</b>	<b>8.716</b>	<b>8.798</b>	<b>8.864</b>	<b>8.958</b>	<b>9.061</b>	<b>9.147</b>	<b>9.223</b>	<b>9.261</b>	<b>9.286</b>	<b>9.360</b>	<b>9.444</b>	<b>9.522</b>	<b>9.587</b>	<b>9.672</b>	<b>9.744</b>	
<b>Energy Use &amp; Related Statistics</b>																							
Delivered Energy Use	5.494	5.487	5.628	5.807	5.905	5.994	6.089	6.154	6.237	6.325	6.419	6.519	6.601	6.675	6.749	6.823	6.898	6.968	7.042	7.114	7.179	7.249	
Total Energy Use	7.680	7.690	7.867	8.160	8.336	8.475	8.601	8.716	8.798	8.864	8.958	9.061	9.147	9.223	9.261	9.286	9.360	9.444	9.522	9.587	9.672	9.744	
Population (millions)	18.951	19.079	19.207	19.336	19.455	19.563	19.663	19.763	19.862	19.960	20.057	20.155	20.253	20.351	20.449	20.546	20.643	20.738	20.833	20.925	21.017	21.109	
US GDP (billion 1996 dollars)	9224	9319	9523	9826	10103	10418	10719	11046	11442	11867	12312	12777	13166	13560	13973	14399	14835	15287	15717	16138	16525	16926	
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.2	1662.2	1693.5	1724.4	1755.8	1780.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.8	2039.3	2064.3	2087.8	2110.4	

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes residential sector electricity generated by using wood and wood waste, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy; 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 cogeneration. Excludes net electricity imports.  
16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
17/ 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.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B: "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/sto/outlook00/bc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.





**Table 5. Energy Consumption by Sector and Source (3 of 3)**  
 (Quadrillion Btu per Year, Unless Otherwise Noted)  
 South Atlantic

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020-
<b>Total Energy Consumption</b>																						
Distillate Fuel	1,292	1,326	1,340	1,394	1,438	1,481	1,513	1,550	1,590	1,634	1,678	1,724	1,767	1,802	1,837	1,868	1,901	1,935	1,969	2,001	2,032	2.3%
Kerosene	0.043	0.043	0.042	0.040	0.039	0.038	0.038	0.037	0.037	0.037	0.036	0.036	0.036	0.036	0.036	0.035	0.035	0.035	0.035	0.035	0.035	-0.9%
Jet Fuel 1/	0.368	0.379	0.368	0.400	0.410	0.421	0.431	0.442	0.457	0.472	0.488	0.505	0.520	0.535	0.550	0.565	0.582	0.599	0.616	0.633	0.650	2.6%
Liquefied Petroleum Gas	0.145	0.134	0.138	0.139	0.139	0.139	0.140	0.141	0.142	0.143	0.144	0.145	0.145	0.145	0.144	0.144	0.144	0.144	0.144	0.144	0.145	0.0%
Motor Gasoline 2/	3,215	3,244	3,311	3,417	3,491	3,567	3,633	3,707	3,790	3,877	3,961	4,046	4,130	4,210	4,281	4,351	4,423	4,492	4,560	4,631	4,693	1.9%
Petrochemical Feedstocks	0.144	0.125	0.139	0.143	0.145	0.147	0.149	0.152	0.154	0.156	0.158	0.162	0.164	0.166	0.167	0.168	0.168	0.168	0.168	0.170	0.171	0.9%
Residual Fuel	0.559	0.585	0.335	0.332	0.341	0.344	0.338	0.324	0.326	0.323	0.322	0.326	0.329	0.331	0.334	0.337	0.337	0.339	0.341	0.343	0.348	-2.3%
Other Petroleum 12/	0.357	0.360	0.378	0.380	0.383	0.386	0.388	0.391	0.394	0.400	0.407	0.412	0.416	0.422	0.429	0.435	0.439	0.443	0.450	0.457	0.463	1.3%
Petroleum Subtotal	6,142	6,195	6,071	6,245	6,386	6,524	6,651	6,785	6,990	7,042	7,195	7,356	7,507	7,645	7,778	7,904	8,038	8,166	8,297	8,418	8,541	1.7%
Natural Gas	2,340	2,077	2,392	2,463	2,533	2,579	2,600	2,621	2,688	2,735	2,828	2,921	3,000	3,075	3,148	3,227	3,298	3,363	3,432	3,483	3,543	2.3%
Metallurgical Coal	0.071	0.065	0.066	0.065	0.064	0.064	0.063	0.062	0.061	0.060	0.059	0.058	0.057	0.056	0.055	0.054	0.053	0.052	0.051	0.050	0.049	-1.6%
Steam Coal	4,476	4,445	4,593	4,705	4,712	4,881	5,003	5,119	5,133	5,182	5,203	5,228	5,285	5,330	5,375	5,433	5,512	5,605	5,708	5,824	5,950	1.4%
Net Coal Coke Imports	0.006	0.004	0.006	0.007	0.008	0.009	0.010	0.011	0.012	0.013	0.015	0.016	0.017	0.018	0.019	0.020	0.020	0.021	0.022	0.023	0.024	7.1%
Coal Subtotal	4,553	4,514	4,684	4,777	4,785	4,933	5,076	5,192	5,207	5,256	5,277	5,302	5,359	5,403	5,449	5,506	5,586	5,678	5,782	5,897	6,024	1.4%
Nuclear Power	2,073	2,108	2,077	2,077	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	2,078	0.0%
Renewable Energy 17/	0.743	0.720	0.762	0.785	0.800	0.811	0.819	0.829	0.833	0.841	0.863	0.883	0.899	0.901	0.908	0.919	0.927	0.939	0.947	0.954	0.956	1.3%
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	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports 16/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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>15,752</b>	<b>15,614</b>	<b>15,966</b>	<b>16,349</b>	<b>16,581</b>	<b>16,926</b>	<b>17,205</b>	<b>17,466</b>	<b>17,699</b>	<b>17,953</b>	<b>18,242</b>	<b>18,540</b>	<b>18,834</b>	<b>19,104</b>	<b>19,362</b>	<b>19,634</b>	<b>19,919</b>	<b>20,215</b>	<b>20,526</b>	<b>20,842</b>	<b>21,152</b>	<b>1.5%</b>
<b>Energy Use &amp; Related Statistics</b>																						
Delivered Energy Use	10,856	10,770	11,072	11,414	11,668	11,909	12,133	12,377	12,624	12,878	13,141	13,431	13,695	13,944	14,184	14,426	14,674	14,909	15,154	15,399	15,638	1.8%
Total Energy Use	15,752	15,614	15,966	16,349	16,581	16,926	17,205	17,466	17,699	17,953	18,242	18,540	18,834	19,104	19,362	19,634	19,919	20,215	20,526	20,842	21,152	1.5%
Population (millions)	50,338	50,965	51,592	52,219	52,846	53,484	54,144	54,794	55,453	56,121	56,793	57,471	58,159	58,856	59,568	60,285	60,975	61,688	62,402	63,117	63,833	1.2%
US GDP (billion 1996 dollars)	9,224	9,319	9,523	9,826	10,103	10,418	10,719	11,046	11,442	11,867	12,312	12,777	13,166	13,560	13,973	14,399	14,835	15,287	15,717	16,138	16,525	3.0%
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1,561.7	1,560.8	1,583.9	1,631.2	1,662.2	1,693.5	1,724.4	1,755.8	1,789.9	1,806.5	1,834.7	1,865.1	1,892.0	1,917.9	1,941.0	1,965.4	1,990.6	2,015.8	2,039.3	2,064.3	2,087.8	1.5%

1/ Includes wood used for residential heating.  
 2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
 3/ Includes residential sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
 4/ Fuel consumption includes consumption for cogeneration.  
 5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
 6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
 7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
 8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
 9/ Includes only kerosene type.  
 10/ Includes aviation gas and lubricants.  
 11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
 12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy. 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 cogeneration. Excludes net electricity imports.  
 16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
 17/ 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.  
 NA = Not applicable.  
 Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
 Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99/1) (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/bc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d1020010.







**Table 6. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
East South Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020- 2020
<b>Total Energy Consumption</b>																						
Distillate Fuel	0.581	0.597	0.605	0.628	0.644	0.661	0.671	0.684	0.698	0.715	0.731	0.749	0.763	0.775	0.786	0.796	0.808	0.818	0.829	0.839	0.848	1.9%
Kerosene	0.011	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	0.012	0.012	0.012	0.012	0.012	0.2%
Jet Fuel 16	0.178	0.174	0.178	0.183	0.187	0.191	0.194	0.198	0.204	0.210	0.216	0.222	0.228	0.233	0.239	0.244	0.251	0.257	0.264	0.270	0.276	2.2%
Liquefied Petroleum Gas	0.093	0.087	0.090	0.091	0.093	0.094	0.095	0.096	0.098	0.099	0.101	0.102	0.103	0.104	0.105	0.105	0.106	0.106	0.108	0.111	0.113	1.0%
Motor Gasoline 2/	1.149	1.159	1.183	1.218	1.239	1.259	1.275	1.293	1.315	1.337	1.357	1.377	1.397	1.415	1.429	1.443	1.458	1.471	1.484	1.498	1.508	1.4%
Petrochemical Feedstocks	0.106	0.092	0.102	0.105	0.107	0.108	0.110	0.111	0.113	0.115	0.116	0.119	0.120	0.122	0.123	0.123	0.124	0.125	0.126	0.126	0.127	0.9%
Residual Fuel	0.061	0.055	0.046	0.052	0.051	0.049	0.045	0.038	0.038	0.035	0.036	0.036	0.037	0.037	0.037	0.038	0.037	0.037	0.038	0.037	0.036	-2.6%
Other Petroleum 12/	0.305	0.309	0.320	0.321	0.324	0.330	0.334	0.343	0.348	0.352	0.360	0.366	0.367	0.371	0.376	0.380	0.382	0.384	0.389	0.393	0.397	1.3%
Petroleum Subtotal	2.484	2.484	2.536	2.608	2.656	2.703	2.736	2.777	2.822	2.873	2.928	2.983	3.027	3.088	3.108	3.142	3.177	3.211	3.246	3.287	3.317	15.2%
Natural Gas	1.371	1.263	1.397	1.443	1.498	1.532	1.621	1.785	1.903	2.057	2.168	2.283	2.398	2.508	2.648	2.773	2.875	2.951	3.045	3.108	3.154	4.3%
Metallurgical Coal	0.099	0.090	0.091	0.090	0.089	0.088	0.087	0.086	0.085	0.084	0.082	0.081	0.079	0.078	0.076	0.075	0.074	0.072	0.071	0.070	0.068	-1.8%
Steam Coal	2.752	2.738	2.732	2.803	2.850	2.895	2.958	2.999	3.000	3.003	2.985	2.991	2.989	3.002	2.982	2.962	2.980	2.982	2.948	2.949	2.951	0.3%
Net Coal Coke Imports	0.008	0.006	0.008	0.010	0.011	0.013	0.014	0.016	0.017	0.019	0.020	0.022	0.023	0.025	0.026	0.027	0.028	0.030	0.031	0.032	0.033	7.1%
Coal Subtotal	2.860	2.834	2.831	2.904	2.961	2.996	3.060	3.101	3.103	3.088	3.094	3.092	3.092	3.105	3.084	3.062	3.064	3.052	3.064	3.051	3.052	0.3%
Nuclear Power	0.702	0.710	0.705	0.706	0.706	0.706	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.707	0.0%
Renewable Energy 17/	0.483	0.449	0.502	0.520	0.528	0.535	0.539	0.545	0.547	0.551	0.572	0.577	0.586	0.593	0.590	0.597	0.597	0.597	0.593	0.603	0.608	1.2%
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	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports 16/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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>7.899</b>	<b>7.741</b>	<b>7.971</b>	<b>8.181</b>	<b>8.339</b>	<b>8.474</b>	<b>8.663</b>	<b>8.911</b>	<b>9.081</b>	<b>9.293</b>	<b>9.464</b>	<b>9.644</b>	<b>9.810</b>	<b>9.972</b>	<b>10.118</b>	<b>10.284</b>	<b>10.428</b>	<b>10.546</b>	<b>10.649</b>	<b>10.756</b>	<b>10.849</b>	<b>1.6%</b>
<b>Energy Use &amp; Related Statistics</b>																						
Delivered Energy Use	5.318	5.211	5.387	5.507	5.602	5.692	5.776	5.873	5.958	6.053	6.152	6.265	6.358	6.441	6.521	6.604	6.686	6.760	6.837	6.912	6.983	1.4%
Total Energy Use	7.899	7.741	7.971	8.181	8.339	8.474	8.663	8.911	9.081	9.293	9.464	9.644	9.810	9.972	10.118	10.284	10.428	10.546	10.649	10.756	10.849	1.6%
Population (millions)	16.732	16.857	16.981	17.104	17.212	17.303	17.382	17.480	17.567	17.653	17.739	17.824	17.909	17.996	18.082	18.168	18.255	18.341	18.428	18.514	18.600	0.5%
US GDP (billion 1996 dollars)	9224	9319	9523	9826	10103	10418	10719	11046	11442	11867	12312	12777	13166	13560	13973	14399	14835	15287	15717	16138	16525	3.0%
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.2	1662.2	1693.5	1724.4	1755.8	1780.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.8	2039.3	2064.3	2087.8	1.5%

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes commercial sector electricity generated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes consumption for cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy, 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 cogeneration. Excludes net electricity imports.  
16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
17/ 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.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B: "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/oc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.





**Table 7. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
West South Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Total Energy Consumption</b>																							
Distillate Fuel	1,099	1,129	1,145	1,191	1,229	1,267	1,294	1,324	1,358	1,396	1,434	1,476	1,510	1,541	1,569	1,593	1,619	1,645	1,671	1,696	1,719	2.3%	
Kerosene	0.010	0.011	0.011	0.011	0.011	0.011	0.011	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	0.012	0.012	0.0%
Jet Fuel 1 <sup>1</sup>	0.860	0.859	0.850	0.910	0.934	0.961	0.966	1,011	1,046	1,083	1,121	1,162	1,198	1,234	1,270	1,306	1,346	1,380	1,408	1,466	1,504	2.7%	
Liquefied Petroleum Gas	1,963	1,847	1,970	2,014	2,041	2,085	2,090	2,103	2,122	2,156	2,179	2,232	2,261	2,285	2,313	2,316	2,333	2,343	2,375	2,416	2,445	1.1%	
Motor Gasoline 2/	1,960	1,977	2,018	2,084	2,130	2,176	2,216	2,261	2,311	2,363	2,413	2,463	2,512	2,558	2,598	2,638	2,678	2,717	2,755	2,794	2,827	1.6%	
Petrochemical Feedstocks	0.610	0.531	0.588	0.605	0.615	0.624	0.632	0.643	0.652	0.662	0.669	0.685	0.695	0.702	0.708	0.712	0.717	0.719	0.724	0.729	0.735	0.9%	
Residual Fuel	0.433	0.479	0.409	0.398	0.400	0.402	0.404	0.405	0.407	0.410	0.413	0.414	0.414	0.416	0.418	0.420	0.422	0.423	0.424	0.426	0.428	-0.1%	
Other Petroleum 12/	1,157	1,159	1,197	1,237	1,257	1,299	1,337	1,414	1,434	1,485	1,515	1,557	1,552	1,560	1,571	1,575	1,582	1,596	1,592	1,604	1,612	1.7%	
Petroleum Subtotal	6,132	7,392	6,218	6,450	6,616	6,806	6,961	6,973	6,340	6,543	6,754	7,000	7,154	7,307	7,458	7,608	7,758	7,908	8,058	8,208	8,358	1.7%	
Natural Gas	6,246	5,953	6,474	6,703	6,746	6,802	6,884	6,903	6,892	7,064	7,210	7,380	7,510	7,616	7,702	7,824	7,916	7,976	8,033	8,050	8,104	1.3%	
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	0.000	0.000	0.000	0.000	0.000	0.000	N/A	
Steam Coal	2,459	2,450	2,424	2,466	2,506	2,533	2,560	2,548	2,512	2,510	2,506	2,507	2,507	2,508	2,511	2,507	2,513	2,514	2,513	2,514	2,515	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A	
Coal Subtotal	2,459	2,450	2,424	2,466	2,506	2,533	2,560	2,548	2,512	2,510	2,506	2,507	2,507	2,508	2,511	2,507	2,513	2,514	2,513	2,514	2,515	0.1%	
Nuclear Power	0.730	0.753	0.771	0.745	0.744	0.745	0.746	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.747	0.1%	
Renewable Energy 17/	0.335	0.355	0.394	0.409	0.420	0.433	0.442	0.453	0.458	0.472	0.482	0.493	0.502	0.512	0.515	0.529	0.532	0.541	0.550	0.558	0.566	2.7%	
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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	N/A	
Electricity Imports 16/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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>17,903</b>	<b>17,504</b>	<b>18,282</b>	<b>18,772</b>	<b>19,035</b>	<b>19,319</b>	<b>19,593</b>	<b>19,824</b>	<b>20,041</b>	<b>20,337</b>	<b>20,700</b>	<b>21,128</b>	<b>21,421</b>	<b>21,694</b>	<b>21,934</b>	<b>22,180</b>	<b>22,417</b>	<b>22,609</b>	<b>22,822</b>	<b>23,013</b>	<b>23,215</b>	<b>1.3%</b>	
<b>Energy Use &amp; Related Statistics</b>																							
Delivered Energy Use	14,811	14,325	15,005	15,423	15,698	15,985	16,285	16,624	16,881	17,195	17,528	17,910	18,173	18,409	18,638	18,865	19,089	19,280	19,482	19,674	19,871	1.5%	
Total Energy Use	17,903	17,503	18,282	18,772	19,035	19,319	19,593	19,824	20,041	20,337	20,700	21,128	21,421	21,694	21,934	22,180	22,417	22,609	22,822	23,013	23,215	1.3%	
Population (millions)	30,767	31,130	31,495	31,859	32,223	32,603	32,976	33,349	33,726	34,109	34,493	34,879	35,265	35,652	36,039	36,427	36,816	37,205	37,593	37,979	38,363	1.1%	
US GDP (billion 1996 dollars)	9,224	9,319	9,523	9,826	10,103	10,418	10,719	11,046	11,442	11,867	12,312	12,777	13,166	13,573	14,009	14,465	14,933	15,415	15,911	16,421	16,954	3.0%	
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1,561.7	1,560.8	1,583.9	1,631.2	1,662.2	1,693.5	1,724.4	1,755.8	1,780.9	1,806.5	1,834.7	1,865.1	1,892.0	1,917.9	1,941.0	1,965.4	1,990.6	2,015.8	2,039.3	2,064.3	2,087.8	1.5%	

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes commercial sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes consumption for cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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.  
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Btu = British thermal unit.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B: "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/oc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102010b.





**Table 8. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
Mountain**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Total Energy Consumption</b>																						
Distillate Fuel	0.597	0.620	0.624	0.652	0.677	0.704	0.724	0.747	0.772	0.799	0.828	0.858	0.883	0.908	0.931	0.954	0.977	1.000	1.025	1.049	1.071	3.0%
Kerosene	0.003	0.003	0.003	0.003	0.003	0.003	0.003	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	0.005	2.3%
Jet Fuel 16	0.223	0.216	0.222	0.230	0.237	0.245	0.252	0.260	0.270	0.280	0.292	0.303	0.314	0.324	0.335	0.346	0.359	0.371	0.384	0.396	0.409	3.1%
Liquefied Petroleum Gas	0.043	0.041	0.043	0.043	0.044	0.045	0.046	0.046	0.047	0.048	0.049	0.050	0.051	0.051	0.053	0.053	0.053	0.054	0.056	0.056	0.059	1.6%
Motor Gasoline 2/	1.064	1.093	1.116	1.163	1.199	1.235	1.269	1.305	1.345	1.386	1.427	1.469	1.510	1.550	1.587	1.624	1.662	1.700	1.737	1.776	1.812	2.6%
Petrochemical Feedstocks	0.019	0.017	0.019	0.019	0.020	0.020	0.020	0.021	0.021	0.021	0.022	0.022	0.023	0.023	0.023	0.023	0.023	0.023	0.023	0.024	0.024	1.0%
Residual Fuel	0.042	0.044	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.002	0.003	0.003	0.003	0.003	0.003	0.003	0.003	-12.8%
Other Petroleum 12/	0.219	0.224	0.228	0.213	0.217	0.223	0.228	0.235	0.239	0.244	0.251	0.255	0.257	0.261	0.266	0.270	0.274	0.277	0.282	0.287	0.292	1.4%
Petroleum Subtotal	2.228	2.259	2.262	2.325	2.389	2.477	2.544	2.619	2.698	2.786	2.874	2.963	3.043	3.124	3.201	3.277	3.354	3.432	3.513	3.597	3.673	2.5%
Natural Gas	3.332	3.444	3.393	3.471	3.511	3.511	3.530	3.538	3.504	3.504	3.546	3.608	3.627	3.645	3.676	3.691	3.718	3.748	3.781	3.801	3.831	1.6%
Metallurgical Coal	0.020	0.019	0.019	0.019	0.018	0.018	0.018	0.018	0.018	0.017	0.017	0.017	0.016	0.016	0.016	0.016	0.015	0.015	0.015	0.014	0.014	-1.8%
Steam Coal	2.401	2.380	2.345	2.387	2.422	2.513	2.589	2.652	2.735	2.789	2.839	2.866	2.940	2.993	3.071	3.182	3.287	3.405	3.533	3.658	3.769	2.3%
Net Coal Coke Imports	0.003	0.002	0.003	0.003	0.004	0.004	0.005	0.005	0.006	0.006	0.007	0.007	0.008	0.008	0.009	0.009	0.009	0.010	0.010	0.011	0.011	7.5%
Coal Subtotal	2.424	2.400	2.366	2.409	2.444	2.536	2.612	2.675	2.758	2.812	2.863	2.891	2.964	3.018	3.095	3.206	3.311	3.430	3.558	3.683	3.794	2.3%
Nuclear Power	0.334	0.338	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	0.334	0.334	0.334	0.334	0.334	0.334	N/A
Renewable Energy 17/	0.554	0.498	0.586	0.815	0.624	0.636	0.644	0.657	0.664	0.677	0.686	0.701	0.710	0.724	0.734	0.741	0.745	0.748	0.752	0.758	0.763	1.6%
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	0.000	0.000	0.000	0.000	0.000	0.000	N/A
Electricity Imports 16/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.7%
<b>Total</b>	<b>6.873</b>	<b>6.939</b>	<b>6.948</b>	<b>7.156</b>	<b>7.313</b>	<b>7.495</b>	<b>7.665</b>	<b>7.826</b>	<b>7.961</b>	<b>8.124</b>	<b>8.304</b>	<b>8.497</b>	<b>8.679</b>	<b>8.845</b>	<b>9.042</b>	<b>9.250</b>	<b>9.463</b>	<b>9.694</b>	<b>9.940</b>	<b>10.173</b>	<b>10.396</b>	<b>2.1%</b>
<b>Energy Use &amp; Related Statistics</b>																						
Delivered Energy Use	4.332	4.423	4.493	4.643	4.787	4.882	5.005	5.132	5.269	5.412	5.567	5.727	5.867	6.001	6.130	6.270	6.409	6.548	6.695	6.835	6.975	2.4%
Total Energy Use	6.873	6.939	6.948	7.156	7.313	7.495	7.665	7.826	7.961	8.124	8.304	8.497	8.679	8.845	9.042	9.250	9.463	9.694	9.940	10.173	10.396	2.1%
Population (millions)	17.521	17.870	18.226	18.588	18.954	19.326	19.701	20.082	20.471	20.867	21.270	21.678	22.093	22.515	22.942	23.375	23.814	24.258	24.706	25.159	25.616	1.9%
US GDP (billion 1996 dollars)	9224	9319	9523	9826	10103	10418	10719	11046	11442	11867	12312	12777	13166	13560	13973	14399	14835	15287	15717	16138	16525	3.0%
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.2	1662.2	1693.5	1724.4	1755.8	1780.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.8	2039.3	2064.3	2087.8	1.5%

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes conventional sector electricity cogenerated by using wood and wood waste, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes consumption for cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy, 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 cogeneration. Excludes net electricity imports.  
16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
17/ 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.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B: "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/bc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.







**Table 9. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
Pacific**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020- 2020	
<b>Total Energy Consumption</b>																							
Distillate Fuel	0.742	0.780	0.777	0.806	0.832	0.856	0.874	0.894	0.916	0.940	0.966	0.993	1.015	1.037	1.059	1.074	1.094	1.104	1.123	1.161	1.162	2.3%	
Kerosene	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	0.007	0.008	0.008	0.008	0.008	0.008	0.6%	
Jet Fuel 16	0.940	0.918	0.941	0.971	0.995	1.022	1.047	1.072	1.105	1.141	1.179	1.218	1.252	1.285	1.320	1.355	1.393	1.432	1.470	1.509	1.544	2.5%	
Liquefied Petroleum Gas	0.071	0.068	0.070	0.108	0.113	0.117	0.105	0.112	0.108	0.105	0.110	0.117	0.113	0.122	0.130	0.134	0.128	0.121	0.108	0.108	0.109	2.2%	
Motor Gasoline 2/	2.395	2.417	2.467	2.544	2.597	2.651	2.698	2.750	2.809	2.870	2.929	2.988	3.045	3.100	3.148	3.195	3.243	3.289	3.334	3.381	3.422	1.8%	
Petrochemical Feedstocks	0.013	0.011	0.013	0.013	0.013	0.014	0.014	0.014	0.014	0.015	0.015	0.015	0.015	0.015	0.016	0.016	0.016	0.016	0.016	0.016	0.016	1.0%	
Residual Fuel	0.421	0.383	0.381	0.380	0.383	0.385	0.389	0.382	0.384	0.383	0.384	0.385	0.386	0.418	0.420	0.421	0.422	0.423	0.424	0.425	0.427	0.1%	
Other Petroleum 12/	0.706	0.721	0.734	0.761	0.758	0.753	0.772	0.754	0.762	0.764	0.778	0.788	0.787	0.794	0.801	0.808	0.812	0.819	0.826	0.833	0.841	0.9%	
Petroleum Subtotal	5.290	5.306	5.389	5.592	5.698	5.804	5.905	5.995	6.104	6.225	6.367	6.511	6.622	6.778	6.901	7.010	7.116	7.212	7.311	7.406	7.531	1.6%	
Natural Gas	3.513	3.692	3.570	3.656	3.814	3.950	4.090	4.191	4.338	4.459	4.524	4.642	4.779	4.850	4.932	5.002	5.083	5.170	5.275	5.337	5.427	2.2%	
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	0.000	0.000	0.000	0.000	0.000	0.000	NA	
Steam Coal	0.241	0.257	0.247	0.245	0.249	0.252	0.255	0.258	0.259	0.261	0.261	0.263	0.264	0.265	0.266	0.267	0.268	0.270	0.271	0.273	0.274	0.7%	
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	0.000	0.000	0.000	0.000	0.000	0.000	NA	
Coal Subtotal	0.241	0.257	0.247	0.245	0.249	0.252	0.255	0.258	0.259	0.261	0.261	0.263	0.264	0.265	0.266	0.267	0.268	0.270	0.271	0.273	0.274	0.7%	
Nuclear Power	0.449	0.455	0.468	0.455	0.456	0.456	0.457	0.459	0.459	0.459	0.460	0.461	0.462	0.462	0.463	0.463	0.463	0.463	0.463	0.463	0.463	0.463	0.2%
Renewable Energy 17/	2.479	2.201	2.012	2.741	2.773	2.809	2.860	2.871	2.897	2.942	2.979	3.018	3.081	3.142	3.197	3.245	3.294	3.341	3.388	3.441	3.491	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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NA	
Electricity Imports 16/	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	NA	
<b>Total</b>	<b>11.977</b>	<b>11.912</b>	<b>12.287</b>	<b>12.700</b>	<b>12.990</b>	<b>13.223</b>	<b>13.559</b>	<b>13.764</b>	<b>14.057</b>	<b>14.317</b>	<b>14.591</b>	<b>14.896</b>	<b>15.202</b>	<b>15.499</b>	<b>15.760</b>	<b>15.989</b>	<b>16.226</b>	<b>16.456</b>	<b>16.709</b>	<b>16.950</b>	<b>17.188</b>	<b>1.8%</b>	
<b>Energy Use &amp; Related Statistics</b>																							
Delivered Energy Use	9.849	9.827	10.061	10.338	10.567	10.771	10.991	11.186	11.394	11.612	11.842	12.078	12.297	12.501	12.700	12.893	13.100	13.302	13.517	13.721	13.913	1.7%	
Total Energy Use	11.955	11.889	12.266	12.671	12.962	13.191	13.532	13.740	14.035	14.295	14.569	14.873	15.179	15.475	15.736	15.963	16.200	16.431	16.683	16.925	17.162	1.8%	
Population (millions)	44.651	45.175	45.693	46.215	46.741	47.271	47.799	48.328	48.862	49.402	49.943	50.487	51.036	51.590	52.147	52.707	53.267	53.829	54.392	54.954	55.515	1.1%	
US GDP (billion 1996 dollars)	9224	9319	9523	9826	10103	10418	10719	11046	11442	11867	12312	12777	13166	13560	13973	14399	14835	15287	15717	16138	16525	3.0%	
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.3	1662.2	1693.5	1724.4	1755.8	1780.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.8	2039.3	2064.3	2087.8	1.5%	

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes commercial sector electricity generated by using wood and wood waste, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes consumption for cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy, 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 cogeneration. Excludes net electricity imports.  
16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
17/ 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.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports. Consumption values of 0.000 are values that round to 0.00, because they are less than 0.005.  
Sources: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860B: "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/bc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.





**Table 10. Energy Consumption by Sector and Source (3 of 3)  
(Quadrillion Btu per Year, Unless Otherwise Noted)  
United States**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020- 2020
<b>Total Energy Consumption</b>																						
Distillate Fuel	7.80	8.07	8.13	8.41	8.63	8.84	8.98	9.15	9.34	9.54	9.75	9.98	10.16	10.33	10.48	10.61	10.75	10.89	11.04	11.20	11.31	1.9%
Kerosene	0.14	0.14	0.14	0.14	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.12	0.12	0.12	0.12	0.12	0.12	0.12	-0.6%
Jet Fuel 1/	3.59	3.49	3.58	3.69	3.78	3.88	3.96	4.06	4.16	4.32	4.46	4.60	4.73	4.88	4.99	5.12	5.26	5.40	5.55	5.69	5.82	2.5%
Liquefied Petroleum Gas	2.93	2.73	2.89	2.98	3.02	3.05	3.06	3.12	3.14	3.19	3.23	3.30	3.33	3.36	3.40	3.41	3.42	3.42	3.46	3.52	3.56	1.0%
Motor Gasoline 2/	16.29	16.43	16.78	17.27	17.60	17.83	18.21	18.52	18.87	19.24	19.59	19.94	20.28	20.60	20.87	21.14	21.41	21.67	21.93	22.19	22.42	1.6%
Petrochemical Feedstocks	1.32	1.15	1.28	1.31	1.34	1.36	1.37	1.40	1.42	1.44	1.45	1.49	1.51	1.52	1.54	1.54	1.55	1.56	1.57	1.58	1.59	0.9%
Residual Fuel	2.40	2.31	1.83	1.61	1.65	1.63	1.62	1.58	1.58	1.59	1.59	1.59	1.59	1.65	1.66	1.67	1.68	1.68	1.69	1.70	1.72	-1.6%
Other Petroleum 12/	4.16	4.19	4.34	4.48	4.52	4.59	4.67	4.78	4.83	4.90	5.01	5.11	5.11	5.16	5.20	5.25	5.27	5.30	5.35	5.40	5.44	1.4%
Petroleum Subtotal	30.63	30.53	30.76	30.89	30.99	31.06	31.40	31.73	32.02	32.33	32.63	32.93	33.23	33.53	33.83	34.13	34.43	34.73	35.03	35.33	35.63	1.5%
Natural Gas	23.63	22.81	24.51	25.37	25.96	26.16	26.67	27.15	27.66	28.17	28.65	29.07	29.54	30.02	30.52	31.02	31.52	32.02	32.52	33.02	33.52	2.0%
Metallurgical Coal	0.77	0.71	0.72	0.71	0.70	0.69	0.68	0.68	0.67	0.66	0.64	0.63	0.62	0.61	0.60	0.59	0.58	0.57	0.56	0.55	0.54	-1.8%
Steam Coal	21.50	21.62	21.65	22.31	22.71	23.27	23.77	24.27	24.40	24.55	24.66	24.77	24.95	25.11	25.24	25.43	25.68	25.93	26.10	26.37	26.65	1.1%
Net Coal Coke Imports	0.06	0.05	0.05	0.05	0.07	0.07	0.08	0.09	0.09	0.10	0.11	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.16	0.16	4.6%
Coal Subtotal	22.34	22.37	22.41	23.08	23.48	24.03	24.53	25.03	25.16	25.30	25.41	25.52	25.69	25.85	25.97	26.16	26.39	26.65	26.81	27.08	27.35	1.0%
Nuclear Power	8.03	8.15	8.13	8.08	8.09	8.10	8.11	7.92	7.90	7.91	7.87	7.81	7.75	7.71	7.68	7.55	7.55	7.49	7.49	7.49	7.49	-0.3%
Renewable Energy 17/	6.48	6.06	6.84	7.13	7.25	7.37	7.49	7.57	7.64	7.75	7.90	8.01	8.14	8.25	8.35	8.48	8.55	8.65	8.74	8.84	8.94	1.6%
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	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Electricity Imports 16/	0.38	0.38	0.36	0.49	0.48	0.54	0.45	0.41	0.38	0.37	0.38	0.40	0.41	0.42	0.41	0.45	0.45	0.44	0.44	0.43	0.44	0.7%
<b>Total</b>	<b>99.29</b>	<b>98.30</b>	<b>101.01</b>	<b>104.05</b>	<b>105.82</b>	<b>107.61</b>	<b>109.28</b>	<b>110.78</b>	<b>112.23</b>	<b>113.83</b>	<b>115.61</b>	<b>117.55</b>	<b>119.18</b>	<b>120.75</b>	<b>122.19</b>	<b>123.64</b>	<b>125.11</b>	<b>126.51</b>	<b>127.98</b>	<b>129.44</b>	<b>130.85</b>	<b>1.4%</b>
<b>Energy Use &amp; Related Statistics</b>																						
Delivered Energy Use	74.06	73.14	75.47	77.66	79.08	80.38	81.67	83.03	84.31	85.69	87.15	88.75	90.07	91.28	92.44	93.60	94.79	95.99	97.06	98.21	99.31	1.5%
Total Energy Use	99.29	98.30	101.01	104.05	105.82	107.61	109.28	110.78	112.23	113.83	115.61	117.55	119.18	120.75	122.19	123.64	125.11	126.51	127.98	129.44	130.85	1.4%
Population (millions)	275.69	278.18	280.68	283.17	285.64	288.09	290.53	292.96	295.38	297.81	300.24	302.68	305.15	307.64	310.14	312.66	315.19	317.72	320.26	322.79	325.33	0.8%
US GDP (billion 1996 dollars)	9224	9319	9523	9826	10103	10418	10719	11046	11442	11867	12312	12777	13166	13560	13973	14399	14835	15287	15717	16138	16525	3.0%
Carbon Dioxide Emissions (million metric tons carbon equivalent)	1561.7	1560.8	1583.9	1631.2	1662.2	1693.5	1724.4	1755.8	1789.9	1806.5	1834.7	1865.1	1892.0	1917.9	1941.0	1965.4	1990.6	2015.8	2039.3	2064.3	2087.8	1.5%

1/ Includes wood used for residential heating.  
2/ Includes ethanol blends of 10 percent or less and others blended into gasoline.  
3/ Includes conventional sector electricity cogenerated by using wood and wood waste, landfill gas, municipal solid waste, and other biomass. See Table A18 for estimates of nonmarketed renewable energy consumption for solar thermal hot water heating and solar photovoltaic electricity generation.  
4/ Fuel consumption includes consumption for cogeneration.  
5/ Includes petroleum coke, asphalt, road oil, lubricants, still gas, and miscellaneous petroleum products.  
6/ Includes lease and plant fuel and consumption by cogenerators; excludes consumption by nonutility generators.  
7/ Includes consumption of energy from hydroelectric, wood and wood waste, municipal solid waste, and other biomass; includes cogeneration, both for sale to the grid and for own use.  
8/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur.  
9/ Includes only kerosene type.  
10/ Includes aviation gas and lubricants.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes unfinished oils, natural gasoline, motor gasoline blending compounds, 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 all electric power generators for grid-connected power except cogenerators, which produce electricity and other useful thermal energy, 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 cogeneration. Excludes net electricity imports.  
16/ In 1999 approximately 70 percent of the U.S. electricity imports were provided by renewable sources (hydroelectricity). EIA does not project future proportions for the fuel source of imported electricity.  
17/ 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.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2000 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: 2000 electric utility fuel consumption: EIA, Electric Power Annual 1999, Volume 1, DOE/EIA-0348(99)/1 (Washington, DC, August 2000). 2000 nonutility consumption estimates: EIA, Form EIA-860E "Annual Electric Generator Report - Nonutility." Other 2000 values: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/ste/outlook/bc01.pdf>. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 11. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 13/																						
Petroleum Products 2/	9.88	9.72	9.49	9.18	9.12	9.16	9.24	9.33	9.37	9.43	9.49	9.53	9.52	9.54	9.59	9.59	9.59	9.55	9.54	9.54	9.54	-0.2%
Distillate Fuel	9.53	8.99	8.46	7.92	7.86	7.89	7.98	8.10	8.18	8.33	8.47	8.51	8.51	8.66	8.79	8.82	8.84	8.77	8.77	8.79	8.79	-0.4%
Jet Fuel	7.82	6.26	6.03	6.04	6.06	6.09	6.06	6.11	6.12	6.29	6.38	6.46	6.45	6.55	6.64	6.68	6.67	6.64	6.64	6.64	6.64	-0.8%
Liquefied Petroleum Gas	15.36	14.76	14.48	15.52	15.69	15.58	15.60	15.62	15.64	15.66	15.78	15.78	15.87	15.79	15.80	15.75	15.69	15.64	15.65	15.66	15.68	0.1%
Motor Gasoline 8/	13.01	12.93	11.74	11.61	11.61	11.62	11.67	11.66	11.66	11.66	11.65	11.65	11.63	11.62	11.62	11.60	11.59	11.57	11.57	11.57	11.56	-0.6%
Residual Fuel	3.59	3.66	3.37	3.27	3.33	3.33	3.36	3.37	3.39	3.41	3.43	3.45	3.47	3.50	3.52	3.54	3.56	3.58	3.61	3.63	3.65	0.1%
Natural Gas	6.65	7.41	4.90	5.24	5.45	5.52	5.52	5.50	5.48	5.46	5.43	5.43	5.41	5.39	5.39	5.42	5.44	5.46	5.49	5.52	5.58	-0.9%
Coal	1.71	1.75	1.66	1.69	1.67	1.62	1.59	1.57	1.58	1.55	1.55	1.59	1.57	1.55	1.54	1.52	1.51	1.49	1.47	1.46	1.45	-0.8%
Ethanol (E85) 11/	17.33	17.33	17.33	20.61	21.35	20.94	21.23	21.22	21.22	21.72	22.23	22.33	23.16	23.84	23.31	23.36	23.42	22.85	22.95	23.05	23.16	1.5%
Electricity	26.25	30.07	27.88	26.20	25.96	25.24	24.63	24.04	23.56	23.84	23.65	23.77	23.84	24.19	24.23	24.26	24.55	24.69	24.95	25.17	25.26	-0.7%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	9.75	10.39	9.55	9.36	9.48	9.45	9.38	9.31	9.32	9.38	9.42	9.50	9.58	9.69	9.78	9.84	9.95	9.99	10.09	10.18	10.27	0.3%
Commercial	5.75	6.10	5.40	5.32	5.44	5.43	5.43	5.43	5.45	5.55	5.63	5.73	5.82	5.98	6.07	6.17	6.25	6.38	6.51	6.64	6.75	0.8%
Industrial	4.26	4.08	3.53	3.54	3.62	3.63	3.63	3.64	3.64	3.64	3.71	3.79	3.88	3.93	4.03	4.09	4.15	4.22	4.27	4.35	4.43	0.1%
Transportation	12.70	12.60	11.79	11.85	12.05	12.19	12.53	12.79	13.03	13.29	13.55	13.79	13.95	14.14	14.29	14.42	14.55	14.62	14.73	14.87	14.96	0.8%
Total Non-Renewable Expenditures	32.56	33.17	30.26	30.07	30.60	30.70	30.98	31.18	31.43	31.93	32.39	32.89	33.28	33.84	34.23	34.58	34.99	35.26	35.69	36.12	36.47	0.6%
Transportation Renewable Expenditures	0.02	0.02	0.02	0.02	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	0.05	0.05	0.05	0.05	6.2%
Total Expenditures	32.57	33.19	30.28	30.09	30.63	30.73	31.01	31.21	31.46	31.96	32.43	32.93	33.32	33.88	34.28	34.62	35.04	35.31	35.73	36.17	36.52	0.6%

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/ Excludes independent power producers.  
4/ Includes cogenerators.  
5/ Excludes used for lease and plant fuel.  
6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.  
7/ Kerosene-type jet fuel. Price 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. Price includes estimated motor vehicle fuel taxes.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.  
13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.  
14/ British thermal unit.  
Note: Data for 2000 are model results and may differ slightly from official EIA data reports.  
Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000, <http://www.eia.doe.gov/pub/annual/pma/pma00/pma00main.pdf> (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001c.





**Table 12. Energy Prices by Sector and Source (1 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**Middle Atlantic**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 13/																						
Petroleum Products 2/	9.66	9.29	8.71	8.72	8.74	8.76	8.89	8.98	9.01	9.09	9.17	9.20	9.19	9.23	9.27	9.26	9.26	9.19	9.20	9.19	9.16	-0.3%
Distillate Fuel	10.10	9.45	8.89	8.42	8.44	8.48	8.62	8.84	8.94	9.07	9.23	9.27	9.24	9.36	9.42	9.46	9.48	9.34	9.32	9.34	9.33	-0.4%
Jet Fuel	7.44	5.93	6.68	5.96	5.98	5.91	5.98	5.62	5.64	5.81	5.93	6.03	6.04	6.16	6.27	6.33	6.32	6.31	6.32	6.33	6.35	-0.8%
Liquefied Petroleum Gas	14.61	13.44	13.13	14.12	14.28	14.15	14.05	13.63	13.55	13.48	13.49	13.46	13.55	13.46	13.47	13.41	13.35	13.29	13.23	13.22	13.25	-0.5%
Motor Gasoline 8/	12.14	12.18	11.01	11.16	11.15	11.13	11.31	11.29	11.30	11.30	11.30	11.30	11.27	11.26	11.26	11.21	11.19	11.17	11.17	11.16	11.15	-0.4%
Residual Fuel	3.91	3.82	3.50	3.72	3.75	3.77	3.78	3.80	3.82	3.84	3.86	3.86	3.88	3.91	3.93	3.95	3.97	3.99	4.01	4.04	4.07	0.2%
Natural Gas	6.70	7.64	5.10	5.30	5.46	5.49	5.49	5.48	5.50	5.47	5.45	5.45	5.45	5.47	5.48	5.50	5.52	5.54	5.57	5.59	5.63	-0.8%
Coal	1.32	1.34	1.30	1.30	1.31	1.31	1.31	1.30	1.30	1.29	1.28	1.29	1.28	1.27	1.26	1.25	1.25	1.24	1.23	1.22	1.21	-0.4%
Ethanol (E85) 11/	17.33	17.33	17.33	18.64	20.39	19.87	20.27	20.26	20.76	21.27	21.36	22.29	22.67	22.34	22.40	22.46	21.88	21.98	22.09	22.19	22.19	1.2%
Electricity	26.73	26.94	23.45	23.37	23.43	22.97	22.43	22.28	22.12	22.13	22.56	22.84	23.01	23.98	23.05	23.24	23.46	23.69	23.92	24.01	24.22	-0.5%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	24.08	25.44	22.29	22.65	23.04	22.92	22.71	22.65	22.71	22.75	22.96	23.17	23.36	23.43	23.57	23.75	23.98	24.08	24.27	24.47	24.75	0.1%
Commercial	17.89	18.48	15.92	16.40	16.82	16.78	16.70	16.83	16.93	17.16	17.68	18.14	18.51	18.82	19.05	19.36	19.62	19.81	20.07	20.29	20.52	0.7%
Industrial	12.40	10.91	9.37	9.91	10.29	10.46	10.50	10.79	10.97	11.20	11.62	11.98	12.19	12.42	12.61	12.92	13.01	13.14	13.43	13.64	13.83	0.5%
Transportation	31.19	30.69	28.67	29.41	29.86	30.30	31.15	31.80	32.36	33.03	33.67	34.24	34.56	35.02	35.35	35.59	35.86	35.91	36.14	36.42	36.60	0.8%
Total Non-Renewable Expenditures	85.56	85.52	76.25	78.37	80.01	80.45	81.06	82.07	82.97	84.14	85.93	87.50	88.61	89.70	90.58	91.51	92.47	92.95	93.91	94.82	95.71	0.6%
Transportation Renewable Expenditures	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.08	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	5.7%
Total Expenditures	85.60	85.57	76.30	78.43	80.07	80.52	81.14	82.15	83.06	84.23	86.03	87.60	88.72	89.81	90.69	91.63	92.59	93.07	94.04	94.95	95.84	0.6%

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/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes used for lease and plant fuel.

6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ States 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. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ 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 2000 are model results and may differ slightly from official EIA data reports.

Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000.

[http://www.eia.doe.gov/pub/natural\\_gas/petroleum\\_data\\_publications/petroleum\\_marketing\\_annual/price/ptmra00.pdf](http://www.eia.doe.gov/pub/natural_gas/petroleum_data_publications/petroleum_marketing_annual/price/ptmra00.pdf) (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 13. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**East North Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 1/																						
Petroleum Products 2/	10.44	9.98	9.19	9.02	9.04	9.08	9.24	9.34	9.37	9.45	9.51	9.52	9.53	9.57	9.60	9.64	9.66	9.64	9.64	9.64	9.65	-0.4%
Distillate Fuel	10.07	9.57	9.02	8.53	8.59	8.56	8.73	8.51	9.22	9.22	9.47	9.51	9.45	9.54	9.53	9.59	9.61	9.61	9.64	9.59	9.60	-0.2%
Jet Fuel	7.12	6.71	6.46	6.32	6.40	6.39	6.33	6.51	6.56	6.74	6.83	6.93	6.99	6.11	6.20	6.36	6.38	6.39	6.39	6.40	6.41	-0.5%
Liquefied Petroleum Gas	12.46	11.33	11.08	11.26	11.44	11.36	11.38	11.42	11.45	11.48	11.64	11.67	11.88	11.86	11.88	11.90	12.03	12.06	12.10	12.14	12.17	-0.1%
Motor Gasoline 8/	12.50	12.17	11.00	10.81	10.79	10.88	11.12	11.10	11.09	11.12	11.12	11.12	11.12	11.12	11.12	11.12	11.13	11.13	11.13	11.13	11.13	-0.6%
Residual Fuel	3.32	3.77	3.40	3.41	3.41	3.42	3.41	3.43	3.45	3.47	3.49	3.51	3.53	3.55	3.57	3.59	3.61	3.63	3.65	3.67	3.69	0.5%
Natural Gas	5.61	6.53	4.15	4.45	4.62	4.65	4.61	4.59	4.61	4.59	4.58	4.62	4.65	4.66	4.67	4.69	4.71	4.72	4.73	4.75	4.77	-0.8%
Coal	1.21	1.26	1.19	1.18	1.18	1.17	1.16	1.15	1.13	1.12	1.11	1.11	1.10	1.09	1.09	1.08	1.07	1.06	1.05	1.04	1.03	-0.8%
Ethanol (E85) 11/	17.33	17.33	17.33	17.62	18.35	17.83	16.21	16.19	16.18	16.87	16.17	16.26	20.09	20.16	20.22	20.29	20.35	19.77	19.95	19.96	20.06	0.7%
Electricity	16.37	17.91	17.23	17.25	17.25	17.10	17.03	16.85	16.85	16.92	16.76	16.98	17.11	17.15	17.13	17.07	17.16	17.30	17.54	17.53	17.62	-0.2%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	25.65	27.54	24.00	24.79	25.29	25.30	25.76	25.78	26.05	26.06	26.29	26.74	27.16	27.36	27.55	27.81	28.24	28.60	29.00	29.29	29.78	0.7%
Commercial	16.73	17.72	15.89	16.51	17.00	17.18	17.13	17.16	17.31	17.34	17.52	17.89	18.19	18.45	18.60	18.76	19.05	19.39	19.70	19.89	20.19	0.9%
Industrial	23.91	21.33	19.17	20.35	21.06	21.55	21.66	21.97	22.41	22.88	23.48	24.15	24.66	25.17	25.59	26.01	26.43	26.83	27.36	27.77	28.21	0.8%
Transportation	44.55	43.62	40.64	40.63	41.35	42.28	43.70	44.83	45.71	46.75	47.70	48.58	49.15	49.87	50.33	50.90	51.44	51.85	52.34	52.70	53.03	0.9%
Total Non-Renewable Expenditures	110.84	110.11	99.49	102.29	104.71	106.31	108.25	109.73	111.48	113.03	115.00	117.37	119.16	120.84	122.08	123.48	125.15	126.67	128.39	129.65	131.21	0.8%
Transportation Renewable Expenditures	0.05	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14	5.3%
Total Expenditures	110.89	110.17	99.55	102.34	104.77	106.38	108.33	109.82	111.57	113.13	115.10	117.48	119.28	120.96	122.20	123.60	125.28	126.80	128.52	129.79	131.35	0.9%

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/ Excludes independent power producers.  
4/ Includes cogenerators.  
5/ Excludes used for lease and plant fuel.  
6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.  
7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.  
8/ States 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. Price includes estimated motor vehicle fuel taxes.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.  
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 2000 are model results and may differ slightly from official EIA data reports.

Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000.  
[http://www.eia.doe.gov/pub/coal\\_gas/petroleum/data\\_publications/petroleum\\_marketing\\_annual/0200001.pdf](http://www.eia.doe.gov/pub/coal_gas/petroleum/data_publications/petroleum_marketing_annual/0200001.pdf) (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 14. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**West North Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 13/																						
Petroleum Products 2/	10.13	9.77	9.05	8.90	8.92	8.97	9.14	9.26	9.29	9.38	9.45	9.46	9.48	9.52	9.54	9.59	9.61	9.60	9.61	9.61	9.61	-0.3%
Distillate Fuel	9.70	9.23	8.73	8.21	8.27	8.25	8.40	8.77	8.87	8.99	9.15	9.18	9.12	9.21	9.29	9.31	9.30	9.34	9.30	9.30	9.37	-0.2%
Jet Fuel	7.27	6.13	5.89	5.79	5.87	5.86	5.90	5.98	6.03	6.22	6.30	6.38	6.42	6.52	6.60	6.74	6.76	6.78	6.76	6.76	6.78	-0.4%
Liquefied Petroleum Gas	9.84	8.94	8.69	8.68	8.67	8.77	8.90	8.84	8.87	8.91	9.05	9.07	9.28	9.34	9.27	9.38	9.41	9.45	9.48	9.52	9.56	-0.1%
Motor Gasoline 8/	12.05	11.90	10.72	10.60	10.58	10.71	10.98	10.95	10.94	10.98	10.98	10.99	10.99	10.99	10.99	10.99	11.00	11.00	11.00	11.01	11.01	-0.5%
Residual Fuel	3.28	3.27	3.06	3.01	3.02	3.03	3.07	3.12	3.15	3.17	3.20	3.21	3.22	3.23	3.24	3.25	3.28	3.29	3.31	3.33	3.34	0.1%
Natural Gas	5.80	6.57	4.33	4.65	4.83	4.89	4.88	4.89	4.90	4.89	4.88	4.91	4.95	4.97	4.98	5.00	5.02	5.04	5.06	5.10	5.15	-0.6%
Coal	0.86	0.86	0.86	0.86	0.85	0.83	0.81	0.80	0.78	0.77	0.77	0.77	0.76	0.76	0.76	0.75	0.75	0.75	0.74	0.73	0.73	-0.8%
Ethanol (E85) 11/	17.33	17.33	17.33	17.74	18.44	17.92	16.30	16.28	16.27	16.76	19.26	19.36	20.19	20.88	20.32	20.98	20.44	19.87	19.96	20.05	20.15	0.6%
Electricity	17.55	16.80	16.55	16.32	16.14	16.05	16.01	15.96	16.14	16.27	16.38	16.29	16.28	16.29	16.30	16.17	16.21	16.25	16.34	16.34	16.41	-0.3%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	11.11	11.46	10.31	10.57	10.74	10.79	10.92	10.98	11.17	11.26	11.40	11.48	11.61	11.68	11.79	11.86	12.03	12.14	12.30	12.45	12.65	0.7%
Commercial	7.86	8.02	7.26	7.52	7.73	7.86	7.92	8.01	8.19	8.33	8.47	8.60	8.75	8.91	9.05	9.16	9.31	9.46	9.63	9.76	9.91	1.3%
Industrial	9.48	8.59	7.99	8.38	8.60	8.77	8.93	9.06	9.14	9.41	9.66	9.81	9.98	10.18	10.39	10.57	10.71	10.84	11.00	11.17	11.34	0.9%
Transportation	22.33	22.10	20.65	20.71	21.14	21.71	22.51	23.19	23.70	24.32	24.90	25.40	25.74	26.17	26.46	26.81	27.14	27.41	27.73	27.96	28.19	1.2%
Total Non-Renewable Expenditures	50.59	50.16	46.20	47.18	48.21	49.13	50.18	51.15	52.20	53.32	54.43	55.29	56.08	56.94	57.70	58.41	59.19	59.85	60.67	61.34	62.09	1.0%
Transportation Renewable Expenditures	0.02	0.03	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	5.6%
Total Expenditures	50.61	50.19	46.22	47.21	48.23	49.16	50.21	51.18	52.24	53.36	54.47	55.34	56.13	56.99	57.75	58.46	59.25	59.91	60.73	61.40	62.15	1.0%

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/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes used for lease and plant fuel.

6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.

8/ States 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. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ 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 2000 are model results and may differ slightly from official EIA data reports.

Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000.

[http://www.eia.doe.gov/pub/natural\\_gas/petroleum\\_data\\_publications/petroleum\\_marketing\\_annual/petroleummarketing.pdf](http://www.eia.doe.gov/pub/natural_gas/petroleum_data_publications/petroleum_marketing_annual/petroleummarketing.pdf) (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 15. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**South Atlantic**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 13/																						
Petroleum Products 2/	9.74	9.52	8.94	8.74	8.75	8.81	8.99	9.10	9.13	9.21	9.26	9.28	9.28	9.32	9.33	9.37	9.39	9.38	9.39	9.38	9.39	-0.2%
Distillate Fuel	9.65	9.15	8.62	7.99	8.05	8.04	8.19	8.57	8.67	8.79	8.84	8.96	8.91	9.00	8.99	9.04	9.06	9.08	9.12	9.07	9.07	-0.3%
Jet Fuel	7.45	6.06	6.82	5.59	5.67	5.67	5.61	5.79	5.84	6.01	6.12	6.22	6.28	6.40	6.51	6.66	6.70	6.72	6.74	6.75	6.76	-0.5%
Liquefied Petroleum Gas	14.53	13.06	12.79	13.96	14.13	14.02	14.05	14.08	14.10	14.13	14.26	14.26	14.45	14.40	14.41	14.51	14.53	14.55	14.56	14.58	14.59	0.0%
Motor Gasoline 8/	11.47	11.70	10.53	10.29	10.27	10.37	10.61	10.59	10.58	10.61	10.61	10.61	10.61	10.61	10.61	10.61	10.62	10.62	10.62	10.62	10.62	-0.4%
Residual Fuel	4.02	3.63	3.28	3.49	3.52	3.54	3.55	3.56	3.57	3.59	3.60	3.62	3.64	3.66	3.68	3.70	3.72	3.74	3.76	3.78	3.80	-0.3%
Natural Gas	6.07	6.82	4.35	4.70	4.86	4.89	4.89	4.90	4.94	4.95	5.01	5.05	5.07	5.09	5.11	5.14	5.18	5.22	5.26	5.32	5.32	-0.7%
Coal	1.48	1.46	1.37	1.36	1.37	1.32	1.27	1.25	1.24	1.23	1.22	1.22	1.21	1.20	1.19	1.18	1.18	1.17	1.16	1.15	1.14	-1.3%
Ethanol (E85) 11/	17.83	17.33	17.33	19.46	20.20	19.99	20.09	20.08	20.08	20.08	21.09	21.19	22.04	22.12	22.19	22.27	22.34	21.78	21.88	21.99	22.10	1.2%
Electricity	20.04	19.72	18.90	18.61	18.74	18.72	18.52	18.50	18.58	18.59	18.69	18.71	18.68	18.80	18.54	18.50	18.61	18.63	18.74	18.75	18.76	-0.3%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	30.39	30.55	29.15	29.81	30.68	31.12	31.34	31.76	32.37	32.78	33.34	33.88	34.39	34.71	35.18	35.67	36.44	36.92	37.64	38.24	38.99	1.3%
Commercial	20.20	20.78	19.87	20.38	21.28	21.86	22.25	22.90	23.63	24.40	25.29	26.12	26.88	27.61	28.39	29.17	30.14	31.03	32.06	32.95	33.88	2.6%
Industrial	16.28	14.80	13.45	14.16	14.63	14.94	15.08	15.38	15.69	16.10	16.50	16.91	17.20	17.53	17.86	18.17	18.49	18.70	19.04	19.33	19.64	0.9%
Transportation	50.16	50.58	47.03	47.04	48.21	49.74	51.86	53.60	55.08	56.86	58.52	60.06	61.33	62.77	63.93	65.22	66.49	67.63	68.67	69.95	71.00	1.8%
Total Non-Renewable Expenditures	117.14	116.70	109.30	111.39	114.80	117.66	120.53	123.64	126.77	130.14	133.66	136.98	139.80	142.63	145.36	148.24	151.56	154.28	157.61	160.47	163.51	1.7%
Transportation Renewable Expenditures	0.06	0.07	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.14	0.16	0.16	0.17	0.18	0.19	0.19	0.19	0.20	0.21	6.7%
Total Expenditures	117.20	116.77	109.37	111.47	114.88	117.75	120.63	123.76	126.89	130.27	133.79	137.12	139.95	142.79	145.53	148.41	151.75	154.46	157.80	160.67	163.72	1.7%

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/ Excludes independent power producers.  
4/ Includes cogenerators.  
5/ Excludes used for lease and plant fuel.  
6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.  
7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.  
8/ States 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. Price includes estimated motor vehicle fuel taxes.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.  
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 2000 are model results and may differ slightly from official EIA data reports.  
Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000.  
http://www.eia.doe.gov/pub/coal\_gas/petroleum/data\_publications/petroleum\_marketing\_annual/02010001.pdf (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.





**Table 16. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**East South Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 13/																						
Petroleum Products 2/	9.87	9.58	8.83	8.61	8.62	8.70	8.88	9.00	9.04	9.13	9.19	9.19	9.20	9.24	9.26	9.31	9.32	9.32	9.33	9.32	9.33	-0.3%
Distillate Fuel	9.85	9.32	8.77	8.14	8.21	8.18	8.34	8.74	8.85	8.95	9.09	9.11	9.04	9.11	9.08	9.14	9.15	9.15	9.14	9.14	9.15	-0.4%
Jet Fuel	7.27	5.89	6.66	5.39	5.47	5.47	5.42	5.59	5.64	5.82	5.94	6.05	6.13	6.26	6.38	6.54	6.59	6.63	6.65	6.67	6.69	-0.4%
Liquefied Petroleum Gas	12.79	11.02	10.75	11.32	11.51	11.41	11.45	11.48	11.52	11.56	11.70	11.71	11.82	11.87	11.88	12.00	12.03	12.06	12.06	12.06	12.08	-0.3%
Motor Gasoline 8/	11.77	11.94	10.76	10.47	10.44	10.59	10.85	10.83	10.81	10.85	10.85	10.85	10.84	10.84	10.84	10.84	10.84	10.86	10.86	10.86	10.86	-0.4%
Residual Fuel	3.46	3.35	3.01	2.63	2.66	2.68	2.70	2.70	2.72	2.74	2.76	2.78	2.80	2.83	2.85	2.87	2.89	2.91	2.93	2.95	2.97	-0.8%
Natural Gas	5.12	5.86	3.72	4.07	4.25	4.29	4.26	4.22	4.24	4.22	4.23	4.28	4.32	4.32	4.32	4.33	4.35	4.39	4.43	4.47	4.53	-0.6%
Coal	1.27	1.21	1.14	1.14	1.14	1.13	1.10	1.09	1.07	1.06	1.05	1.05	1.04	1.03	1.02	1.01	1.00	0.98	0.97	0.96	0.95	-1.5%
Ethanol (E85) 11/	17.83	17.33	17.33	17.74	17.68	17.83	16.32	16.29	16.59	16.11	16.62	16.69	19.76	19.83	19.90	19.96	20.03	20.10	20.17	20.25	20.33	0.6%
Electricity	17.65	17.23	16.85	16.50	16.62	16.81	16.46	16.41	16.47	16.46	16.49	16.49	16.43	16.36	16.30	16.24	16.35	16.43	16.52	16.51	16.53	-0.3%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	10.34	10.37	9.80	9.94	10.17	10.24	10.33	10.40	10.55	10.61	10.73	10.86	10.97	11.01	11.10	11.20	11.40	11.54	11.72	11.85	12.04	0.8%
Commercial	7.46	7.60	7.17	7.37	7.65	7.84	7.92	8.09	8.31	8.50	8.72	8.84	9.13	9.31	9.49	9.67	9.85	10.16	10.39	10.57	10.76	1.8%
Industrial	10.23	9.67	9.84	9.36	9.69	9.88	9.97	10.15	10.35	10.61	10.88	11.16	11.36	11.57	11.76	11.98	12.19	12.35	12.59	12.79	13.01	1.1%
Transportation	19.83	19.81	18.50	18.29	18.69	19.22	19.93	20.54	20.99	21.55	22.08	22.52	22.84	23.25	23.53	23.87	24.19	24.49	24.80	25.03	25.26	1.2%
Total Non-Renewable Expenditures	48.15	47.46	44.32	44.96	46.18	47.18	48.15	49.18	50.20	51.28	52.41	53.48	54.30	55.14	55.90	56.73	57.70	58.54	59.50	60.25	61.06	1.2%
Transportation Renewable Expenditures	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.06	0.06	5.7%
Total Expenditures	48.17	47.48	44.34	44.98	46.20	47.21	48.18	49.21	50.24	51.32	52.45	53.52	54.35	55.19	55.95	56.78	57.75	58.59	59.55	60.30	61.12	1.2%

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/ Excludes independent power producers.  
4/ Includes cogenerators.  
5/ Excludes used for lease and plant fuel.  
6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.  
7/ Kerosene-type jet fuel. Price 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. Price includes estimated motor vehicle fuel taxes.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.  
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 2000 are model results and may differ slightly from official EIA data reports.  
Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000, <http://www.eia.doe.gov/pub/annual/pma/pma00/pma00main.pdf> (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994, 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 17. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**West South Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Average Price to All Users 1/																							
Petroleum Products 2/	9.90	8.16	7.64	7.79	7.86	7.86	7.96	8.06	8.10	8.19	8.27	8.30	8.37	8.39	8.42	8.49	8.52	8.52	8.54	8.55	8.57	-0.7%	
Distillate Fuel	9.45	9.13	8.61	8.02	8.08	8.05	8.22	8.65	8.77	8.88	8.97	8.99	8.93	9.01	8.99	9.06	9.07	9.07	9.11	9.06	9.06	-0.2%	
Jet Fuel	8.79	6.42	6.17	5.16	5.23	5.22	5.17	5.34	5.39	5.57	5.69	5.81	5.88	6.01	6.13	6.29	6.33	6.35	6.37	6.38	6.40	-0.3%	
Liquefied Petroleum Gas	11.89	7.32	7.07	7.76	7.94	7.84	7.88	7.91	7.94	7.98	8.12	8.15	8.35	8.32	8.35	8.45	8.49	8.52	8.52	8.56	8.60	8.63	-1.6%
Motor Gasoline 8/	11.55	11.81	10.64	10.54	10.52	10.59	10.81	10.80	10.78	10.81	10.81	10.81	10.81	10.81	10.81	10.81	10.82	10.82	10.82	10.83	10.83	10.83	-0.3%
Residual Fuel	4.74	3.51	3.13	3.20	3.23	3.25	3.27	3.28	3.30	3.32	3.34	3.35	3.37	3.39	3.41	3.43	3.45	3.47	3.49	3.51	3.53	-1.5%	
Natural Gas	4.37	4.60	2.72	3.07	3.27	3.35	3.35	3.37	3.42	3.45	3.49	3.56	3.62	3.64	3.67	3.69	3.72	3.77	3.83	3.88	3.94	3.94	-0.5%
Coal	1.14	1.12	1.15	1.15	1.16	1.15	1.13	1.12	1.11	1.10	1.09	1.08	1.08	1.07	1.07	1.06	1.05	1.05	1.04	1.03	1.02	1.02	-0.6%
Ethanol (E85) 11/	17.33	17.33	17.33	19.20	19.94	19.42	19.81	19.90	19.79	20.29	20.80	20.89	21.73	21.81	21.87	21.94	22.01	21.44	21.54	19.56	18.57	18.57	0.3%
Electricity	17.81	17.64	16.98	16.60	16.82	17.08	16.78	16.71	16.52	16.33	16.21	16.21	16.38	16.41	16.38	16.50	16.67	16.84	17.06	17.21	17.45	17.45	0.0%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																							
Residential	16.65	17.07	15.67	16.14	16.59	16.92	17.00	17.43	17.63	17.64	17.84	18.15	18.58	18.81	19.06	19.44	19.92	20.33	20.83	21.29	21.88	21.88	1.4%
Commercial	11.49	11.95	11.13	11.32	11.81	12.41	12.40	12.47	12.63	12.89	13.15	13.53	13.82	14.03	14.31	14.61	14.92	15.25	15.53	15.90	16.26	16.26	1.6%
Industrial	46.82	34.59	31.11	33.23	35.84	36.56	36.99	37.61	38.25	39.15	40.17	41.40	42.74	43.38	44.04	44.89	45.56	46.14	46.88	47.79	48.71	48.71	0.2%
Transportation	39.32	38.21	35.79	36.16	37.16	38.18	39.64	41.20	42.43	43.90	45.23	46.56	47.58	48.80	49.78	50.92	51.95	52.82	53.80	54.65	55.48	55.48	1.7%
Total Non-Renewable Expenditures	114.28	101.82	93.69	97.85	101.49	104.06	106.03	108.71	110.93	113.37	116.10	119.26	122.43	124.79	126.92	129.56	132.04	134.21	136.86	139.26	141.97	141.97	1.1%
Transportation Renewable Expenditures	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.08	0.08	0.08	0.09	0.09	0.10	0.10	0.11	0.11	0.11	0.10	0.10	0.10	5.7%
Total Expenditures	114.31	101.86	93.73	97.89	101.54	104.12	106.09	108.78	111.00	113.44	116.18	119.34	122.52	124.89	127.02	129.67	132.15	134.32	136.97	139.36	142.07	142.07	1.1%

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/ Excludes independent power producers.  
4/ Includes cogenerators.  
5/ Excludes used for lease and plant fuel.  
6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.  
7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.  
8/ States 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. Price includes estimated motor vehicle fuel taxes.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.  
13/ Weighted averages of end-use fuel prices are derived from the prices shown in each sector and the corresponding sectoral consumption.  
14/ British thermal unit.  
Note: Data for 2000 are model results and may differ slightly from official EIA data reports.  
Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000, [http://www.eia.doe.gov/pub/annual/petroleum\\_data\\_publications/petroleum\\_marketing\\_annual/petmra00.pdf](http://www.eia.doe.gov/pub/annual/petroleum_data_publications/petroleum_marketing_annual/petmra00.pdf) (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 18. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**Mountain**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 13/																						
Petroleum Products 2/	10.61	10.23	9.55	9.59	9.61	9.66	9.83	9.96	9.99	10.08	10.14	10.16	10.16	10.20	10.22	10.27	10.29	10.28	10.29	10.27	10.28	-0.2%
Distillate Fuel	10.19	9.89	9.20	9.80	9.87	9.85	9.01	9.40	9.52	9.63	9.79	9.82	9.77	9.86	9.85	9.92	9.94	9.94	9.98	9.94	9.95	-0.1%
Jet Fuel	7.98	6.50	6.26	6.15	6.23	6.22	6.16	6.34	6.39	6.56	6.60	6.64	6.66	6.73	6.79	6.91	6.91	6.89	6.88	6.87	6.86	-0.7%
Liquefied Petroleum Gas	11.79	10.28	10.01	10.28	10.48	10.38	10.43	10.47	10.51	10.54	10.68	10.71	10.92	10.88	10.88	11.03	11.08	11.10	11.10	11.09	11.11	-0.3%
Motor Gasoline 8/	12.68	12.60	11.42	11.56	11.53	11.64	11.89	11.87	11.85	11.89	11.89	11.89	11.89	11.89	11.89	11.89	11.89	11.90	11.90	11.90	11.90	-0.3%
Residual Fuel	4.32	4.26	3.55	3.12	3.14	3.18	3.18	3.18	3.18	3.16	3.14	3.16	3.18	3.20	3.22	3.24	3.26	3.28	3.30	3.32	3.34	3.36
Natural Gas	5.17	6.31	4.11	4.43	4.65	4.73	4.77	4.72	4.84	4.84	4.82	4.82	4.82	4.90	5.00	5.02	5.10	5.14	5.15	5.20	5.27	5.35
Coal	1.06	1.00	1.01	0.99	0.99	0.95	0.92	0.90	0.88	0.87	0.85	0.84	0.81	0.79	0.78	0.77	0.76	0.74	0.73	0.72	0.70	-2.0%
Ethanol (E85) 11/	17.33	17.33	17.33	19.26	20.01	19.50	19.89	19.89	19.88	20.38	20.90	21.00	21.84	21.82	21.99	22.07	22.14	21.58	21.68	21.79	21.90	1.2%
Electricity	17.46	17.65	17.63	17.28	18.22	18.22	18.20	18.20	18.26	18.25	18.24	18.49	18.47	18.66	18.54	18.51	18.42	18.44	18.34	18.45	18.34	0.2%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	7.78	8.65	7.96	8.21	8.79	8.98	9.15	9.30	9.56	9.72	9.90	10.17	10.38	10.61	10.75	10.95	11.16	11.35	11.55	11.83	12.08	2.2%
Commercial	6.81	7.54	6.99	7.26	7.92	8.09	8.28	8.46	8.72	8.98	9.25	9.68	10.02	10.47	10.74	11.07	11.34	11.68	11.95	12.36	12.64	3.1%
Industrial	5.56	5.44	5.03	5.25	5.55	5.70	5.79	5.89	6.01	6.17	6.32	6.49	6.62	6.85	7.01	7.20	7.31	7.44	7.56	7.75	7.89	1.8%
Transportation	20.47	20.12	18.91	19.62	20.31	21.12	22.17	23.16	24.02	25.01	25.96	26.87	27.62	28.48	29.21	30.02	30.81	31.54	32.33	33.05	33.77	2.5%
Total Non-Renewable Expenditures	40.62	41.75	38.90	40.34	42.57	43.89	45.38	46.82	48.31	49.88	51.43	53.21	54.64	56.42	57.71	59.24	60.62	62.00	63.40	64.99	66.38	2.5%
Transportation Renewable Expenditures	0.02	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.08	0.08	7.5%
Total Expenditures	40.64	41.77	38.92	40.36	42.60	43.93	45.42	46.86	48.35	49.93	51.48	53.26	54.70	56.47	57.77	59.31	60.69	62.07	63.47	65.07	66.45	2.5%

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/ Excludes independent power producers.  
4/ Includes cogenerators.  
5/ Excludes used for lease and plant fuel.  
6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.  
7/ Kerosene-type jet fuel. Price 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. Price includes estimated motor vehicle fuel taxes.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.  
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 2000 are model results and may differ slightly from official EIA data reports.  
Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000, [http://www.eia.doe.gov/pub/annual/pma/pma00/pma00\\_publication/pma00\\_publication.pdf](http://www.eia.doe.gov/pub/annual/pma/pma00/pma00_publication/pma00_publication.pdf) (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 19. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**Pacific**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020-2020
Average Price to All Users 13/																						
Petroleum Products 2/	10.42	9.69	9.00	9.11	9.18	9.32	9.43	9.53	9.62	9.65	9.61	9.78	9.87	9.77	9.73	9.83	9.70	9.66	9.62	9.65	9.63	-0.4%
Distillate Fuel	11.07	10.31	9.85	9.26	9.31	9.33	9.55	9.97	9.75	9.72	9.80	10.10	10.33	10.04	9.94	10.04	9.74	9.77	9.59	9.58	9.71	-0.7%
Jet Fuel	7.74	6.22	6.99	5.39	5.47	5.49	5.50	5.60	5.61	5.62	5.61	5.70	5.79	5.69	5.67	5.91	5.91	5.90	5.90	5.90	5.89	-1.4%
Liquefied Petroleum Gas	13.48	12.92	12.65	13.33	13.54	13.84	14.23	14.61	14.41	14.64	15.01	15.17	15.53	15.67	15.78	15.83	15.90	15.97	16.10	16.08	16.02	0.9%
Motor Gasoline 8/	13.22	12.76	11.59	11.93	11.99	12.23	12.40	12.34	12.63	12.69	12.56	12.75	12.85	12.79	12.71	12.75	12.61	12.58	12.63	12.69	12.65	-0.2%
Residual Fuel	4.47	3.65	3.36	3.50	3.53	3.55	3.57	3.58	3.59	3.61	3.62	3.64	3.67	3.69	3.71	3.73	3.75	3.77	3.79	3.81	3.83	-0.8%
Natural Gas	5.46	6.15	3.99	4.29	4.46	4.52	4.53	4.49	4.50	4.48	4.46	4.48	4.52	4.58	4.59	4.62	4.64	4.64	4.65	4.67	4.72	-0.7%
Coal	1.60	1.56	1.59	1.59	1.59	1.57	1.55	1.54	1.53	1.52	1.51	1.52	1.51	1.51	1.50	1.49	1.49	1.48	1.47	1.46	1.45	-0.5%
Ethanol (E85) 11/	17.33	17.33	17.33	19.23	20.00	19.90	19.95	19.97	19.90	20.39	20.93	21.08	21.97	22.85	22.11	22.20	22.27	21.71	21.82	21.92	22.03	1.2%
Electricity	23.16	26.26	27.37	24.71	23.27	22.00	21.68	21.66	21.67	22.04	22.04	22.05	20.93	20.82	20.76	20.80	20.96	20.99	20.98	20.96	20.95	-0.5%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	17.67	21.60	19.52	18.96	18.84	18.53	18.66	18.84	19.19	19.38	19.56	19.79	19.55	19.74	19.94	20.21	20.58	20.75	21.00	21.25	21.56	1.0%
Commercial	18.08	22.51	20.01	19.12	18.99	18.77	19.13	19.62	20.26	20.85	21.31	21.89	21.50	22.06	22.61	23.23	23.86	24.85	25.16	25.76	26.36	1.9%
Industrial	13.38	14.56	11.98	12.30	12.38	12.43	12.59	12.85	13.13	13.39	13.64	13.96	13.81	14.08	14.31	14.67	14.89	14.97	15.10	15.37	15.54	0.8%
Transportation	47.81	44.63	42.30	43.51	44.75	46.47	46.02	49.37	51.11	52.51	53.47	55.69	57.51	58.03	58.71	60.41	61.36	62.29	63.48	64.36	64.36	1.5%
Total Non-Renewable Expenditures	96.94	103.60	93.81	93.89	94.95	96.19	96.41	100.67	103.70	106.14	107.99	111.33	112.37	113.90	115.57	118.32	119.86	121.64	123.55	125.85	127.82	1.4%
Transportation Renewable Expenditures	0.05	0.06	0.05	0.06	0.07	0.08	0.09	0.09	0.10	0.11	0.12	0.12	0.13	0.14	0.14	0.15	0.15	0.16	0.16	0.17	0.17	6.5%
Total Expenditures	96.99	103.66	93.87	93.95	95.02	96.27	96.49	100.76	103.80	106.25	108.10	111.45	112.50	114.03	115.71	118.47	120.01	121.79	123.72	126.02	128.00	1.4%

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/ Excludes independent power producers.  
4/ Includes cogenerators.  
5/ Excludes used for lease and plant fuel.  
6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.  
7/ Kerosene-type jet fuel. Price includes Federal and State taxes while excluding county and local taxes.  
8/ States 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. Price includes estimated motor vehicle fuel taxes.  
11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).  
12/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.  
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 2000 are model results and may differ slightly from official EIA data reports.  
Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000, [http://www.eia.doe.gov/pub/annual/petroleum/petroleum\\_data\\_publications/petroleum\\_marketing\\_annual0000.pdf](http://www.eia.doe.gov/pub/annual/petroleum/petroleum_data_publications/petroleum_marketing_annual0000.pdf) (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.





**Table 20. Energy Prices by Sector and Source (2 of 2)**  
**(2000 Dollars per Million Btu, Unless Otherwise Noted)**  
**United States**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Average Price to All Users 1/																						
Petroleum Products 2/	10.05	9.37	8.74	8.70	8.73	8.78	8.92	9.03	9.07	9.14	9.19	9.24	9.27	9.28	9.30	9.35	9.35	9.33	9.33	9.34	9.34	-0.4%
Distillate Fuel	9.93	9.41	8.89	8.53	8.39	8.38	8.55	8.90	8.98	9.08	9.22	9.27	9.25	9.31	9.37	9.36	9.34	9.35	9.32	9.32	9.33	-0.3%
Jet Fuel	7.36	5.93	6.69	5.45	5.52	5.52	5.49	5.63	5.66	5.80	5.87	5.96	6.03	6.09	6.16	6.32	6.34	6.35	6.36	6.36	6.37	-0.7%
Liquefied Petroleum Gas	12.06	8.60	8.32	8.97	9.16	9.06	9.10	9.16	9.18	9.21	9.37	9.40	9.59	9.56	9.60	9.70	9.72	9.73	9.74	9.77	9.79	-1.0%
Motor Gasoline 8/	12.20	12.15	10.98	10.93	10.92	11.02	11.24	11.22	11.25	11.29	11.27	11.29	11.31	11.29	11.28	11.28	11.27	11.26	11.27	11.28	11.28	-0.4%
Residual Fuel	4.11	3.65	3.31	3.42	3.45	3.46	3.48	3.49	3.51	3.53	3.54	3.56	3.58	3.60	3.62	3.64	3.66	3.68	3.70	3.73	3.75	-0.5%
Natural Gas	5.43	6.10	3.90	4.21	4.40	4.45	4.45	4.44	4.47	4.47	4.47	4.51	4.55	4.57	4.59	4.61	4.63	4.67	4.70	4.74	4.78	-0.6%
Coal	1.22	1.22	1.18	1.17	1.17	1.15	1.12	1.11	1.09	1.08	1.07	1.07	1.06	1.05	1.04	1.03	1.03	1.02	1.00	0.99	0.98	-1.1%
Ethanol (E85) 11/	17.33	17.33	17.33	18.94	19.64	19.17	19.56	19.55	19.57	20.07	20.59	20.69	21.48	21.57	21.64	21.71	21.78	21.85	21.95	21.10	21.19	1.0%
Electricity	20.20	20.68	19.67	18.11	18.06	18.83	18.61	18.50	18.53	18.52	18.58	18.66	18.56	18.58	18.53	18.53	18.65	18.74	18.85	18.90	18.97	-0.3%
Non-Renewable Energy Expenditures by Sector (billion 2000 dollars)																						
Residential	153.41	163.05	148.25	150.43	153.62	154.25	155.24	156.45	158.55	159.58	161.45	163.72	165.60	167.05	168.73	170.74	173.71	175.70	178.39	180.83	184.01	0.9%
Commercial	112.06	120.71	109.24	111.21	114.74	116.21	117.16	118.97	121.43	123.80	126.73	130.15	132.30	135.42	138.02	140.90	144.23	147.38	150.72	153.75	156.55	1.7%
Industrial	142.86	123.83	110.36	117.58	121.76	124.06	125.17	127.38	129.70	132.89	136.11	139.81	142.53	145.17	147.89	150.46	152.77	154.99	157.29	159.66	162.53	0.6%
Transportation	288.38	282.56	264.27	267.21	273.51	281.21	291.52	300.48	308.44	317.23	325.09	333.71	340.28	346.65	351.58	357.95	362.87	367.64	373.04	378.11	382.65	1.4%
Total Non-Renewable Expenditures	696.71	690.15	632.11	646.43	663.64	675.73	689.09	703.28	718.12	733.31	749.39	767.39	780.72	794.19	806.03	820.07	833.58	845.31	859.45	872.66	886.10	1.2%
Transportation Renewable Expenditures	0.31	0.37	0.35	0.38	0.43	0.48	0.53	0.57	0.62	0.66	0.70	0.73	0.79	0.82	0.85	0.88	0.92	0.93	0.96	0.98	1.00	6.1%
Total Expenditures	697.01	690.52	632.46	646.82	664.07	676.21	689.62	703.86	718.74	733.97	750.09	768.12	781.50	795.01	806.88	820.95	834.50	846.24	860.41	873.64	887.11	1.2%

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/ Excludes independent power producers.

4/ Includes cogenerators.

5/ Excludes used for lease and plant fuel.

6/ Diesel fuel containing 500 parts per million (ppm) or 15 ppm sulfur. Price includes Federal and State taxes while excluding county and local taxes.

7/ Kerosene-type jet fuel. Price 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. Price includes estimated motor vehicle fuel taxes.

11/ E85 is 85 percent ethanol (renewable) and 15 percent motor gasoline (nonrenewable).

13/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy. Includes small power producers and exempt wholesale generators.

14/ 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 2000 are model results and may differ slightly from official EIA data reports.

Source: 2000 prices for gasoline, distillate, and jet fuel are based on the preliminary Petroleum Marketing Annual 2000.

[http://www.eia.doe.gov/pub/natural\\_gas/petroleum\\_data\\_publications/petroleum\\_marketing\\_annual/price/petmra00.pdf](http://www.eia.doe.gov/pub/natural_gas/petroleum_data_publications/petroleum_marketing_annual/price/petmra00.pdf) (August 2001). 2000 prices for all other petroleum products are derived from the EIA, State Energy Price and Expenditure Report 1997, DOE/EIA-0276(97) (Washington, DC, July 2000). 2000 industrial gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. 2000 residential and commercial natural gas delivered prices: EIA, Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001). 2000 coal prices based on EIA, Quarterly Coal Report, DOE/EIA-0121(2000/4Q) (Washington, DC, October-December 2000) and EIA, AEO2001 National Energy Modeling System run aeo2002.d102001b. 2000 electricity prices for commercial, industrial, and transportation: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 21. Residential Sector Equipment Stock and Efficiency (2 of 2)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Building Shell Efficiency Index</b>																						
<b>Space Heating</b>																						
Pre-1998 Homes	0.95	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.93	0.93	0.93	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.92	0.91	0.91	-0.2%
New Construction	0.86	0.85	0.85	0.85	0.85	0.85	0.86	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.0%
All Homes	0.95	0.94	0.94	0.93	0.93	0.93	0.92	0.92	0.92	0.92	0.92	0.91	0.91	0.91	0.91	0.90	0.90	0.90	0.90	0.90	0.89	-0.3%
<b>Space Cooling</b>																						
Pre-1998 Homes	0.96	0.96	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.94	0.94	-0.1%
New Construction	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.91	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.0%
All Homes	0.95	0.95	0.95	0.95	0.95	0.95	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.93	0.93	0.93	0.93	0.93	0.93	0.93	-0.1%

1) Does not include immersion heaters or outdoor grills.

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

HSFP = 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.

CCP = 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, AEO2002 National Energy Modeling System run\_aeo2002.d102001b.

Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency (1 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020
Commercial Building Delivered																						
Energy Consumption (quadrillion Btu)/																						
Assembly	0.53	0.52	0.53	0.54	0.55	0.56	0.56	0.57	0.58	0.58	0.59	0.60	0.60	0.61	0.62	0.62	0.63	0.64	0.65	0.65	0.66	1.1%
Education	0.72	0.71	0.74	0.76	0.78	0.79	0.80	0.81	0.82	0.83	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.91	0.92	0.93	1.3%
Food Sales	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.19	0.19	0.19	0.19	0.19	0.20	0.20	0.20	1.4%
Food Service	0.38	0.39	0.40	0.41	0.42	0.42	0.43	0.43	0.44	0.45	0.45	0.46	0.47	0.47	0.48	0.48	0.49	0.49	0.50	0.51	0.51	1.4%
Health Care	0.56	0.56	0.58	0.61	0.63	0.65	0.66	0.68	0.70	0.72	0.74	0.77	0.79	0.81	0.83	0.85	0.87	0.90	0.92	0.94	0.97	2.8%
Lodging	0.54	0.54	0.55	0.57	0.59	0.60	0.61	0.62	0.64	0.65	0.67	0.68	0.70	0.72	0.73	0.75	0.77	0.78	0.80	0.82	0.83	2.2%
Office - Large	0.71	0.72	0.74	0.76	0.79	0.81	0.83	0.85	0.86	0.88	0.90	0.91	0.93	0.95	0.97	0.99	1.00	1.02	1.04	1.05	1.07	2.1%
Office - Small	0.56	0.57	0.58	0.61	0.63	0.64	0.66	0.67	0.69	0.70	0.71	0.73	0.74	0.75	0.77	0.78	0.79	0.80	0.81	0.82	0.83	2.0%
Mercantile/Service	1.15	1.16	1.19	1.22	1.25	1.26	1.28	1.30	1.31	1.33	1.35	1.36	1.37	1.39	1.40	1.41	1.42	1.44	1.45	1.46	1.47	1.2%
Warehouse	0.39	0.40	0.42	0.44	0.46	0.47	0.49	0.50	0.51	0.52	0.54	0.55	0.57	0.58	0.60	0.62	0.63	0.65	0.66	0.68	0.69	2.9%
Other	0.49	0.51	0.53	0.56	0.58	0.60	0.63	0.65	0.68	0.70	0.72	0.75	0.77	0.80	0.83	0.86	0.89	0.91	0.94	0.97	1.00	3.6%
Total	6.17	6.23	6.42	6.65	6.83	6.97	7.11	7.26	7.40	7.55	7.69	7.84	7.99	8.14	8.29	8.44	8.59	8.73	8.88	9.02	9.17	2.0%
Commercial Building Floorspace																						
(billion square feet)																						
Assembly	7.09	7.17	7.23	7.30	7.37	7.44	7.52	7.59	7.66	7.74	7.82	7.90	7.98	8.06	8.14	8.22	8.30	8.38	8.47	8.55	8.63	1.0%
Education	8.54	8.74	8.95	9.15	9.35	9.55	9.74	9.92	10.09	10.26	10.42	10.58	10.73	10.87	11.01	11.15	11.27	11.39	11.49	11.58	11.65	1.6%
Food Sales	0.71	0.73	0.75	0.76	0.78	0.79	0.80	0.81	0.82	0.84	0.85	0.86	0.87	0.88	0.89	0.90	0.91	0.92	0.93	0.94	0.94	1.4%
Food Service	1.48	1.51	1.54	1.56	1.58	1.60	1.61	1.62	1.64	1.65	1.67	1.68	1.70	1.71	1.72	1.73	1.75	1.76	1.77	1.78	1.80	1.0%
Health Care	1.88	1.91	1.96	2.00	2.05	2.10	2.15	2.20	2.25	2.30	2.35	2.40	2.46	2.51	2.57	2.62	2.68	2.74	2.80	2.86	2.92	2.3%
Lodging	4.06	4.15	4.25	4.34	4.43	4.52	4.61	4.69	4.77	4.86	4.95	5.05	5.15	5.26	5.36	5.47	5.57	5.67	5.78	5.88	5.98	2.0%
Office - Large	6.05	6.14	6.24	6.34	6.43	6.52	6.60	6.67	6.74	6.81	6.88	6.96	7.04	7.11	7.19	7.27	7.35	7.43	7.51	7.58	7.66	1.2%
Office - Small	5.74	5.83	5.93	6.03	6.13	6.22	6.30	6.38	6.45	6.52	6.60	6.68	6.76	6.85	6.93	7.02	7.10	7.19	7.27	7.36	7.44	1.3%
Mercantile/Service	13.93	14.21	14.45	14.67	14.89	15.09	15.28	15.46	15.64	15.83	16.01	16.20	16.37	16.53	16.69	16.84	16.99	17.15	17.30	17.46	17.60	1.2%
Warehouse	9.49	9.95	10.34	10.68	10.94	11.18	11.40	11.61	11.80	11.99	12.23	12.51	12.80	13.10	13.38	13.64	13.90	14.17	14.43	14.68	14.93	2.3%
Other	5.55	5.78	5.99	6.20	6.44	6.67	6.90	7.12	7.34	7.55	7.77	7.99	8.21	8.44	8.67	8.90	9.13	9.35	9.58	9.80	10.03	3.0%
Total	64.50	66.10	67.62	69.02	70.38	71.67	72.90	74.07	75.20	76.34	77.55	78.73	80.08	81.32	82.55	83.75	84.95	86.14	87.31	88.45	89.56	1.7%
Stock Average Equipment Efficiency %																						
Space Heating																						
Electricity	1.09	1.10	1.10	1.11	1.11	1.11	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	1.12	0.1%
Natural Gas	0.72	0.73	0.73	0.73	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.78	0.78	0.78	0.78	0.4%
Distillate	0.74	0.74	0.75	0.75	0.75	0.76	0.76	0.76	0.76	0.76	0.77	0.77	0.77	0.77	0.77	0.77	0.77	0.78	0.78	0.78	0.78	0.3%
Space Cooling																						
Electricity	2.76	2.79	2.82	2.85	2.87	2.90	2.92	2.95	2.97	3.00	3.02	3.04	3.06	3.08	3.10	3.12	3.13	3.15	3.16	3.18	3.20	0.7%
Natural Gas	0.91	0.93	0.94	0.95	0.96	0.97	0.99	1.00	1.00	1.01	1.02	1.03	1.03	1.04	1.05	1.06	1.06	1.06	1.06	1.07	1.07	0.8%

**Table 22. Commercial Sector Energy Consumption, Floorspace, and Equipment Efficiency (2 of 2)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Water Heating</b>																							
Electricity	0.98	0.98	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.1%
Natural Gas	0.79	0.79	0.80	0.80	0.81	0.81	0.81	0.82	0.82	0.82	0.82	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.84	0.84	0.84	0.84	0.4%
Distillate	0.75	0.75	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	0.77	0.77	0.77	0.77	0.77	0.77	0.2%
<b>Ventilation (cfm per Btu) 3/</b>																							
Electricity	0.40	0.40	0.41	0.41	0.41	0.41	0.42	0.42	0.42	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.45	0.45	0.45	0.46	0.46	0.46	0.7%
<b>Cooking</b>																							
Electricity	0.71	0.71	0.72	0.72	0.73	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	0.75	0.75	0.75	0.75	0.3%
Natural Gas	0.51	0.52	0.51	0.51	0.51	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	0.52	0.52	0.52	0.1%
<b>Lighting Efficacy 4/</b>																							
(efficacy in lumens per watt)																							
Electricity	49.80	49.57	50.05	50.40	50.69	51.03	51.40	51.73	52.04	52.31	52.57	52.82	53.07	53.30	53.54	53.94	54.33	54.74	55.18	55.60	55.99	56.38	0.7%
<b>Refrigeration</b>																							
Electricity	1.31	1.32	1.32	1.32	1.33	1.33	1.33	1.33	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	1.34	0.1%

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 quality of light, expressed in lumens per watt.  
 Btu = British thermal unit.  
 CFM = Cubic feet per minute.  
 Note: Totals may not equal sum of components due to independent rounding.  
 Source: Energy Information Administration, AEO2002 National Energy Modeling System run\_aeo2002.d102001b.

Table 23. Industrial Sector Macroeconomic Indicators (1 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
GDP (billion 1996 dollars)	9224.0	9319.0	9523.3	9626.2	10103.3	10416.5	10718.9	11046.4	11441.6	11866.9	12311.8	12777.0	13166.4	13559.9	13972.7	14399.2	14835.3	15287.3	15717.2	16138.0	16525.5	3.0%
Non-Agricultural Employment (million)	130.1	130.5	130.7	132.7	134.8	136.9	138.8	140.5	142.0	143.5	145.2	146.8	147.6	148.4	149.3	150.2	151.3	152.4	153.2	153.9	154.5	0.9%
Value of Gross Output (billion 1992 dollars)																						
Nonmanufacturing Sector																						
Agriculture	303.3	298.3	289.8	300.9	308.8	316.0	312.0	309.4	315.3	322.2	329.1	335.7	341.4	346.6	351.5	356.5	362.0	367.6	374.1	380.7	385.6	1.2%
Mining	165.6	168.6	169.9	172.5	173.3	174.2	176.8	179.3	181.4	183.3	185.6	188.6	190.8	194.2	197.4	200.6	204.0	206.6	208.8	210.1	212.3	1.3%
Construction	570.4	585.8	589.4	607.2	621.6	636.7	644.6	655.1	667.4	681.1	696.3	704.3	712.1	726.6	747.1	767.5	777.6	788.8	809.1	828.5	846.5	2.0%
Manufacturing Sector																						
Food and Kindred Products	479.5	481.4	488.9	497.5	505.8	514.5	506.5	513.6	522.3	531.7	541.5	551.3	560.4	568.7	577.0	585.3	594.0	603.0	610.8	618.6	624.8	1.3%
Tobacco Products	38.5	38.3	37.6	37.9	37.7	35.9	36.1	36.4	36.6	37.1	37.5	38.4	38.1	38.7	38.9	39.5	39.8	39.4	39.3	38.5	39.2	0.0%
Textile Mill Products	86.7	85.5	85.4	85.1	86.5	87.3	87.8	88.5	88.9	90.2	91.7	93.5	94.9	96.3	97.2	97.6	97.5	97.4	98.5	99.3	99.9	0.7%
Apparel and Other Textile Products	73.9	73.4	75.7	77.6	78.2	79.0	78.8	78.5	75.4	77.4	81.1	82.3	83.9	85.1	85.2	83.8	80.4	81.1	80.9	80.5	78.6	0.3%
Lumber and Wood Products	103.0	103.0	105.2	106.6	109.3	112.0	114.4	117.0	116.9	120.6	122.9	125.1	125.5	126.6	128.2	130.6	132.5	134.4	136.7	138.6	140.2	1.6%
Furniture and Fixtures	51.8	50.9	52.4	55.0	56.2	57.2	58.3	59.8	61.5	63.0	65.2	66.7	67.7	68.7	69.9	70.8	71.6	72.3	72.4	72.1	71.3	1.6%
Paper and Allied Products	154.5	155.1	159.5	164.0	167.6	172.2	176.4	180.6	179.3	181.4	183.6	188.3	192.0	195.1	198.0	200.8	204.1	207.1	209.8	212.2	214.3	1.6%
Printing and Publishing	187.2	188.8	193.2	194.8	196.6	203.3	207.3	209.1	211.5	215.5	216.3	218.6	220.3	221.7	223.7	224.2	224.2	224.7	224.6	224.1	222.9	0.9%
Chemical and Allied Products	356.2	353.9	363.4	375.4	381.5	392.8	404.4	417.8	428.9	442.1	459.3	476.1	486.7	496.4	505.4	516.7	531.7	545.1	559.4	574.2	588.7	2.5%
Bulk Chemicals	178.7	174.0	178.3	183.1	185.7	188.1	190.0	192.7	194.7	196.2	200.6	205.9	209.1	211.5	213.5	215.0	216.7	217.7	219.5	221.1	223.2	1.1%
Other Chemical and Allied Products	177.6	179.9	185.0	192.2	195.8	204.8	214.4	225.2	234.1	243.9	258.7	270.1	277.6	284.8	291.9	301.7	315.0	327.4	339.9	353.1	363.5	3.6%
Petroleum and Coal Products	171.9	170.9	175.6	174.3	178.1	181.7	183.7	187.0	188.9	191.1	193.4	195.3	196.6	198.1	199.7	200.9	201.5	202.1	203.1	204.1	205.0	0.9%
Petroleum Refining	152.6	151.5	155.9	154.3	157.6	160.8	162.6	165.9	167.5	169.5	171.5	173.2	174.4	175.7	177.9	178.4	179.8	179.6	180.4	181.1	181.1	0.9%
Other Petroleum and Coal Products	19.3	19.4	19.6	20.0	20.5	20.9	21.0	21.2	21.4	21.6	21.9	22.1	22.1	22.4	22.7	23.0	23.1	23.2	23.7	23.9	23.9	1.1%
Rubber and Miscellaneous Plastic Products	161.5	160.4	167.7	176.4	182.9	190.4	197.4	204.8	212.4	220.2	229.3	238.3	246.0	253.9	261.7	269.6	277.2	285.3	293.6	301.3	309.4	3.3%
Leather and Leather Products	8.4	7.1	7.4	6.8	4.8	5.2	4.7	4.9	5.1	4.4	4.4	4.7	4.2	4.3	4.4	4.4	4.3	4.1	3.8	3.4	3.3	-4.5%
Stone, Clay, and Glass Products	81.2	82.1	83.8	84.2	85.7	86.3	88.0	91.2	92.0	91.2	92.9	93.5	94.3	94.9	95.9	97.1	98.5	99.7	100.8	101.7	101.7	1.1%
Glass and Glass Products	22.9	22.6	23.0	23.8	24.3	24.2	24.9	25.5	25.7	26.3	26.4	26.9	27.2	27.6	27.7	27.7	27.9	28.5	28.8	29.1	29.3	1.2%
Cement, Hydraulic	5.6	6.2	6.3	6.2	6.3	6.3	6.4	6.5	6.6	6.7	6.5	6.6	6.6	6.6	6.7	6.8	6.9	6.9	7.0	7.1	7.1	1.2%
Other Stone, Clay, & Glass Products	52.7	53.4	54.5	54.2	55.1	55.8	56.6	57.4	58.2	59.1	58.2	59.4	59.7	60.1	60.5	61.4	62.4	63.1	63.9	64.6	65.2	1.1%

**Table 23. Industrial Sector Macroeconomic Indicators (2 of 2)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Primary Metals Industry	182.2	174.6	180.3	186.8	189.6	192.6	196.7	200.0	202.9	205.9	210.1	214.2	216.2	218.2	220.0	221.4	222.9	224.7	226.6	227.9	228.5	1.1%
Blast Furnace & Basic Steel Products	70.4	68.0	69.8	72.2	72.8	73.8	74.7	75.6	76.4	77.2	78.7	79.7	80.3	80.8	81.5	82.2	82.7	83.4	84.0	84.4	84.6	0.9%
Aluminum	36.1	33.7	35.0	36.3	37.1	38.0	39.3	40.2	41.0	41.6	42.4	43.4	43.9	44.2	44.4	44.6	44.9	45.1	45.6	45.8	45.9	1.2%
Other Primary Metal Products	75.7	72.9	75.5	78.3	79.6	80.8	82.6	84.2	85.5	87.0	89.0	91.1	92.1	93.2	94.1	94.6	95.3	96.2	97.1	97.7	98.0	1.3%
Fabricated Metal Products	221.8	222.5	229.0	238.2	243.4	248.9	253.7	258.6	263.0	266.8	273.4	278.9	283.1	286.9	290.9	295.4	298.8	302.5	306.8	310.8	313.9	1.8%
Industrial Machinery and Equipment	392.5	383.6	405.4	440.1	469.1	488.9	511.0	534.2	558.7	584.8	615.8	643.6	664.7	689.5	707.6	721.2	732.8	746.2	761.7	777.4	786.5	3.5%
Electronic & Other Electric Equipment	557.5	489.1	524.8	577.1	630.5	681.9	736.9	794.6	857.1	923.2	1000.2	1080.7	1155.5	1232.1	1307.3	1384.0	1464.1	1550.0	1640.0	1728.0	1807.1	6.1%
Transportation Equipment	501.0	484.9	485.4	527.4	545.2	573.7	598.6	616.8	631.8	640.9	655.1	665.9	676.3	684.9	693.9	703.6	709.6	720.4	734.6	746.9	753.4	2.1%
Instruments & Related Products	157.9	165.4	169.1	176.5	182.4	188.3	195.3	202.3	210.5	219.1	228.2	237.5	247.4	256.7	265.7	276.9	286.1	296.9	307.7	314.4	322.8	3.7%
Miscellaneous Manufacturing Industries	55.7	45.8	49.0	62.7	55.4	57.8	60.5	63.5	65.9	69.0	73.1	77.3	80.5	83.5	86.1	88.3	89.9	92.1	93.1	92.5	95.5	2.7%
Total Industrial Goods Output	5061.6	4869.4	5102.7	5315.2	5489.9	5676.8	5829.7	6001.5	6173.9	6360.9	6584.5	6798.2	6978.5	7170.0	7352.1	7535.0	7705.6	7892.2	8095.1	8285.1	8447.4	2.6%

GDP = Gross domestic product.

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

Sources: 2000: DRI-WEFA, Simulation CTL0901. Projections: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102010.



Table 24. Refining Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	152.56	151.51	155.94	154.29	157.57	160.78	162.61	165.86	167.49	169.49	171.47	173.19	174.42	175.70	177.04	177.89	178.40	178.88	179.62	180.38	181.10	0.9%
Energy Consumption (trillion Btu)																						
Residual Oil	35.2	35.4	36.1	10.3	10.6	10.5	10.7	10.4	10.8	10.8	11.0	2.5	0.2	30.6	31.0	30.9	30.9	31.0	31.4	33.3	43.8	1.1%
Distillate Oil	4.2	4.2	4.3	0.0	0.0	0.0	0.0	0.0	0.0	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	16.3	16.4	16.7	45.4	48.8	51.2	41.8	63.9	63.6	63.7	74.5	83.1	78.3	87.3	108.8	97.7	92.2	84.1	98.6	136.3	147.4	11.6%
Petroleum Coke	579.0	582.1	593.9	702.8	695.3	708.8	745.0	808.2	816.9	837.3	834.1	851.2	841.8	843.0	836.8	838.7	843.3	847.7	850.8	854.7	858.9	2.0%
Still Gas	1431.2	1438.9	1468.2	1522.8	1558.2	1604.2	1664.2	1699.1	1731.3	1750.0	1837.3	1900.2	1897.6	1906.5	1921.2	1925.5	1931.2	1933.0	1934.5	1946.0	1951.1	1.6%
Other Petroleum 2/	39.5	39.7	40.5	7.4	7.5	8.1	6.3	0.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	2105.3	2116.6	2159.8	2288.7	2320.3	2377.8	2458.1	2581.6	2623.7	2661.8	2756.8	2837.0	2817.9	2867.3	2897.9	2892.8	2897.6	2895.6	2915.3	2970.3	3001.2	1.8%
Natural Gas	853.2	857.8	875.3	974.9	959.8	957.8	1021.8	1007.6	987.4	997.4	976.6	982.1	984.8	937.6	906.6	936.0	948.7	964.6	948.4	888.8	868.7	0.1%
Steam Coal	0.8	0.8	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	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Purchased Electricity	112.0	112.6	114.9	134.4	142.2	149.5	159.7	176.5	172.8	175.5	188.3	195.9	197.1	195.8	198.1	198.7	199.7	199.4	199.7	200.4	199.7	2.9%
Total	3071.4	3067.8	3150.9	3398.0	3422.4	3485.1	3639.6	3765.7	3783.8	3834.7	3921.6	3995.1	3999.8	4000.7	4002.5	4027.6	4046.1	4059.8	4063.4	4059.5	4069.6	1.4%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																						
Residual Oil	0.23	0.23	0.23	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.01	0.00	0.17	0.18	0.17	0.17	0.17	0.17	0.18	0.24	0.2%
Distillate Oil	0.03	0.03	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	0.00	0.00	0.00	0.00	N/A
Liquefied Petroleum Gas	0.11	0.11	0.11	0.29	0.31	0.32	0.26	0.39	0.38	0.38	0.43	0.48	0.45	0.50	0.61	0.55	0.52	0.47	0.55	0.76	0.81	10.7%
Petroleum Coke	3.79	3.84	3.81	4.56	4.41	4.41	4.58	4.87	4.88	4.94	4.86	4.91	4.83	4.80	4.73	4.71	4.73	4.74	4.74	4.74	4.74	1.1%
Still Gas	9.38	9.50	9.62	9.87	9.89	9.98	10.17	10.24	10.34	10.33	10.72	10.97	10.88	10.85	10.82	10.83	10.81	10.77	10.79	10.77	10.77	0.2%
Other Petroleum 2/	0.26	0.26	0.26	0.05	0.05	0.02	0.04	0.00	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	N/A
Petroleum Subtotal	13.80	13.97	13.85	14.83	14.73	14.79	15.12	15.57	15.66	15.70	16.08	16.38	16.16	16.32	16.37	16.26	16.24	16.19	16.23	16.47	16.57	0.9%
Natural Gas	5.59	5.66	5.61	6.32	6.09	5.96	6.28	6.08	5.90	5.88	5.70	5.56	5.65	5.34	5.12	5.26	5.32	5.39	5.28	4.93	4.80	-0.8%
Steam Coal	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Purchased Electricity	0.73	0.74	0.74	0.87	0.90	0.93	0.98	1.06	1.03	1.04	1.10	1.13	1.13	1.11	1.12	1.12	1.12	1.11	1.11	1.11	1.10	2.1%
Total	20.13	20.38	20.21	22.02	21.72	21.68	22.38	22.70	22.59	22.62	22.87	23.07	22.93	22.77	22.61	22.64	22.66	22.70	22.62	22.51	22.47	0.6%
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	52.8	53.1	54.1	58.1	58.8	60.1	62.9	65.4	65.6	66.4	68.3	69.7	69.8	70.0	70.1	70.5	70.8	70.9	71.0	71.1	71.3	1.5%

1/ Fuel consumption includes consumption for cogeneration.

2/ Includes lubricants and miscellaneous petroleum products.

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

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

Table 25. Food Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Industry Output (billion 1992 dollars)	479.47	481.43	488.88	497.55	505.81	514.53	506.50	513.62	522.25	531.67	541.52	551.27	560.40	568.72	577.04	585.29	594.05	602.96	610.84	618.56	624.77	1.3%	
Energy Consumption (trillion Btu)																							
Residual Oil	5.7	5.6	5.5	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.8	5.8	5.8	5.8	5.8	5.8	5.9	5.9	5.9	5.9	0.2%	
Distillate Oil	5.9	6.2	5.5	5.7	5.9	6.0	5.9	5.9	6.0	6.0	6.1	6.2	6.2	6.3	6.3	6.3	6.4	6.4	6.5	6.5	6.5	6.6	0.6%
Liquefied Petroleum Gas	4.3	4.8	4.2	4.3	4.3	4.4	4.3	4.4	4.4	4.5	4.5	4.5	4.5	4.6	4.6	4.7	4.7	4.8	4.9	4.9	4.9	5.0	0.8%
Other Petroleum 2/	16.1	16.0	14.6	15.1	15.5	15.8	15.6	15.7	15.9	16.1	16.3	16.5	16.7	16.8	17.0	17.1	17.3	17.5	17.6	17.7	17.9	0.5%	
Petroleum Subtotal	31.9	32.6	29.9	30.7	31.4	31.8	31.4	31.6	32.3	32.5	32.9	33.2	33.5	33.7	33.9	34.2	34.6	34.9	35.1	35.1	35.4	0.5%	
Natural Gas	554.0	548.5	579.4	592.8	594.2	589.5	579.6	583.0	588.0	594.1	600.6	608.9	612.3	617.1	622.1	628.8	632.3	637.8	642.4	646.8	649.6	0.8%	
Steam Coal	148.0	151.1	134.1	140.1	144.0	148.5	144.5	146.1	148.5	150.7	153.0	155.4	157.9	160.0	161.9	164.0	166.0	168.3	170.4	172.5	174.3	0.8%	
Renewables	141.3	142.3	145.2	148.4	151.5	155.0	153.4	156.4	159.9	163.7	167.7	171.7	175.5	179.1	182.8	186.4	190.2	194.1	197.6	201.0	204.0	1.9%	
Purchased Electricity	223.0	223.3	221.1	222.7	224.1	225.8	220.6	221.5	223.8	226.1	228.5	230.9	233.2	235.2	237.2	239.4	241.7	244.1	246.1	248.0	249.2	0.6%	
Total	1098.3	1097.8	1108.7	1122.7	1135.2	1148.6	1128.5	1139.1	1152.2	1166.9	1182.3	1197.8	1212.1	1224.9	1237.7	1250.5	1264.5	1278.9	1291.4	1303.4	1312.5	0.9%	
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																							
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-1.1%	
Distillate 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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.7%	
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.6%	
Other Petroleum 2/	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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.8%	
Petroleum Subtotal	0.07	0.07	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	0.06	0.06	0.06	0.06	0.06	-0.8%	
Natural Gas	1.16	1.14	1.18	1.17	1.16	1.15	1.14	1.14	1.13	1.12	1.11	1.10	1.09	1.08	1.07	1.06	1.06	1.06	1.05	1.04	1.04	-0.5%	
Steam Coal	0.31	0.31	0.27	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	0.28	0.28	0.28	0.28	-0.5%	
Renewables	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.5%	
Purchased Electricity	0.47	0.46	0.45	0.45	0.44	0.44	0.44	0.43	0.43	0.43	0.42	0.42	0.42	0.41	0.41	0.41	0.41	0.40	0.40	0.40	0.40	-0.8%	
Total	2.29	2.28	2.27	2.26	2.24	2.23	2.23	2.22	2.21	2.19	2.18	2.17	2.16	2.15	2.14	2.14	2.13	2.12	2.11	2.11	2.10	-0.4%	
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	23.5	23.6	23.2	23.5	23.7	23.9	23.5	23.7	23.8	24.0	24.2	24.5	24.7	24.9	25.0	25.2	25.5	25.7	25.9	26.1	26.2	0.9%	

1/ Fuel consumption includes consumption for cogeneration.

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

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

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run\_aeo2002\_e102001b.

Table 26. Paper Industry Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	154.48	155.10	159.47	164.00	167.57	172.17	176.44	180.59	179.26	181.35	183.59	188.28	191.96	195.10	198.02	200.85	204.11	207.09	209.81	212.20	214.26	1.6%
Energy Consumption (trillion Btu)																						
Residual Oil	172.1	164.3	152.2	154.6	155.8	156.8	157.3	157.7	156.5	156.1	155.9	156.6	157.1	157.3	155.4	152.7	150.3	147.8	145.1	142.4	139.6	-1.0%
Distillate Oil	11.9	11.8	10.8	11.1	11.2	11.2	11.2	11.2	11.0	10.9	10.8	10.8	10.7	10.4	8.7	8.7	8.6	8.6	8.6	8.6	8.5	-1.6%
Liquefied Petroleum Gas	4.9	5.4	4.9	5.0	5.0	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.3	5.3	5.3	5.4	5.4	5.5	5.5	5.6	5.6	0.7%
Petroleum Subtotal	188.8	181.6	167.9	170.7	172.0	173.2	173.7	174.2	172.7	172.2	171.8	172.7	173.2	173.3	171.1	166.8	164.4	161.9	159.3	156.5	153.7	-1.0%
Natural Gas	614.1	597.3	630.3	625.1	617.1	614.1	611.6	609.0	594.1	586.9	580.2	578.5	574.5	573.2	578.9	595.2	599.4	605.2	612.6	618.7	618.7	0.0%
Steam Coal	337.3	333.2	300.3	308.3	309.3	309.5	308.2	306.6	300.1	296.8	293.6	293.0	291.7	286.7	276.5	276.0	276.8	277.8	278.5	279.1	279.5	-0.9%
Renewables	1403.4	1410.8	1448.9	1488.6	1521.0	1562.4	1600.8	1638.6	1630.6	1651.4	1673.5	1717.4	1752.1	1782.6	1811.7	1840.2	1872.1	1901.9	1929.5	1954.3	1977.6	1.7%
Purchased Electricity	263.4	262.0	269.1	269.3	269.7	269.7	271.0	272.4	267.0	266.7	266.7	270.3	272.9	275.1	277.4	280.0	283.3	286.4	289.1	291.6	294.1	0.6%
Total	2807.0	2784.9	2816.6	2862.0	2886.2	2929.0	2965.3	3000.8	2964.5	2973.9	2985.9	3031.9	3064.4	3090.8	3115.6	3148.2	3189.1	3227.1	3262.5	3294.2	3323.7	0.8%
Energy Consumption per Unit of Output																						
(thousand Btu per 1992 dollar)																						
Residual Oil	1.11	1.06	0.95	0.94	0.93	0.91	0.89	0.87	0.87	0.86	0.85	0.83	0.82	0.81	0.78	0.76	0.74	0.71	0.69	0.67	0.65	-2.6%
Distillate Oil	0.08	0.08	0.07	0.07	0.07	0.07	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.04	0.04	0.04	0.04	0.04	0.04	-3.2%
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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.9%
Petroleum Subtotal	1.22	1.17	1.05	1.04	1.03	1.01	0.98	0.96	0.95	0.94	0.92	0.90	0.89	0.86	0.83	0.81	0.79	0.76	0.74	0.72	0.70	-2.6%
Natural Gas	3.98	3.85	3.95	3.81	3.68	3.67	3.47	3.37	3.31	3.24	3.16	3.07	2.99	2.94	2.92	2.91	2.90	2.89	2.89	2.89	2.89	-1.6%
Steam Coal	2.18	2.15	1.88	1.88	1.85	1.89	1.75	1.70	1.67	1.64	1.60	1.56	1.52	1.47	1.40	1.37	1.36	1.34	1.33	1.32	1.30	-2.5%
Renewables	9.08	9.10	9.09	9.08	9.08	9.08	9.07	9.07	9.10	9.11	9.12	9.12	9.13	9.14	9.15	9.16	9.17	9.18	9.20	9.21	9.23	0.1%
Purchased Electricity	1.70	1.69	1.69	1.64	1.60	1.57	1.54	1.51	1.49	1.47	1.45	1.44	1.42	1.41	1.40	1.39	1.39	1.38	1.38	1.37	1.37	-1.1%
Total	18.17	17.95	17.66	17.45	17.24	17.01	16.81	16.62	16.54	16.40	16.26	16.10	15.96	15.84	15.73	15.67	15.62	15.58	15.55	15.52	15.51	-0.8%
Carbon Dioxide Emissions 2)																						
(million metric tons carbon equivalent)	34.6	34.1	33.5	33.7	33.5	33.6	33.6	33.7	32.9	32.6	32.3	32.4	32.4	32.3	32.2	32.3	32.5	32.7	32.8	33.0	33.1	-0.2%

1/ Fuel consumption includes consumption for cogeneration.

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

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.a10201b.



**Table 28. Glass Industry Energy Consumption (1 of 1)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	22.90	22.56	23.03	23.78	24.28	24.23	24.92	25.54	25.69	26.28	26.40	26.91	27.20	27.64	27.74	27.73	27.90	28.49	28.75	29.08	29.32	1.2%
Energy Consumption (trillion Btu)																						
Residual Oil	2.6	2.5	1.7	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	-0.5%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Petroleum Subtotal	2.6	2.5	1.7	1.9	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.2	2.3	2.3	2.3	2.3	-0.5%
Natural Gas	161.2	157.3	160.5	163.5	165.0	163.3	165.9	168.1	167.6	169.6	169.0	170.5	170.8	171.9	171.2	170.0	169.8	171.6	171.8	172.2	172.3	0.3%
Purchased Electricity	44.7	44.0	43.8	45.0	45.7	45.4	46.4	47.2	47.3	48.0	48.0	48.6	48.9	49.4	49.4	49.2	49.3	50.0	50.2	50.5	50.7	0.6%
Total	208.4	203.9	206.0	210.4	212.7	210.7	214.4	217.5	217.0	219.8	219.1	221.2	221.9	223.5	222.8	221.5	221.3	223.9	224.3	225.0	225.3	0.4%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																						
Residual Oil	0.11	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	0.08	0.08	0.08	0.08	0.08	0.08	-1.7%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
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	0.00	0.00	0.00	0.00	0.00	N/A
Petroleum Subtotal	0.11	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	0.08	0.08	0.08	0.08	0.08	0.08	-1.7%
Natural Gas	7.04	6.98	6.97	6.87	6.80	6.74	6.66	6.58	6.53	6.45	6.40	6.34	6.28	6.22	6.17	6.13	6.09	6.02	5.97	5.92	5.88	-0.9%
Purchased Electricity	1.95	1.95	1.90	1.85	1.88	1.88	1.86	1.85	1.84	1.83	1.82	1.81	1.80	1.79	1.78	1.77	1.77	1.76	1.75	1.74	1.73	-0.6%
Total	9.10	9.04	8.95	8.85	8.76	8.70	8.60	8.51	8.45	8.36	8.30	8.22	8.16	8.08	8.03	7.99	7.93	7.86	7.80	7.74	7.68	-0.8%
Carbon Dioxide Emissions 2/ (million metric tons carbon equivalent)	4.6	4.5	4.5	4.6	4.7	4.6	4.7	4.8	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.8	4.8	4.9	4.9	4.9	4.9	0.3%

1/ Fuel consumption includes consumption for cogeneration.

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

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

**Table 29. Cement Industry Energy Consumption (1 of 1)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	5.61	6.16	6.27	6.20	6.26	6.33	6.42	6.49	6.57	6.65	6.51	6.59	6.60	6.62	6.68	6.78	6.86	6.92	7.02	7.09	7.14	1.2%
Energy Consumption (trillion Btu)																						
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	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Distillate Oil	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1	2.0	2.1	2.1	2.1	2.1	2.1	0.3%
Other Petroleum 2/	58.5	62.7	63.3	62.2	62.4	62.6	62.9	63.1	63.3	63.6	62.0	62.4	62.0	61.9	62.0	62.4	62.7	62.8	63.1	63.3	63.4	0.4%
Petroleum Subtotal	60.4	64.9	65.5	64.4	64.6	64.8	65.1	65.3	65.6	65.8	64.2	64.5	64.2	64.0	64.0	64.5	64.7	64.8	65.2	65.4	65.5	0.4%
Natural Gas	20.0	21.3	22.6	23.5	23.2	22.8	22.3	22.2	21.8	21.6	21.9	22.8	23.3	24.9	24.7	24.6	24.5	24.3	24.2	23.9	23.6	0.8%
Steam Coal	250.4	270.4	281.9	282.3	282.5	284.1	285.1	287.3	289.2	292.7	294.7	298.5	295.8	295.7	296.5	299.0	297.1	271.7	273.9	275.4	276.5	0.5%
Purchased Electricity	41.1	44.2	44.6	43.9	44.2	44.4	44.8	45.1	45.3	45.6	44.4	44.8	44.6	44.7	45.2	45.5	45.6	45.6	46.0	46.2	46.3	0.6%
Total	371.9	400.8	404.7	398.1	399.4	400.9	403.3	404.8	406.9	408.8	399.2	401.5	399.8	399.1	399.9	403.2	405.5	406.4	409.3	410.9	411.8	0.5%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Distillate Oil	0.34	0.36	0.35	0.36	0.35	0.35	0.35	0.34	0.34	0.33	0.33	0.32	0.32	0.31	0.31	0.30	0.30	0.29	0.29	0.29	0.29	-0.9%
Other Petroleum 2/	10.43	10.19	10.09	10.04	9.96	9.88	9.79	9.72	9.64	9.56	9.52	9.46	9.41	9.36	9.28	9.20	9.13	9.07	9.00	8.93	8.88	-0.8%
Petroleum Subtotal	10.77	10.55	10.44	10.40	10.31	10.23	10.14	10.06	9.97	9.89	9.85	9.79	9.73	9.66	9.59	9.50	9.43	9.37	9.29	9.22	9.16	-0.8%
Natural Gas	3.57	3.45	3.50	3.46	3.45	3.35	3.25	3.19	3.08	3.01	3.07	3.19	3.23	3.35	3.30	3.27	3.26	3.24	3.21	3.18	3.14	-0.4%
Steam Coal	44.64	43.91	41.75	42.00	41.92	41.71	41.44	41.18	40.95	40.70	40.63	40.43	40.29	40.13	39.91	39.67	39.44	39.26	39.04	38.86	38.70	-0.7%
Purchased Electricity	7.34	7.18	7.12	7.09	7.05	7.02	6.98	6.94	6.86	6.82	6.79	6.76	6.73	6.70	6.66	6.62	6.59	6.55	6.51	6.48	6.48	-0.6%
Total	66.32	65.09	64.50	64.24	63.78	63.31	62.81	62.36	61.90	61.46	61.28	60.92	60.61	60.27	59.90	59.46	59.07	58.72	58.33	57.97	57.65	-0.7%
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	9.9	10.7	10.6	10.5	10.5	10.6	10.7	10.7	10.8	10.8	10.5	10.6	10.5	10.5	10.5	10.6	10.7	10.7	10.8	10.8	10.8	0.5%

1/ Fuel consumption includes consumption for cogeneration.

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

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

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002-d102001b.

Table 30. Iron and Steel Industries Energy Consumption (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Industry Output (billion 1992 dollars)	70.44	68.00	69.81	72.19	72.85	73.75	74.74	75.64	76.45	77.22	78.67	79.73	80.25	80.83	81.52	82.21	82.71	83.36	83.98	84.43	84.58	0.9%	
Energy Consumption (trillion Btu)																							
Distillate Oil	5.3	5.1	5.0	5.1	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.2	5.1	5.1	5.0	5.0	5.0	5.0	5.0	5.0	4.9	-0.4%
Residual Oil	34.5	28.0	22.4	25.4	25.6	25.7	25.6	25.5	25.5	25.3	25.9	26.2	26.0	25.7	25.5	25.4	25.1	25.0	24.9	24.6	24.1	24.1	-1.6%
Other Petroleum 2/	7.8	7.7	7.6	7.5	7.4	7.3	7.2	7.1	7.0	6.9	6.8	6.8	6.7	6.6	6.5	6.4	6.3	6.2	6.2	6.1	6.0	6.0	-1.3%
Petroleum Subtotal	47.6	40.7	35.0	38.1	38.2	38.2	38.0	37.8	37.7	37.4	37.9	38.2	37.9	37.4	37.1	36.9	36.4	36.2	36.0	35.6	35.1	35.1	-1.5%
Natural Gas	513.8	493.8	532.8	534.0	530.2	529.6	530.4	530.8	530.2	530.0	532.9	533.8	532.2	531.4	531.4	531.1	530.4	530.1	529.9	529.0	528.8	528.8	0.1%
Metallurgical Coal	692.0	679.4	667.0	654.8	642.8	631.1	619.6	608.3	597.2	586.3	575.6	565.1	554.8	544.6	534.7	524.9	515.4	505.9	496.7	487.6	478.7	478.7	-1.8%
Nat Coke Imports	51.6	43.6	52.1	85.5	70.7	77.0	83.8	90.2	96.1	102.0	111.1	118.4	123.1	128.2	133.7	138.3	144.0	149.4	154.8	159.3	162.4	162.4	5.9%
Steam Coal	107.3	111.3	86.4	91.5	94.0	95.1	95.7	96.2	97.2	97.8	98.9	99.9	100.8	101.5	102.0	102.8	103.3	104.2	105.2	105.9	106.6	106.6	0.0%
Coal Subtotal	850.9	832.2	805.5	811.8	807.5	803.2	799.0	794.6	790.5	786.1	785.6	783.4	778.7	774.3	770.4	767.1	762.8	759.6	756.6	752.8	747.7	747.7	-0.6%
Purchased Electricity	157.5	151.1	152.5	159.0	160.7	162.8	165.2	167.2	169.0	170.8	174.2	176.7	177.8	179.0	180.5	182.1	183.2	184.7	186.1	187.2	187.6	187.6	0.9%
Total	1569.7	1517.9	1525.9	1542.8	1536.5	1533.9	1532.6	1530.5	1527.3	1524.2	1530.6	1532.1	1528.6	1522.1	1519.5	1517.2	1512.7	1510.7	1508.6	1504.6	1497.2	1497.2	-0.2%
Energy Consumption per Unit of Output (thousand Btu per 1992 dollar)																							
Distillate Oil	0.08	0.07	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	0.06	0.06	0.06	0.06	0.06	0.06	-1.3%
Residual Oil	0.49	0.41	0.32	0.35	0.35	0.35	0.34	0.34	0.33	0.33	0.33	0.33	0.32	0.32	0.31	0.31	0.30	0.30	0.30	0.29	0.29	0.29	-2.7%
Other Petroleum 2/	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	-2.2%
Petroleum Subtotal	0.68	0.60	0.50	0.53	0.52	0.52	0.51	0.50	0.49	0.48	0.48	0.48	0.47	0.47	0.46	0.45	0.44	0.43	0.42	0.41	0.41	0.41	-2.4%
Natural Gas	7.29	7.28	7.63	7.40	7.28	7.18	7.10	7.02	6.98	6.96	6.97	6.99	6.93	6.97	6.92	6.90	6.81	6.78	6.71	6.67	6.63	6.63	-0.8%
Metallurgical Coal	9.82	9.99	9.55	9.07	8.82	8.56	8.29	8.04	7.81	7.59	7.32	7.09	6.91	6.74	6.56	6.39	6.23	6.07	5.91	5.78	5.66	5.66	-2.7%
Nat Coke Imports	0.73	0.61	0.75	0.91	0.97	1.04	1.12	1.19	1.26	1.32	1.41	1.49	1.53	1.59	1.64	1.69	1.74	1.79	1.84	1.89	1.92	1.92	4.9%
Steam Coal	1.52	1.64	1.24	1.27	1.29	1.29	1.28	1.27	1.27	1.27	1.26	1.25	1.26	1.26	1.26	1.25	1.25	1.25	1.25	1.25	1.25	1.25	-0.9%
Coal Subtotal	12.08	12.24	11.54	11.25	11.08	10.89	10.69	10.51	10.34	10.18	9.99	9.83	9.70	9.58	9.45	9.33	9.22	9.11	9.01	8.92	8.84	8.84	-1.5%
Purchased Electricity	2.24	2.22	2.19	2.20	2.21	2.21	2.21	2.21	2.21	2.21	2.22	2.22	2.22	2.21	2.21	2.22	2.22	2.22	2.22	2.22	2.22	2.22	0.0%
Total	22.28	22.32	21.86	21.37	21.09	20.89	20.51	20.23	19.98	19.74	19.45	19.21	19.02	18.83	18.64	18.46	18.29	18.12	17.96	17.82	17.70	17.70	-1.1%
Carbon Dioxide Emissions 3/ (million metric tons carbon equivalent)	37.8	36.6	36.3	36.5	36.7	36.8	36.8	36.8	36.7	36.6	36.6	36.8	36.7	36.6	36.5	36.5	36.4	36.4	36.3	36.3	36.3	36.1	-0.2%

1/ Fuel consumption includes consumption for cogeneration.

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

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

Btu = British thermal unit.

NA = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2020 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002-d102001b.

**Table 31. Aluminum Industry Energy Consumption (1 of 1)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	36.06	33.66	34.96	36.31	37.15	38.05	39.30	40.20	40.95	41.62	42.42	43.44	43.88	44.16	44.40	44.60	44.92	45.13	45.59	45.78	45.88	1.2%
Energy Consumption (trillion Btu)																						
Distillate Oil	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	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-0.3%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Coke	5.4	5.4	5.3	5.2	5.2	5.1	5.0	5.0	4.9	4.8	4.8	4.7	4.6	4.6	4.5	4.4	4.4	4.3	4.3	4.2	4.2	-1.3%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Petroleum Subtotal	6.0	5.9	5.8	5.7	5.7	5.6	5.5	5.5	5.4	5.3	5.3	5.2	5.1	5.1	4.9	4.9	4.8	4.8	4.7	4.7	4.6	-1.2%
Natural Gas	147.8	138.2	141.3	144.0	145.0	146.2	146.2	149.3	150.0	150.4	151.2	152.4	152.3	151.7	151.1	150.3	149.9	149.2	149.1	148.5	147.6	0.0%
Steam Coal	71.6	71.6	71.6	70.3	69.0	67.7	66.5	65.3	64.1	62.9	61.7	60.6	59.5	58.4	57.3	56.3	55.3	54.3	53.3	52.3	51.3	-1.6%
Purchased Electricity	230.0	223.1	222.0	221.1	219.5	218.0	216.9	215.3	213.8	211.7	210.1	208.7	206.6	204.4	202.1	199.8	197.7	195.5	193.6	191.4	189.2	-1.0%
Total	455.4	438.8	440.7	441.2	439.2	437.5	437.1	435.4	433.0	430.4	428.3	427.0	423.6	419.6	415.5	411.4	407.7	403.8	400.7	396.8	392.7	-0.7%
Energy Consumption per Unit of Output																						
(thousand Btu per 1992 dollar)																						
Distillate 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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-1.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Petroleum Coke	0.15	0.16	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09	0.09	-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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Petroleum Subtotal	0.17	0.17	0.17	0.16	0.15	0.15	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.10	-2.4%
Natural Gas	4.10	4.11	4.04	3.97	3.90	3.84	3.77	3.71	3.66	3.61	3.56	3.51	3.47	3.44	3.40	3.37	3.34	3.31	3.27	3.24	3.22	-1.2%
Steam Coal	1.99	2.13	2.05	1.98	1.86	1.78	1.69	1.62	1.56	1.51	1.46	1.40	1.36	1.32	1.29	1.26	1.23	1.20	1.17	1.14	1.12	-2.8%
Purchased Electricity	6.38	6.63	6.35	6.09	5.91	5.73	5.52	5.36	5.21	5.09	4.95	4.81	4.71	4.63	4.55	4.48	4.40	4.33	4.25	4.18	4.12	-2.2%
Total	12.63	13.04	12.60	12.15	11.82	11.50	11.12	10.83	10.57	10.34	10.10	9.83	9.65	9.50	9.36	9.22	9.08	8.95	8.79	8.67	8.56	-1.9%
Carbon Dioxide Emissions 2)																						
(million metric tons carbon equivalent)	15.6	15.1	14.8	14.8	14.7	14.6	14.6	14.5	14.3	14.2	14.0	13.9	13.7	13.5	13.3	13.2	13.0	12.9	12.7	12.6	12.4	-1.1%

1/ Fuel consumption includes consumption for cogeneration.

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

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.





**Table 32. Other Industrial Sector Energy Consumption (2 of 2)  
(Trillion Btu)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Industry Output (billion 1992 dollars)	165.57	168.56	169.86	172.52	173.25	174.24	176.77	179.33	181.41	183.28	185.58	188.60	190.77	194.24	197.43	200.61	203.99	206.55	208.84	210.09	212.33	1.3%
Energy Consumption per Unit of Output	11.29	11.20	11.19	11.33	11.58	11.70	11.84	11.96	12.16	12.33	12.52	12.59	12.65	12.64	12.63	12.63	12.62	12.64	12.69	12.74	12.77	0.6%
Carbon Dioxide Emissions 1/	20.9	21.3	21.2	21.4	21.4	21.6	21.8	22.1	22.1	22.3	22.3	22.5	22.6	22.9	23.0	23.2	23.4	23.6	23.7	23.9	24.1	0.7%
(million metric tons carbon equivalent)																						
Metal-Based Durables Consumption																						
Residual Oil	9.4	8.6	8.0	8.8	9.4	9.9	10.5	11.0	11.5	12.0	12.7	13.3	13.8	14.4	14.9	15.4	15.8	16.4	17.0	17.5	18.0	3.3%
Distillate Oil	26.3	26.4	23.6	26.6	28.5	30.0	31.4	32.6	34.2	35.1	36.5	38.2	39.5	40.4	41.0	41.6	42.7	44.1	45.7	47.0	48.3	3.1%
Liquefied Petroleum Gas	13.8	15.0	12.7	13.5	14.2	14.9	15.5	16.1	16.6	17.4	17.9	18.7	19.1	19.8	20.3	20.8	21.3	22.0	22.7	23.4	24.0	2.6%
Petroleum Subtotal	49.5	52.0	44.2	48.9	52.1	54.9	57.4	59.6	62.5	64.5	67.1	70.2	72.5	74.5	76.2	77.8	79.9	82.5	85.4	87.9	90.3	3.1%
Natural Gas	729.1	686.7	720.1	756.6	787.3	818.6	850.5	881.2	912.0	942.9	980.6	1015.9	1045.4	1075.4	1103.5	1131.1	1157.7	1187.8	1220.2	1250.9	1275.8	2.8%
Steam Coal	63.5	62.1	59.2	61.9	63.7	65.3	66.8	68.2	69.6	70.9	72.5	74.0	75.2	76.4	77.5	78.6	79.5	80.8	82.1	83.3	84.4	1.4%
Renewables	44.4	42.4	44.4	47.8	50.6	53.4	56.3	59.2	62.1	65.0	68.6	72.0	75.2	78.4	81.4	84.5	87.4	90.8	94.3	97.7	100.5	4.2%
Purchased Electricity	736.8	701.8	716.8	760.4	795.7	830.5	865.8	899.5	934.3	968.4	1010.0	1049.9	1084.2	1118.5	1150.6	1182.5	1213.4	1248.2	1285.7	1321.3	1350.8	3.1%
Total	1623.3	1545.0	1584.7	1675.6	1749.4	1822.7	1896.9	1967.7	2040.5	2111.7	2198.8	2281.8	2352.5	2423.2	2489.2	2554.4	2617.8	2690.1	2767.6	2841.1	2901.8	2.9%
Industry Output (billion 1992 dollars)	1830.32	1745.52	1823.59	1959.29	2070.62	2181.57	2295.41	2406.48	2521.00	2634.88	2772.70	2906.56	3026.89	3150.01	3265.36	3381.05	3493.32	3616.05	3750.82	3877.61	3983.63	4.0%
Energy Consumption per Unit of Output	0.89	0.89	0.87	0.86	0.84	0.84	0.83	0.82	0.81	0.80	0.79	0.79	0.78	0.77	0.76	0.76	0.75	0.74	0.74	0.73	0.73	-1.0%
Carbon Dioxide Emissions 1/	50.0	47.9	47.9	50.8	53.0	55.3	57.7	60.0	61.9	63.8	66.1	68.4	70.4	72.4	74.2	76.0	77.8	80.0	82.1	84.2	85.9	2.7%
(million metric tons carbon equivalent)																						
Other Manufacturing Consumption																						
Residual Oil	64.2	59.7	53.6	55.7	57.1	58.6	59.6	60.7	61.6	62.7	64.3	65.8	66.8	67.7	68.5	69.3	70.0	71.0	71.9	72.7	73.3	0.7%
Distillate Oil	56.5	62.3	51.7	55.6	57.4	59.0	60.1	61.0	62.1	62.4	63.5	65.0	65.8	65.9	65.7	65.7	66.3	67.3	68.3	68.9	69.7	1.1%
Liquefied Petroleum Gas	27.1	37.2	25.7	26.6	27.4	28.5	28.9	29.4	30.1	30.7	31.2	32.1	32.3	33.0	33.4	33.7	34.2	34.9	35.7	36.4	37.1	1.6%
Petroleum Subtotal	147.7	159.2	130.9	137.9	141.9	146.1	148.7	151.1	153.9	155.8	159.0	162.9	164.8	166.6	167.6	168.7	170.5	173.2	175.9	177.9	180.1	1.0%
Natural Gas	1358.9	1318.2	1404.9	1416.3	1428.1	1453.5	1478.1	1502.7	1521.6	1548.4	1588.1	1617.8	1637.2	1659.2	1677.7	1698.3	1715.3	1736.8	1757.1	1773.3	1786.2	1.4%
Steam Coal	263.6	261.5	247.0	256.2	262.0	268.6	273.8	279.3	284.1	289.7	297.4	304.5	309.2	314.0	318.1	322.5	326.8	332.0	337.0	341.3	345.2	1.4%
Renewables	344.0	340.9	350.6	358.1	364.8	373.8	382.7	391.9	399.5	409.3	422.0	433.9	442.2	450.9	459.0	466.8	474.5	483.2	491.9	499.3	505.9	1.9%
Purchased Electricity	911.9	896.0	907.3	922.5	933.4	950.8	967.1	983.8	996.6	1013.9	1038.3	1060.0	1073.0	1086.5	1098.7	1110.9	1123.0	1137.4	1151.1	1161.8	1170.7	1.3%
Total	3026.2	2973.8	3040.7	3090.9	3130.1	3192.9	3250.4	3309.8	3365.7	3417.0	3502.8	3579.2	3626.6	3676.2	3721.0	3765.2	3810.0	3862.7	3913.1	3953.6	3988.1	1.4%
Industry Output (billion 1992 dollars)	1091.89	1078.79	1113.29	1137.76	1158.53	1190.34	1220.00	1250.62	1275.45	1307.02	1349.53	1387.73	1413.59	1440.31	1464.74	1488.95	1513.12	1540.71	1567.19	1589.58	1609.14	2.0%
Energy Consumption per Unit of Output	2.77	2.76	2.73	2.72	2.70	2.68	2.66	2.65	2.63	2.61	2.60	2.58	2.57	2.55	2.54	2.53	2.52	2.51	2.50	2.49	2.48	-0.6%
Carbon Dioxide Emissions 1/	74.9	73.9	73.7	75.0	75.8	77.3	78.8	80.3	81.0	82.1	83.8	85.3	86.1	87.2	87.9	88.8	89.6	90.8	91.8	92.6	93.2	1.1%
(million metric tons carbon equivalent)																						

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

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 are model results and may differ slightly from official EIA data reports.

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.n102001b.



**Table 33. Transportation Sector Energy Use by Mode and Type (1 of 2)  
(Trillion Btu)**

1/ Commercial light trucks from 5,000 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: 2000 values derived using Energy Information Administration (EIA), Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasts/steso/shortses/lo01.pdf>.

EIA, Fuel Oil and Kerosene Sales 1999, DOE/EIA-0325(99) (Washington, DC, September 2002); EIA, State Energy Data Report 1999, DOE/EIA-0114(99) (Washington, DC, May 2001);

Oak Ridge National Laboratory, Transportation Energy Data Book: 17, 18 and 19 (Oak Ridge, TN, September 1999); Department of Defense, Defense Fuel Supply Center; and EIA,

AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.



**Table 34. Transportation Sector Energy Use by Fuel Type Within a Mode (2 of 2)  
(Trillion Btu)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Bus Transportation</b>																						
Transit Bus (motor gasoline)	4.83	4.80	4.81	4.85	4.89	4.93	4.96	5.01	5.05	5.10	5.14	5.18	5.21	5.24	5.25	5.25	5.25	5.24	5.24	5.23	5.23	0.4%
Transit Bus (diesel)	82.02	84.55	84.55	85.11	85.81	86.55	87.20	87.92	88.75	89.58	90.33	91.01	91.57	91.97	92.14	92.17	92.16	92.11	91.99	91.94	91.88	0.6%
Intercity Bus (diesel)	23.29	24.01	24.01	24.17	24.37	24.58	24.77	24.97	25.20	25.44	25.65	25.85	26.01	26.12	26.17	26.18	26.17	26.13	26.11	26.11	26.09	0.6%
School Bus (motor gasoline)	3.98	3.95	3.96	3.99	4.02	4.05	4.08	4.12	4.16	4.19	4.23	4.26	4.29	4.31	4.31	4.32	4.32	4.31	4.31	4.30	4.30	0.4%
School Bus (diesel)	67.45	69.54	69.53	70.00	70.57	71.18	71.72	72.31	72.98	73.67	74.29	74.85	75.31	75.64	75.78	75.80	75.79	75.75	75.65	75.61	75.56	0.6%
<b>Total</b>	<b>181.58</b>	<b>186.85</b>	<b>186.87</b>	<b>188.12</b>	<b>189.66</b>	<b>191.28</b>	<b>192.73</b>	<b>194.32</b>	<b>196.14</b>	<b>197.98</b>	<b>199.65</b>	<b>201.15</b>	<b>202.38</b>	<b>203.38</b>	<b>203.65</b>	<b>203.71</b>	<b>203.69</b>	<b>203.57</b>	<b>203.32</b>	<b>203.20</b>	<b>203.06</b>	<b>0.6%</b>
<b>Rail Transportation</b>																						
Intercity Rail (electricity)	8.08	8.24	8.40	8.57	8.74	8.92	9.07	9.24	9.41	9.59	9.77	9.96	10.14	10.33	10.51	10.69	10.87	11.08	11.24	11.43	11.61	1.5%
Intercity Rail (diesel)	12.34	12.92	13.10	13.37	13.64	13.90	14.15	14.41	14.68	14.96	15.24	15.52	15.81	16.10	16.38	16.67	16.95	17.24	17.53	17.82	18.11	1.9%
Transit Rail (electricity)	44.27	45.15	46.05	46.98	47.93	48.88	49.73	50.63	51.59	52.57	53.56	54.56	55.58	56.60	57.69	58.58	59.59	60.60	61.61	62.64	63.64	1.8%
Commuter Rail (electricity)	5.58	5.69	5.80	5.92	6.04	6.16	6.27	6.38	6.50	6.62	6.75	6.88	7.00	7.13	7.26	7.38	7.51	7.64	7.76	7.89	8.02	1.8%
Commuter Rail (diesel)	8.52	8.92	9.05	9.23	9.42	9.60	9.77	9.95	10.14	10.33	10.52	10.72	10.92	11.12	11.32	11.51	11.71	11.91	12.11	12.31	12.51	1.9%
<b>Total</b>	<b>78.80</b>	<b>80.92</b>	<b>82.41</b>	<b>84.06</b>	<b>85.76</b>	<b>87.44</b>	<b>88.99</b>	<b>90.60</b>	<b>92.32</b>	<b>94.08</b>	<b>95.84</b>	<b>97.64</b>	<b>99.47</b>	<b>101.29</b>	<b>103.05</b>	<b>104.82</b>	<b>106.64</b>	<b>108.45</b>	<b>110.25</b>	<b>112.10</b>	<b>113.89</b>	<b>1.9%</b>
<b>Recreation Boats</b>	<b>312.28</b>	<b>312.31</b>	<b>313.62</b>	<b>317.12</b>	<b>320.02</b>	<b>323.01</b>	<b>325.36</b>	<b>327.82</b>	<b>331.06</b>	<b>334.56</b>	<b>337.91</b>	<b>341.46</b>	<b>345.01</b>	<b>348.37</b>	<b>351.72</b>	<b>355.03</b>	<b>358.48</b>	<b>361.77</b>	<b>364.89</b>	<b>368.14</b>	<b>370.92</b>	<b>0.9%</b>
Lubricants	180.00	194.00	200.00	203.69	204.87	206.88	209.47	212.48	215.52	218.99	222.33	225.72	229.50	231.21	233.83	236.48	239.11	241.90	244.74	247.45	249.87	1.7%
Pipeline Fuel Natural Gas	791.82	790.00	772.73	791.10	795.92	795.48	807.84	817.76	831.81	842.93	860.38	885.25	901.24	916.80	933.02	950.16	966.22	982.19	998.48	1007.68	1018.62	1.3%
<b>Total Miscellaneous</b>	<b>2164.90</b>	<b>2208.30</b>	<b>2242.29</b>	<b>2278.53</b>	<b>2293.74</b>	<b>2304.87</b>	<b>2329.67</b>	<b>2353.78</b>	<b>2383.96</b>	<b>2413.34</b>	<b>2448.17</b>	<b>2489.52</b>	<b>2518.59</b>	<b>2544.98</b>	<b>2572.18</b>	<b>2599.64</b>	<b>2625.81</b>	<b>2651.51</b>	<b>2677.05</b>	<b>2696.47</b>	<b>2714.60</b>	<b>1.1%</b>
<b>Total Consumption</b>	<b>27316.72</b>	<b>27485.83</b>	<b>28043.99</b>	<b>28904.46</b>	<b>29533.09</b>	<b>30181.46</b>	<b>30736.01</b>	<b>31343.88</b>	<b>32032.13</b>	<b>32765.36</b>	<b>33490.00</b>	<b>34247.30</b>	<b>34914.67</b>	<b>35546.68</b>	<b>36118.79</b>	<b>36675.84</b>	<b>37252.03</b>	<b>37823.11</b>	<b>38375.88</b>	<b>38929.62</b>	<b>39415.55</b>	<b>1.9%</b>

1) Commercial trucks from 8,000 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: 2000 compressed natural gas volume: Energy Information Administration (EIA), AEO2002 National Energy Modeling System run aeo2002.t102001b. Other 2000 values derived using: EIA, Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/gas/shortterm/short1.pdf>; EIA, Fuel Oil and Kerosene Sales 1998, DOE/EIA-0539p (Washington, DC, September 2002); EIA, State Energy Data Report 1999, DOE/EIA-0214/99 (Washington, DC, May 2001); Oak Ridge National Laboratory, Transportation Energy

Data Book: 17, 18 and 19 (Oak Ridge, TN, September 1999); Department of Defense, Defense Fuel Supply Center, and EIA, AEO2002 National Energy Modeling System run

aeo2002.t102001b. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.t102001b.

**Table 35. Light-Duty Vehicle Energy Consumption by Technology Type and Fuel Type (1 of 1)  
(Trillion Btu)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Light-Duty Consumption by Technology Type</b>																						
<b>Conventional Vehicles 1/</b>																						
Gasoline ICE Vehicles	14542.78	14658.07	14816.66	15309.48	15548.80	15762.84	15997.77	16230.81	16502.50	16762.96	17042.78	17306.17	17561.39	17797.14	17994.64	18182.78	18382.68	18572.27	18756.48	18953.84	19118.52	1.4%
TDI Diesel ICE	106.50	132.53	150.89	176.62	201.61	229.18	257.92	284.48	312.17	340.28	366.98	393.41	419.85	445.34	469.22	492.71	515.77	539.71	559.16	578.51	595.29	9.0%
<b>Alternative-Fuel Vehicles</b>																						
<b>Alcohol Fuel Technology</b>																						
Methanol-Flex Fuel ICE	7.82	11.88	15.38	19.13	22.31	24.99	26.99	28.59	30.18	31.70	33.14	34.50	35.76	36.91	37.96	38.92	39.83	40.66	41.42	42.14	42.77	8.9%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.0%
Ethanol-Flex Fuel ICE	186.63	228.44	291.04	326.54	368.18	408.04	444.18	479.60	515.39	550.41	583.91	616.44	647.52	678.42	707.42	735.97	763.68	792.95	823.98	844.82	833.34	7.5%
Ethanol ICE	0.14	0.16	0.18	0.19	0.21	0.22	0.23	0.24	0.25	0.26	0.27	0.27	0.28	0.28	0.29	0.29	0.29	0.29	0.30	0.30	0.31	4.2%
Total Alcohol	204.58	250.28	296.60	345.87	390.70	433.25	471.40	508.43	545.82	582.36	617.32	651.21	683.56	713.62	740.66	766.08	790.80	813.90	835.67	857.26	876.42	7.5%
<b>Natural Gas Technology</b>																						
CNG ICE	6.04	6.60	7.26	7.96	8.59	9.22	9.99	10.77	11.55	12.34	13.12	13.88	14.67	15.41	16.11	16.85	17.61	18.35	18.96	19.60	20.19	6.2%
CNG Bi-fuel	49.13	68.74	87.86	106.70	121.83	134.36	144.17	152.83	161.39	169.58	177.48	185.00	192.10	198.63	204.58	210.13	215.41	220.32	224.92	229.43	233.55	8.1%
LPG ICE	4.99	5.79	6.53	7.29	8.01	8.77	9.51	10.26	11.05	11.88	12.63	13.42	14.18	14.85	15.67	16.39	17.12	17.85	18.60	19.39	20.17	7.2%
LPG Bi-fuel	41.69	50.87	59.84	68.82	75.81	81.54	85.88	89.62	93.37	96.96	100.40	103.68	106.78	109.57	112.11	114.46	116.69	118.73	120.60	122.40	123.97	5.6%
Total Natural Gas Technology	101.85	132.00	161.50	190.77	214.24	233.89	249.56	263.48	277.38	290.74	303.63	315.98	327.70	338.56	348.46	357.83	366.83	375.25	383.08	390.82	397.68	7.1%
<b>Electric Technology</b>																						
Electric Vehicle	1.79	2.53	3.24	4.12	4.95	5.68	6.51	7.13	7.72	8.53	9.38	10.28	11.47	12.68	13.79	15.52	17.25	18.96	21.30	23.66	25.89	14.3%
Electric-Diesel Hybrid	0.43	0.84	1.20	3.84	6.60	10.01	15.13	19.90	24.99	30.44	35.92	41.60	47.69	53.94	60.25	67.19	73.95	80.40	85.59	90.61	94.94	31.0%
Electric-Gasoline Hybrid	3.72	6.56	9.40	22.13	35.47	51.97	73.09	95.73	119.31	144.13	169.59	195.74	222.73	249.80	276.35	304.23	331.37	357.11	378.98	399.85	418.37	26.6%
Total Electricity	5.94	9.93	13.84	30.08	47.02	66.76	94.73	122.75	152.02	183.10	214.90	247.61	281.89	316.42	350.40	389.94	422.57	456.46	485.87	514.12	539.20	25.3%
<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	0.01	0.04	0.13	0.35	0.83	1.76	3.50	6.49	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	0.00	0.00	0.00	0.00	0.01	0.01	0.02	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	0.01	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.17	0.20	0.24	N/A
Total Fuel Cell	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.06	0.11	0.22	0.47	0.98	1.94	3.72	6.75	N/A
<b>Light-Duty Consumption by Fuel Type1/</b>																						
Motor Gasoline	14736.35	14883.58	15182.27	15623.80	15910.74	16205.80	16470.19	16765.05	17099.21	17443.15	17765.39	18090.50	18406.79	18700.76	18952.65	19194.65	19448.31	19684.33	19912.43	20152.48	20394.58	1.6%
Diesel (diesel)	106.50	132.53	150.89	176.62	201.61	229.18	257.92	284.48	312.17	340.28	366.98	393.41	419.85	445.34	469.22	492.71	515.77	539.71	559.16	578.51	595.29	9.0%
Methanol	7.38	11.20	14.77	18.29	21.05	23.02	23.95	24.28	24.63	24.94	25.21	25.42	25.45	25.53	25.59	25.59	25.64	25.62	25.93	25.97	25.97	6.5%
Ethanol	33.21	45.23	62.26	80.52	98.42	115.71	132.52	149.85	167.38	184.39	200.99	218.73	236.42	253.91	271.14	288.11	304.81	321.24	337.41	353.31	368.94	5.7%
Compressed Natural Gas	50.61	70.30	89.31	107.23	120.28	129.30	134.52	138.16	141.85	145.31	148.75	151.96	154.96	157.57	159.93	162.24	164.48	166.58	168.48	170.43	172.21	6.3%
Liquefied Petroleum Gas	35.00	45.92	54.82	63.68	69.96	74.45	76.85	78.16	79.69	81.12	82.31	83.57	84.50	85.50	86.34	87.10	87.95	88.80	89.65	90.57	91.49	4.9%
Electricity	1.79	2.53	3.24	4.12	4.95	5.68	6.51	7.13	7.72	8.53	9.38	10.28	11.47	12.68	13.79	15.52	17.25	18.96	21.30	23.66	25.89	14.3%
Liquid Hydrogen	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.05	0.07	0.09	0.12	0.15	0.17	0.20	0.24	N/A

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, AEO2002 National Energy Modeling System run aeo2002\_e102010b.





**Table 36. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Percent Alternative Light Truck Sales	8.43	8.92	9.05	10.19	10.31	12.10	14.88	15.01	15.06	15.44	15.43	15.44	15.81	15.75	15.63	16.36	16.06	15.63	14.60	14.25	14.04	2.6%
Total New Truck Sales	388.8	362.1	358.1	377.4	371.0	376.7	382.1	386.7	389.6	390.6	391.7	393.2	393.9	394.2	394.7	395.4	395.7	396.1	396.3	396.5	396.4	0.1%
Percent Total Alternative Sales	5.07	5.51	5.60	7.17	7.33	9.88	13.96	13.80	13.69	14.16	14.03	13.93	14.37	14.21	13.94	14.89	14.43	13.88	12.88	12.39	12.06	4.4%
EPACT Legislative Alternative Sales	10.99	13.19	13.01	13.57	13.23	13.33	13.44	13.53	13.57	13.55	13.55	13.56	13.56	13.54	13.54	13.53	13.53	13.53	13.53	13.52	13.51	1.0%
ZEV Legislative Alternative Sales	0.00	0.00	0.00	42.15	78.64	116.45	157.95	158.61	159.18	164.83	164.91	165.72	172.54	173.00	173.12	186.50	187.15	187.35	199.82	200.52	200.60	N/A
Total Vehicles Sales	837.3	778.4	768.1	800.5	780.1	786.2	792.3	797.5	799.8	796.8	798.4	799.2	798.8	797.8	797.5	797.7	797.3	797.2	796.9	796.6	795.9	-0.3%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.doe.gov/energy/alternatives/alt1.html>; and EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.



**Table 37. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**Middle Atlantic**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
Percent Alternative Light Truck Sales	8.26	8.51	8.55	8.72	9.85	10.07	10.47	10.61	10.75	10.89	11.02	11.14	11.30	11.40	11.53	11.76	11.81	11.85	11.81	11.92	12.05	1.9%
Total New Truck Sales	1108.6	1026.9	1010.6	1060.3	1038.5	1051.3	1063.5	1073.5	1078.9	1079.1	1079.5	1080.9	1080.3	1078.6	1077.4	1076.7	1075.0	1073.3	1071.4	1069.4	1066.6	-0.2%
Percent Total Alternative Sales	4.94	5.22	5.25	6.81	6.96	7.23	7.84	7.94	8.05	8.26	8.37	8.49	8.72	8.83	8.93	9.31	9.33	9.35	9.42	9.50	9.59	3.4%
EPACT Legislative Alternative Sales	31.35	37.40	36.72	38.14	37.03	37.21	37.41	37.56	37.58	37.45	37.34	37.29	37.18	37.05	36.95	36.87	36.77	36.67	36.57	36.48	36.36	0.7%
ZEV Legislative Alternative Sales	0.00	0.00	0.00	76.74	143.16	211.84	287.42	288.57	289.57	299.82	299.93	301.37	313.75	314.57	314.78	339.10	340.25	340.61	363.27	364.54	364.68	N/A
Total Vehicles Sales	2387.6	2207.4	2167.4	2250.1	2184.0	2194.2	2205.5	2214.2	2215.1	2206.9	2200.4	2197.2	2190.8	2182.7	2176.6	2172.0	2165.8	2160.3	2154.4	2148.7	2141.7	-0.5%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.dau.doe.gov/external/transport/altfuel1.htm>, and EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.



**Table 38. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**East North Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
Percent Alternative Light Truck Sales	8.21	8.52	8.58	9.73	9.84	10.03	10.43	10.58	10.71	10.86	10.98	11.11	11.24	11.35	11.47	11.67	11.72	11.77	11.71	11.82	11.95	1.9%	
Total New Truck Sales	1274.3	1183.1	1166.6	1226.5	1203.8	1221.4	1238.6	1253.1	1261.7	1263.8	1266.1	1269.6	1270.6	1270.2	1270.4	1271.2	1270.8	1270.4	1269.6	1268.7	1266.8	1266.8	0.0%
Percent Total Alternative Sales	4.94	5.24	5.27	6.79	6.91	7.15	7.68	7.78	7.90	8.05	8.17	8.29	8.43	8.54	8.66	8.86	8.87	8.90	8.79	8.86	8.96	3.0%	
EPACT Legislative Alternative Sales	36.04	43.09	42.40	44.11	42.92	43.23	43.56	43.84	43.95	43.98	43.79	43.80	43.73	43.63	43.57	43.53	43.46	43.41	43.34	43.28	43.19	43.19	0.9%
ZEV 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	2744.6	2543.1	2502.2	2602.7	2531.6	2549.2	2568.5	2584.5	2590.4	2584.7	2580.7	2580.6	2576.5	2570.4	2566.6	2564.4	2560.3	2556.9	2553.0	2549.2	2543.8	2543.8	-0.4%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.doe.gov/oeat/transport/altfuel1.html>, and EIA, "NEQ2002 National Energy Modeling System run neo2002.0102001b.

Projections: EIA, "NEQ2002 National Energy Modeling System run neo2002.0102001b.



**Table 39. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**West North Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
Percent Alternative Light Truck Sales	8.33	8.69	8.72	8.86	9.59	10.20	10.61	10.78	10.93	11.10	11.24	11.39	11.55	11.69	11.85	12.07	12.15	12.24	12.22	12.36	12.53	2.1%
Total New Truck Sales	535.4	499.2	494.1	521.3	513.1	521.7	529.9	536.9	541.7	543.8	546.0	548.7	550.4	551.4	552.6	554.1	555.0	555.9	556.6	557.2	557.4	0.2%
Percent Total Alternative Sales	5.00	5.34	5.38	6.07	7.01	7.26	7.79	7.91	8.04	8.21	8.34	8.47	8.63	8.76	8.90	9.12	9.15	9.20	9.11	9.21	9.33	3.2%
ERFECT Legislative Alternative Sales	15.14	18.18	17.95	18.75	18.30	18.46	18.64	18.79	18.87	18.87	18.89	18.93	18.94	18.94	18.95	18.97	18.98	18.99	19.00	19.01	19.00	1.1%
ZEV 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	1153.2	1073.0	1059.7	1106.2	1079.1	1088.9	1098.8	1107.4	1112.1	1112.1	1112.9	1115.4	1116.0	1115.8	1116.5	1117.8	1118.2	1118.9	1119.3	1119.7	1119.3	-0.1%

1/ Includes personal and fleet light-duty cars.

2/ Includes personal and fleet light-duty trucks.

ICE = Internal combustion engine.

ERFECT = Energy Policy Act of 1992.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R) (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.doe.gov/energy/transportation/altfuel.html>, and EIA, "NEQ2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NEQ2002 National Energy Modeling System run aeo2002.d102001b.





**Table 40. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**South Atlantic**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
Percent Alternative Light Truck Sales	8.26	8.51	8.56	9.69	9.80	9.99	10.38	10.54	10.67	10.81	10.93	11.06	11.19	11.30	11.42	11.62	11.67	11.72	11.66	11.76	11.90	1.8%
Total New Truck Sales	1455.6	1361.3	1351.9	1431.5	1415.7	1447.4	1478.8	1507.7	1530.7	1546.8	1563.4	1581.8	1597.3	1611.3	1626.2	1641.8	1655.9	1670.1	1683.7	1697.1	1709.2	0.8%
Percent Total Alternative Sales	4.94	5.22	5.26	6.76	6.88	7.11	7.64	7.74	7.86	8.01	8.12	8.24	8.39	8.50	8.62	8.82	8.83	8.86	8.74	8.82	8.92	3.0%
EPACT Legislative Alternative Sales	41.16	49.58	49.13	51.48	50.47	51.23	52.01	52.75	53.32	53.88	54.08	54.57	54.92	55.36	55.77	56.22	56.63	57.06	57.48	57.89	58.27	1.8%
ZEV 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	3135.0	2926.3	2899.6	3037.7	2977.2	3020.9	3066.8	3109.7	3142.6	3163.4	3186.7	3215.2	3239.1	3260.8	3285.3	3312.0	3336.3	3361.3	3385.7	3410.1	3432.2	0.5%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.dau.doe.gov/energy/transportation/alternatives.html>, and EIA, "NEQ2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NEQ2002 National Energy Modeling System run aeo2002.d102001b.



**Table 41. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**East South Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
Percent Alternative Light Truck Sales	8.25	8.49	8.54	8.68	9.79	9.97	10.36	10.52	10.65	10.80	10.92	11.05	11.18	11.29	11.41	11.61	11.66	11.71	11.65	11.76	11.89	1.8%	
Total New Truck Sales	478.1	446.4	442.5	467.4	460.5	468.3	475.8	482.4	486.8	488.9	491.1	493.7	495.3	496.4	497.7	499.2	500.2	501.2	502.0	502.8	503.2	0.3%	
Percent Total Alternative Sales	4.94	5.22	5.25	6.76	6.88	7.11	7.64	7.74	7.86	8.02	8.13	8.25	8.40	8.51	8.63	8.83	8.84	8.87	8.75	8.83	8.93	3.0%	
EPACT Legislative Alternative Sales	13.52	16.26	16.08	16.81	16.42	16.57	16.74	16.86	16.96	16.97	17.03	17.03	17.06	17.06	17.07	17.09	17.11	17.12	17.14	17.15	17.15	1.2%	
ZEV 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Total Vehicles Sales	1029.8	959.6	949.0	991.5	968.3	977.3	966.7	994.5	999.5	999.9	1001.0	1003.6	1004.4	1004.4	1004.5	1005.5	1007.0	1007.8	1008.8	1009.5	1010.3	1010.3	-0.1%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(06) (Washington, DC, March 1996); EIA, "Alternatives to Traditional Transportation Fuels 1998," <http://www.doe.gov/energy/alternatives/1998/>; and EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b." Projections: EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b."



**Table 42. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**West South Central**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
Percent Alternative Light Truck Sales	8.30	8.58	8.64	8.76	9.87	10.06	10.46	10.61	10.75	10.89	11.00	11.13	11.26	11.37	11.50	11.69	11.74	11.80	11.74	11.85	11.98	1.9%
Total New Truck Sales	852.4	797.9	793.1	840.5	831.5	850.3	868.9	885.9	899.3	908.6	918.0	928.4	936.7	943.9	951.6	959.6	966.7	973.8	980.5	987.0	992.6	0.8%
Percent Total Alternative Sales	4.98	5.27	5.32	6.82	6.94	7.18	7.70	7.80	7.92	8.07	8.18	8.30	8.45	8.56	8.69	8.88	8.89	8.92	8.80	8.88	8.98	3.0%
EPACT Legislative Alternative Sales	24.10	29.06	29.82	30.23	29.65	30.09	30.56	31.00	31.33	31.63	31.75	32.02	32.24	32.42	32.63	32.86	33.06	33.27	33.47	33.67	33.84	1.7%
ZEV 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	1835.8	1715.1	1701.1	1783.5	1748.6	1774.7	1802.0	1827.3	1846.4	1858.2	1871.3	1887.0	1899.4	1910.2	1922.5	1935.8	1947.7	1959.9	1971.6	1983.2	1993.3	0.4%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.doe.gov/energy/alternatives/alt1.html>, and EIA, "NEQ2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NEQ2002 National Energy Modeling System run aeo2002.d102001b.



**Table 43. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**Mountain**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
Percent Alternative Light Truck Sales	8.42	8.75	8.81	10.02	10.27	10.59	11.08	11.28	11.44	11.60	11.72	11.86	11.99	12.12	12.25	12.46	12.52	12.59	12.56	12.69	12.85	2.1%
Total New Truck Sales	473.6	447.8	449.3	480.6	479.7	494.8	510.0	524.4	536.8	546.8	557.0	567.9	577.7	586.9	596.6	606.5	615.9	625.5	634.9	644.2	653.2	1.6%
Percent Total Alternative Sales	5.07	5.39	5.43	7.02	7.23	7.57	8.17	8.30	8.44	8.60	8.71	8.84	8.98	9.10	9.22	9.42	9.45	9.48	9.37	9.46	9.58	3.2%
EPACT Legislative Altern Sales	13.39	16.31	16.33	17.28	17.10	17.51	17.94	18.35	18.70	18.98	19.27	19.59	19.88	20.16	20.46	20.77	21.07	21.37	21.67	21.98	22.27	2.6%
ZEV 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Vehicles Sales	1020.1	962.5	963.7	1019.6	1008.9	1032.8	1057.6	1081.6	1102.1	1118.3	1135.4	1154.3	1171.4	1187.7	1205.2	1223.5	1241.0	1258.9	1276.6	1294.5	1311.6	1.3%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.doe.gov/energy/alternatives/alt1.html>, and EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.





**Table 44. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**(Thousands)**  
**Pacific**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Percent Alternative Light Truck Sales	8.36	8.66	8.68	8.62	9.97	10.18	12.24	12.01	11.98	12.23	12.32	12.44	12.81	12.85	12.98	13.78	13.72	13.74	12.92	13.09	13.21	2.3%
Total New Truck Sales	1234.5	1153.7	1144.8	1211.3	1196.8	1222.4	1247.8	1271.0	1289.0	1301.1	1313.4	1327.1	1338.3	1348.0	1358.5	1369.5	1379.2	1389.1	1398.4	1407.6	1415.6	0.7%
Percent Total Alternative Sales	5.04	5.33	5.34	6.03	7.11	7.39	10.32	9.87	9.83	10.32	10.25	10.33	10.83	10.87	10.93	12.05	11.94	11.89	11.16	11.31	11.31	4.1%
EPACT Legislative Alternative Sales	34.91	42.02	41.60	43.57	42.67	43.26	43.89	44.47	44.90	45.15	45.43	45.78	46.08	46.30	46.59	46.90	47.17	47.46	47.74	48.02	48.26	1.6%
ZEV Legislative Alternative Sales	0.00	0.00	0.00	174.48	325.68	482.39	654.46	657.32	659.81	663.34	663.74	687.16	715.52	717.48	718.05	773.60	776.30	777.17	828.92	831.87	832.23	N/A
Total Vehicles Sales	2658.8	2479.9	2455.3	2570.5	2517.0	2551.4	2587.7	2621.5	2646.4	2660.9	2677.3	2697.6	2713.8	2728.0	2744.5	2762.7	2778.9	2795.7	2812.0	2828.4	2842.9	0.3%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.doe.gov/energy/alternatives/1998/>, and EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.



**Table 45. Light-Duty Vehicle Sales by Technology Type (2 of 2)**  
**United States**  
**(Thousands)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
Percent Alternative Light Truck Sales	8.30	8.59	8.64	8.78	9.52	10.20	10.99	11.08	11.19	11.36	11.47	11.60	11.78	11.88	11.99	12.32	12.34	12.37	12.15	12.24	12.36	2.0%
Total New Truck Sales	7801.3	7278.3	7211.1	7616.5	7510.6	7654.3	7795.3	7921.5	8014.4	8069.6	8126.2	8191.3	8240.5	8280.8	8325.8	8374.0	8414.4	8455.3	8493.3	8530.5	8561.2	0.5%
Percent Total Alternative Sales	4.98	5.28	5.31	6.85	6.99	7.36	8.46	8.47	8.55	8.77	8.85	8.96	9.19	9.27	9.36	9.77	9.75	9.74	9.50	9.57	9.63	3.4%
EPACT Legislative Alternative Sales	220.60	265.07	262.05	273.95	267.78	270.90	274.18	277.16	279.16	280.02	281.09	282.57	283.61	284.44	285.51	286.76	287.79	288.90	289.94	291.00	291.86	1.4%
ZEV Legislative Alternative Sales	0.00	0.00	0.00	293.37	547.48	810.78	1099.83	1104.50	1108.57	1147.99	1148.57	1154.25	1201.81	1205.04	1205.95	1299.21	1303.70	1305.12	1392.00	1396.93	1397.52	N/A
Total Vehicles Sales	16802.2	15645.4	15466.1	16163.2	15795.0	15975.6	16165.9	16338.7	16454.3	16503.3	16564.3	16650.2	16710.2	16756.0	16820.2	16892.9	16953.2	17017.7	17078.9	17140.6	17191.1	0.1%

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.

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

N/A = Not applicable.

Sources: 2000 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 - LEVI 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(R)" (Washington, DC, March 1996); EIA, "Alternatives to Traditional

Transportation Fuels 1998," <http://www.doe.gov/energy/alternatives/1998/>; and EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.

Projections: EIA, "NECD2002 National Energy Modeling System run aeo2002.d102001b.



**Table 46. Light-Duty Vehicle Stock by Technology Type (2 of 2)**  
(Millions)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Electric Technology																						
Electric Vehicle	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.09	15.8%
Electric-Diesel Hybrid	0.00	0.00	0.01	0.02	0.03	0.04	0.06	0.07	0.09	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.32	27.8%
Electric-Gasoline Hybrid	0.03	0.05	0.07	0.18	0.29	0.42	0.61	0.80	0.99	1.20	1.40	1.61	1.82	2.03	2.24	2.47	2.68	2.89	3.04	3.20	3.34	27.0%
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	0.00	0.00	0.00	0.01	0.01	0.03	0.05	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Alternatives	2.78	3.38	3.96	4.65	5.32	6.00	6.74	7.46	8.18	8.88	9.56	10.22	10.87	11.48	12.07	12.65	13.20	13.71	14.17	14.61	15.02	8.8%
Total Truck Stock	65.35	69.75	73.92	78.32	82.42	86.50	90.54	94.48	98.32	102.00	105.51	108.86	112.02	114.99	117.78	120.40	122.83	125.10	127.21	129.17	130.98	3.5%
Total Vehicle Stock	189.85	195.48	200.54	205.88	210.50	215.01	219.46	223.81	228.03	232.05	235.91	239.61	243.13	246.45	249.59	252.56	255.35	257.99	260.46	262.78	264.94	1.7%

1/ Includes personal and fleet vehicles.

ICE = Internal combustion engine.

N/A = Not applicable.

Sources: 2000 derived using Energy Information Administration (EIA), Household Vehicles Energy Consumption 1994, DOE/EIA-0464(94) (Washington, DC, August 1997); EIA,

Descriptive Content and Potential Markets for Alternative Fuel Vehicles, DOE/EIA-0404(98) (Washington, DC, March 1998); EIA, Alternatives to Traditional Transportation Fuels

1998, <http://www.eia.doe.gov/coalalt/alternatives.html>; Federal Highway Administration, Highway Statistics 1998 (Washington, DC, November 1999); Oak Ridge National

Laboratory, Transportation Energy Data Book: 19 (Oak Ridge, TN, September 1999); and EIA, AEC2002 National Energy Modeling System run aec2002.0102001b.

Projections: EIA, AEC2002 National Energy Modeling System run aec2002.0102001b.

**Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type (1 of 2)  
(Miles per Gallon Gasoline Equivalent)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Automobiles 1/																						
Conventional Vehicles																						
Gasoline ICE Vehicles	28.52	28.63	28.55	29.40	29.37	29.42	29.48	29.50	29.59	29.71	29.91	30.02	30.14	30.31	30.48	30.63	30.77	30.90	31.09	31.26	31.38	0.5%
TDI Diesel ICE	38.70	38.63		39.22	38.98	39.10		39.18	39.16	39.23	39.36	39.53	39.65	39.77	39.93	40.07	40.21	40.33	40.48	40.63	40.80	0.3%
Alternative-Fuel Vehicles																						
Alcohol Fuel Technology																						
Methanol-Flex Fuel ICE	27.42	27.59	27.64	28.41	28.34	28.45	28.54	28.60	28.73	28.89	29.08	29.23	29.37	29.55	29.71	29.89	30.04	30.21	30.37	30.55	30.67	0.8%
Methanol ICE	29.63	29.78	29.77	30.58	30.46	30.60	30.72	30.78	30.91	31.06	31.26	31.40	31.54	31.75	31.90	32.08	32.24	32.40	32.56	32.73	32.84	0.5%
Ethanol-Flex Fuel ICE	27.52	27.59	27.61	28.40	28.33	28.42	28.51	28.56	28.68	28.83	29.01	29.16	29.23	29.48	29.63	29.81	29.96	30.12	30.28	30.47	30.59	0.5%
Ethanol ICE	28.49	28.63	28.62	29.40	29.30	29.41	29.49	29.55	29.68	29.81	30.00	30.14	30.27	30.46	30.62	30.79	30.95	31.11	31.27	31.45	31.56	0.5%
Natural Gas Technology																						
CNG ICE	29.46	29.59	29.55	30.19	30.03	30.14	30.22	30.24	30.31	30.40	30.52	30.59	30.68	30.83	30.93	31.08	31.18	31.30	31.41	31.55	31.65	0.4%
CNG Bi-fuel	27.51	27.58	27.54	28.17	28.05	28.14	28.19	28.20	28.25	28.32	28.43	28.48	28.54	28.66	28.75	28.86	28.95	29.05	29.17	29.29	29.37	0.3%
LPG ICE	29.13	29.29	29.27	30.07	30.00	30.16	30.28	30.32	30.41	30.53	30.71	30.83	30.96	31.14	31.30	31.47	31.63	31.78	31.94	32.11	32.23	0.5%
LPG Bi-fuel	27.43	27.53	27.52	28.25	28.15	28.27	28.33	28.36	28.44	28.55	28.69	28.78	28.88	29.03	29.16	29.31	29.43	29.57	29.72	29.88	29.99	0.4%
Electric Technology																						
Electric Vehicle	28.52	28.50	28.64	29.22	31.97	35.39	39.89	45.54	45.39	45.37	45.25	45.14	45.12	45.04	44.95	44.93	44.81	44.73	44.68	44.61	44.49	2.2%
Electric-Diesel Hybrid	42.58	42.18	41.74	42.13	41.70	41.55	41.45	41.27	41.17	41.13	41.03	40.95	40.90	40.81	40.74	40.71	40.63	40.61	40.57	40.58	40.59	-0.2%
Electric-Gasoline Hybrid	38.64	38.21	37.77	38.80	38.43	38.27	38.24	38.11	38.03	37.99	37.91	37.82	37.78	37.69	37.63	37.62	37.56	37.53	37.49	37.49	37.50	-0.2%
Fuel Cell Technology																						
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	44.02	43.75	43.54	43.38	43.23	43.08	42.96	42.91	42.88	42.90	42.96	43.03	43.15	43.29	43.45	43.58	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	46.96	46.66	46.41	46.21	46.01	45.81	45.62	45.48	45.34	45.20	45.07	44.92	44.80	44.69	44.60	44.47	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	51.31	50.94	50.63	50.33	50.00	49.73	49.53	49.39	49.25	49.12	48.99	48.85	48.74	48.64	48.55	48.43	N/A
Average New Car MPG	28.56	28.66	28.58	29.57	29.54	29.62	29.78	29.79	29.88	30.02	30.21	30.32	30.45	30.63	30.77	30.97	31.11	31.26	31.40	31.57	31.68	0.5%
Light-Duty Trucks 1/																						
Conventional Vehicles																						
Gasoline ICE Vehicles	20.67	20.68	20.69	21.14	21.02	21.08	21.20	21.32	21.47	21.60	21.77	21.97	22.15	22.46	22.59	22.74	22.89	23.02	23.12	23.22	23.30	0.6%
TDI Diesel ICE	28.13	28.08	28.08	28.50	28.26	28.27	28.35	28.47	28.61	28.74	28.90	29.08	29.28	29.57	29.65	29.77	29.88	30.02	30.11	30.15	30.18	0.4%
Alternative-Fuel Vehicles																						
Alcohol Fuel Technology																						
Methanol-Flex Fuel ICE	20.40	20.42	20.47	20.99	20.90	20.96	21.12	21.26	21.44	21.60	21.79	22.01	22.22	22.55	22.68	22.84	22.99	23.11	23.21	23.30	23.39	0.7%
Methanol ICE	23.73	23.69	23.77	24.24	24.11	24.25	24.40	24.50	24.66	24.80	24.97	25.17	25.37	25.67	25.76	25.88	25.99	26.09	26.17	26.21	26.26	0.5%
Ethanol-Flex Fuel ICE	21.12	21.10	21.09	21.61	21.47	21.54	21.66	21.77	21.92	22.08	22.26	22.45	22.64	22.94	23.07	23.22	23.36	23.49	23.58	23.68	23.77	0.6%
Ethanol ICE	23.03	23.00	23.05	23.60	23.48	23.58	23.71	23.80	23.94	24.07	24.23	24.43	24.62	24.90	24.99	25.10	25.20	25.32	25.39	25.43	25.49	0.5%
Natural Gas Technology																						
CNG ICE	22.03	22.04	22.01	22.52	22.39	22.44	22.56	22.67	22.78	22.89	23.01	23.15	23.29	23.51	23.60	23.73	23.84	23.93	23.95	24.01	24.08	0.4%
CNG Bi-fuel	19.92	19.93	19.90	20.30	20.21	20.23	20.35	20.45	20.55	20.65	20.76	20.88	20.99	21.21	21.29	21.40	21.50	21.57	21.62	21.68	21.73	0.4%
LPG ICE	22.68	22.53	22.55	23.06	22.88	22.92	23.00	23.08	23.21	23.33	23.50	23.68	23.86	24.14	24.25	24.38	24.51	24.64	24.72	24.79	24.87	0.5%
LPG Bi-fuel	20.05	20.05	20.06	20.52	20.43	20.47	20.61	20.72	20.86	20.99	21.14	21.30	21.45	21.72	21.83	21.97	22.10	22.21	22.30	22.39	22.48	0.6%
Electric Technology																						
Electric Vehicle	21.58	21.61	21.66	22.87	25.28	28.07	31.29	35.49	35.12	35.01	34.67	34.38	34.61	34.42	34.23	34.75	34.63	34.49	34.73	34.62	34.49	2.4%
Electric-Diesel Hybrid	32.97	32.65	32.41	31.90	31.58	31.52	31.79	31.60	31.53	31.52	31.42	31.38	31.38	31.36	31.28	31.27	31.25	31.28	31.23	31.18	31.12	-0.3%
Electric-Gasoline Hybrid	30.63	30.22	29.86	30.48	30.09	29.91	29.79	29.68	29.60	29.55	29.46	29.40	29.35	29.28	29.23	29.20	29.19	29.21	29.19	29.14	29.11	-0.3%

**Table 47. Light-Duty Vehicle Miles per Gallon by Technology Type (2 of 2)**  
(Miles per Gallon Gasoline Equivalent)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Fuel Cell Technology																						
Fuel Cell Gasoline	0.00	0.00	0.00	0.00	0.00	37.65	37.28	36.89	36.47	36.04	35.62	35.19	34.83	34.48	34.15	33.84	33.52	33.21	32.92	32.65	32.40	N/A
Fuel Cell Methanol	0.00	0.00	0.00	0.00	0.00	40.17	39.78	39.36	38.89	38.42	37.93	37.39	36.98	36.58	36.23	35.91	35.58	35.24	34.94	34.65	34.39	N/A
Fuel Cell Hydrogen	0.00	0.00	0.00	0.00	0.00	43.94	43.44	42.90	42.29	41.81	40.81	40.02	39.52	39.13	38.82	38.53	38.33	38.14	37.95	37.78	37.62	N/A
Average New Truck MPG	21.08	21.10	21.05	21.60	21.48	21.56	21.73	21.82	21.97	22.11	22.28	22.47	22.66	22.96	23.09	23.25	23.40	23.52	23.61	23.71	23.80	0.6%
Fleet Average Stock Car MPG 2/	21.60	21.76	21.89	21.88	22.04	22.21	22.37	22.53	22.68	22.84	23.00	23.16	23.32	23.48	23.64	23.81	23.98	24.15	24.31	24.48	24.65	0.7%
Fleet Average Stock Truck MPG 2/	17.11	17.11	17.09	16.98	17.01	17.04	17.08	17.13	17.18	17.25	17.32	17.40	17.48	17.57	17.66	17.76	17.86	17.95	18.05	18.14	18.23	0.3%
Fleet Average Stock Vehicle MPG 2/	19.81	19.83	19.84	19.71	19.75	19.79	19.84	19.88	19.94	19.99	20.06	20.13	20.20	20.29	20.39	20.48	20.58	20.69	20.79	20.89	20.99	0.3%

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: 2000 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 1998 (Washington, DC, November 1999); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey" EC9FTV (Washington, DC, October 1999); and EIA, AEC2002 National Energy Modeling System run aec2002.012001b. Projections: EIA, AEC2002 National Energy Modeling System run aec2002.012001b.

**Table 48. Light-Duty Vehicle Miles Traveled by Technology Type (1 of 1)  
(Billion Miles, Unless Otherwise Noted)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
Conventional Vehicles 1/																							
Gasoline ICE Vehicles	2274.9	2323.6	2373.9	2421.1	2464.8	2508.6	2546.1	2588.0	2637.4	2689.0	2739.3	2791.7	2844.0	2895.4	2941.6	2987.1	3035.6	3082.8	3129.5	3178.8	3227.7	1.8%	
TDI Diesel ICE	20.9	24.8	28.0	31.8	35.8	40.1	44.3	48.1	52.2	56.3	60.2	64.1	67.9	71.8	75.0	78.2	81.5	84.8	87.5	90.5	93.1	7.8%	
Alternative-Fuel Vehicles																							
Alcohol Fuel Technology																							
Methanol-Flex Fuel ICE	1.1	1.7	2.3	2.8	3.3	3.7	4.0	4.3	4.5	4.8	5.0	5.2	5.5	5.7	5.9	6.1	6.3	6.4	6.6	6.7	6.9	9.5%	
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3%	
Ethanol-Flex Fuel ICE	27.0	33.1	39.2	45.3	51.2	56.8	62.0	67.1	72.3	77.5	82.4	87.4	92.2	96.8	101.0	105.1	109.1	112.9	116.6	120.2	123.5	7.9%	
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	0.0	0.0	0.0	0.0	0.0	0.1	0.1	4.5%	
Natural Gas Technology																							
CNG ICE	1.0	1.0	1.1	1.2	1.3	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.3	2.5	2.6	2.7	2.8	3.0	3.1	3.2	3.3	6.4%	
CNG Bi-Fuel	7.3	10.4	13.3	16.1	18.4	20.4	21.9	23.2	24.6	25.8	27.1	28.3	29.5	30.6	31.6	32.6	33.5	34.4	35.2	36.0	36.8	8.4%	
LPG ICE	0.8	0.9	1.0	1.1	1.2	1.3	1.5	1.6	1.7	1.8	2.0	2.1	2.2	2.3	2.5	2.6	2.7	2.9	3.0	3.1	3.3	7.6%	
LPG Bi-Fuel	6.1	7.6	9.0	10.3	11.4	12.3	13.1	13.7	14.3	14.9	15.5	16.1	16.6	17.2	17.6	18.1	18.5	19.0	19.4	19.7	20.1	6.2%	
Electric Technology																							
Electric Vehicle	0.3	0.4	0.5	0.7	0.8	1.0	1.2	1.4	1.6	1.9	2.2	2.5	2.8	3.2	3.5	4.0	4.5	5.0	5.6	6.3	7.0	17.4%	
Electric-Diesel Hybrid	0.1	0.2	0.3	0.5	0.6	0.8	1.0	1.2	1.4	1.6	1.9	2.2	2.5	2.8	3.2	3.5	4.0	4.5	5.0	5.6	6.3	7.0	17.4%
Electric-Gasoline Hybrid	0.8	1.5	2.1	4.8	7.8	11.2	16.0	20.8	25.9	31.2	36.7	42.2	48.0	53.7	59.3	65.1	70.8	76.2	80.8	85.2	89.0	26.3%	
Fuel Cell Technology																							
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	0.0	0.0	0.1	0.2	0.4	0.9	1.6	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	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	0.0	0.0	0.0	0.0	0.1	0.1	0.1	N/A	
VMT Equation Components																							
Total VMT (billion miles)	2340.3	2405.2	2470.7	2536.4	2597.8	2659.4	2715.2	2774.9	2842.5	2912.7	2981.3	3052.0	3122.8	3192.2	3255.4	3318.2	3383.5	3447.1	3508.8	3573.0	3630.6	2.2%	
VMT/Driving Population (thousand miles)	11.3	11.4	11.6	11.8	11.9	12.0	12.1	12.2	12.4	12.5	12.7	12.8	13.0	13.2	13.3	13.4	13.6	13.8	13.9	14.0	14.2	1.1%	
Driving Population (million)	213.1	215.4	217.8	220.1	222.4	224.8	227.3	229.7	232.1	234.4	236.6	238.7	240.7	242.7	244.7	246.7	248.7	250.6	252.6	254.6	256.5	0.9%	
Price Effects																							
Motor Gasoline Price (1987 dollars / million Btu)	8.84	8.81	7.96	7.93	7.91	8.01	8.15	8.13	8.15	8.18	8.17	8.19	8.19	8.19	8.18	8.17	8.17	8.16	8.17	8.17	8.17	-0.4%	
Fleet Miles per Gallon	20.04	20.05	20.03	19.88	19.91	19.94	19.98	20.02	20.08	20.14	20.21	20.28	20.36	20.45	20.55	20.65	20.76	20.87	20.98	21.09	21.20	0.3%	
Real Cost of Driving per Mile (1987 cents)	7.110	7.082	6.402	6.434	6.407	6.478	6.575	6.546	6.547	6.518	6.508	6.489	6.454	6.416	6.381	6.341	6.308	6.276	6.249	6.216	6.179	-0.7%	
Price Elasticity	-0.057	-0.056	-0.050	-0.048	-0.048	-0.048	-0.049	-0.048	-0.048	-0.047	-0.046	-0.046	-0.045	-0.044	-0.043	-0.043	-0.042	-0.041	-0.041	-0.040	-0.040	-1.8%	
Income Effects																							
Disposable Income (billion 1987 dollars)	5658.1	5859.4	5991.0	6202.9	6382.0	6569.7	6720.3	6880.4	7095.5	7332.4	7563.9	7815.6	8071.8	8320.5	8572.7	8827.6	9098.3	9361.8	9616.7	9887.1	10121.6	3.0%	
Point Income Elasticity	0.413	0.417	0.417	0.422	0.426	0.430	0.432	0.435	0.440	0.445	0.450	0.456	0.461	0.466	0.471	0.476	0.481	0.485	0.490	0.494	0.498	0.9%	
Demographic Driving Population Effect																							
Percentage Female Driving Population	0.601	0.610	0.617	0.624	0.630	0.636	0.641	0.646	0.650	0.654	0.658	0.661	0.664	0.668	0.670	0.672	0.674	0.675	0.676	0.677	0.678	0.6%	
Point Demographic Elasticity	0.299	0.299	0.298	0.298	0.297	0.297	0.297	0.296	0.295	0.293	0.291	0.289	0.288	0.284	0.282	0.280	0.277	0.275	0.273	0.270	0.268	-0.5%	

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

VMT = Vehicle miles traveled.

ICE = Internal combustion engine.

MtBtu = Million British thermal units.

N/A = Not applicable.

Sources: 2000 derived using: Federal Highway Administration, Highway Statistics 1998 (Washington, DC, November 1999); Oak Ridge National Laboratory, Transportation

Energy Data Book, 19 (Oak Ridge, TN, September 1999); United States Department of Commerce, Bureau of the Census, "Vehicle Inventory and Use Survey," EIC97TV

(Washington, DC, October 1999); and Energy Information Administration (EIA), AEC02002 National Energy Modeling System run aec02002.0102001b. Projections: EIA,

AEC02002 National Energy Modeling System run aec02002.0102001b.

















Table 54. Air Travel Energy Use (2 of 2)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Aircraft Stock Efficiency 3/																						
Narrow Body Aircraft	47.9	48.1	48.3	48.7	49.1	49.5	49.8	50.2	50.6	51.0	51.4	51.8	52.2	52.6	53.0	53.5	53.9	54.3	54.7	55.1	55.5	0.7%
Wide Body Aircraft	57.1	57.3	57.4	57.8	58.2	58.5	58.8	59.2	59.6	59.9	60.3	60.7	61.0	61.4	61.8	62.2	62.6	63.0	63.4	63.8	64.1	0.6%
Average Aircraft	52.1	52.3	52.6	53.0	53.4	53.8	54.2	54.6	55.1	55.5	55.9	56.4	56.8	57.2	57.6	58.1	58.6	59.0	59.4	59.9	60.3	0.7%
Fuel Consumption (trillion Btu)																						
Commercial																						
Jet Fuel	3070.6	2968.5	3018.0	3123.2	3207.9	3304.4	3391.5	3481.8	3602.4	3734.3	3870.4	4014.1	4141.9	4267.6	4397.1	4528.7	4672.3	4819.0	4962.5	5109.3	5244.7	2.7%
Aviation Gasoline	42.6	42.5	42.4	42.3	42.3	42.3	42.2	42.2	42.2	42.2	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	-0.1%
Military																						
Jet Fuel	509.4	525.5	564.0	570.4	572.9	575.7	579.3	583.8	589.0	595.3	601.3	606.4	609.4	611.1	613.5	615.5	617.4	619.0	620.4	621.7	622.8	1.0%

1/ Fraction of seats filled.  
 2/ 1992 cents per passenger mile.  
 3/ Seat miles per gallon.  
 RPM = Revenue passenger miles.  
 GDP = Gross domestic product.  
 Btu = British thermal unit.  
 N/A = Not applicable.

Sources: 2000 derived using: Decision Analysis Corporation of Virginia, NEMS Transportation Sector Model: Model Maintenance Re-Estimation of the Air Travel 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; Ruffo, A. B., Peterson, and D. Greene, 36 Transport Energy Use Model, Oak Ridge National Laboratory, April 1991; Draft Energy Information Administration (EIA), State Energy Data Report 1999, DOE/EIA-0214(99) (Washington, DC, May 2001); Department of Defense, Defense Energy Support Center, Fact Book: Fiscal Year 1999, and EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b. Projections: EIA AEO2002 National Energy Modeling System run aeo2002.d102001b.







**Table 55. Freight Transportation Energy Use (3 of 3)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Domestic Shipping</b>																						
Ton Miles Shipping (billion ton miles)	689.25	706.10	709.05	723.30	731.82	740.90	749.12	758.40	768.72	779.37	791.71	805.01	814.62	828.27	841.56	855.30	868.58	879.95	891.02	899.93	910.10	1.4%
Fuel Efficiency (ton miles / thousand Btu)	2.28	2.29	2.29	2.30	2.30	2.31	2.31	2.31	2.32	2.32	2.33	2.33	2.34	2.34	2.35	2.35	2.36	2.36	2.37	2.37	2.38	0.2%
Fuel Consumption (million Btu)																						
Distillate (diesel)	211.58	218.60	218.64	222.59	224.76	227.09	229.15	231.53	234.21	236.98	240.25	243.79	246.21	249.84	253.34	256.96	260.43	263.19	266.09	268.21	270.70	1.2%
Residual Oil	90.53	90.14	90.79	92.43	93.33	94.30	95.15	96.14	97.25	98.40	99.76	101.24	102.24	103.74	105.20	106.70	108.14	109.29	110.49	111.37	112.41	1.1%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>International Shipping</b>																						
Gross Trade (billion 1996 dollars)	2161.90	2116.02	2119.58	2246.56	2389.70	2534.34	2687.65	2853.44	3033.30	3238.39	3459.28	3698.89	3957.99	4237.14	4541.85	4870.50	5222.99	5605.93	6022.59	6467.06	6944.10	6.0%
Exports (billion 1996 dollars)	836.08	804.08	803.09	862.22	924.93	996.14	1078.16	1167.72	1265.44	1378.24	1501.12	1634.57	1759.64	1894.22	2039.83	2196.71	2365.98	2547.67	2742.50	2947.36	3164.07	6.9%
Imports (billion 1996 dollars)	1325.82	1311.94	1316.50	1384.37	1464.77	1538.20	1609.50	1685.71	1767.86	1860.15	1958.17	2064.32	2198.34	2342.92	2502.02	2673.79	2857.01	3058.25	3280.10	3519.70	3780.02	5.4%
Fuel Consumption (million Btu)																						
Distillate (diesel)	69.42	64.74	66.00	66.10	66.20	66.29	66.39	66.49	66.59	66.70	66.81	66.93	67.04	67.16	67.28	67.40	67.52	67.64	67.76	67.89	68.01	-0.1%
Residual Oil	1029.18	924.90	949.50	950.92	952.38	953.77	955.16	956.58	958.06	959.65	961.25	962.89	964.57	966.25	967.95	969.67	971.39	973.14	974.91	976.68	978.45	-0.3%

VMT = Vehicle miles traveled.

MPG = Miles per gallon.

Btu = British thermal unit.

NA = Not applicable.

Sources: 2000 derived using Oak Ridge National Laboratory, Transportation Energy Data Book: 17, 18, and 19 (Oak Ridge, TN, September 1999); United States Department of

Transportation, 1989 Commodity 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," ECHOVT (Washington, DC, October 1999); Federal Highway Administration, Highway Statistics 1998

(Washington, DC, November 1999); and Energy Information Administration (EIA), AEO2002 National Energy Modeling System run aeo2002.d1020r1b. Projections: EIA,

AEO2002 National Energy Modeling System run aeo2002.d1020r1b.













**Table 57. New Light-Duty Vehicle Prices (2 of 4)**  
**(Thousand 1990 Dollars)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Ethanol																							
Mini-compact Cars	26.8	27.0	27.1	27.2	27.5	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	27.9	27.9	28.0	0.2%	
Subcompact Cars	18.1	18.2	18.3	18.4	18.7	18.8	18.8	18.8	18.9	18.9	18.9	19.0	19.0	19.1	19.1	19.2	19.2	19.2	19.2	19.2	19.3	0.3%	
Compact Cars	16.3	16.4	16.5	16.5	16.9	16.9	16.9	16.9	17.0	17.0	17.0	17.1	17.1	17.1	17.1	17.1	17.1	17.1	17.2	17.2	17.2	0.3%	
Midsize Cars	20.8	20.9	21.0	21.0	21.3	21.4	21.4	21.4	21.4	21.5	21.5	21.5	21.5	21.5	21.5	21.5	21.6	21.6	21.6	21.6	21.6	0.2%	
Large Cars	25.9	26.1	26.1	26.1	26.4	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.5	26.6	26.6	26.6	26.6	0.1%	
Two Seater Cars	28.6	28.7	28.8	28.9	29.2	29.2	29.2	29.2	29.2	29.3	29.3	29.3	29.3	29.3	29.4	29.4	29.4	29.4	29.4	29.4	29.4	0.2%	
Small Pickup	15.7	15.9	15.9	16.0	16.3	16.3	16.3	16.3	16.4	16.4	16.4	16.4	16.4	16.4	16.5	16.5	16.5	16.5	16.5	16.6	16.6	0.3%	
Large Pickup	18.6	18.8	18.8	18.8	19.2	19.2	19.2	19.2	19.3	19.3	19.3	19.3	19.4	19.4	19.4	19.4	19.4	19.5	19.5	19.5	19.5	0.2%	
Small Van	21.3	21.5	21.5	21.5	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.8	21.9	21.9	21.9	21.9	21.9	22.0	22.0	22.0	22.0	0.2%	
Large Van	19.6	19.7	19.8	19.8	20.1	20.2	20.2	20.3	20.3	20.3	20.4	20.4	20.4	20.4	20.4	20.5	20.5	20.5	20.5	20.5	20.5	0.2%	
Small Utility	22.1	22.3	22.3	22.4	22.7	22.7	22.7	22.7	22.7	22.7	22.8	22.8	22.8	22.8	22.8	22.9	22.9	22.9	22.9	23.0	23.0	0.2%	
Large Utility	25.3	25.4	25.5	25.6	25.9	25.9	26.0	26.0	26.0	26.1	26.1	26.1	26.2	26.2	26.2	26.2	26.3	26.3	26.3	26.3	26.3	0.2%	
Ethanol Flex																							
Mini-compact Cars	27.0	27.1	27.2	27.3	27.6	27.7	27.7	27.7	27.8	27.8	27.9	27.9	27.9	28.0	28.0	28.0	28.1	28.1	28.1	28.1	28.1	0.2%	
Subcompact Cars	18.2	18.3	18.4	18.5	18.8	18.9	18.9	18.9	19.0	19.0	19.1	19.1	19.2	19.2	19.2	19.3	19.3	19.3	19.4	19.4	19.4	0.3%	
Compact Cars	16.4	16.5	16.6	16.6	17.0	17.0	17.0	17.0	17.1	17.1	17.1	17.2	17.2	17.2	17.2	17.3	17.3	17.3	17.3	17.3	17.3	0.3%	
Midsize Cars	20.9	21.1	21.1	21.2	21.5	21.5	21.5	21.6	21.6	21.6	21.6	21.7	21.7	21.7	21.7	21.7	21.8	21.8	21.8	21.8	21.8	0.2%	
Large Cars	26.1	26.3	26.3	26.3	26.6	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.8	26.8	26.8	26.8	26.8	0.1%	
Two Seater Cars	28.7	28.9	29.0	29.0	29.3	29.4	29.4	29.4	29.4	29.5	29.5	29.5	29.5	29.5	29.6	29.6	29.6	29.6	29.6	29.6	29.6	0.2%	
Small Pickup	15.2	15.5	15.5	15.5	15.8	15.9	15.9	15.9	15.9	15.9	16.0	16.0	16.0	16.0	16.1	16.1	16.1	16.1	16.1	16.1	16.1	0.3%	
Large Pickup	17.9	18.2	18.2	18.2	18.5	18.6	18.6	18.6	18.7	18.7	18.7	18.8	18.8	18.8	18.8	18.9	18.9	18.9	18.9	18.9	18.9	0.3%	
Small Van	20.3	20.5	20.5	20.5	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.9	20.9	20.9	20.9	20.9	0.2%	
Large Van	19.7	19.9	20.0	20.0	20.3	20.4	20.4	20.4	20.5	20.5	20.6	20.6	20.6	20.6	20.7	20.7	20.7	20.7	20.7	20.8	20.8	0.3%	
Small Utility	20.7	20.9	20.9	21.0	21.3	21.3	21.3	21.3	21.4	21.4	21.4	21.4	21.4	21.4	21.5	21.5	21.5	21.5	21.6	21.6	21.6	0.2%	
Large Utility	24.0	24.2	24.3	24.3	24.6	24.7	24.7	24.7	24.7	24.8	24.8	24.8	24.8	24.9	24.9	24.9	24.9	24.9	24.9	25.0	25.0	0.2%	
Compressed Natural Gas (CNG)																							
Mini-compact Cars	31.5	31.7	31.8	31.9	32.2	32.3	32.3	32.3	32.4	32.5	32.5	32.6	32.6	32.7	32.7	32.8	32.8	32.8	32.9	32.9	32.9	0.2%	
Subcompact Cars	21.5	21.6	21.7	21.8	22.2	22.2	22.2	22.3	22.3	22.4	22.4	22.5	22.5	22.6	22.6	22.7	22.7	22.8	22.8	22.8	22.9	0.3%	
Compact Cars	19.7	19.9	19.9	20.0	20.3	20.3	20.4	20.4	20.4	20.5	20.5	20.6	20.6	20.6	20.7	20.7	20.7	20.8	20.8	20.8	20.8	0.3%	
Midsize Cars	24.4	24.6	24.7	24.7	25.0	25.1	25.0	25.0	25.1	25.1	25.2	25.2	25.2	25.3	25.3	25.3	25.3	25.3	25.3	25.3	25.3	0.2%	
Large Cars	30.5	30.7	30.7	30.8	31.1	31.1	31.1	31.2	31.2	31.2	31.3	31.3	31.3	31.4	31.4	31.4	31.4	31.5	31.5	31.5	31.5	0.2%	
Two Seater Cars	33.9	34.0	34.1	34.2	34.5	34.6	34.6	34.6	34.7	34.7	34.8	34.8	34.9	34.9	34.9	35.0	35.0	35.0	35.1	35.1	35.1	0.2%	
Small Pickup	19.1	19.3	19.4	19.4	19.7	19.8	19.8	19.8	19.8	19.9	19.9	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.2	0.3%	
Large Pickup	22.2	22.4	22.4	22.5	22.8	22.8	22.8	22.9	22.9	23.0	23.0	23.1	23.1	23.2	23.2	23.2	23.3	23.3	23.3	23.3	23.3	0.2%	
Small Van	24.8	25.0	25.0	25.1	25.4	25.4	25.4	25.5	25.5	25.5	25.6	25.6	25.6	25.7	25.7	25.7	25.7	25.7	25.8	25.8	25.8	0.2%	
Large Van	23.1	23.3	23.3	23.4	23.7	23.8	23.8	23.9	23.9	24.0	24.0	24.1	24.1	24.2	24.2	24.2	24.3	24.3	24.3	24.3	24.3	0.3%	
Small Utility	25.5	25.7	25.8	25.8	26.1	26.2	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.1	26.2	26.2	26.2	0.1%	
Large Utility	28.8	29.0	29.0	29.1	29.4	29.5	29.5	29.6	29.6	29.7	29.7	29.8	29.8	29.9	29.9	30.0	30.0	30.0	30.1	30.1	30.1	0.2%	
CNG Bi-Fuel																							
Mini-compact Cars	31.4	31.6	31.7	31.8	32.1	32.2	32.2	32.2	32.3	32.4	32.4	32.5	32.6	32.6	32.7	32.7	32.8	32.8	32.9	32.9	32.9	0.2%	
Subcompact Cars	21.4	21.6	21.6	21.8	22.1	22.1	22.2	22.2	22.3	22.3	22.4	22.5	22.5	22.6	22.6	22.7	22.7	22.8	22.8	22.8	22.9	0.3%	
Compact Cars	19.8	19.8	19.8	19.8	20.2	20.3	20.3	20.3	20.4	20.4	20.5	20.5	20.5	20.6	20.6	20.7	20.7	20.8	20.8	20.8	20.8	0.3%	
Midsize Cars	23.8	23.9	24.0	24.1	24.4	24.4	24.5	24.5	24.6	24.6	24.6	24.6	24.7	24.7	24.8	24.8	24.8	24.9	24.9	24.9	24.9	0.2%	
Large Cars	29.9	30.1	30.2	30.2	30.6	30.6	30.6	30.7	30.7	30.7	30.8	30.8	30.9	30.9	30.9	31.0	31.0	31.0	31.1	31.1	31.1	0.2%	
Two Seater Cars	33.7	33.9	34.0	34.1	34.4	34.5	34.5	34.5	34.6	34.6	34.7	34.7	34.8	34.8	34.9	34.9	35.0	35.0	35.1	35.1	35.1	0.2%	
Small Pickup	18.4	18.6	18.6	18.7	19.0	19.0	19.0	19.1	19.1	19.2	19.2	19.2	19.3	19.3	19.4	19.4	19.5	19.5	19.5	19.5	19.6	0.3%	
Large Pickup	20.8	21.0	21.0	21.1	21.4	21.4	21.5	21.5	21.6	21.6	21.7	21.7	21.8	21.8	21.8	21.9	21.9	22.0	22.0	22.0	22.0	0.3%	
Small Van	24.1	24.2	24.3	24.3	24.6	24.7	24.7	24.7	24.8	24.8	24.9	24.9	25.0	25.0	25.0	25.1	25.1	25.1	25.1	25.1	25.2	0.2%	
Large Van	21.7	21.8	21.9	22.0	22.3	22.4	22.4	22.5	22.5	22.6	22.6	22.7	22.7	22.8	22.8	22.9	22.9	23.0	23.0	23.0	23.0	0.3%	
Small Utility	24.8	24.9	25.0	25.1	25.4	25.4	25.5	25.5	25.6	25.6	25.7	25.7	25.8	25.8	25.8	25.9	25.9	25.9	25.9	26.0	26.0	0.2%	
Large Utility	27.5	27.7	27.8	27.8	28.2	28.2	28.3	28.3	28.4	28.4	28.5	28.5	28.6	28.6	28.7	28.7	28.8	28.8	28.8	28.9	28.9	0.2%	





Table 58. New Light-Duty Vehicle Range (1 of 4)  
(Miles)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
Gasoline																							
Mini-compact Cars	429	427	426	444	442	440	440	441	443	444	446	448	450	453	456	460	462	465	467	468	470	0.5%	
Subcompact Cars	465	465	463	476	476	477	478	478	478	480	482	483	485	487	489	492	493	495	497	498	501	0.4%	
Compact Cars	453	453	452	468	470	470	470	470	471	473	478	480	482	485	487	490	492	495	497	500	502	0.5%	
Midsize Cars	459	461	461	475	473	474	475	475	477	479	481	483	484	487	490	493	495	498	500	500	505	0.5%	
Large Cars	493	497	499	512	511	514	516	517	520	523	528	531	534	537	540	543	546	549	553	557	559	0.6%	
Two Seater Cars	425	425	425	441	439	439	439	440	442	444	446	448	450	453	456	460	462	465	467	469	471	0.5%	
Small Pickup	432	433	431	436	433	433	434	434	435	437	439	442	444	448	451	454	457	460	462	463	464	0.4%	
Large Pickup	421	421	420	426	423	424	427	430	433	436	440	444	449	456	459	462	465	468	470	472	473	0.6%	
Small Van	506	506	507	513	510	513	516	518	518	521	523	527	531	536	544	545	548	551	555	558	563	0.5%	
Large Van	457	457	459	470	469	470	476	480	485	489	493	497	502	510	513	517	521	523	525	528	530	0.7%	
Small Utility	404	405	406	419	417	418	419	420	422	424	427	431	434	439	441	444	447	454	452	454	456	0.6%	
Large Utility	496	495	496	511	510	511	517	522	527	532	536	541	545	552	556	561	564	567	569	572	574	0.7%	
Turbo Direct Injection Diesel																							
Mini-compact Cars	573	577	575	598	596	594	594	595	597	600	602	604	607	611	616	621	624	627	630	632	634	0.5%	
Subcompact Cars	627	627	625	643	643	644	645	645	647	649	651	653	655	658	661	664	666	669	672	674	676	0.4%	
Compact Cars	612	612	611	631	635	635	635	635	638	638	645	648	651	655	658	661	665	668	671	675	678	0.5%	
Midsize Cars	620	623	622	641	639	640	641	642	644	646	649	651	654	658	662	666	669	672	676	679	682	0.5%	
Large Cars	665	671	673	692	690	694	696	698	701	707	712	717	720	725	728	733	737	741	746	752	755	0.6%	
Two Seater Cars	574	574	573	595	593	592	592	593	596	600	603	605	608	612	616	621	624	628	631	634	636	0.5%	
Small Pickup	563	564	562	566	564	565	566	566	568	569	573	576	580	607	609	613	617	621	623	625	627	0.4%	
Large Pickup	568	569	567	575	571	572	576	580	585	589	593	600	606	616	620	624	628	631	634	637	638	0.6%	
Small Van	683	683	684	693	689	693	696	699	703	707	711	717	724	734	736	740	744	750	753	756	760	0.5%	
Large Van	617	618	620	635	633	635	642	648	654	660	666	672	677	688	693	698	703	706	709	712	715	0.7%	
Small Utility	546	547	548	566	563	564	565	567	569	572	577	581	585	592	596	600	604	607	610	612	615	0.6%	
Large Utility	669	668	670	690	688	690	698	704	711	718	724	730	738	746	751	757	762	765	769	772	775	0.7%	
Methanol																							
Mini-compact Cars	270	269	268	280	278	277	277	278	279	280	281	282	283	285	287	290	291	293	294	295	296	0.5%	
Subcompact Cars	293	293	292	300	300	300	301	301	302	303	304	305	306	307	308	310	311	312	313	315	316	0.4%	
Compact Cars	285	286	285	295	296	296	296	296	297	298	301	302	304	306	307	309	310	312	313	315	316	0.5%	
Midsize Cars	289	291	290	299	298	299	299	299	300	302	303	304	305	307	309	311	312	314	315	317	318	0.5%	
Large Cars	310	313	314	323	322	324	325	326	327	330	332	334	336	338	340	342	344	346	348	351	352	0.6%	
Two Seater Cars	269	268	268	278	277	276	276	277	278	280	281	282	284	286	288	290	291	293	294	296	297	0.5%	
Small Pickup	272	273	273	274	273	273	273	273	274	275	277	278	280	283	284	286	288	290	291	292	292	0.4%	
Large Pickup	265	265	265	268	267	267	269	271	273	274	277	280	283	287	289	291	293	295	296	297	298	0.6%	
Small Van	319	319	319	323	321	323	325	326	328	330	332	335	338	342	344	345	347	350	352	353	355	0.5%	
Large Van	288	288	289	296	296	296	300	302	305	308	311	313	316	321	323	326	328	330	331	332	334	0.7%	
Small Utility	255	255	256	264	263	263	264	264	266	267	269	271	273	276	278	280	282	283	284	286	287	0.6%	
Large Utility	312	312	313	322	321	322	326	328	332	335	338	341	344	348	350	353	355	357	359	360	362	0.7%	
Methanol Flex																							
Mini-compact Cars	244	244	243	253	252	251	251	251	252	253	254	255	256	258	260	262	263	265	266	267	268	0.5%	
Subcompact Cars	265	265	264	271	272	272	272	272	273	274	275	276	276	278	279	280	281	282	284	285	285	0.4%	
Compact Cars	258	258	258	267	268	268	268	268	269	269	273	274	275	276	278	278	280	281	282	283	285	0.5%	
Midsize Cars	262	263	263	271	270	270	271	271	272	272	273	274	275	278	279	279	281	282	284	285	286	0.5%	
Large Cars	281	283	284	292	291	293	294	295	296	298	301	303	304	306	308	309	311	313	315	317	319	0.6%	
Two Seater Cars	242	242	242	251	250	250	250	251	252	253	254	255	256	257	258	260	262	263	265	266	266	0.5%	
Small Pickup	246	247	246	248	247	247	247	247	248	248	249	250	252	253	256	257	259	261	262	263	264	0.4%	
Large Pickup	240	240	240	243	241	242	243	245	247	248	251	253	256	260	262	264	265	267	268	269	269	0.6%	
Small Van	288	288	289	293	291	292	294	295	297	298	300	303	306	310	311	312	314	317	318	319	321	0.5%	
Large Van	251	251	252	258	257	258	271	273	276	279	281	284	286	290	292	295	297	298	298	300	301	0.7%	
Small Utility	230	231	231	239	238	238	239	239	242	242	244	246	247	250	252	253	255	256	257	259	260	0.6%	
Large Utility	282	282	283	291	290	292	295	297	300	303	305	308	311	315	317	320	322	323	325	326	327	0.7%	

**Table 58. New Light-Duty Vehicle Range (2 of 4)**  
(Miles)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
Ethanol																							
Mini-compact Cars	326	325	324	337	336	335	334	335	336	338	339	340	342	344	347	349	351	353	355	356	357	0.5%	
Subcompact Cars	353	353	352	362	362	362	363	363	364	365	367	367	369	370	372	374	376	377	378	378	381	0.5%	
Compact Cars	344	345	344	355	356	357	358	358	359	361	363	365	366	369	370	372	374	376	378	380	381	0.5%	
Midsize Cars	349	351	350	361	360	360	361	361	364	365	367	367	368	370	372	375	376	378	380	382	384	0.5%	
Large Cars	374	378	379	389	389	390	392	393	395	398	401	404	406	408	410	412	415	417	420	423	425	0.6%	
Two Seater Cars	323	323	323	335	334	333	333	334	336	338	339	341	342	345	347	349	351	353	355	357	358	0.5%	
Small Pickup	328	329	327	331	329	329	330	330	331	332	334	336	338	342	343	345	347	350	351	352	353	0.4%	
Large Pickup	320	320	319	324	322	322	324	327	329	331	334	336	341	347	349	351	354	355	357	358	359	0.6%	
Small Van	385	385	385	390	389	389	392	393	395	398	400	404	406	413	414	416	419	422	424	426	428	0.5%	
Large Van	347	348	349	357	357	358	361	365	368	371	375	378	381	387	390	393	396	398	399	401	402	0.7%	
Small Utility	307	308	308	318	319	317	318	318	319	320	322	325	327	330	334	336	338	340	342	343	345	0.6%	
Large Utility	377	376	377	388	387	389	393	396	400	404	407	411	414	420	423	426	429	431	433	435	436	0.7%	
Ethanol Flex																							
Mini-compact Cars	313	312	311	324	322	321	321	322	323	324	326	327	328	331	333	336	337	339	341	342	343	0.5%	
Subcompact Cars	339	339	338	348	348	348	349	348	350	351	352	353	354	356	357	359	360	362	363	365	366	0.4%	
Compact Cars	331	331	330	341	343	343	343	343	344	345	349	350	352	354	356	358	359	361	363	365	366	0.5%	
Midsize Cars	335	337	337	347	345	346	346	347	348	349	351	352	354	356	358	360	362	363	365	367	369	0.5%	
Large Cars	360	363	364	374	373	375	377	377	379	382	385	388	390	392	394	396	398	401	404	406	408	0.6%	
Two Seater Cars	311	310	310	322	321	320	320	321	322	324	326	327	329	331	333	336	337	339	341	343	344	0.5%	
Small Pickup	315	316	315	316	316	316	317	317	318	319	320	322	324	326	328	330	332	334	336	337	338	0.4%	
Large Pickup	307	307	307	311	309	310	312	314	316	318	321	324	328	333	335	338	340	341	343	344	345	0.6%	
Small Van	369	369	369	373	375	375	376	376	380	382	384	388	391	397	398	400	402	405	407	409	411	0.5%	
Large Van	334	334	335	343	343	343	347	350	354	357	360	363	366	372	375	377	380	382	384	385	387	0.7%	
Small Utility	295	296	296	306	304	305	306	306	308	309	312	314	317	320	322	324	327	328	330	331	333	0.6%	
Large Utility	362	361	362	373	372	373	377	381	384	388	391	395	398	403	406	409	412	414	416	417	419	0.7%	
Compressed Natural Gas (CNG)																							
Mini-compact Cars	257	256	255	266	265	264	264	264	266	267	268	269	270	272	274	276	277	279	280	281	282	0.5%	
Subcompact Cars	279	279	278	286	286	286	287	287	287	288	289	290	291	292	294	295	296	297	298	300	300	0.4%	
Compact Cars	272	272	271	281	282	282	282	282	283	284	287	288	289	291	292	294	295	297	298	300	301	0.5%	
Midsize Cars	275	277	277	285	284	284	285	285	286	287	289	290	291	292	294	296	297	299	300	302	303	0.5%	
Large Cars	296	298	299	307	307	308	310	310	312	314	317	319	320	322	324	326	327	330	332	334	336	0.4%	
Two Seater Cars	255	255	255	265	264	263	263	264	265	267	268	269	270	272	274	276	277	279	280	282	283	0.5%	
Small Pickup	259	260	259	261	260	260	260	260	261	262	263	265	267	270	271	272	274	276	277	278	279	0.4%	
Large Pickup	253	253	252	255	254	254	256	258	260	261	264	266	269	274	275	277	279	281	282	283	284	0.6%	
Small Van	304	304	304	308	306	308	309	311	313	314	316	319	322	326	327	329	331	333	335	336	338	0.5%	
Large Van	274	274	275	282	282	282	285	288	291	293	296	298	301	306	308	310	312	314	315	317	318	0.7%	
Small Utility	243	243	243	252	250	251	251	252	253	254	256	258	260	263	265	267	268	270	271	272	273	0.6%	
Large Utility	287	287	288	307	306	307	310	313	316	319	322	324	327	331	334	336	338	340	342	343	344	0.7%	
CNG Bi-Fuel																							
Mini-compact Cars	214	214	213	222	221	220	220	220	221	222	223	224	225	226	228	230	231	232	233	234	235	0.5%	
Subcompact Cars	232	232	231	238	238	238	239	239	240	240	241	242	242	244	245	246	247	248	249	250	250	0.4%	
Compact Cars	227	227	226	234	235	235	236	236	236	238	239	240	241	242	244	245	246	247	249	250	251	0.5%	
Midsize Cars	229	231	231	237	237	237	237	238	238	239	240	241	242	244	245	246	248	249	250	251	252	0.5%	
Large Cars	246	248	249	256	256	257	258	258	260	262	264	265	267	268	270	271	273	275	276	278	280	0.6%	
Two Seater Cars	213	213	212	220	220	219	219	220	221	221	222	223	224	225	227	228	230	231	232	234	235	0.5%	
Small Pickup	216	216	215	218	216	217	217	217	218	219	220	221	222	225	226	227	229	230	231	232	232	0.4%	
Large Pickup	211	211	210	213	212	212	213	215	216	218	220	222	224	228	229	231	233	234	235	236	236	0.6%	
Small Van	293	293	293	297	295	297	298	299	299	300	302	306	309	315	316	318	320	322	324	325	326	0.7%	
Large Van	229	229	229	235	235	235	238	240	242	244	247	249	251	255	257	259	261	262	263	264	265	0.7%	
Small Utility	202	203	203	203	208	209	209	210	211	212	214	215	217	219	221	222	224	225	226	227	228	0.6%	
Large Utility	248	247	248	255	255	256	258	261	263	266	268	270	273	276	278	280	282	283	285	286	287	0.7%	

**Table 58. New Light-Duty Vehicle Range (3 of 4)  
(Miles)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Liquefied Petroleum Gas (LPG)</b>																						
Mini-compact Cars	365	363	362	377	375	374	374	375	376	378	379	381	382	385	388	391	393	395	397	398	399	0.5%
Subcompact Cars	395	395	394	405	405	405	406	406	407	408	410	411	415	414	416	418	419	421	423	424	426	0.5%
Compact Cars	385	385	385	397	400	400	400	400	405	402	406	408	410	412	414	417	416	418	421	423	425	0.5%
Midsize Cars	390	392	392	404	402	403	403	404	405	407	409	410	412	412	414	417	419	421	423	425	428	0.5%
Large Cars	419	422	424	435	435	437	438	439	442	445	449	451	454	456	459	461	464	467	470	473	478	0.6%
Two Seater Cars	362	362	361	375	373	373	373	374	375	378	379	381	383	385	388	391	393	395	397	399	401	0.5%
Small Pickup	367	368	366	370	368	368	369	369	370	371	373	375	378	382	384	386	388	391	393	394	395	0.4%
Large Pickup	358	358	357	362	360	360	363	365	368	368	370	377	382	388	390	393	396	397	399	401	402	0.6%
Small Van	430	430	431	438	434	438	438	440	443	445	448	451	456	462	464	466	468	473	474	476	479	0.5%
Large Van	388	389	390	400	399	400	404	408	412	415	419	423	427	433	436	439	442	445	447	448	450	0.7%
Small Utility	344	344	345	355	354	355	356	357	358	360	363	366	369	373	375	378	380	382	384	386	387	0.6%
Large Utility	421	421	422	434	433	435	439	443	448	452	456	460	464	470	473	477	480	482	484	486	488	0.7%
<b>LPG Bi-Fuel</b>																						
Mini-compact Cars	343	342	341	355	353	352	362	363	364	366	367	368	369	382	385	368	370	372	373	374	376	0.5%
Subcompact Cars	372	372	370	381	381	381	382	382	383	384	386	387	388	388	390	391	393	395	396	398	399	0.4%
Compact Cars	362	363	362	374	376	376	376	378	377	378	382	384	386	388	390	392	394	396	398	398	400	0.5%
Midsize Cars	367	369	369	380	378	379	380	380	381	383	385	386	388	389	392	394	396	398	400	402	404	0.5%
Large Cars	394	397	399	410	409	411	413	414	418	419	422	425	427	429	432	434	437	439	442	445	448	0.6%
Two Seater Cars	340	340	340	353	351	351	351	352	353	355	357	359	360	363	365	368	370	372	374	375	377	0.5%
Small Pickup	346	346	345	348	346	347	347	347	348	350	351	353	356	360	361	363	366	368	369	371	371	0.4%
Large Pickup	337	337	338	341	339	339	341	344	346	349	352	355	359	365	367	370	372	374	376	377	378	0.6%
Small Van	405	405	405	411	408	411	413	414	417	419	421	425	429	435	436	438	441	444	446	448	450	0.5%
Large Van	366	366	367	376	375	378	380	384	388	391	395	398	401	408	410	414	416	418	420	421	424	0.7%
Small Utility	323	324	325	335	334	334	335	336	337	339	342	345	347	351	353	356	358	360	361	363	365	0.6%
Large Utility	396	396	397	408	408	409	414	417	421	425	429	432	436	442	445	449	451	454	456	458	459	0.7%
<b>Electric</b>																						
Mini-compact Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Subcompact Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Compact Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Midsize Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Large Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Two Seater Cars	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Small Pickup	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Large Pickup	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Small Van	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Large Van	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Small Utility	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
Large Utility	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	N/A
<b>Diesel-Electric Hybrid</b>																						
Mini-compact Cars	557	556	553	577	574	572	572	573	575	578	580	582	585	589	593	598	601	604	607	608	611	0.5%
Subcompact Cars	604	604	602	619	619	620	621	621	623	625	627	628	630	634	636	639	641	644	647	649	651	0.4%
Compact Cars	589	590	588	608	612	611	612	612	613	614	622	624	627	630	633	637	640	643	647	650	653	0.5%
Midsize Cars	597	600	599	617	616	616	617	618	620	622	625	627	630	634	637	641	644	647	651	654	656	0.5%
Large Cars	641	646	648	666	665	668	671	672	675	681	686	690	694	698	701	705	710	714	719	724	727	0.6%
Two Seater Cars	553	553	552	573	571	570	570	571	574	577	580	583	585	590	593	598	601	604	607	610	613	0.5%
Small Pickup	562	562	560	566	563	563	564	564	566	568	571	574	578	584	587	590	594	598	600	602	603	0.4%
Large Pickup	547	548	546	554	550	551	555	559	563	566	571	577	584	593	597	601	605	608	611	613	614	0.6%
Small Van	658	658	659	668	663	667	670	673	677	680	685	688	690	697	707	709	712	716	722	725	728	0.5%
Large Van	594	595	597	615	610	612	618	624	630	635	641	647	652	663	667	672	677	680	683	686	688	0.7%
Small Utility	525	527	527	545	543	543	544	546	548	551	555	560	564	571	574	580	582	585	587	590	593	0.6%
Large Utility	644	643	645	664	663	665	672	678	685	691	697	703	709	718	723	729	734	737	740	743	746	0.7%

**Table 58. New Light-Duty Vehicle Range (4 of 4)**  
(Miles)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Gasoline-Electric Hybrid																							
Mini-compact Cars	536	534	532	555	552	550	550	551	553	556	558	560	562	566	570	575	577	581	583	585	587	0.5%	
Subcompact Cars	561	561	579	595	595	596	596	597	598	601	603	604	606	609	612	614	617	619	622	624	626	0.4%	
Compact Cars	566	567	565	585	588	588	588	588	589	591	593	594	596	598	602	606	609	612	615	618	622	0.5%	
Midsize Cars	574	576	576	594	591	592	593	594	596	598	601	603	606	609	613	616	619	622	626	629	631	0.5%	
Large Cars	616	621	623	640	639	642	645	646	649	654	660	664	667	671	674	678	682	687	691	696	699	0.6%	
Two Seater Cars	532	532	531	551	549	548	548	549	552	555	558	560	563	567	570	575	578	581	584	587	589	0.5%	
Small Pickup	540	541	539	545	541	541	542	543	544	546	549	552	555	562	564	568	571	575	577	579	580	0.4%	
Large Pickup	526	526	525	532	529	530	534	537	541	545	549	555	561	570	574	578	583	585	587	590	591	0.6%	
Small Van	633	632	633	642	638	641	645	647	651	654	658	664	670	680	682	685	689	694	698	700	704	0.5%	
Large Van	571	572	574	588	587	588	594	600	606	611	616	622	627	637	641	646	651	654	657	660	662	0.7%	
Small Utility	505	506	507	524	521	522	523	525	527	530	534	538	542	549	552	556	559	562	564	567	570	0.6%	
Large Utility	619	618	620	638	637	639	646	652	658	664	670	676	682	690	695	701	705	709	712	715	718	0.7%	
Fuel Cell Methanol																							
Mini-compact Cars	429	427	426	444	442	440	440	441	443	444	446	448	450	453	456	460	462	465	467	468	470	0.5%	
Subcompact Cars	465	465	463	476	476	477	478	478	479	480	482	483	485	487	489	492	493	496	497	499	501	0.4%	
Compact Cars	453	453	452	468	470	470	470	470	471	473	478	480	482	485	487	490	492	495	497	500	502	0.5%	
Midsize Cars	459	461	461	475	473	474	475	475	477	479	481	483	483	484	487	490	493	495	498	500	503	0.5%	
Large Cars	493	497	499	512	511	514	516	517	520	523	528	531	534	537	540	543	546	549	553	557	559	0.6%	
Two Seater Cars	425	425	424	441	439	439	439	440	442	444	446	448	450	453	456	460	462	465	467	469	471	0.5%	
Small Pickup	432	433	431	436	433	433	434	434	435	437	439	442	444	449	451	454	457	460	462	463	464	0.4%	
Large Pickup	421	421	420	426	423	424	427	430	433	436	440	444	449	456	459	462	465	468	470	472	473	0.6%	
Small Van	506	506	507	513	510	513	516	518	521	523	527	531	536	544	548	551	555	558	560	563	565	0.5%	
Large Van	457	457	459	470	469	470	476	480	485	489	493	497	502	510	513	517	521	523	525	528	530	0.7%	
Small Utility	404	405	406	419	417	418	419	420	422	424	427	431	434	439	441	444	447	450	452	454	456	0.6%	
Large Utility	496	495	496	511	510	511	517	522	527	532	536	541	545	552	556	561	564	567	569	572	574	0.7%	
Fuel Cell Hydrogen																							
Mini-compact Cars	429	427	426	444	442	440	440	441	443	444	446	448	450	453	456	460	462	465	467	468	470	0.5%	
Subcompact Cars	465	465	463	476	476	477	478	478	479	480	482	483	485	487	489	492	493	496	497	499	501	0.4%	
Compact Cars	453	453	452	468	470	470	470	470	471	473	478	480	482	485	487	490	492	495	497	500	502	0.5%	
Midsize Cars	459	461	461	475	473	474	475	475	477	479	481	483	483	484	487	490	493	495	498	500	503	0.5%	
Large Cars	493	497	499	512	511	514	516	517	520	523	528	531	534	537	540	543	546	549	553	557	559	0.6%	
Two Seater Cars	425	425	425	441	439	439	439	440	442	444	446	448	450	453	456	460	462	465	467	469	471	0.5%	
Small Pickup	432	433	431	436	433	433	434	434	435	437	439	442	444	449	451	454	457	460	462	463	464	0.4%	
Large Pickup	421	421	420	426	423	424	427	430	433	436	440	444	449	456	459	462	465	468	470	472	473	0.6%	
Small Van	506	506	507	513	510	513	516	518	521	523	527	531	536	544	548	551	555	558	560	563	565	0.5%	
Large Van	457	457	459	470	469	470	476	480	485	489	493	497	502	510	513	517	521	523	525	528	530	0.7%	
Small Utility	404	405	406	419	417	418	419	420	422	424	427	431	434	439	441	444	447	450	452	454	456	0.6%	
Large Utility	496	495	496	511	510	511	517	522	527	532	536	541	545	552	556	561	564	567	569	572	574	0.7%	
Fuel Cell Gasoline																							
Mini-compact Cars	429	427	426	444	442	440	440	441	443	444	446	448	450	453	456	460	462	465	467	468	470	0.5%	
Subcompact Cars	465	465	463	476	476	477	478	478	479	480	482	483	485	487	489	492	493	496	497	499	501	0.4%	
Compact Cars	453	453	452	468	470	470	470	470	471	473	478	480	482	485	487	490	492	495	497	500	502	0.5%	
Midsize Cars	459	461	461	475	473	474	475	475	477	479	481	483	483	484	487	490	493	495	498	500	503	0.5%	
Large Cars	493	497	499	512	511	514	516	517	520	523	528	531	534	537	540	543	546	549	553	557	559	0.6%	
Two Seater Cars	425	425	425	441	439	439	439	440	442	444	446	448	450	453	456	460	462	465	467	469	471	0.5%	
Small Pickup	432	433	431	436	433	433	434	434	435	437	439	442	444	449	451	454	457	460	462	463	464	0.4%	
Large Pickup	421	421	420	426	423	424	427	430	433	436	440	444	449	456	459	462	465	468	470	472	473	0.6%	
Small Van	506	506	507	513	510	513	516	518	521	523	527	531	536	544	548	551	555	558	560	563	565	0.5%	
Large Van	457	457	459	470	469	470	476	480	485	489	493	497	502	510	513	517	521	523	525	528	530	0.7%	
Small Utility	404	405	406	419	417	418	419	420	422	424	427	431	434	439	441	444	447	450	452	454	456	0.6%	
Large Utility	496	495	496	511	510	511	517	522	527	532	536	541	545	552	556	561	564	567	569	572	574	0.7%	

Sources: 2000 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, AEO2002 National Energy Modeling System run ae02002\_0102010. Projections: EIA, AEO2002 National Energy Modeling System run ae02002\_0102010s.







**Table 59. Electric Power Projections for Electricity Market Module Region (3 of 3)  
East Central Area Reliability Coordination Agreement**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	3.9	3.8	3.7	3.7	3.7	3.6	3.7	3.6	3.6	3.5	3.6	3.6	3.6	3.6	3.6	3.6	3.7	3.8	3.9	3.9	3.9	0.0%
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	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-0.3%
Distribution	1.7	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	1.5	1.5	1.5	1.5	1.5	1.5	1.5	-0.6%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	5.15	5.18	5.21	5.40	5.48	5.61	5.66	5.81	5.85	5.89	5.92	5.93	5.96	5.99	6.02	6.03	6.05	6.08	6.09	6.10	6.11	0.9%
Natural Gas	0.21	0.19	0.37	0.38	0.40	0.42	0.47	0.51	0.58	0.69	0.85	0.72	0.78	0.83	0.88	0.93	0.98	1.05	1.12	1.18	1.25	9.3%
Oil	0.05	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	0.01	0.01	0.01	0.01	0.01	0.01	-8.7%
Total	5.42	5.40	5.59	5.79	5.89	6.03	6.14	6.32	6.42	6.49	6.58	6.66	6.75	6.82	6.90	6.96	7.04	7.14	7.22	7.29	7.36	1.5%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	149.62	148.82	152.21	157.66	160.28	163.86	166.14	170.91	172.93	174.48	176.36	177.85	179.59	181.28	182.89	183.98	185.57	187.63	189.00	190.22	191.67	1.2%
Carbon Dioxide	548.59	545.86	558.11	576.10	587.69	600.84	609.19	626.68	634.06	639.75	646.67	652.10	658.50	664.69	670.61	674.58	680.41	687.98	693.02	697.46	702.80	1.2%
Sulfur Dioxide	3.23	3.20	3.38	3.25	3.11	2.93	2.87	2.77	2.76	2.73	2.60	2.36	2.35	2.36	2.36	2.36	2.36	2.35	2.33	2.27	2.28	-1.7%
Nitrogen Oxide	1.16	1.16	1.18	1.22	0.89	0.90	0.91	0.93	0.94	0.94	0.95	0.95	0.96	0.96	0.96	0.96	0.97	0.97	0.97	0.97	0.97	-0.9%

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. Nameplate capacity is reported for nonutilities on Form EA-869B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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 sulfate 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, 2000.

7/ Generation to meet system load by source.

8/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.





**Table 60. Electric Power Projections for Electricity Market Module Region (3 of 3)**  
**Electric Reliability Council of Texas**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	4.5	4.7	4.3	4.1	4.2	4.4	4.1	4.0	3.9	3.6	3.6	3.5	3.7	3.7	3.7	3.8	3.9	4.0	4.1	4.2	4.4	-0.2%
Transmission	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4%
Distribution	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.4	1.4	1.3	1.3	1.3	-0.3%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	1.17	1.16	1.14	1.15	1.17	1.18	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	1.19	0.1%
Natural Gas	1.05	0.96	1.04	1.13	1.15	1.18	1.22	1.19	1.19	1.20	1.25	1.28	1.30	1.37	1.39	1.43	1.45	1.48	1.50	1.52	1.54	2.0%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-7.6%
Total	2.22	2.15	2.18	2.28	2.32	2.36	2.40	2.39	2.38	2.39	2.43	2.48	2.52	2.56	2.59	2.61	2.65	2.67	2.69	2.72	2.74	1.1%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	50.40	49.14	49.16	50.98	51.76	52.45	53.25	53.10	53.03	53.15	53.85	54.55	55.20	55.78	56.29	56.67	57.24	57.64	58.01	58.42	58.75	0.8%
Carbon Dioxide	184.80	180.17	180.25	186.93	189.79	192.31	195.24	194.71	194.45	194.88	197.45	200.02	202.40	204.52	206.41	207.80	209.90	211.35	212.69	214.21	215.43	0.8%
Sulfur Dioxide	0.35	0.40	0.38	0.35	0.35	0.38	0.42	0.40	0.39	0.38	0.38	0.39	0.39	0.39	0.31	0.31	0.30	0.33	0.33	0.36	0.38	0.4%
Nitrogen Oxide	0.27	0.27	0.27	0.28	0.28	0.27	0.27	0.26	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	-0.6%

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (inclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators. Nameplate capacity is reported for nonutilities on Form EA-909B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfate 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, 2000.

7/ Generation to meet system load by source.

8/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d100201b.





**Table 61. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Mid-Atlantic Area Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	5.5	5.2	4.2	4.4	4.5	4.3	4.1	4.1	4.0	4.1	4.3	4.5	4.5	4.5	4.5	4.5	4.5	4.6	4.7	4.8	4.9	-0.6%
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	0.5	0.5	0.5	0.5	0.5	0.5	0.5	-0.4%
Distribution	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.5	2.5	2.5	2.5	2.4	-0.2%
<b>Fuel Consumption (quadrillion Btu 9/)</b>																						
Coal	1.10	1.11	1.14	1.19	1.22	1.26	1.30	1.35	1.35	1.36	1.36	1.36	1.36	1.38	1.38	1.38	1.38	1.39	1.39	1.40	1.40	1.2%
Natural Gas	0.07	0.09	0.14	0.15	0.17	0.18	0.20	0.23	0.24	0.25	0.29	0.34	0.35	0.39	0.41	0.44	0.46	0.48	0.51	0.52	0.53	10.6%
Oil	0.07	0.08	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	0.01	0.01	0.01	0.01	0.01	-10.4%
Total	1.23	1.28	1.29	1.35	1.40	1.45	1.51	1.59	1.60	1.62	1.66	1.70	1.72	1.77	1.80	1.83	1.85	1.89	1.90	1.92	1.94	2.3%
<b>Emissions (million tons 10/)</b>																						
Total Carbon	33.36	34.30	34.36	35.80	36.99	38.20	39.72	41.50	41.72	42.02	42.89	43.52	43.86	44.75	45.21	45.91	46.12	46.63	47.07	47.54	47.87	1.8%
Carbon Dioxide	122.32	125.78	125.98	131.28	135.64	140.08	145.64	152.15	152.98	154.09	157.25	159.58	160.83	164.09	165.77	168.32	169.11	170.99	172.59	174.31	175.53	1.8%
Sulfur Dioxide	1.24	0.95	1.19	1.00	0.93	0.91	1.03	1.06	0.96	0.94	0.89	0.83	0.83	0.73	0.72	0.74	0.74	0.74	0.72	0.72	0.74	-1.7%
Nitrogen Oxide	0.23	0.24	0.24	0.25	0.20	0.20	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.23	0.23	-0.1%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

2/ Annual Electric Generator Report - Nonutility. Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

3/ Includes oil, gas, and dual-fired capability.

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

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

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

7/ Cumulative additions after December 31, 2000.

8/ Generation to meet system load by source.

9/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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

EMM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.



**Table 62. Electric Power Projections for Electricity Market Module Region (1 of 3)  
Mid-America Interconnected Network**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Electricity Generating Capacity 1/ (gigawatts)																							
Coal Steam	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	26.78	26.78	-0.1%
Other Fossil Steam 2/	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	3.98	3.98	3.98	3.98	3.98	3.98	3.98	3.98	N/A
Combined Cycle	0.31	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.76	1.11	1.23	1.38	1.65	1.87	2.08	2.33	2.55	2.76	3.01	3.01	12.0%	
Combustion Turbine/Diesel	7.98	8.39	9.69	9.93	11.12	12.48	12.73	13.72	14.32	14.53	14.56	14.56	14.56	14.56	14.92	15.78	16.63	17.59	18.45	19.32	19.32	4.5%	
Nuclear Power	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	12.21	11.43	11.43	11.43	11.43	11.43	11.43	11.43	11.43	11.43	11.43	-0.6%
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.1%
Distributed Generation 5/	0.00	0.00	0.00	0.04	0.10	0.16	0.23	0.30	0.43	0.56	0.71	0.76	0.89	1.02	1.16	1.28	1.40	1.53	1.66	1.80	1.84	1.84	N/A
Total Capacity	54.09	54.82	55.93	56.41	57.67	59.08	59.99	60.45	61.18	61.52	61.99	61.59	61.07	61.35	62.11	63.38	64.58	65.91	66.40	67.61	67.91	1.1%	
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	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	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	N/A
Combustion Turbine/Diesel	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	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	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	0.00	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	0.73	0.73	0.73	0.73	0.73	0.73	0.73	N/A
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	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	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	0.29	0.63	0.76	0.90	1.18	1.40	1.61	1.86	2.07	2.28	2.54	2.54	N/A	
Combustion Turbine/Diesel	0.00	0.00	1.11	1.57	2.85	4.44	4.69	6.76	6.36	6.58	6.69	6.69	6.69	6.69	7.05	7.91	8.76	9.72	10.64	11.51	11.51	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	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	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	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	0.00	0.06	0.06	0.06	0.06	0.06	0.06	0.06	N/A
Total Unplanned Additions	0.00	0.00	1.11	1.62	2.95	4.69	4.92	6.06	6.79	7.14	7.69	8.08	8.34	8.62	9.38	10.54	11.63	13.17	14.44	15.65	15.94	N/A	
Distributed Generation 5/	0.00	0.00	0.00	0.04	0.10	0.16	0.23	0.30	0.43	0.56	0.71	0.76	0.89	1.02	1.16	1.28	1.40	1.53	1.66	1.80	1.84	N/A	
Cumulative Total Additions	0.00	0.73	1.84	2.34	3.68	5.33	5.65	6.79	7.52	7.86	8.42	8.81	9.06	9.34	10.11	11.37	12.56	13.90	15.16	16.37	16.67	N/A	
Cumulative Retirements 7/																							
Coal Steam	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	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	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	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	0.01	0.03	0.11	0.34	0.34	0.43	0.43	0.43	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.58	0.58	0.58	0.58	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	0.78	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.57	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.01	0.03	0.11	0.34	0.36	0.44	0.44	0.44	0.52	1.31	2.09	2.09	2.09	2.09	2.09	2.09	2.86	2.86	2.86	2.86	N/A
Cogenerators 8/																							
Capability	0.84	0.84	0.84	0.84	0.84	0.84	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	0.83	0.82	-0.1%
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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-0.2%
Natural Gas	0.42	0.44	0.44	0.45	0.47	0.48	0.48	0.50	0.52	0.53	0.54	0.55	0.57	0.58	0.59	0.61	0.63	0.64	0.66	0.67	0.69	0.69	2.5%
Other Gaseous Fuels	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	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	4.4%
Renewable Sources 4/	0.20	0.20	0.20	0.21	0.22	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.29	0.29	0.30	0.30	0.31	2.1%	
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	1.51	1.53	1.53	1.56	1.57	1.59	1.61	1.63	1.64	1.66	1.68	1.70	1.72	1.74	1.76	1.78	1.80	1.82	1.84	1.87	1.89	1.89	1.1%

**Table 62. Electric Power Projections for Electricity Market Module Region (2 of 3)  
Mid-America Interconnected Network**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
<b>Electricity Demand</b>																						
(billion kilowatthours)																						
Residential	71.22	75.02	77.15	79.81	81.38	82.81	83.77	84.70	85.71	86.89	88.10	89.27	90.48	91.70	93.08	94.55	95.80	97.03	98.24	99.59	100.97	1.2%
Commercial/Other	75.03	78.14	79.68	81.71	83.59	85.20	86.78	88.16	89.35	90.45	91.49	92.51	93.54	94.66	95.94	97.21	98.40	99.51	100.58	101.70	102.87	1.6%
Industrial	84.65	80.44	81.24	83.31	85.14	87.25	89.04	91.07	92.63	94.11	96.06	97.97	99.18	100.31	101.44	102.56	103.61	104.76	106.00	107.14	107.99	1.2%
Transportation	1.06	1.08	1.10	1.24	1.38	1.50	1.61	1.70	1.79	1.89	1.98	2.07	2.16	2.25	2.33	2.36	2.34	2.31	2.27	2.23	2.18	3.7%
Total Sales	231.95	234.69	239.16	246.07	251.49	256.86	261.17	265.63	269.48	273.34	277.63	281.82	285.33	288.93	292.77	296.69	300.15	303.61	307.07	310.65	314.01	1.5%
<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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	19.63	15.48	14.53	14.94	16.86	16.40	16.73	14.50	14.91	14.88	15.00	18.12	21.68	22.65	23.32	23.12	22.79	22.57	24.38	23.30	24.53	1.1%
Gross Interregional Electricity Exports	28.37	23.78	19.16	20.12	22.81	22.48	23.88	23.74	23.29	21.10	20.14	17.79	14.93	14.67	14.02	13.75	12.72	11.55	8.96	8.07	7.18	-6.6%
Purchases from Cogenerators 8/	1.06	1.02	1.13	1.27	1.34	1.43	1.52	1.61	1.69	1.78	1.88	1.99	2.10	2.22	2.33	2.45	2.57	2.69	2.83	2.96	3.10	5.5%
Utility Generation for Customers	255.63	258.16	259.05	266.70	273.01	278.63	284.04	290.56	293.60	295.33	298.61	297.36	294.47	296.73	299.18	302.94	305.81	308.38	307.60	311.42	312.74	1.0%
Total Net Energy for Load	247.94	250.88	255.55	262.79	268.41	273.98	278.40	282.93	286.91	290.90	295.35	299.68	303.33	306.93	310.82	314.75	318.44	322.10	325.84	329.61	333.20	1.5%
<b>Generation by Fuel Type</b>																						
(billion kilowatthours)																						
Coal	148.22	155.74	155.15	162.90	168.75	174.00	180.11	186.65	188.87	190.26	191.35	193.78	195.00	195.86	196.51	197.17	197.66	198.08	193.42	193.79	194.13	1.4%
Petroleum	3.31	0.67	0.30	0.36	0.35	0.33	0.35	0.32	0.33	0.32	0.34	0.36	0.37	0.36	0.36	0.36	0.36	0.36	0.37	0.37	0.37	-10.4%
Natural Gas	6.78	4.06	5.90	5.51	5.49	5.58	4.76	4.56	5.04	5.16	6.67	9.18	10.73	11.88	13.46	16.00	18.27	20.38	24.19	27.60	29.56	7.5%
Nuclear	97.63	98.23	97.46	97.65	97.84	98.02	98.21	98.40	98.59	98.78	98.97	93.24	87.51	87.70	87.89	87.95	88.00	88.01	88.01	88.01	88.01	-0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	3.46	3.68	4.51	4.57	4.87	4.98	4.88	4.89	4.99	4.97	5.45	4.89	4.89	4.88	4.85	5.31	5.30	5.28	5.27	5.28	5.26	2.1%
Total Generation	259.40	262.39	263.32	271.00	277.34	282.98	288.42	294.96	298.01	299.74	303.02	301.77	298.88	301.14	303.59	307.35	310.21	312.79	312.00	315.83	317.15	1.0%
Sales to Customers	255.62	258.16	259.05	266.70	273.01	278.63	284.04	290.56	293.60	295.33	298.61	297.36	294.47	296.73	299.18	302.94	305.81	308.38	307.60	311.42	312.74	1.0%
Generation for Own Use	3.78	4.23	4.27	4.30	4.33	4.35	4.38	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	4.41	0.8%
<b>Cogenerators</b>																						
(billion kilowatthours)																						
Coal	3.24	3.24	3.24	3.22	3.21	3.20	3.19	3.18	3.16	3.15	3.15	3.14	3.14	3.13	3.13	3.12	3.11	3.11	3.10	3.10	3.09	-0.2%
Petroleum	0.45	0.45	0.45	0.50	0.50	0.50	0.50	0.51	0.51	0.51	0.52	0.52	0.52	0.53	0.53	0.53	0.54	0.54	0.55	0.55	0.56	1.1%
Natural Gas	2.02	2.11	2.14	2.27	2.27	2.26	2.25	2.23	2.22	2.20	2.29	2.99	3.08	3.18	3.27	3.38	3.46	3.60	3.71	3.83	3.96	3.4%
Other Gaseous Fuels	0.36	0.36	0.36	0.35	0.35	0.36	0.37	0.37	0.36	0.35	0.33	0.33	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	3.9%
Renewable Sources 4/	1.79	1.76	1.80	1.88	1.95	2.02	2.10	2.17	2.18	2.22	2.26	2.34	2.41	2.46	2.52	2.57	2.63	2.69	2.74	2.78	2.83	2.3%
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	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.1%
Total	7.96	8.02	8.09	8.52	8.68	8.85	9.02	9.17	9.24	9.38	9.53	9.72	9.89	10.06	10.22	10.38	10.56	10.74	10.93	11.12	11.32	1.8%
Sales to Utilities	1.06	1.02	1.13	1.27	1.34	1.43	1.52	1.61	1.69	1.78	1.88	1.99	2.10	2.22	2.33	2.45	2.57	2.69	2.83	2.96	3.10	5.5%
Generation for Own Use	6.90	7.00	6.96	7.25	7.33	7.42	7.50	7.56	7.55	7.59	7.65	7.73	7.79	7.84	7.89	7.94	8.00	8.05	8.11	8.16	8.22	0.9%
<b>End-Use Prices</b>																						
(\$000 cents per kilowatthour)																						
Residential	8.6	8.4	8.0	7.7	7.7	7.8	7.7	7.5	7.6	7.6	7.6	7.8	7.9	7.9	7.8	7.7	7.7	7.7	7.8	7.8	7.8	-0.5%
Commercial	7.2	6.9	6.5	6.6	6.6	6.5	6.4	6.3	6.3	6.3	6.3	6.5	6.7	6.7	6.8	6.8	6.7	6.7	6.8	6.8	6.7	-0.3%
Industrial	4.7	4.5	4.2	4.3	4.3	4.3	4.2	4.1	4.1	4.1	4.2	4.3	4.5	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.6	-0.2%
Transportation	7.1	6.6	6.2	5.9	5.8	5.3	5.3	5.4	5.6	5.7	5.9	6.1	6.2	6.3	6.3	6.2	6.2	6.1	6.1	6.0	5.9	-0.9%
All Sectors Average	6.7	6.5	6.2	6.2	6.2	6.1	6.1	6.1	6.0	6.0	6.0	6.1	6.3	6.4	6.3	6.3	6.2	6.2	6.3	6.3	6.3	-0.3%

**Table 62. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Mid-America Interconnected Network**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	4.3	4.2	3.9	3.9	3.9	3.8	3.8	3.7	3.6	3.6	3.7	3.8	4.0	4.1	4.1	4.0	4.0	3.9	4.0	4.0	4.1	-0.3%
Transmission	0.5	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	0.4	0.4	0.4	0.4	0.4	0.4	-0.6%
Distribution	1.9	1.9	1.8	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	-0.3%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	1.54	1.83	1.62	1.70	1.76	1.83	1.89	1.96	1.99	2.00	2.01	2.04	2.06	2.07	2.07	2.08	2.09	2.09	2.04	2.05	2.05	1.4%
Natural Gas	0.08	0.04	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.05	0.07	0.09	0.10	0.11	0.12	0.14	0.15	0.17	0.20	0.23	0.23	9.8%
Oil	0.04	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-11.2%
Total	1.66	1.88	1.69	1.77	1.83	1.89	1.95	2.01	2.04	2.06	2.08	2.13	2.16	2.18	2.20	2.22	2.25	2.26	2.25	2.28	2.28	1.6%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	46.17	46.88	46.89	49.35	51.09	52.79	54.53	56.46	57.27	57.74	58.27	59.38	60.02	60.47	60.87	61.42	61.86	62.24	61.37	61.97	62.19	1.5%
Carbon Dioxide	169.31	171.30	172.28	180.95	187.33	193.57	199.94	207.03	210.00	211.71	213.65	217.72	220.08	221.73	223.21	225.22	226.82	228.23	225.04	227.21	228.04	1.5%
Sulfur Dioxide	0.58	1.09	0.99	1.03	1.00	0.98	0.95	0.92	0.90	0.88	0.86	0.84	0.83	0.84	0.83	0.82	0.81	0.81	0.78	0.78	0.78	-1.2%
Nitrogen Oxide	0.33	0.35	0.34	0.37	0.32	0.33	0.34	0.35	0.36	0.36	0.36	0.37	0.37	0.37	0.38	0.38	0.38	0.38	0.37	0.37	0.37	0.6%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfate 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, 2000.

7/ Generation to meet system load by source.

8/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.

**Table 63. Electric Power Projections for Electricity Market Module Region (1 of 3)  
Mid-Continent Area Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-		
<b>Electricity Generating Capacity 1/</b> <b>(gigawatts)</b>																								
<b>Coal Steam</b>	19.86	19.86	19.86	19.86	19.86	19.86	19.83	19.83	19.83	19.83	19.83	19.83	19.82	19.82	19.82	19.82	19.82	19.82	19.82	19.82	19.82	20.18	0.1%	
<b>Other Fossil Steam 2/</b>	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	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	0.58	N/A
<b>Combined Cycle</b>	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.72	1.09	1.47	1.85	2.17	2.32	2.32	2.63	3.06	3.43	3.82	4.23	4.47	4.74	4.74	13.3%	
<b>Combustion Turbine/Diesel</b>	5.40	5.79	6.43	6.84	7.59	7.53	7.78	8.07	8.22	8.22	8.24	8.43	8.65	9.03	9.39	9.51	9.84	10.50	10.92	11.42	11.09	11.09	3.7%	
<b>Nuclear Power</b>	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.29	2.53	2.53	2.53	2.53	2.53	2.53	2.53	-2.0%	
<b>Pumped Storage/Other 3/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 Cells</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Renewable Sources 4/</b>	3.25	4.09	4.24	4.28	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.33	0.5%	
<b>Distributed Generation 5/</b>	0.00	0.00	0.00	0.00	0.04	0.07	0.11	0.15	0.18	0.22	0.25	0.28	0.38	0.44	0.53	0.61	0.70	0.78	0.87	0.96	1.05	N/A		
<b>Total Capacity</b>	<b>33.93</b>	<b>34.47</b>	<b>35.25</b>	<b>35.71</b>	<b>36.52</b>	<b>36.49</b>	<b>37.08</b>	<b>37.78</b>	<b>38.36</b>	<b>38.77</b>	<b>39.14</b>	<b>39.50</b>	<b>39.80</b>	<b>40.28</b>	<b>40.54</b>	<b>40.42</b>	<b>41.21</b>	<b>42.34</b>	<b>43.26</b>	<b>44.11</b>	<b>44.48</b>	<b>44.48</b>	<b>1.4%</b>	
<b>Cumulative Planned Additions 6/</b>																								
<b>Coal Steam</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Other Fossil Steam 2/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Combined Cycle</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Combustion Turbine/Diesel</b>	0.00	0.39	0.39	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	0.72	0.72	0.72	0.72	0.72	0.72	N/A
<b>Nuclear Power</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Pumped Storage/Other 3/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 Cells</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Renewable Sources 4/</b>	0.00	0.15	0.29	0.33	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	0.36	0.36	0.36	0.36	0.36	N/A
<b>Distributed Generation 5/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.54</b>	<b>0.68</b>	<b>1.06</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>1.08</b>	<b>N/A</b>
<b>Cumulative Unplanned Additions 6/</b>																								
<b>Coal Steam</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.36	N/A	
<b>Other Fossil Steam 2/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Combined Cycle</b>	0.00	0.00	0.00	0.00	0.00	0.33	0.70	1.08	1.46	1.78	1.93	1.93	1.93	1.93	2.24	2.57	2.97	3.43	3.84	4.26	4.35	4.35	4.35	N/A
<b>Combustion Turbine/Diesel</b>	0.00	0.00	0.64	0.72	1.47	1.54	1.79	2.08	2.24	2.24	2.25	2.44	2.66	3.04	3.40	3.52	3.85	4.51	4.93	5.43	5.89	5.89	5.89	N/A
<b>Nuclear Power</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Pumped Storage/Other 3/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 Cells</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Renewable Sources 4/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	N/A	
<b>Distributed Generation 5/</b>	0.00	0.00	0.64	0.72	1.51	1.61	1.93	2.23	2.93	3.50	3.91	4.28	4.65	4.95	5.42	6.17	6.90	7.60	8.72	9.65	10.50	11.67	N/A	
<b>Total Unplanned Additions</b>	<b>0.00</b>	<b>0.00</b>	<b>0.64</b>	<b>0.72</b>	<b>1.51</b>	<b>1.61</b>	<b>1.93</b>	<b>2.23</b>	<b>2.93</b>	<b>3.50</b>	<b>3.91</b>	<b>4.28</b>	<b>4.65</b>	<b>4.95</b>	<b>5.42</b>	<b>6.17</b>	<b>6.90</b>	<b>7.60</b>	<b>8.72</b>	<b>9.65</b>	<b>10.50</b>	<b>11.67</b>	<b>N/A</b>	
<b>Cumulative Total Additions</b>	<b>0.00</b>	<b>0.54</b>	<b>1.32</b>	<b>1.78</b>	<b>2.59</b>	<b>2.69</b>	<b>3.31</b>	<b>4.01</b>	<b>4.58</b>	<b>4.99</b>	<b>5.37</b>	<b>5.73</b>	<b>6.03</b>	<b>6.50</b>	<b>7.25</b>	<b>7.88</b>	<b>8.68</b>	<b>9.80</b>	<b>10.73</b>	<b>11.58</b>	<b>12.75</b>	<b>12.75</b>	<b>N/A</b>	
<b>Cumulative Retirements 7/</b>																								
<b>Coal Steam</b>	0.00	0.00	0.00	0.00	0.00	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	0.03	0.03	0.03	0.03	N/A
<b>Other Fossil Steam 2/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Combined Cycle</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Combustion Turbine/Diesel</b>	0.00	0.00	0.00	0.00	0.00	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	0.13	0.13	0.13	0.93	N/A
<b>Nuclear Power</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48	1.23	1.23	1.23	1.23	1.23	1.23	1.23	1.23	N/A
<b>Pumped Storage</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 Cells</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Renewable Sources 4/</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.13</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.64</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>1.40</b>	<b>2.19</b>	<b>N/A</b>	
<b>Cogenerators 8/</b>																								
<b>Capability</b>																								
<b>Coal</b>	0.58	0.58	0.58	0.58	0.58	0.58	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	0.57	0.57	-0.1%	
<b>Petroleum</b>	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	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-0.2%	
<b>Natural Gas</b>	0.04	0.04																						



**Table 63. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Mid-Continent Area Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	3.3	3.0	2.9	2.8	2.7	2.7	2.6	2.6	2.6	2.7	2.7	2.6	2.6	2.6	2.6	2.5	2.5	2.6	2.6	2.6	2.6	-1.1%
Transmission	0.8	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	0.7	0.7	0.7	0.7	0.7	0.7	-0.6%
Distribution	2.0	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	-0.5%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	1.28	1.30	1.30	1.37	1.43	1.48	1.52	1.55	1.58	1.55	1.55	1.56	1.56	1.57	1.57	1.57	1.57	1.57	1.57	1.57	1.60	1.1%
Natural Gas	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.11	0.13	0.15	0.17	0.19	0.20	0.21	10.7%
Oil	0.01	0.01	0.00	0.01	0.01	0.01	0.01	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	0.01	-1.5%
Total	1.31	1.34	1.34	1.41	1.48	1.52	1.56	1.60	1.61	1.60	1.62	1.63	1.65	1.68	1.69	1.71	1.73	1.75	1.77	1.78	1.81	1.6%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	37.50	38.05	38.01	40.14	42.08	43.29	44.48	45.46	45.74	45.55	45.83	46.11	46.46	46.75	47.14	47.53	47.80	48.25	48.57	48.70	49.50	1.4%
Carbon Dioxide	137.49	139.53	139.38	147.17	154.31	158.73	163.09	166.67	167.71	167.02	168.06	169.08	170.37	171.42	172.85	174.28	175.28	176.92	178.10	178.58	181.50	1.4%
Sulfur Dioxide	0.48	0.48	0.48	0.49	0.50	0.52	0.52	0.52	0.51	0.50	0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.4%
Nitrogen Oxide	0.26	0.27	0.27	0.28	0.29	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	1.0%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfate 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, 2000.

7/ Generation to meet system load by source.

8/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.1r02001b.

Table 64. Electric Power Projections for Electricity Market Module Region (1 of 3)  
Northeast Power Coordinating Council / New York

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
<b>Electricity Generating Capacity 1/ (gigawatts)</b>																							
Coal Steam	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	-0.1%
Other Fossil Steam 2/	12.36	12.36	12.36	12.36	11.25	10.35	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	-1.5%
Combined Cycle	0.63	0.63	0.63	0.63	0.63	1.34	3.04	3.65	4.23	4.74	4.92	5.31	5.61	5.66	5.97	6.13	6.25	6.30	6.30	6.30	6.30	6.30	12.2%
Combustion Turbine/Diesel	3.64	3.64	3.64	3.64	3.64	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	0.8%
Nuclear Power	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	-1.1%
Pumped Storage/Other 3/	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	4.55	4.63	4.78	4.85	4.92	4.99	5.13	5.13	5.13	5.13	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	0.6%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	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	0.03	0.03	0.03	N/A
Total Capacity	31.02	31.10	31.24	31.31	30.27	30.84	31.54	32.15	32.73	33.23	33.46	33.85	34.09	34.14	33.48	33.64	33.76	33.81	33.81	33.81	33.81	33.81	0.4%
<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	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	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	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	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	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	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	0.71	2.41	3.02	3.60	4.10	4.29	4.68	4.98	5.03	5.24	5.50	5.62	5.67	5.67	5.67	5.67	5.67	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	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	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	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	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	0.04	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 Unplanned Additions	0.00	0.00	0.00	0.00	0.00	1.67	3.37	3.98	4.56	5.07	5.30	5.69	5.98	6.03	6.34	6.50	6.50	6.51	6.51	6.51	6.51	6.51	N/A
Distributed Generation 5/	0.00	0.00	0.00	0.00	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	0.03	0.03	0.03	0.03	N/A
Cumulative Total Additions	0.00	0.01	0.01	0.01	0.01	1.67	3.38	3.99	4.57	5.07	5.30	5.69	5.99	6.04	6.35	6.51	6.51	6.51	6.51	6.51	6.51	6.51	N/A
<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	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	1.11	2.01	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16	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	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	0.28	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	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	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	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	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	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	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	1.11	2.29	3.43	3.43	3.43	3.43	3.43	3.43	3.50	3.50	4.47	4.47	4.47	4.47	4.47	4.47	4.47	4.47	N/A
<b>Cogenerators 8/</b>																							
Capability	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	0.27	0.27	0.27	0.27	0.27	0.27	0.27	0.27	-0.1%
Coal	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	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	-0.1%
Natural Gas	3.79	3.80	3.88	3.81	3.82	3.82	3.83	3.84	3.85	3.85	3.86	3.87	3.88	3.88	3.89	3.90	3.91	3.92	3.92	3.94	3.95	3.95	0.2%
Other Gaseous Fuels	0.02	0.02	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	4.4%
Renewable Sources 4/	0.20	0.20	0.20	0.20	0.20	0.21	0.21	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	1.2%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	4.41	4.42	4.42	4.44	4.45	4.47	4.48	4.49	4.50	4.51	4.52	4.53	4.55	4.56	4.57	4.58	4.60	4.61	4.62	4.64	4.65	4.65	0.3%

**Table 64. Electric Power Projections for Electricity Market Module Region (2 of 3)  
Northeast Power Coordinating Council / New York**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Demand</b>																						
(billion kilowatt-hours)																						
Residential	43.47	45.25	46.56	48.13	48.83	49.42	49.90	50.36	50.79	51.17	51.49	51.80	52.18	52.61	53.11	53.62	53.99	54.40	54.85	55.33	55.82	1.3%
Commercial/Other	63.81	66.32	67.15	68.96	70.52	71.90	73.34	74.68	75.96	77.15	78.28	79.36	80.37	81.34	82.16	82.58	82.77	82.90	82.98	83.01	83.00	1.3%
Industrial	25.14	23.63	24.11	24.28	24.79	25.29	25.62	26.02	26.47	26.94	27.50	28.06	28.37	28.74	29.05	29.40	29.74	30.06	30.37	30.67	30.97	1.0%
Transportation	0.90	0.92	0.94	1.05	1.16	1.26	1.35	1.42	1.49	1.57	1.64	1.71	1.78	1.85	1.91	1.94	1.91	1.88	1.85	1.81	1.77	3.4%
Total Sales	133.32	136.32	138.75	142.42	145.29	147.87	150.20	152.48	154.71	156.83	158.91	160.93	162.70	164.54	166.23	167.54	168.41	169.24	170.05	170.83	171.46	1.3%
<b>Net Energy for Load (billion kilowatt-hours) 7/</b>																						
Gross International Imports	15.58	17.84	19.10	21.38	23.79	23.84	22.57	22.11	22.38	22.07	22.64	23.00	23.14	23.54	22.98	24.46	24.45	23.91	23.44	22.88	22.02	1.7%
Gross International Exports	1.45	1.46	1.47	1.48	1.50	1.51	1.52	1.53	1.54	1.56	1.57	1.56	1.58	1.56	1.56	1.56	1.55	1.55	1.55	1.55	1.55	0.3%
Gross Interregional Electricity Imports	17.58	16.25	16.46	14.41	16.13	15.64	16.46	16.66	16.52	15.73	14.44	13.13	12.31	12.46	12.06	14.57	15.21	15.08	15.18	15.62	16.12	-0.4%
Gross Interregional Electricity Exports	9.23	5.89	4.14	6.11	5.81	7.01	8.47	8.46	8.06	8.10	7.31	6.75	6.49	6.58	6.04	4.78	4.51	4.15	3.89	3.51	1.86	-7.7%
Purchases from Cogenerators 8/	20.37	20.35	20.38	20.44	20.47	20.59	20.53	20.56	20.59	20.62	20.66	20.70	20.74	20.78	20.82	20.86	20.90	20.95	21.00	21.05	21.10	0.2%
Utility Generation for Customers	102.75	99.76	99.98	102.55	103.15	107.43	111.72	114.10	116.06	119.33	121.37	123.73	125.85	127.15	129.22	125.24	125.24	126.40	127.31	127.94	127.21	1.2%
Total Net Energy for Load	143.59	146.85	149.41	153.19	156.24	158.89	161.30	163.64	165.95	168.10	170.24	172.24	173.98	175.79	177.46	178.79	179.74	180.63	181.49	182.33	183.04	1.2%
<b>Generation by Fuel Type</b>																						
(billion kilowatt-hours)																						
Coal	22.90	23.03	22.99	23.33	23.80	24.23	24.66	25.06	24.95	24.86	24.79	24.69	24.71	24.76	24.77	24.79	24.79	24.76	24.80	24.80	24.81	0.4%
Petroleum	11.82	13.46	4.79	2.62	2.70	1.70	1.07	0.62	0.78	0.74	0.73	0.71	0.75	1.11	1.24	1.65	1.95	2.07	2.19	2.52	2.55	-7.4%
Natural Gas	10.91	10.24	14.72	18.09	17.89	22.31	26.08	28.08	29.98	33.19	34.76	37.16	39.08	39.87	41.72	43.99	43.65	44.69	45.47	45.68	45.04	7.3%
Nuclear	39.52	40.01	39.76	39.86	39.96	40.06	40.16	40.26	40.37	40.47	40.57	40.67	40.77	40.87	40.97	41.07	41.17	41.27	41.37	41.47	41.57	-0.7%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	17.34	14.75	18.57	20.22	20.55	20.88	21.50	21.65	21.75	21.85	22.29	22.28	22.27	22.27	22.26	22.25	22.25	22.24	22.23	22.23	22.23	1.2%
Total Generation	102.48	101.50	100.83	104.31	104.89	109.19	113.49	115.88	117.84	121.12	123.15	125.51	127.59	128.90	130.97	129.99	128.99	128.14	129.05	129.59	128.96	1.2%
Sales to Customers	100.75	99.76	99.98	102.55	103.15	107.43	111.72	114.10	116.06	119.33	121.37	123.73	125.85	127.15	129.22	125.24	125.24	126.40	127.31	127.94	127.21	1.2%
Generation for Own Use	1.73	1.74	1.75	1.76	1.75	1.76	1.77	1.78	1.78	1.78	1.78	1.78	1.78	1.78	1.75	1.75	1.75	1.75	1.75	1.75	1.75	0.0%
<b>Cogenerators</b>																						
Coal	1.34	1.34	1.32	1.32	1.32	1.31	1.31	1.31	1.30	1.30	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.29	1.28	1.28	1.28	-0.2%
Petroleum	0.27	0.27	0.27	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.31	0.9%
Natural Gas	20.57	20.62	20.63	20.70	20.76	20.89	20.95	20.94	20.98	21.03	21.08	21.13	21.18	21.22	21.26	21.35	21.39	21.45	21.51	21.51	21.58	0.2%
Other Gaseous Fuels	0.19	0.19	0.19	0.28	0.28	0.29	0.29	0.29	0.30	0.31	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.36	0.37	0.39	0.40	3.9%
Renewable Sources 4/	1.04	1.02	1.04	1.07	1.08	1.11	1.13	1.15	1.15	1.16	1.17	1.19	1.21	1.23	1.24	1.26	1.27	1.29	1.30	1.32	1.33	1.2%
Other	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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.1%
Total	23.46	23.49	23.51	23.72	23.79	23.86	23.93	24.00	24.04	24.10	24.16	24.24	24.32	24.39	24.46	24.54	24.62	24.69	24.76	24.87	24.96	0.3%
Sales to Utilities	20.37	20.35	20.38	20.44	20.47	20.59	20.53	20.56	20.59	20.62	20.66	20.70	20.74	20.78	20.82	20.86	20.90	20.95	21.00	21.05	21.10	0.2%
Generation for Own Use	3.08	3.13	3.12	3.27	3.32	3.36	3.40	3.43	3.44	3.47	3.51	3.55	3.58	3.62	3.65	3.68	3.71	3.75	3.79	3.82	3.86	1.1%
<b>End-Use Prices</b>																						
(\$2000 cents per kilowatt-hour)																						
Residential	13.4	13.7	12.8	12.1	12.1	12.0	11.7	11.5	11.4	11.5	11.6	11.7	11.7	11.7	11.8	11.9	12.0	12.0	12.0	12.0	12.0	-0.5%
Commercial	11.2	10.8	9.8	9.3	9.2	8.9	8.7	8.6	8.4	8.4	8.4	8.5	8.6	8.7	8.7	8.9	9.1	9.1	9.1	9.2	9.4	-0.9%
Industrial	4.9	4.9	4.6	4.5	4.8	4.8	4.8	4.8	4.9	4.9	5.0	5.0	5.1	5.1	5.2	5.3	5.4	5.4	5.5	5.6	5.6	0.7%
Transportation	10.8	10.5	9.8	8.7	8.4	7.9	7.8	7.9	8.0	8.1	8.3	8.4	8.6	8.7	8.8	8.9	8.8	8.8	8.7	8.6	8.5	-1.2%
All Sectors Average	10.7	10.7	9.9	9.4	9.4	9.2	9.0	8.9	8.8	8.8	8.9	8.9	9.0	9.0	9.1	9.2	9.3	9.4	9.4	9.4	9.6	-0.6%



**Table 64. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Northeast Power Coordinating Council / New York**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	5.9	5.9	5.2	4.7	4.7	4.5	4.3	4.2	4.0	4.0	4.1	4.1	4.2	4.3	4.3	4.5	4.6	4.7	4.7	4.8	4.9	-0.9%
Transmission	1.5	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	1.4	1.4	1.4	1.4	1.3	1.3	-0.5%
Distribution	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.4	3.3	3.3	-0.1%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	0.24	0.24	0.24	0.24	0.24	0.25	0.25	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	0.4%
Natural Gas	0.11	0.10	0.15	0.18	0.18	0.21	0.21	0.22	0.23	0.25	0.26	0.27	0.29	0.29	0.30	0.32	0.32	0.33	0.34	0.34	0.33	5.6%
Oil	0.12	0.14	0.05	0.03	0.03	0.02	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	0.03	0.03	-7.4%
Total	0.47	0.48	0.44	0.46	0.46	0.48	0.48	0.49	0.49	0.51	0.52	0.54	0.55	0.56	0.57	0.60	0.60	0.60	0.61	0.62	0.61	1.3%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	11.32	11.61	10.15	10.35	10.42	10.69	10.73	10.91	11.00	11.29	11.44	11.64	11.85	12.07	12.27	12.66	12.70	12.83	12.97	13.09	13.02	0.7%
Carbon Dioxide	41.52	42.58	37.23	37.94	38.20	39.19	39.33	40.01	40.33	41.40	41.96	42.69	43.44	44.24	44.98	46.43	46.58	47.05	47.56	48.01	47.75	0.7%
Sulfur Dioxide	0.28	0.30	0.25	0.22	0.22	0.21	0.19	0.18	0.18	0.18	0.18	0.17	0.17	0.17	0.16	0.16	0.16	0.16	0.16	0.16	0.16	-2.1%
Nitrogen Oxide	0.06	0.07	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	0.05	0.05	0.05	0.05	0.05	-0.6%

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. Nameplate capacity is reported for nonutilities on Form EIA-860B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

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

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

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

6/ Cumulative additions after December 31, 2000.

7/ Generation to meet system load by source.

8/ Generators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.

**Table 65. Electric Power Projections for Electricity Market Module Region (1 of 3)**  
**Northeast Power Coordinating Council / New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020		
<b>Electricity Generating Capacity 1/</b>																								
(gigawatts)																								
Coal Steam	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68		
Other Fossil Steam 2/	7.80	7.80	7.80	7.80	7.38	7.07	7.07	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	-1.2%		
Combined Cycle	4.53	5.20	5.20	5.20	5.20	6.01	6.01	6.88	7.58	7.58	7.92	8.38	8.57	8.82	9.20	9.30	9.51	9.70	9.78	9.90	10.01	4.0%		
Combustion Turbine/Diesel	1.86	1.75	1.75	1.75	1.75	1.75	1.75	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	0.6%	
Nuclear Power	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	-0.8%	
Pumped Storage/Other 3/	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Renewable Sources 4/	3.21	3.21	3.22	3.25	3.29	3.34	3.39	3.45	3.50	3.56	3.61	3.61	3.61	3.61	3.63	3.69	3.69	3.69	3.69	3.69	3.69	3.69	0.7%	
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.18	0.19	0.22	0.24	0.28	0.38	0.31	0.33	0.34	0.36	0.38	0.39	0.40	0.40	N/A	
<b>Total Capacity</b>	<b>25.53</b>	<b>26.10</b>	<b>26.10</b>	<b>26.14</b>	<b>25.75</b>	<b>26.30</b>	<b>26.39</b>	<b>26.88</b>	<b>27.64</b>	<b>27.75</b>	<b>28.16</b>	<b>28.65</b>	<b>28.86</b>	<b>28.47</b>	<b>28.88</b>	<b>29.07</b>	<b>29.29</b>	<b>29.49</b>	<b>29.59</b>	<b>29.73</b>	<b>29.85</b>	<b>29.85</b>	<b>0.8%</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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Combined Cycle	0.00	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	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	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	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	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	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	0.01	0.01	0.05	0.08	0.11	0.17	0.22	0.27	0.33	0.38	0.38	0.38	0.38	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	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	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>0.00</b>	<b>0.68</b>	<b>0.68</b>	<b>0.72</b>	<b>0.75</b>	<b>0.78</b>	<b>0.84</b>	<b>0.89</b>	<b>0.94</b>	<b>1.00</b>	<b>1.05</b>	<b>1.05</b>	<b>1.05</b>	<b>1.05</b>	<b>1.05</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</b>	<b>1.10</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	0.00	0.00	0.00	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	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	0.80	0.80	1.88	2.35	2.38	2.71	3.17	3.36	3.82	4.00	4.10	4.30	4.48	4.57	4.65	4.81	4.81	N/A	
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.36	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	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	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	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.04	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	0.03	0.06	0.06	0.13	0.18	0.19	0.22	0.24	0.28	0.31	0.33	0.34	0.36	0.38	0.39	0.40	0.40	N/A	
<b>Cumulative Total Additions</b>	<b>0.00</b>	<b>0.68</b>	<b>0.68</b>	<b>0.72</b>	<b>0.75</b>	<b>1.61</b>	<b>1.70</b>	<b>3.08</b>	<b>3.84</b>	<b>3.95</b>	<b>4.36</b>	<b>4.85</b>	<b>5.06</b>	<b>5.34</b>	<b>5.75</b>	<b>5.94</b>	<b>6.18</b>	<b>6.37</b>	<b>6.46</b>	<b>6.60</b>	<b>6.72</b>	<b>N/A</b>		
<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	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	0.43	0.73	0.73	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Combustion Turbine/Diesel	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	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	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
<b>Total</b>	<b>0.00</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.53</b>	<b>0.84</b>	<b>0.84</b>	<b>1.73</b>	<b>1.73</b>	<b>1.73</b>	<b>1.73</b>	<b>1.73</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>2.40</b>	<b>N/A</b>	
<b>Cogenerators 8/</b>																								
<b>Capacity</b>																								
Coal	0.32	0.32	0.32	0.32	0.32	0.32	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	0.30	0.30	-0.3%	
Petroleum	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	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	-0.2%	
Natural Gas	2.15	2.18	2.18	2.41	2.43	2.45	2.48	2.48	2.51	2.53	2.55	2.58	2.60	2.62	2.64	2.67	2.69	2.72	2.75	2.77	2.80	2.80	1.3%	
Other Gaseous Fuels	0.06	0.06	0.06	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.15	0.15	4.4%	
Renewable Sources 4/	0.99	0.99	0.99	1.02	1.04	1.08	1.11	1.14	1.14	1.16	1.18	1.22	1.24	1.27	1.29	1.31	1.33	1.35	1.37	1.39	1.41	1.41	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
<b>Total</b>	<b>3.67</b>	<b>3.70</b>	<b>3.70</b>	<b>3.99</b>	<b>4.04</b>	<b>4.10</b>	<b>4.13</b>	<b>4.18</b>	<b>4.21</b>	<b>4.25</b>	<b>4.29</b>	<b>4.35</b>	<b>4.40</b>	<b>4.45</b>	<b>4.50</b>	<b>4.55</b>	<b>4.60</b>	<b>4.65</b>	<b>4.70</b>	<b>4.75</b>	<b>4.80</b>	<b>1.4%</b>		

**Table 65. Electric Power Projections for Electricity Market Module Region (2 of 3)  
Northeast Power Coordinating Council / New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Demand</b>																						
(billion kilowatthours)																						
Residential	41.51	42.89	43.85	45.42	46.26	47.02	47.61	48.23	48.85	49.35	49.82	50.27	50.75	51.20	51.70	52.26	52.69	53.16	53.65	54.17	54.76	1.4%
Commercial/Other	41.31	43.63	44.02	45.55	46.88	48.03	49.09	50.14	51.18	52.13	53.01	53.86	54.69	55.42	56.14	56.77	57.37	57.93	58.51	59.11	59.73	1.9%
Industrial	26.11	24.71	24.99	25.47	25.87	26.37	26.81	27.30	27.71	28.14	28.67	29.22	29.56	29.91	30.20	30.49	30.78	31.11	31.45	31.73	31.93	1.0%
Transportation	0.78	0.80	0.82	0.93	1.03	1.12	1.20	1.27	1.34	1.42	1.49	1.56	1.62	1.69	1.75	1.78	1.76	1.74	1.71	1.68	1.65	3.8%
Total Sales	109.72	112.03	113.67	117.37	120.04	122.54	124.71	126.94	129.09	131.03	132.98	134.91	136.63	138.22	139.80	141.30	142.60	143.94	145.32	146.69	148.07	1.5%
<b>Net Energy for Load (billion kilowatthours) 7/</b>																						
Gross International Imports	10.73	8.10	12.00	12.94	12.64	13.99	13.53	12.75	12.54	12.52	12.50	12.29	12.12	12.02	11.48	12.95	12.17	11.68	11.49	11.39	14.65	1.6%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	2.59	2.66	1.80	2.82	3.45	4.45	6.40	6.59	6.39	6.54	5.89	5.47	5.30	5.60	5.21	4.13	4.00	3.77	3.65	3.36	1.81	-1.8%
Gross Interregional Electricity Exports	2.44	1.21	0.02	0.05	0.24	0.25	0.29	0.54	0.84	0.76	0.95	0.81	0.83	0.60	0.55	0.85	0.91	0.86	0.76	0.65	0.77	-5.6%
Purchases from Cogenerators 8/	10.95	10.93	11.73	13.50	13.48	13.14	13.18	13.00	12.77	13.07	13.20	13.11	13.32	13.72	13.73	13.94	14.12	14.38	14.63	14.87	14.84	1.5%
Utility Generation for Customers	97.58	101.40	98.13	98.35	101.06	101.71	102.54	105.90	109.06	110.57	113.33	115.85	117.74	118.49	120.94	122.99	124.27	126.13	127.54	129.03	128.91	1.4%
Total Net Energy for Load	119.41	121.89	123.63	127.56	130.40	133.05	135.36	137.69	139.93	141.94	143.97	145.91	147.64	149.23	150.80	152.26	153.65	155.09	156.55	158.01	159.45	1.5%
<b>Generation by Fuel Type</b>																						
(billion kilowatthours)																						
Coal	17.79	17.81	17.72	18.21	18.63	18.98	19.30	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.64	19.64	19.64	0.5%
Petroleum	21.17	21.10	5.55	7.54	9.81	7.48	6.00	6.22	5.79	6.09	6.13	5.48	5.80	7.23	7.13	7.49	7.73	8.13	8.58	8.91	9.06	-4.2%
Natural Gas	20.86	25.18	36.54	33.82	33.53	35.74	35.42	38.71	43.08	43.95	46.40	49.42	50.91	54.72	57.13	57.67	59.48	60.94	61.88	63.04	62.63	5.7%
Nuclear	31.24	31.69	31.53	31.67	31.81	31.95	32.07	32.14	32.28	32.35	32.43	32.50	32.60	28.07	28.14	28.21	28.21	28.21	28.21	28.21	28.21	-0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	10.88	10.11	11.21	11.53	11.65	11.84	12.11	12.31	12.51	12.71	12.91	12.97	12.97	13.03	13.19	13.25	13.24	13.24	13.24	13.24	13.24	1.0%
Total Generation	101.95	105.88	102.54	102.77	105.44	106.09	106.92	110.07	113.24	114.74	117.51	120.02	121.91	122.66	125.11	126.26	128.45	130.31	131.71	133.21	133.09	1.3%
Sales to Customers	97.58	101.40	98.13	98.35	101.06	101.71	102.54	105.90	109.06	110.57	113.33	115.85	117.74	118.49	120.94	122.99	124.27	126.13	127.54	129.03	128.91	1.4%
Generation for Own Use	4.37	4.48	4.42	4.42	4.38	4.38	4.38	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	4.17	-0.2%
<b>Cogenerators</b>																						
Coal	2.17	2.12	2.05	2.07	2.10	2.10	2.10	2.10	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	2.09	-0.2%
Petroleum	1.77	2.67	1.83	2.00	2.07	2.04	2.05	2.04	2.03	2.05	2.06	2.08	2.09	2.12	2.11	2.11	2.13	2.15	2.17	2.21	2.22	1.1%
Natural Gas	10.59	10.07	11.43	12.90	12.76	12.49	12.39	12.15	11.89	12.11	12.17	11.99	12.10	12.40	12.35	12.46	12.54	12.69	12.81	12.92	12.78	0.9%
Other Gaseous Fuels	1.29	1.28	1.29	1.94	1.95	1.97	2.02	2.02	2.05	2.11	2.16	2.21	2.27	2.32	2.37	2.40	2.45	2.50	2.58	2.65	2.74	3.9%
Renewable Sources 4/	5.09	4.87	5.15	5.38	5.53	5.70	5.87	6.03	6.04	6.14	6.23	6.42	6.56	6.69	6.81	6.93	7.06	7.18	7.30	7.40	7.50	2.0%
Other	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	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.1%
Total	20.87	21.08	21.81	24.37	24.46	24.27	24.49	24.40	24.17	24.55	24.76	24.85	25.18	25.69	25.78	26.06	26.33	26.67	27.01	27.33	27.39	1.3%
Sales to Utilities	10.95	10.93	11.73	13.50	13.48	13.14	13.18	13.00	12.77	13.07	13.20	13.11	13.32	13.72	13.73	13.94	14.12	14.38	14.63	14.87	14.84	1.5%
Generation for Own Use	10.02	10.14	10.08	10.87	10.98	11.13	11.31	11.41	11.40	11.48	11.58	11.78	11.86	11.96	12.05	12.11	12.21	12.29	12.38	12.46	12.55	1.1%
<b>End-Use Prices</b>																						
(\$2000 cents per kilowatthour)																						
Residential	11.6	12.1	11.5	10.9	10.8	10.6	10.4	10.2	10.1	10.2	10.2	10.2	10.3	10.4	10.4	10.4	10.4	10.5	10.5	10.6	10.6	-0.5%
Commercial	9.7	9.8	8.8	8.3	8.2	7.9	7.8	7.6	7.4	7.5	7.4	7.5	7.6	7.6	7.7	7.8	7.9	8.1	8.1	8.1	8.1	-0.9%
Industrial	7.7	7.9	7.3	6.7	6.6	6.3	6.0	5.8	5.5	5.5	5.6	5.6	5.6	5.8	5.8	5.8	5.8	6.0	6.1	6.1	6.2	-1.1%
Transportation	10.9	10.3	9.8	8.6	8.1	7.7	7.6	7.7	7.7	7.9	8.1	8.2	8.3	8.5	8.6	8.6	8.6	8.5	8.5	8.4	8.4	-1.4%
All Sectors Average	10.0	10.3	9.5	8.9	8.9	8.6	8.4	8.2	8.0	8.1	8.1	8.1	8.1	8.3	8.3	8.3	8.4	8.4	8.5	8.6	8.6	-0.7%

**Table 65. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Northeast Power Coordinating Council / New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	5.6	6.0	5.3	4.7	4.7	4.4	4.2	4.0	3.8	3.9	3.9	3.9	4.0	4.1	4.1	4.2	4.2	4.3	4.4	4.5	4.6	-1.1%
Transmission	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	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.0%
Distribution	3.3	3.3	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	3.1	-0.4%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	0.18	0.18	0.18	0.18	0.19	0.19	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	0.20	0.5%
Natural Gas	0.18	0.21	0.31	0.28	0.28	0.29	0.29	0.31	0.33	0.34	0.35	0.37	0.38	0.41	0.42	0.43	0.44	0.45	0.46	0.46	0.46	4.9%
Oil	0.22	0.21	0.05	0.07	0.10	0.07	0.08	0.08	0.06	0.06	0.06	0.05	0.05	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.09	-4.3%
Total	0.57	0.59	0.54	0.54	0.56	0.55	0.55	0.57	0.58	0.59	0.61	0.62	0.63	0.68	0.69	0.70	0.71	0.72	0.74	0.75	0.74	1.4%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	12.83	13.10	11.03	11.23	11.80	11.51	11.89	11.80	12.01	12.20	12.47	12.63	12.85	13.63	13.85	13.98	14.23	14.48	14.70	14.90	14.87	0.7%
Carbon Dioxide	47.04	48.04	40.45	41.19	43.28	42.22	42.86	43.27	44.04	44.75	45.71	46.29	47.13	49.99	50.78	51.25	52.18	53.09	53.88	54.85	54.51	0.7%
Sulfur Dioxide	0.24	0.25	0.16	0.17	0.18	0.16	0.16	0.15	0.15	0.15	0.15	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	-1.9%
Nitrogen Oxide	0.07	0.06	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	0.05	0.05	0.05	0.05	0.05	-1.0%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

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

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

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

6/ Cumulative additions after December 31, 2000.

7/ Generation to meet system load by source.

8/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.



**Table 66. Electric Power Projections for Electricity Market Module Region (2 of 3)  
Florida Reliability Coordinating Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
<b>Electricity Demand</b>																							
(billion kilowatthours)																							
Residential	84.90	98.54	101.95	105.79	108.25	110.49	112.29	114.10	115.96	117.86	119.80	121.86	124.01	126.25	128.58	130.96	133.09	135.35	137.59	139.98	142.37	2.0%	
Commercial/Other	69.82	71.89	74.47	77.25	79.89	82.39	85.00	87.66	90.36	93.12	95.92	98.80	101.77	104.84	108.05	111.27	114.46	117.67	120.86	124.06	127.20	3.0%	
Industrial	16.77	15.92	16.05	16.50	16.84	17.19	17.51	17.88	18.20	18.53	18.91	19.37	19.70	20.03	20.33	20.61	20.90	21.19	21.52	21.82	22.09	1.4%	
Transportation	0.75	0.78	0.80	0.91	1.01	1.11	1.20	1.28	1.36	1.45	1.53	1.62	1.70	1.79	1.87	1.91	1.91	1.90	1.88	1.86	1.84	4.6%	
Total Sales	182.24	187.13	193.26	200.45	205.99	211.17	216.00	220.92	225.88	230.96	236.16	241.65	247.18	252.91	258.80	264.75	270.36	276.11	281.85	287.71	293.49	2.4%	
<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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Gross Interregional Electricity Imports	29.22	28.23	35.82	39.60	38.73	36.75	37.84	38.61	38.84	35.76	33.28	31.71	30.06	28.37	26.52	25.58	25.18	23.93	21.74	20.12	18.85	-2.2%	
Gross Interregional Electricity Exports	0.26	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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 Cogenerators 8/	9.37	9.27	9.14	9.22	9.32	9.36	9.39	9.44	9.46	9.50	9.53	9.59	9.64	9.69	9.75	9.81	9.86	9.93	9.99	10.06	10.13	0.4%	
Utility Generation for Customers	157.19	163.40	162.25	166.00	172.40	179.86	183.52	187.77	194.71	200.97	208.75	215.83	223.05	230.49	238.32	245.39	251.71	258.94	267.10	274.83	281.96	3.0%	
Total Net Energy for Load	195.53	200.66	207.21	214.83	220.45	225.77	230.75	235.82	241.02	246.22	251.56	257.13	262.75	268.56	274.59	280.77	286.76	292.79	298.84	305.00	310.94	2.3%	
<b>Generation by Fuel Type</b>																							
(billion kilowatthours)																							
Coal	69.95	68.28	70.37	72.68	67.40	68.78	70.10	71.44	71.44	72.83	72.03	72.03	72.03	72.52	72.52	72.52	73.56	75.38	77.31	80.82	84.55	1.0%	
Petroleum	23.33	28.72	12.31	11.23	11.85	11.58	10.34	8.44	7.90	7.39	7.03	7.10	7.24	7.20	7.31	7.41	7.16	7.02	7.15	7.04	7.27	-5.7%	
Natural Gas	31.08	32.24	45.58	47.54	58.12	64.06	68.01	72.81	80.13	85.66	93.65	100.66	107.72	115.20	122.88	129.83	135.33	140.75	146.92	151.21	154.12	8.3%	
Nuclear	31.02	31.35	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Renewable Sources 4/	3.68	3.68	3.77	4.33	4.78	4.79	4.80	4.81	4.95	5.07	5.68	5.69	5.89	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.41	1.9%	
Total Generation	158.06	164.27	163.12	166.87	173.26	180.52	184.37	188.63	195.57	201.83	209.61	216.89	223.90	231.35	239.18	246.25	252.57	259.60	267.96	275.68	282.82	3.0%	
Sales to Customers	157.19	163.40	162.25	166.00	172.40	179.86	183.52	187.77	194.71	200.97	208.75	215.83	223.05	230.49	238.32	245.39	251.71	258.94	267.10	274.83	281.96	3.0%	
Generation for Own Use	0.87	0.87	0.87	0.87	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	0.86	0.86	0.86	-0.1%	
<b>Cogenerators</b>																							
Coal	5.06	4.96	4.79	4.81	4.87	4.87	4.86	4.86	4.85	4.84	4.83	4.83	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	-0.2%	
Petroleum	0.30	0.30	0.30	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.34	0.34	0.34	0.34	0.34	0.35	0.35	0.35	0.35	0.36	0.36	1.0%	
Natural Gas	5.40	5.45	5.46	5.53	5.58	5.62	5.67	5.71	5.75	5.79	5.83	5.88	5.92	5.97	6.01	6.06	6.12	6.17	6.23	6.28	6.35	0.8%	
Other Gaseous Fuels	0.22	0.22	0.22	0.33	0.34	0.34	0.35	0.35	0.35	0.35	0.37	0.38	0.39	0.40	0.41	0.41	0.42	0.43	0.44	0.46	0.47	3.9%	
Renewable Sources 4/	0.97	0.97	0.97	1.01	1.05	1.10	1.14	1.19	1.22	1.24	1.24	1.29	1.33	1.37	1.40	1.43	1.47	1.50	1.54	1.56	1.59	2.5%	
Other	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	0.50	0.50	0.50	0.50	0.50	0.50	0.1%	
Total	12.44	12.39	12.24	12.51	12.66	12.75	12.85	12.94	12.97	13.04	13.11	13.22	13.31	13.41	13.49	13.58	13.78	13.88	13.99	14.09	14.09	0.6%	
Sales to Utilities	9.37	9.27	9.14	9.22	9.32	9.36	9.39	9.44	9.46	9.50	9.53	9.59	9.64	9.69	9.75	9.81	9.86	9.93	9.99	10.06	10.13	0.4%	
Generation for Own Use	3.07	3.12	3.11	3.29	3.34	3.40	3.46	3.50	3.54	3.58	3.63	3.67	3.71	3.75	3.78	3.82	3.85	3.89	3.93	3.97	3.97	1.3%	
<b>End-Use Prices</b>																							
(\$2000 cents per kilowatthour)																							
Residential	8.4	8.5	8.1	7.8	7.8	7.9	7.8	7.8	7.8	7.8	7.8	7.8	7.7	7.7	7.7	7.7	7.7	7.7	7.6	7.7	7.6	-0.5%	
Commercial	6.9	7.1	6.8	6.6	6.7	6.8	6.7	6.7	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	-0.1%	
Industrial	5.2	5.3	5.1	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.9	4.9	4.9	4.9	4.9	4.9	4.9	-0.3%	
Transportation	7.2	7.3	6.9	6.2	5.9	5.6	5.6	5.8	6.1	6.4	6.6	6.7	6.9	7.0	7.1	7.1	7.1	7.0	6.9	6.7	6.5	-0.7%	
All Sectors Average	7.6	7.6	7.3	7.1	7.2	7.2	7.1	7.1	7.2	7.2	7.2	7.1	7.1	7.1	7.1	7.1	7.1	7.0	7.1	7.1	7.1	-0.4%	

**Table 66. Electric Power Projections for Electricity Market Module Region (3 of 3)**  
**Florida Reliability Coordinating Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Prices by Service Category</b>																							
<b>(2000 cents/kilowatthour)</b>																							
Generation	4.9	5.1	4.8	4.5	4.6	4.6	4.6	4.5	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	-0.5%	
Transmission	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	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6	1.0%
Distribution	2.2	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.1	2.1	2.1	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	-0.4%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																							
Coal	0.69	0.69	0.71	0.73	0.67	0.69	0.70	0.71	0.71	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.73	0.75	0.77	0.80	0.83	0.9%	
Natural Gas	0.30	0.31	0.45	0.47	0.53	0.57	0.59	0.61	0.65	0.67	0.73	0.77	0.81	0.86	0.91	0.96	0.99	1.02	1.06	1.09	1.11	6.7%	
Oil	0.24	0.29	0.13	0.11	0.12	0.12	0.11	0.09	0.09	0.09	0.07	0.07	0.07	0.07	0.07	0.08	0.07	0.07	0.07	0.07	0.07	-5.7%	
Total	1.23	1.29	1.28	1.32	1.33	1.37	1.39	1.40	1.44	1.47	1.52	1.56	1.61	1.66	1.71	1.75	1.80	1.85	1.90	1.96	2.01	2.5%	
<b>Emissions (million tons) 10/</b>																							
Total Carbon	29.67	31.09	29.92	30.66	30.15	31.10	31.46	31.73	32.29	32.90	33.49	34.20	34.93	35.82	36.62	37.39	38.16	39.15	40.28	41.52	42.72	1.8%	
Carbon Dioxide	109.51	113.98	109.70	112.49	110.54	114.05	116.35	116.34	118.38	120.63	122.81	125.41	128.09	131.34	134.26	137.08	139.93	143.64	147.68	152.24	156.66	1.8%	
Sulfur Dioxide	0.38	0.41	0.32	0.31	0.27	0.27	0.28	0.28	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	-1.6%	
Nitrogen Oxide	0.21	0.22	0.20	0.21	0.19	0.19	0.19	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	-0.6%	

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfate 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, 2000.

7/ Generation to meet system load by source.

8/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.







**Table 67. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Southeastern Electric Reliability Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatt-hour)</b>																						
Generation	3.9	3.9	3.8	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.4	3.4	3.4	3.3	3.3	3.3	3.4	3.4	3.4	-0.6%
Transmission	0.5	0.5	0.5	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	0.6	0.6	0.6	0.6	0.4%
Distribution	1.7	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	0.3%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	4.46	4.45	4.52	4.62	4.72	4.83	4.88	5.08	5.09	5.12	5.13	5.16	5.21	5.25	5.25	5.30	5.38	5.45	5.50	5.58	5.67	1.2%
Natural Gas	0.86	0.86	0.85	0.91	0.91	0.89	0.90	0.95	1.03	1.14	1.24	1.35	1.44	1.53	1.64	1.74	1.85	1.87	1.95	1.99	2.03	5.7%
Oil	0.10	0.15	0.05	0.06	0.05	0.05	0.04	0.03	0.03	0.02	0.02	0.02	0.03	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-5.8%
Total	5.22	5.26	5.42	5.60	5.68	5.78	5.92	6.05	6.15	6.29	6.40	6.53	6.67	6.80	6.92	7.07	7.23	7.35	7.47	7.60	7.73	2.0%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	138.03	138.72	141.29	145.61	148.15	151.25	154.97	158.32	160.07	162.70	164.58	167.10	169.86	172.50	174.49	177.54	181.06	184.01	186.47	189.63	192.79	1.7%
Carbon Dioxide	506.12	508.84	518.07	533.89	543.22	554.57	568.21	580.49	586.94	596.98	603.48	612.70	622.82	632.51	639.78	650.98	663.89	674.71	683.73	695.32	706.89	1.7%
Sulfur Dioxide	3.20	3.07	3.29	3.33	3.17	3.14	3.01	2.98	2.94	2.85	2.99	2.68	2.72	2.80	2.80	2.78	2.79	2.77	2.84	2.87	2.82	-0.6%
Nitrogen Oxide	0.53	0.94	0.96	0.98	0.85	0.87	0.88	0.89	0.89	0.89	0.89	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	-0.2%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

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

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

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

6/ Cumulative additions after December 31, 2000.

7/ Generation to meet system load by source.

8/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.

**Table 68. Electric Power Projections for Electricity Market Module Region (1 of 3)  
Southwest Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
Electricity Generating Capacity 1/ (gigawatts)																						
Coal Steam	21.20	21.20	21.20	21.20	21.20	21.20	21.20	20.67	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	-0.2%
Other Fossil Steam 2/	13.69	13.61	13.52	13.44	13.36	12.00	11.37	11.06	11.03	11.03	10.99	10.98	10.98	10.94	10.94	10.94	10.94	10.89	10.89	10.89	10.89	-1.1%
Combined Cycle	1.78	2.94	2.94	2.94	3.41	4.05	4.75	4.74	7.96	8.58	9.29	10.00	10.85	11.15	11.70	11.93	12.62	13.08	13.59	14.06	14.62	11.1%
Combustion Turbine/Diesel	4.63	4.64	4.64	4.72	3.60	4.15	5.05	5.20	5.30	5.42	5.55	5.66	5.66	5.77	5.91	6.02	6.12	6.24	6.33	6.45	6.45	1.7%
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	1.17	1.17	1.17	1.17	1.17	1.17	0%
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	2.47	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.60	2.60	2.60	2.60	2.61	2.61	2.61	2.61	2.62	2.62	2.62	2.62	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Capacity	45.46	46.86	46.56	46.57	45.84	45.86	46.65	47.94	46.65	49.49	50.34	51.12	51.98	52.34	53.03	53.37	54.16	54.75	55.30	55.89	56.45	1.1%
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	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	1.16	1.16	1.16	1.16	1.16	1.16	N/A
Combustion Turbine/Diesel	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.15	0.15	0.15	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	0.00	1.28	1.28	1.28	1.28	1.28	1.29	1.29	1.29	1.29	1.29	1.30	1.30	1.30	1.30	1.30	1.31	1.31	1.31	1.31	1.32	N/A
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	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	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	0.47	1.11	1.81	3.03	4.52	5.64	6.35	7.06	7.91	8.21	8.76	8.99	9.68	10.14	10.65	11.11	11.67	N/A
Combustion Turbine/Diesel	0.00	0.00	0.00	0.23	0.28	0.95	1.87	2.02	2.12	2.23	2.37	2.48	2.48	2.59	2.73	2.84	2.94	3.06	3.15	3.27	3.27	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Unplanned Additions	0.00	0.00	0.00	0.23	0.75	2.06	3.68	5.62	7.93	7.87	8.72	9.53	10.39	10.80	11.49	11.83	12.61	13.20	13.80	14.39	14.96	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Cumulative Total Additions	0.00	1.28	1.28	1.52	2.03	3.35	4.97	7.11	8.32	8.16	10.01	10.83	11.68	12.10	12.79	13.13	13.92	14.51	15.11	15.70	16.26	N/A
Cumulative Retirements 7/																						
Coal Steam	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	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	0.10	0.17	0.25	1.64	2.26	2.58	2.61	2.61	2.61	2.64	2.66	2.70	2.70	2.70	2.70	2.70	2.75	2.75	2.75	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	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	0.16	1.32	1.45	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	1.46	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	0.00	0.00	0.10	0.33	1.57	3.09	3.72	4.57	6.07	6.07	6.07	6.11	6.13	6.16	6.16	6.16	6.16	6.16	6.22	6.22	6.22	N/A
Cogenerators 8/ Capability																						
Coal	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.0%
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	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0%
Natural Gas	0.80	0.82	0.83	0.85	0.87	0.89	0.90	0.92	0.94	0.96	0.97	0.99	1.01	1.03	1.05	1.07	1.10	1.12	1.14	1.17	1.20	2.0%
Other Gaseous Fuels	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	4.4%
Renewable Sources 4/	0.33	0.33	0.33	0.34	0.36	0.37	0.39	0.40	0.40	0.41	0.42	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	1.59	1.61	1.62	1.66	1.68	1.72	1.75	1.78	1.80	1.83	1.86	1.89	1.92	1.95	1.98	2.02	2.06	2.08	2.12	2.15	2.19	1.6%

**Table 68. Electric Power Projections for Electricity Market Module Region (2 of 3)  
Southwest Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
<b>Electricity Demand</b>																							
(billion kilowatthours)																							
Residential	59.25	61.26	62.65	64.72	65.98	67.10	67.92	68.63	69.41	70.32	71.32	72.41	73.49	74.61	75.78	77.06	78.18	79.37	80.55	81.82	83.06	1.7%	
Commercial/Other	60.13	61.23	62.33	64.34	66.22	67.83	69.42	71.03	72.59	74.16	75.76	77.39	78.91	80.37	81.82	83.17	84.39	85.54	86.57	87.62	88.69	2.0%	
Industrial	51.06	48.72	49.13	50.91	52.17	53.49	54.81	56.49	57.25	58.25	59.75	61.23	62.14	62.97	63.85	64.69	65.43	66.20	67.05	67.85	68.55	1.5%	
Transportation	0.66	0.68	0.70	0.79	0.88	0.96	1.03	1.10	1.16	1.23	1.30	1.36	1.43	1.49	1.55	1.58	1.57	1.56	1.55	1.55	1.53	1.50	4.2%
Total Sales	171.10	171.89	174.82	180.76	185.23	189.37	193.17	197.25	200.41	203.95	208.14	212.40	215.97	219.43	223.00	226.50	229.58	232.67	235.72	238.82	241.72	1.7%	
<b>Net Energy for Load (billion kilowatt-hours) 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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Gross Interregional Electricity Imports	20.38	18.64	16.81	17.84	18.36	17.82	18.41	18.10	17.41	17.31	15.56	13.38	11.94	11.50	10.12	8.85	7.59	6.77	5.07	4.60	4.38	-7.4%	
Gross Interregional Electricity Exports	23.73	23.59	23.81	22.91	22.28	21.19	21.37	21.83	21.14	20.52	19.38	18.90	18.57	18.13	17.18	15.43	14.57	13.06	11.75	10.41	10.19	-4.1%	
Purchases from Cogenerators 8/	4.73	4.72	4.71	4.81	4.90	4.97	5.03	5.10	5.17	5.25	5.34	5.44	5.54	5.68	5.76	5.87	5.99	6.11	6.22	6.35	6.48	1.6%	
Utility Generation for Customers	183.92	186.16	191.35	195.62	199.03	203.06	206.35	211.25	214.52	217.57	222.46	226.37	232.92	236.48	240.40	243.36	246.83	249.92	252.82	255.14	258.09	1.7%	
Total Net Energy for Load	185.50	185.96	189.06	195.57	200.02	204.46	208.42	212.61	215.95	219.61	223.98	228.29	231.83	235.50	239.10	242.66	245.65	249.14	252.37	255.68	259.76	1.7%	
<b>Generation by Fuel Type</b>																							
(billion kilowatt-hours)																							
Coal	137.83	138.61	139.21	143.20	146.82	149.92	153.05	152.34	148.81	148.82	148.82	148.86	148.86	148.87	148.87	148.87	148.87	148.87	148.88	148.88	148.88	0.4%	
Petroleum	0.83	2.97	0.95	0.94	0.98	1.02	0.97	0.77	0.76	0.70	0.64	0.70	0.73	0.81	0.80	0.84	0.82	0.88	0.87	0.87	0.87	0.7%	
Natural Gas	30.75	30.66	36.12	36.17	35.92	36.90	37.20	43.01	49.81	52.93	57.76	63.67	68.19	71.65	75.58	79.50	81.96	84.42	87.91	90.22	93.08	5.7%	
Nuclear	9.79	9.89	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	9.79	9.79	9.79	9.79	9.79	0.0%	
Pumped Storage/Other 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	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	N/A	
Renewable Sources 4/	4.73	4.17	5.39	5.64	5.63	5.64	5.45	5.45	5.45	5.45	5.55	5.46	5.46	5.47	5.47	5.48	5.48	5.49	5.49	5.49	5.49	0.8%	
Total Generation	183.99	186.25	191.42	195.69	199.10	203.13	206.42	211.32	214.58	217.64	222.53	228.44	232.99	236.65	240.47	243.43	246.90	249.99	252.89	255.21	258.15	1.7%	
Sales to Customers	183.92	186.16	191.35	195.62	199.03	203.06	206.35	211.25	214.52	217.57	222.46	226.37	232.92	236.48	240.40	243.36	246.83	249.92	252.82	255.14	258.09	1.7%	
Generation for Own Use	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	0.07	0.07	0.07	0.07	0.07	0.07	0.07	N/A	
<b>Cogenerators</b>																							
Coal	3.45	3.39	3.29	3.33	3.36	3.36	3.36	3.36	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.35	3.34	3.34	3.34	3.34	-0.2%	
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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.1%	
Natural Gas	3.62	3.78	3.84	3.99	4.08	4.18	4.27	4.36	4.44	4.53	4.63	4.74	4.84	4.95	5.06	5.17	5.29	5.40	5.52	5.65	5.80	2.4%	
Other Gaseous Fuels	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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	3.9%	
Renewable Sources 4/	2.20	2.20	2.20	2.21	2.39	2.50	2.60	2.71	2.77	2.83	2.94	3.03	3.11	3.19	3.26	3.34	3.42	3.48	3.56	3.62	3.62	2.5%	
Other	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	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.1%	
Total	9.41	9.51	9.48	9.77	9.93	10.19	10.39	10.56	10.81	10.97	11.19	11.38	11.57	11.75	11.94	12.14	12.33	12.52	12.72	12.92	13.12	1.6%	
Sales to Utilities	4.73	4.72	4.71	4.81	4.90	4.97	5.03	5.10	5.17	5.25	5.34	5.44	5.54	5.68	5.76	5.87	5.99	6.11	6.22	6.35	6.48	1.6%	
Generation for Own Use	4.68	4.80	4.77	4.96	5.09	5.23	5.36	5.47	5.48	5.55	5.63	5.74	5.83	5.91	5.99	6.06	6.15	6.23	6.30	6.37	6.44	1.6%	
<b>End-Use Prices</b>																							
(\$000 cents per kilowatt-hour)																							
Residential	6.2	6.1	5.9	5.8	5.8	5.7	6.4	6.6	6.7	6.8	6.9	6.9	6.9	6.9	6.9	6.9	6.9	7.0	7.0	7.0	7.0	0.6%	
Commercial	5.2	5.1	5.5	5.4	5.4	5.5	5.5	5.6	5.7	5.8	5.8	5.9	5.8	5.9	5.9	5.9	6.0	6.0	6.0	6.0	6.0	0.7%	
Industrial	3.4	3.4	3.7	3.8	3.8	3.7	3.7	3.7	3.8	3.8	3.9	3.9	3.9	3.9	3.9	4.0	4.0	4.0	4.0	4.1	4.1	0.9%	
Transportation	5.0	5.2	5.1	4.6	4.5	4.4	4.3	4.6	4.8	5.1	5.2	5.4	5.4	5.5	5.6	5.6	5.5	5.5	5.4	5.3	5.2	0.3%	
All Sectors Average	5.0	4.9	5.1	5.0	5.0	5.1	5.3	5.4	5.5	5.6	5.6	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.8	5.8	0.7%	

**Table 68. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Southwest Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<i>(2000 cents/kilowatthour)</i>																						
Generation	2.4	2.5	2.7	2.6	2.6	2.7	3.0	3.0	3.1	3.2	3.3	3.3	3.3	3.3	3.4	3.4	3.4	3.5	3.5	3.6	3.6	2.1%
Transmission	0.6	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	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.1%
Distribution	2.1	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.6	-1.3%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	1.45	1.46	1.47	1.51	1.55	1.59	1.62	1.62	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	0.4%
Natural Gas	0.32	0.31	0.36	0.36	0.35	0.35	0.34	0.36	0.41	0.43	0.46	0.51	0.53	0.56	0.59	0.61	0.63	0.64	0.66	0.68	0.69	4.0%
Oil	0.01	0.03	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	0.01	0.01	0.01	0.01	0.01	0.4%
Total	1.78	1.80	1.84	1.88	1.91	1.94	1.97	1.99	2.00	2.02	2.05	2.09	2.12	2.15	2.18	2.20	2.22	2.23	2.26	2.27	2.29	1.3%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	47.16	47.59	48.11	49.29	50.19	51.14	52.01	52.36	52.12	52.45	52.99	53.71	54.15	54.58	54.99	55.36	55.66	55.91	56.27	56.46	56.74	0.9%
Carbon Dioxide	172.91	174.48	176.41	180.74	184.03	187.52	190.70	192.00	191.12	192.32	194.32	196.93	198.55	200.15	201.61	202.96	204.10	204.99	206.31	207.00	208.06	0.9%
Sulfur Dioxide	0.43	0.47	0.46	0.48	0.49	0.50	0.51	0.50	0.49	0.48	0.48	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.4%
Nitrogen Oxide	0.29	0.28	0.28	0.29	0.29	0.30	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	0.29	0.29	0.2%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

\*Annual Electric Generator Report - Nonutility.\* Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

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

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfate 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, 2000.

7/ Generation to meet system load by source.

8/ Generators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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 cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.

**Table 69. Electric Power Projections for Electricity Market Module Region (1 of 3)**  
 Western Systems Coordinating Council / Northwest Power Pool Area

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
<b>Electricity Generating Capacity 1/</b>																							
(gigawatts)																							
Coal Steam	10.74	10.74	10.74	10.74	10.74	10.74	10.74	10.74	10.74	10.74	10.99	11.24	11.66	11.92	12.69	13.69	14.67	15.80	17.00	18.07	18.91	2.9%	
Other Fossil Steam 2/	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	0.71	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	-3.2%
Combined Cycle	1.64	1.64	1.64	1.64	1.64	3.02	3.86	3.86	5.84	7.63	9.23	10.54	11.59	12.11	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	10.7%
Combustion Turbine/Diesel	1.11	1.11	2.04	2.81	2.81	2.81	4.04	4.01	4.01	4.20	4.28	4.28	4.15	4.47	4.96	5.60	5.98	6.09	6.09	6.09	6.09	6.33	9.1%
Nuclear Power	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	1.12	1.12	1.12	1.12	1.12	1.12	1.12	1.12	N/A
Pumped Storage/Other 3/	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	38.10	36.41	36.41	36.58	36.65	36.80	36.94	37.10	37.19	37.47	37.57	37.66	37.59	38.32	38.47	38.63	38.71	38.90	39.03	39.16	39.28	39.28	0.4%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.05	0.27	0.49	0.56	0.62	0.83	1.04	1.27	1.51	1.74	1.93	2.16	2.38	2.38	N/A
<b>Total Capacity</b>	<b>51.73</b>	<b>52.04</b>	<b>52.97</b>	<b>53.91</b>	<b>55.36</b>	<b>56.36</b>	<b>57.75</b>	<b>59.48</b>	<b>61.38</b>	<b>63.88</b>	<b>65.64</b>	<b>67.30</b>	<b>69.29</b>	<b>69.76</b>	<b>71.38</b>	<b>73.42</b>	<b>75.12</b>	<b>76.75</b>	<b>78.27</b>	<b>79.70</b>	<b>81.12</b>	<b>2.3%</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	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	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	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.31	0.31	0.48	0.54	0.70	0.72	0.88	0.90	1.07	1.10	1.28	1.31	1.51	1.54	1.58	1.58	1.59	1.60	1.60	1.60	1.61	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Planned Additions</b>	<b>0.00</b>	<b>0.31</b>	<b>0.31</b>	<b>0.48</b>	<b>0.54</b>	<b>0.70</b>	<b>0.72</b>	<b>0.88</b>	<b>0.90</b>	<b>1.07</b>	<b>1.10</b>	<b>1.28</b>	<b>1.31</b>	<b>1.51</b>	<b>1.54</b>	<b>1.58</b>	<b>1.58</b>	<b>1.59</b>	<b>1.60</b>	<b>1.60</b>	<b>1.61</b>	<b>1.61</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	0.00	0.24	0.50	0.91	1.18	1.48	1.94	2.94	3.93	5.06	6.26	7.33	8.16	8.16	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	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	1.38	2.22	2.22	4.20	5.96	7.67	8.90	9.95	10.47	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	10.82	N/A
Combustion Turbine/Diesel	0.00	0.00	0.92	1.70	1.70	2.93	2.93	2.93	3.12	3.20	3.20	3.20	3.20	3.53	4.02	4.66	5.02	5.15	5.15	5.15	5.15	5.38	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	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	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	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	0.12	0.12	0.19	0.29	0.40	0.50	0.60	0.73	0.85	0.98	1.10	1.23	1.35	1.48	1.60	1.60	N/A
<b>Total Unplanned Additions</b>	<b>0.00</b>	<b>0.00</b>	<b>0.92</b>	<b>1.70</b>	<b>3.08</b>	<b>3.02</b>	<b>5.30</b>	<b>7.27</b>	<b>8.15</b>	<b>11.27</b>	<b>13.24</b>	<b>14.71</b>	<b>15.81</b>	<b>17.08</b>	<b>18.68</b>	<b>20.67</b>	<b>22.37</b>	<b>23.09</b>	<b>25.51</b>	<b>26.93</b>	<b>28.34</b>	<b>28.34</b>	<b>N/A</b>
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.05	0.27	0.49	0.56	0.62	0.83	1.04	1.27	1.51	1.74	1.93	2.16	2.38	2.38	N/A
<b>Cumulative Total Additions</b>	<b>0.00</b>	<b>0.31</b>	<b>1.23</b>	<b>2.18</b>	<b>3.62</b>	<b>4.62</b>	<b>6.01</b>	<b>8.15</b>	<b>10.05</b>	<b>12.35</b>	<b>14.34</b>	<b>16.00</b>	<b>17.12</b>	<b>18.59</b>	<b>20.22</b>	<b>22.25</b>	<b>23.96</b>	<b>25.68</b>	<b>27.10</b>	<b>28.53</b>	<b>29.95</b>	<b>N/A</b>	
<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	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	0.37	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	0.37	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	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	0.03	0.03	0.03	0.03	0.03	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	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	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	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	0.02	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.41</b>	<b>0.41</b>	<b>0.41</b>	<b>0.43</b>	<b>0.43</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>0.57</b>	<b>N/A</b>
<b>Cogenerators 8/</b>																							
<b>Capability</b>																							
Coal	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	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.0%	
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	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-0.2%	
Natural Gas	0.65	0.66	0.66	0.67	0.68	0.69	0.70	0.70	0.71	0.72	0.73	0.74	0.74	0.75	0.76	0.77	0.78	0.79	0.80	0.81	0.83	1.2%	
Other Gaseous Fuels	0.01	0.01	0.01	0.02	0.02	0.																	

**Table 69. Electric Power Projections for Electricity Market Module Region (2 of 3)  
Western Systems Coordinating Council / Northwest Power Pool Area**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Demand</b>																						
(billion kilowatthours)																						
Residential	73.50	74.40	74.73	77.06	78.79	80.95	81.79	82.81	83.67	84.54	85.48	86.57	88.13	89.87	91.16	92.62	93.83	95.12	96.47	97.93	99.43	1.52%
Commercial/Other	73.14	73.63	73.88	76.73	79.95	83.15	86.08	88.82	91.43	94.08	96.85	99.72	102.97	106.36	109.52	112.59	115.61	118.63	121.70	124.83	127.96	2.8%
Industrial	84.72	82.85	82.46	86.76	88.79	91.05	92.95	96.15	97.06	98.92	101.25	103.61	105.43	107.33	108.93	110.39	112.25	114.15	116.49	118.47	120.25	1.8%
Transportation	1.30	1.34	1.38	1.56	1.74	1.90	2.05	2.19	2.32	2.46	2.60	2.74	2.88	3.01	3.14	3.22	3.22	3.21	3.19	3.16	3.13	4.5%
Total Sales	232.66	232.31	232.46	242.10	249.28	256.66	262.88	268.96	274.48	280.00	286.18	292.64	299.39	306.27	312.75	318.83	324.91	331.10	337.84	344.39	350.76	2.1%
<b>Net Energy for Load (billion kilowatthours) 7/</b>																						
Gross International Imports	7.62	9.04	2.60	3.02	4.53	9.14	6.11	4.77	1.63	1.63	1.47	1.31	1.14	0.98	0.82	0.65	0.49	0.33	0.18	0.08	0.00	N/A
Gross International Exports	10.01	10.01	9.96	9.52	13.24	13.28	13.29	13.32	13.34	13.37	12.43	11.47	10.50	9.53	8.56	7.60	6.63	5.66	4.70	4.21	3.73	-4.8%
Gross Interregional Electricity Imports	28.23	41.32	26.19	25.08	23.29	19.23	18.11	18.12	17.92	17.89	16.23	14.41	12.58	10.87	9.06	7.35	5.75	4.32	2.83	1.75	1.00	-15.4%
Gross Interregional Electricity Exports	30.45	28.16	34.29	39.30	37.54	35.86	34.31	35.79	34.17	34.43	29.81	30.26	29.61	29.69	29.30	29.37	27.70	26.72	27.10	26.98	26.51	-0.7%
Purchases from Cogenerators 8/	4.13	4.09	4.16	4.22	4.28	4.35	4.41	4.55	4.61	4.69	4.76	4.85	4.94	5.03	5.13	5.23	5.33	5.43	5.55	5.66	5.77	1.7%
Utility Generation for Customers	251.81	234.42	261.72	277.14	296.95	292.48	301.54	310.69	318.14	324.08	328.76	334.78	342.07	350.02	357.21	364.28	369.84	375.88	384.20	391.47	398.09	2.3%
Total Net Energy for Load	251.13	250.71	250.42	260.63	268.28	276.07	282.59	289.02	294.79	300.49	306.98	313.63	320.63	327.68	334.35	340.55	347.08	353.56	360.74	367.78	374.62	2.0%
<b>Generation by Fuel Type</b>																						
(billion kilowatthours)																						
Coal	80.62	81.12	78.97	79.44	80.47	80.95	81.43	81.90	81.90	81.90	83.71	85.62	88.69	90.66	96.35	103.78	111.11	119.51	128.46	136.42	142.62	2.9%
Petroleum	2.50	3.59	0.64	0.47	0.44	0.29	0.25	0.12	0.08	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-20.0%
Natural Gas	18.94	24.23	24.84	31.73	40.01	44.82	51.92	60.25	68.69	71.43	71.15	75.89	78.67	83.14	83.14	81.55	78.63	75.20	73.52	71.73	71.10	6.8%
Nuclear	7.80	7.84	7.93	8.00	8.07	8.14	8.21	8.28	8.35	8.42	8.49	8.56	8.63	8.70	8.77	8.77	8.77	8.77	8.77	8.77	8.77	0.6%
Pumped Storage/Other 3/	-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	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	N/A
Renewable Sources 4/	142.84	118.81	150.41	158.59	159.06	159.58	160.82	161.24	162.00	163.27	164.27	165.55	168.69	168.24	169.57	170.69	171.75	172.70	173.88	174.69	175.83	1.0%
Total Generation	252.46	235.28	262.57	278.01	287.83	293.36	302.43	311.58	319.02	324.66	327.64	335.67	342.95	350.90	359.09	365.17	370.72	376.74	385.08	392.36	398.96	2.3%
Sales to Customers	251.81	234.42	261.72	277.14	296.95	292.48	301.54	310.69	318.14	324.08	328.76	334.78	342.07	350.02	357.21	364.28	369.84	375.88	384.20	391.47	398.09	2.3%
Generation for Own Use	0.66	0.86	0.85	0.87	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	0.88	0.88	0.88	0.1%
<b>Cogenerators</b>																						
Coal	0.49	0.49	0.49	0.49	0.49	0.49	0.48	0.48	0.48	0.48	0.48	0.48	0.48	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	-0.2%
Petroleum	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	0.05	0.05	0.05	0.05	0.05	0.05	0.06	1.1%
Natural Gas	5.17	5.27	5.27	5.42	5.52	5.61	5.71	5.82	5.90	5.99	6.08	6.17	6.26	6.36	6.45	6.56	6.67	6.77	6.89	7.01	7.14	1.8%
Other Gaseous Fuels	0.04	0.04	0.04	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	3.9%
Renewable Sources 4/	2.35	2.32	2.36	2.46	2.53	2.63	2.72	2.84	2.94	2.99	2.94	3.04	3.12	3.18	3.25	3.31	3.38	3.45	3.51	3.57	3.62	2.2%
Other	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	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.1%
Total	8.17	8.24	8.28	8.54	8.72	8.81	8.99	9.32	9.40	9.54	9.69	9.88	10.05	10.21	10.37	10.54	10.72	10.89	11.07	11.25	11.43	1.7%
Sales to Utilities	4.13	4.09	4.16	4.22	4.28	4.35	4.41	4.55	4.61	4.69	4.76	4.85	4.94	5.03	5.13	5.23	5.33	5.43	5.55	5.66	5.77	1.7%
Generation for Own Use	4.04	4.14	4.12	4.33	4.44	4.58	4.68	4.77	4.79	4.85	4.92	5.03	5.11	5.18	5.24	5.31	5.38	5.46	5.53	5.59	5.66	1.7%
<b>End-Use Prices</b>																						
(2000 cents per kilowatthour)																						
Residential	6.1	6.4	6.4	5.8	5.9	6.0	6.0	6.2	6.3	6.5	6.6	6.6	6.5	6.5	6.5	6.5	6.5	6.6	6.6	6.6	6.6	0.4%
Commercial	5.6	6.1	5.9	5.3	5.4	5.4	5.4	5.5	5.7	5.8	5.8	5.8	5.7	5.7	5.7	5.7	5.7	5.8	5.8	5.8	5.8	0.1%
Industrial	3.2	3.3	3.3	3.0	3.0	3.1	3.1	3.1	3.2	3.3	3.3	3.3	3.3	3.3	3.2	3.2	3.2	3.3	3.3	3.3	3.3	0.2%
Transportation	5.4	5.8	5.7	4.8	4.5	4.4	4.3	4.5	4.6	5.0	5.2	5.3	5.4	5.5	5.6	5.6	5.6	5.5	5.4	5.3	5.2	-0.4%
All Sectors Average	4.9	5.2	5.2	4.6	4.7	4.8	4.8	4.9	5.0	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.2	5.2	5.2	0.3%

**Table 69. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Western Systems Coordinating Council / Northwest Power Pool Area**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	2.5	2.9	2.8	2.3	2.4	2.4	2.5	2.5	2.6	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	0.7%
Transmission	0.9	0.8	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.5%
Distribution	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	-0.6%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	0.85	0.86	0.84	0.84	0.85	0.86	0.86	0.87	0.87	0.87	0.89	0.90	0.93	0.95	1.00	1.07	1.13	1.21	1.29	1.36	1.42	2.6%
Natural Gas	0.17	0.23	0.24	0.31	0.36	0.38	0.44	0.48	0.51	0.53	0.51	0.53	0.55	0.58	0.58	0.57	0.55	0.52	0.51	0.50	0.48	-5.3%
Oil	0.03	0.04	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	0.00	0.00	0.00	0.00	0.00	0.00	-20.2%
Total	1.05	1.13	1.09	1.15	1.21	1.25	1.31	1.35	1.38	1.40	1.39	1.44	1.48	1.53	1.58	1.64	1.68	1.73	1.80	1.86	1.91	3.0%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	27.79	29.09	27.85	28.94	30.09	30.67	31.74	32.45	32.95	33.26	33.44	34.38	35.51	36.52	38.02	39.79	41.36	43.17	45.32	47.23	48.79	2.9%
Carbon Dioxide	101.90	106.85	102.11	106.12	110.33	112.45	116.36	118.97	120.82	121.95	122.62	126.06	130.19	133.90	139.40	145.91	151.66	158.28	166.19	173.17	178.91	2.9%
Sulfur Dioxide	0.16	0.15	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	0.10	0.10	0.10	0.10	0.10	-2.2%
Nitrogen Oxide	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.17	0.17	0.16	0.16	0.17	0.17	0.17	0.18	0.18	0.19	0.19	0.19	0.9%

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. Nameplate capacity is reported for nonutilities on Form EA-868B.

2/ Annual Electric Generator Report - Nonutility. Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

3/ Includes oil, gas, and dual-fired capability.

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

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

6/ Presently peak-load capacity fueled by natural gas.

7/ Cumulative additions after December 31, 2000.

8/ Generation to meet system load by source.

9/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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

11/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

GEM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.01020016.



**Table 70. Electric Power Projections for Electricity Market Module Region (1 of 3)**  
**Western Systems Coordinating Council / Rocky Mountain Power Area, Arizona, New Mexico, and Southern Nevada**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
<b>Electricity Generating Capacity 1/</b> <b>(gigawatts)</b>																						
Coal Steam	15.82	15.82	15.82	15.82	15.82	16.84	17.66	18.31	19.48	20.26	20.75	20.86	21.52	22.01	22.38	23.00	23.55	24.16	24.83	25.59	26.30	2.6%
Other Fossil Steam 2/	2.79	2.79	2.79	2.79	2.79	2.79	2.75	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	-1.4%
Combined Cycle	1.98	2.90	2.90	2.90	4.22	4.92	4.92	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	5.0%
Combustion Turbine/Diesel	3.17	3.17	3.94	4.70	4.70	4.70	5.62	6.61	6.61	6.61	6.61	6.61	6.61	6.61	7.10	7.16	7.58	7.65	7.98	7.98	8.38	5.0%
Nuclear Power	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	N/A
Pumped Storage/Other 3/	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	0.75	0.75	0.75	0.75	0.75	0.75	0.75	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	5.83	5.93	5.93	5.93	5.93	5.93	5.94	5.94	5.94	5.94	5.94	5.95	5.95	5.96	5.96	5.96	5.99	6.02	6.05	6.09	6.17	0.3%
Distributed Generation 5/	0.00	0.00	0.00	0.04	0.04	0.04	0.09	0.14	0.14	0.14	0.16	0.18	0.23	0.29	0.47	0.66	0.84	0.97	1.16	1.26	1.45	N/A
<b>Total Capacity</b>	<b>33.04</b>	<b>34.07</b>	<b>34.84</b>	<b>35.64</b>	<b>36.96</b>	<b>38.68</b>	<b>40.44</b>	<b>41.80</b>	<b>42.99</b>	<b>43.75</b>	<b>44.27</b>	<b>44.40</b>	<b>45.11</b>	<b>45.87</b>	<b>46.71</b>	<b>47.61</b>	<b>48.78</b>	<b>49.64</b>	<b>50.86</b>	<b>51.80</b>	<b>53.17</b>	<b>2.4%</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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combined Cycle	0.00	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total Planned Additions</b>	<b>0.00</b>	<b>1.02</b>	<b>1.02</b>	<b>1.03</b>	<b>1.03</b>	<b>1.03</b>	<b>1.03</b>	<b>1.03</b>	<b>1.04</b>	<b>1.04</b>	<b>1.04</b>	<b>1.05</b>	<b>1.05</b>	<b>1.05</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.07</b>	<b>1.07</b>	<b>1.07</b>	<b>1.08</b>	<b>N/A</b>
<b>Cumulative Unplanned Additions 6/</b>																						
Coal Steam	0.00	0.00	0.00	0.00	0.00	1.02	1.95	2.80	3.78	4.54	5.04	5.15	5.80	6.30	6.67	7.29	7.84	8.45	9.12	9.88	10.58	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	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	1.32	2.02	2.02	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	2.34	N/A
Combustion Turbine/Diesel	0.00	0.00	0.77	1.53	1.53	1.83	2.45	3.44	3.44	3.44	3.44	3.44	3.44	3.44	3.93	3.99	4.41	4.48	4.81	4.81	5.21	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	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	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	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	0.00	0.02	0.05	0.08	0.11	0.15	0.26	N/A
Total Unplanned Additions	0.00	0.00	0.77	1.57	1.57	2.89	4.61	6.51	8.52	9.70	10.47	10.98	11.11	11.82	12.37	13.40	14.30	15.47	16.32	17.54	18.48	N/A
Distributed Generation 5/	0.00	0.00	0.04	0.04	0.04	0.09	0.14	0.14	0.14	0.16	0.18	0.23	0.29	0.47	0.66	0.84	0.97	1.16	1.26	1.45	1.45	N/A
<b>Cumulative Total Additions</b>	<b>0.00</b>	<b>1.02</b>	<b>1.79</b>	<b>2.59</b>	<b>3.92</b>	<b>5.63</b>	<b>7.54</b>	<b>9.55</b>	<b>10.74</b>	<b>11.51</b>	<b>12.02</b>	<b>12.16</b>	<b>12.87</b>	<b>13.42</b>	<b>14.46</b>	<b>15.36</b>	<b>16.53</b>	<b>17.39</b>	<b>18.61</b>	<b>19.55</b>	<b>20.92</b>	<b>N/A</b>
<b>Cumulative Retirements 7/</b>																						
Coal Steam	0.00	0.00	0.00	0.00	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	0.11	0.11	0.11	N/A
Other Fossil Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	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	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	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	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.15</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>0.80</b>	<b>N/A</b>
<b>Cogenerators 8/</b>																						
<b>Capability</b>																						
Coal	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	0.09	0.09	0.09	0.09	0.09	0.09	0.09	-0.1%
Petroleum	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	0.06	0.06	0.06	0.06	0.06	0.06	0.06	-2.2%
Natural Gas	1.14	1.15	1.15	1.15	1.16	1.17	1.18	1.18	1.19	1.19	1.20	1.21	1.22	1.22	1.23	1.24	1.25	1.26	1.27	1.27	1.28	0.6%
Other Gaseous Fuels	0.03	0.03	0.03	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	4.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>1.32</b>	<b>1.33</b>	<b>1.34</b>	<b>1.36</b>	<b>1.37</b>	<b>1.38</b>	<b>1.38</b>															

**Table 70. Electric Power Projections for Electricity Market Module Region (2 of 3)  
Western Systems Coordinating Council / Rocky Mountain Power Area, Arizona, New Mexico, and Southern Nevada**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-
<b>Electricity Demand</b>																						
(billion kilowatthours)																						
Residential	51.52	54.21	55.41	57.69	59.94	60.11	61.07	62.12	63.21	64.36	65.56	66.81	68.12	69.48	70.87	72.40	73.79	75.26	76.78	78.33	79.92	2.2%
Commercial/Other	57.83	60.13	60.80	63.17	65.10	66.97	68.97	71.13	73.41	75.90	78.53	81.17	83.85	86.50	89.25	91.96	94.71	97.45	100.23	102.88	105.72	3.1%
Industrial	33.61	32.83	32.69	33.35	34.18	35.07	35.84	36.70	37.45	38.19	39.12	40.06	40.79	41.56	42.27	42.98	43.67	44.42	45.26	46.04	46.76	1.7%
Transportation	0.65	0.67	0.70	0.80	0.89	0.98	1.07	1.15	1.23	1.31	1.39	1.47	1.55	1.64	1.72	1.77	1.78	1.78	1.78	1.77	1.77	5.1%
Total Sales	143.61	147.84	149.59	155.00	159.11	163.14	166.95	171.10	175.29	179.76	184.60	189.51	194.32	199.15	204.11	209.10	213.96	218.92	224.04	229.12	234.16	2.5%
<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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Gross Interregional Electricity Imports	22.52	21.25	22.07	23.16	22.13	21.28	20.83	20.89	20.81	19.84	17.76	15.62	14.21	12.83	11.11	9.67	8.29	6.35	4.55	3.87	3.13	-9.4%
Gross Interregional Electricity Exports	48.81	45.08	43.07	43.14	44.26	47.50	49.36	49.88	47.85	45.29	40.93	36.91	33.80	30.49	26.70	23.16	20.17	17.30	14.85	13.82	12.96	-6.4%
Purchases from Cogenerators 8/	6.20	6.19	6.19	6.22	6.23	6.25	6.27	6.28	6.30	6.32	6.34	6.36	6.41	6.43	6.45	6.45	6.48	6.51	6.53	6.56	6.59	0.3%
Utility Generation for Customers	177.65	179.80	178.90	183.65	190.03	198.28	204.60	209.39	211.89	215.11	217.95	220.91	224.39	227.44	230.49	233.53	237.08	241.42	246.16	251.22	256.47	1.9%
Total Net Energy for Load	157.55	162.16	164.09	169.88	174.14	178.30	182.34	186.68	191.14	195.99	201.12	206.19	211.18	216.18	221.32	226.49	231.68	236.98	242.40	247.84	253.23	2.4%
<b>Generation by Fuel Type</b>																						
(billion kilowatthours)																						
Coal	114.15	113.29	112.02	114.12	115.94	124.88	132.00	137.90	146.67	152.34	155.92	156.81	161.68	165.38	168.12	172.73	176.81	181.38	186.34	192.00	197.25	2.8%
Petroleum	1.69	1.81	0.16	0.09	0.08	0.07	0.07	0.06	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	-16.8%
Natural Gas	22.64	27.51	26.49	28.59	31.16	32.68	31.66	30.54	24.29	21.83	20.96	23.06	21.65	21.03	21.26	19.47	18.82	18.40	17.98	17.06	16.70	-1.5%
Nuclear	22.73	22.95	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	0.0%
Pumped Storage/Other 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	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	N/A
Renewable Sources 4/	17.16	15.02	18.26	18.86	18.86	18.86	18.86	18.86	18.86	18.87	18.98	18.94	18.94	18.89	18.89	19.03	19.07	19.20	19.32	19.59	19.88	0.7%
Total Generation	178.33	180.54	179.63	184.38	190.76	199.00	205.33	210.11	212.61	215.64	218.67	221.64	225.11	228.16	231.21	234.25	237.80	242.14	246.89	251.95	257.20	1.8%
Sales to Customers	177.65	179.80	178.90	183.65	190.03	198.28	204.60	209.39	211.89	215.11	217.95	220.91	224.39	227.44	230.49	233.53	237.08	241.42	246.16	251.22	256.47	1.9%
Generation for Own Use	0.68	0.74	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	0.72	0.72	0.72	0.72	0.72	0.3%
<b>Cogenerators</b>																						
Coal	0.62	0.61	0.60	0.60	0.61	0.61	0.61	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	-0.2%
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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.1%
Natural Gas	6.62	6.67	6.68	6.75	6.80	6.84	6.89	6.93	6.97	7.01	7.06	7.10	7.15	7.20	7.24	7.30	7.35	7.40	7.46	7.52	7.58	0.7%
Other Gaseous Fuels	0.02	0.02	0.02	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	0.04	0.04	0.04	0.04	0.04	3.9%
Renewable Sources 4/	0.13	0.13	0.13	0.14	0.14	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.22	2.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	7.42	7.46	7.46	7.55	7.61	7.66	7.71	7.76	7.80	7.85	7.90	7.95	8.00	8.05	8.11	8.16	8.22	8.28	8.34	8.41	8.48	0.7%
Sales to Utilities	6.20	6.19	6.19	6.22	6.23	6.25	6.27	6.28	6.30	6.32	6.34	6.36	6.41	6.43	6.45	6.48	6.51	6.53	6.56	6.58	6.59	0.3%
Generation for Own Use	1.22	1.27	1.27	1.34	1.38	1.41	1.45	1.48	1.50	1.52	1.55	1.59	1.62	1.65	1.68	1.71	1.74	1.77	1.81	1.84	1.88	2.2%
<b>End-Use Prices</b>																						
(\$2000 cents per kilowatthour)																						
Residential	8.0	7.8	7.7	7.7	8.2	8.3	8.3	8.3	8.4	8.4	8.3	8.5	8.4	8.5	8.4	8.4	8.3	8.3	8.3	8.3	8.3	0.1%
Commercial	6.8	6.6	6.7	6.8	7.4	7.3	7.3	7.2	7.1	7.1	7.0	6.9	7.1	7.1	7.3	7.2	7.2	7.1	7.1	7.0	7.0	0.1%
Industrial	4.7	4.6	4.6	4.7	5.1	5.0	5.0	4.9	4.8	4.7	4.7	4.8	4.8	4.9	4.8	4.8	4.7	4.7	4.7	4.7	4.7	0.0%
Transportation	7.0	7.1	7.3	6.7	6.4	6.1	6.1	6.3	6.5	6.8	6.7	6.9	7.0	7.1	7.1	7.0	6.9	6.8	6.7	6.6	6.5	-0.4%
All Sectors Average	6.7	6.6	6.6	6.7	7.2	7.2	7.2	7.1	7.1	7.0	7.0	7.1	7.1	7.1	7.2	7.1	7.1	7.0	7.0	7.0	7.0	0.2%

**Table 70. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Western Systems Coordinating Council / Rocky Mountain Power Area, Arizona, New Mexico, and Southern Nevada**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Prices by Service Category</b>																							
<b>(2000 cents/kilowatt-hour)</b>																							
Generation	3.9	3.9	3.9	3.9	4.4	4.3	4.3	4.2	4.1	4.0	4.0	4.1	4.1	4.3	4.2	4.2	4.1	4.1	4.0	4.1	4.1	0.2%	
Transmission	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9	1.1%	
Distribution	2.1	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	2.0	2.0	2.0	2.0	2.0	2.0	-0.4%	
<b>Fuel Consumption (quadrillion Btu) 9/</b>																							
Coal	1.20	1.19	1.18	1.20	1.22	1.30	1.37	1.43	1.51	1.56	1.60	1.60	1.65	1.68	1.71	1.75	1.79	1.83	1.87	1.92	1.97	2.5%	
Natural Gas	0.25	0.29	0.27	0.28	0.31	0.28	0.27	0.26	0.26	0.18	0.17	0.19	0.18	0.18	0.18	0.16	0.16	0.15	0.15	0.14	0.14	-2.9%	
Oil	0.02	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-17.3%	
Total	1.47	1.50	1.45	1.48	1.53	1.59	1.64	1.69	1.71	1.74	1.77	1.80	1.83	1.86	1.89	1.91	1.94	1.98	2.02	2.07	2.11	1.8%	
<b>Emissions (million tons) 10/</b>																							
Total Carbon	38.44	38.86	37.74	38.70	39.47	41.51	43.33	44.68	46.15	47.36	48.22	48.81	49.91	50.82	51.59	52.55	53.54	54.69	55.95	57.33	58.67	2.1%	
Carbon Dioxide	140.95	142.49	138.39	141.90	144.73	152.22	158.86	163.83	169.20	173.65	176.81	178.97	183.01	186.95	189.15	192.69	196.33	200.54	205.15	210.20	215.13	2.1%	
Sulfur Dioxide	0.20	0.20	0.19	0.20	0.20	0.20	0.20	0.21	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.20	0.0%	
Nitrogen Oxide	0.22	0.22	0.22	0.22	0.22	0.23	0.23	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.25	0.25	0.26	0.26	0.7%

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. Nameplate capacity is reported for nonutilities on Form EA-869B.

2/ Annual Electric Generator Report - Nonutility. Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

3/ Includes oil, gas, and dual-fired capability.

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

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

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

7/ Cumulative additions after December 31, 2000.

8/ Generation to meet system load by source.

9/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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

11/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

EMM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.r102001b.

**Table 71. Electric Power Projections for Electricity Market Module Region (1 of 3)**  
**Western Systems Coordinating Council / California**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
Electricity Generating Capacity 1/ (gigawatts)																							
Coal Steam	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	5.00	0.1%
Other Fossil Steam 2/	19.14	19.14	19.14	19.14	19.14	19.14	19.20	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	-0.4%
Combined Cycle	1.41	1.41	1.41	1.41	2.81	4.81	4.81	7.02	9.37	11.94	14.54	15.05	16.13	17.09	18.37	19.83	21.31	22.55	23.21	24.29	24.85	24.85	15.4%
Combustion Turbine/Diesel	2.64	2.68	3.77	5.09	5.09	5.07	7.08	7.04	7.04	7.04	7.04	8.29	9.22	10.37	11.38	12.32	13.29	14.50	16.02	17.44	19.10	10.4%	
Nuclear Power	5.33	5.33	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	0.0%
Pumped Storage/Other 3/	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	15.84	15.91	16.72	17.07	17.30	17.64	17.64	17.65	17.68	17.78	17.78	17.79	17.90	17.98	18.03	18.07	18.10	18.13	18.16	18.22	18.28	18.28	0.7%
Distributed Generation 5/	0.00	0.00	0.00	0.06	0.06	0.06	0.13	0.24	0.55	0.55	0.55	0.66	1.13	1.41	1.70	2.03	2.37	2.70	3.03	3.34	3.64	3.64	N/A
Total Capacity	53.01	53.12	55.05	56.76	58.40	60.72	62.66	63.55	66.25	68.92	71.53	73.59	75.99	78.45	81.09	83.85	86.67	89.49	92.03	94.89	97.56	3.1%	
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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Combustion Turbine/Diesel	0.00	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	0.04	0.04	0.04	0.04	0.04	0.04	0.04	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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 4/	0.00	0.07	0.69	1.23	1.57	1.91	1.92	1.92	1.92	1.93	1.93	1.94	1.94	1.95	1.96	1.96	1.97	1.98	1.98	1.99	1.99	2.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total Planned Additions	0.00	0.11	0.93	1.27	1.61	1.95	1.96	1.96	1.97	1.97	1.98	1.98	1.99	1.99	2.00	2.01	2.01	2.02	2.03	2.04	2.04	N/A	
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	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	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	1.40	3.40	3.40	5.60	7.96	10.53	13.13	13.64	14.72	15.88	16.96	18.42	19.90	21.14	21.80	22.88	23.44	23.44	N/A
Combustion Turbine/Diesel	0.00	0.00	1.09	2.41	2.41	2.41	4.47	4.47	4.47	4.47	4.47	5.72	6.65	7.80	8.81	9.75	10.72	11.93	13.45	14.87	16.53	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	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	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	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	0.02	0.12	0.12	0.13	0.22	0.30	0.35	0.38	0.40	0.43	0.45	0.50	0.55	0.55	N/A	
Total Unplanned Additions	0.00	0.00	1.09	2.47	3.87	5.67	8.00	10.31	13.00	15.67	18.27	20.34	22.73	25.19	27.82	30.57	33.38	36.20	38.73	41.58	44.24	N/A	
Distributed Generation 5/	0.00	0.00	0.00	0.06	0.06	0.06	0.13	0.24	0.55	0.55	0.55	0.66	1.13	1.41	1.70	2.03	2.37	2.70	3.03	3.34	3.64	N/A	
Cumulative Total Additions	0.00	0.11	2.02	3.74	5.48	7.82	9.96	12.27	14.97	17.64	20.25	22.32	24.71	27.18	29.81	32.58	35.39	38.22	40.76	43.62	46.28	N/A	
Cumulative Retirements 7/																							
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	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	0.14	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	1.53	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	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	0.02	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	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	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	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	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	0.11	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	0.11	0.11	0.11	0.11	N/A
Total	0.00	0.00	0.00	0.00	0.11	0.13	0.32	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	1.76	N/A
Cogenerators 8/																							
Capacity																							
Coal	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	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.0%
Petroleum	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	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	-0.1%
Natural Gas	4.95	5.40	5.43	5.48	5.58	5.86	5.74	5.81	5.88	5.96	6.04	6.12	6.20	6.38	6.37	6.46	6.56	6.65	6.75	6.86	6.97	6.97	1.7%
Other Gaseous Fuels	0.08	0.08	0.08	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.16	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.18	4.4%
Renewable Sources 4/	0.18	0.18	0.18	0.19	0.20	0.20	0.21	0.22	0.22	0.22	0.23	0.23	0.24	0.24	0.25	0.25	0.26	0.26	0.27	0.27	0.28	0.28	2.1%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Total	5.80	6.25	6.27	6.39	6.48	6.57	6.66	6.74	6.81	6.89	6.98	7.08	7.17	7.28	7.35	7.45	7.55	7.66	7.77	7.88	8.01	8.01	1.6%



**Table 71. Electric Power Projections for Electricity Market Module Region (3 of 3)  
Western Systems Coordinating Council / California**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	6.5	10.0	8.9	7.6	6.7	6.0	5.7	5.6	5.6	5.5	5.5	4.8	4.8	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	-15%
Transmission	0.8	0.7	0.7	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	18%
Distribution	2.9	2.7	2.8	2.9	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	-0.1%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	0.38	0.38	0.37	0.37	0.38	0.38	0.38	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	0.2%
Natural Gas	0.72	0.89	0.59	0.63	0.68	0.68	0.74	0.75	0.80	0.81	0.88	0.93	0.99	1.04	1.08	1.13	1.17	1.23	1.27	1.29	1.35	3.2%
Oil	0.02	0.03	0.01	0.01	0.01	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	0.01	0.03	0.02	-18%
Total	1.13	1.30	0.97	1.02	1.05	1.08	1.14	1.15	1.20	1.21	1.27	1.33	1.38	1.43	1.48	1.52	1.57	1.62	1.66	1.71	1.75	2.2%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	22.83	25.57	20.16	20.94	21.60	22.04	23.08	23.16	23.94	24.09	25.18	26.02	26.93	27.73	28.61	29.25	30.05	30.79	31.59	32.39	33.19	1.9%
Carbon Dioxide	83.71	93.77	73.92	76.77	79.21	80.82	84.63	84.91	87.78	88.34	92.34	95.41	98.73	101.69	104.89	107.25	110.20	112.91	115.84	118.77	121.71	1.9%
Sulfur Dioxide	0.09	0.09	0.08	0.07	0.07	0.07	0.08	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	-1.3%
Nitrogen Oxide	0.09	0.10	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.5%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

2/ Annual Electric Generator Report - Nonutility. Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

3/ Includes oil, gas, and dual-fired capability.

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

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

6/ Presently peak-load capacity fueled by natural gas.

7/ Cumulative additions after December 31, 2000.

8/ Generation to meet system load by source.

9/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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

11/ Estimated emissions from utilities and nonutilities (excluding cogenerators).

EMM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.01020016.

**Table 72. Electric Power Projections for Electricity Market Module Region (1 of 3)  
United States**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Electricity Generating Capacity 1/</b> <b>(gigawatts)</b>																							
Coal Steam	304.57	304.57	304.94	304.61	303.32	303.73	302.72	302.73	303.43	304.76	305.71	306.47	308.13	309.43	310.67	313.13	315.77	318.92	321.15	325.02	328.02	0.4%	
Other Fossil Steam 2/	134.96	134.54	133.46	132.56	130.61	127.43	123.59	117.77	115.79	115.72	115.59	115.28	115.23	114.86	114.54	114.38	114.38	113.69	113.63	113.53	113.31	-0.9%	
Combined Cycle	30.56	35.25	36.48	36.48	49.63	59.60	70.85	93.03	111.26	127.53	139.86	149.77	158.47	164.98	174.51	182.43	189.51	196.43	202.56	208.60	213.82	10.2%	
Combustion Turbine/Diesel	77.73	80.95	80.82	87.90	89.42	104.91	117.59	122.46	125.31	127.26	128.85	130.62	131.81	137.52	143.85	149.61	155.54	161.77	167.77	173.47	177.85	4.2%	
Nuclear Power	97.51	97.57	97.70	97.70	97.70	97.70	97.70	94.96	94.96	94.34	93.56	92.77	92.10	89.59	88.83	88.83	88.83	88.83	88.83	88.83	88.83	-0.5%	
Pumped Storage/Other 3/	19.18	19.52	19.56	19.60	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	19.64	0.1%	
Fuel Cells	0.00	0.00	0.01	0.03	0.04	0.06	0.07	0.09	0.11	0.13	0.16	0.18	0.21	0.22	0.23	0.24	0.25	0.25	0.25	0.25	0.25	35.2%	
Renewable Sources 4/	88.13	91.43	92.78	93.79	94.33	95.16	95.85	96.01	96.34	96.90	97.19	97.64	97.99	98.49	98.97	99.49	100.29	100.52	100.84	101.22	101.52	0.6%	
Distributed Generation 5/	0.00	0.00	0.00	0.25	0.47	0.86	1.50	2.19	3.24	4.15	5.08	5.92	6.90	8.08	9.54	11.09	12.68	14.33	15.96	17.52	19.05	N/A	
<b>Total Capacity</b>	<b>753.64</b>	<b>763.83</b>	<b>775.77</b>	<b>782.83</b>	<b>795.36</b>	<b>809.08</b>	<b>829.31</b>	<b>848.88</b>	<b>870.07</b>	<b>891.06</b>	<b>906.43</b>	<b>919.09</b>	<b>931.14</b>	<b>945.30</b>	<b>961.54</b>	<b>978.81</b>	<b>996.55</b>	<b>1013.35</b>	<b>1029.50</b>	<b>1046.89</b>	<b>1062.19</b>	<b>1.7%</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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Combined Cycle	0.00	4.69	5.14	5.14	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	6.62	N/A	
Combustion Turbine/Diesel	0.00	3.34	3.34	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Pumped Storage/Other 3/	0.00	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	0.30	0.30	0.30	0.30	0.30	0.30	N/A	
Fuel Cells	0.00	0.00	0.01	0.03	0.04	0.06	0.07	0.09	0.11	0.13	0.16	0.18	0.21	0.22	0.23	0.24	0.25	0.25	0.25	0.25	0.25	N/A	
Renewable Sources 4/	0.00	2.22	3.43	4.23	4.90	5.63	5.86	6.21	6.43	6.80	6.96	7.23	7.35	7.63	7.75	7.92	8.01	8.05	8.09	8.13	8.18	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
<b>Total Planned Additions</b>	<b>0.00</b>	<b>10.54</b>	<b>12.22</b>	<b>13.36</b>	<b>15.52</b>	<b>16.27</b>	<b>16.51</b>	<b>16.88</b>	<b>17.12</b>	<b>17.51</b>	<b>17.70</b>	<b>18.00</b>	<b>18.14</b>	<b>18.43</b>	<b>18.56</b>	<b>18.74</b>	<b>18.84</b>	<b>18.89</b>	<b>18.93</b>	<b>18.97</b>	<b>19.01</b>	<b>N/A</b>	
<b>Cumulative Unplanned Additions 6/</b>																							
Coal Steam	0.00	0.00	0.00	0.00	0.00	1.02	1.95	2.80	3.78	5.12	6.15	6.92	8.64	9.94	11.69	14.15	16.78	19.94	23.38	27.24	31.25	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	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	11.87	21.84	32.89	55.07	73.30	89.58	101.90	111.81	120.52	127.92	136.55	144.97	151.56	158.48	164.60	170.65	175.87	N/A	
Combustion Turbine/Diesel	0.00	0.00	10.03	17.76	20.99	28.17	41.15	46.41	49.34	51.57	53.58	55.99	58.80	64.63	70.96	76.72	82.65	88.95	95.02	100.77	105.94	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	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	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	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	0.02	0.15	0.15	0.26	0.46	0.61	0.79	1.02	1.34	1.59	1.92	2.31	2.62	2.90	3.06	3.42	N/A	
Total Unplanned Additions	0.00	0.00	10.03	18.01	33.33	51.71	77.64	106.42	129.93	150.88	167.33	181.42	195.87	210.91	230.34	248.35	265.99	284.32	301.76	319.26	335.53	N/A	
Distributed Generation 5/	0.00	0.00	0.00	0.25	0.47	0.86	1.50	2.19	3.24	4.15	5.08	5.92	6.90	8.08	9.54	11.09	12.68	14.33	15.96	17.52	19.05	N/A	
<b>Cumulative Total Additions</b>	<b>0.00</b>	<b>10.54</b>	<b>22.24</b>	<b>31.37</b>	<b>48.84</b>	<b>67.99</b>	<b>84.15</b>	<b>123.30</b>	<b>147.05</b>	<b>168.39</b>	<b>185.03</b>	<b>199.42</b>	<b>214.01</b>	<b>229.34</b>	<b>248.90</b>	<b>267.09</b>	<b>284.83</b>	<b>303.20</b>	<b>309.69</b>	<b>338.23</b>	<b>354.54</b>	<b>N/A</b>	
<b>Cumulative Retirements 7/</b>																							
Coal Steam	0.00	0.20	0.20	0.20	1.47	2.08	4.03	4.66	5.14	5.16	5.24	5.24	5.31	5.31	5.81	5.81	5.81	5.81	5.81	7.02	7.02	7.02	N/A
Other Fossil Steam 2/	0.00	0.21	0.40	1.24	3.19	6.40	10.24	16.06	18.04	18.11	18.24	18.55	18.60	18.98	19.20	19.45	19.45	20.14	20.20	20.30	20.52	N/A	
Combined Cycle	0.00	0.00	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	0.04	0.04	0.04	0.04	0.04	N/A	
Combustion Turbine/Diesel	0.00	0.11	0.27	1.26	2.96	4.66	4.95	5.34	5.43	5.70	6.12	6.76	8.38	8.50	8.50	8.50	8.50	8.50	8.50	8.64	8.68	N/A	
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.74	2.74	2.74	3.36	4.14	4.53	5.60	8.11	8.87	8.87	9.68	9.68	9.68	9.68	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	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	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	0.11	0.11	0.11	0.11	0.11	0.11	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.13	N/A	
<b>Total</b>	<b>0.00</b>	<b>0.52</b>	<b>0.91</b>	<b>2.73</b>	<b>7.77</b>	<b>13.30</b>	<b>19.37</b>	<b>28.96</b>	<b>31.51</b>	<b>31.86</b>	<b>33.13</b>	<b>34.86</b>	<b>37.40</b>	<b>38.66</b>	<b>41.88</b>	<b>42.80</b>	<b>42.80</b>	<b>44.38</b>	<b>45.71</b>	<b>46.86</b>	<b>46.86</b>	<b>N/A</b>	
<b>Cogenerators 8/</b>																							
<b>Capability</b>																							
Coal	8.91	8.91	8.91	8.90	8.89	8.88	8.86	8.85	8.84	8.83	8.59	8.59	8.59	8.59	8.59	8.58	8.58	8.58	8.58	8.58	8.57	-0.2%	
Petroleum	2.35	2.35	2.35	2.32	2.32	2.31	2.31	2.31	2.31	2.31	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	2.30	-0.1%	
Natural Gas	35.87	37.80	39.01	38.78	39.52	40.22	40.93	41.54	42.15	42.79	43.48	44.20	44.90	45.62	46.34	47.14	47.97	48.79	49.68	50.59	51.58	1.8%	
Other Gaseous Fuels	0.67	0.67	0.67	1.07	1.08	1.09	1.12	1.14	1.17	1.20	1.23	1.23	1.23	1.30	1.34	1.37	1.40	1.43	1.48	1.53	1.57	4.4%	
Renewable Sources 4/	6.76	6.77	6.79																				





**Table 72. Electric Power Projections for Electricity Market Module Region (3 of 3)  
United States**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Prices by Service Category</b>																						
<b>(2000 cents/kilowatthour)</b>																						
Generation	4.3	4.6	4.2	4.0	4.0	3.9	3.8	3.8	3.7	3.7	3.7	3.8	3.7	3.7	3.7	3.7	3.8	3.8	3.8	3.9	3.9	-0.4%
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	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.3%
Distribution	2.0	1.9	1.9	2.0	1.9	1.9	1.9	1.9	1.9	2.0	1.9	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	-0.3%
<b>Fuel Consumption (quadrillion Btu) 9/</b>																						
Coal	19.69	19.82	19.89	20.52	20.89	21.44	21.93	22.42	22.55	22.69	22.80	22.89	23.05	23.21	23.33	23.52	23.75	23.99	24.15	24.40	24.67	1.1%
Natural Gas	4.18	4.34	4.50	5.21	5.43	5.57	5.78	5.98	6.28	6.54	6.95	7.48	7.87	8.27	8.67	9.02	9.30	9.61	9.94	10.17	10.40	4.7%
Oil	0.53	1.08	0.36	0.35	0.37	0.32	0.30	0.23	0.22	0.21	0.21	0.20	0.21	0.23	0.24	0.24	0.25	0.25	0.26	0.29	0.28	-5.9%
Total	24.50	25.24	25.16	26.09	26.69	27.33	28.01	28.63	29.05	29.44	29.96	30.56	31.13	31.71	32.24	32.78	33.30	33.85	34.34	34.86	35.35	1.5%
<b>Emissions (million tons) 10/</b>																						
Total Carbon	645.32	652.82	646.99	669.67	684.08	700.52	717.11	732.84	741.23	749.20	759.03	769.90	781.13	792.71	802.82	814.03	825.38	837.43	847.58	859.40	870.80	1.5%
Carbon Dioxide	2366.17	2393.86	2372.29	2455.46	2508.29	2588.57	2629.40	2697.07	2717.83	2747.05	2783.12	2822.97	2864.14	2906.61	2943.69	2984.78	3028.37	3070.67	3107.78	3151.14	3192.93	1.5%
Sulfur Dioxide	11.24	11.09	11.29	10.99	10.59	10.39	10.34	10.14	9.94	9.85	9.70	9.95	9.95	9.85	9.95	9.95	9.95	9.95	9.95	9.95	9.95	-1.0%
Nitrogen Oxide	4.29	4.33	4.32	4.46	3.89	3.94	4.00	4.03	4.03	4.03	4.04	4.06	4.08	4.09	4.10	4.12	4.13	4.15	4.15	4.15	4.16	0.1%

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. Nameplate capacity is reported for nonutilities on Form EA-969B.

2/ Annual Electric Generator Report - Nonutility. Nameplate capacity is designated by the manufacturer. The nameplate capacity has been converted to net summer capacity based on historic relationships.

3/ Includes oil-, gas-, and dual-fired capability.

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

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

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

7/ Cumulative additions after December 31, 2000.

8/ Generation to meet system load by source.

9/ Cogenerators produce electricity and other useful thermal energy (such as steam or heat) through the sequential use of energy.

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

EMM = Operation and maintenance.

EMM = Electricity market module.

NA = Not applicable.

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

Sources: 2000 (except for prices and nonutility data): Energy Information Administration (EIA), Annual Energy Review 2000, DOE/EIA-0384(2000) (Washington, DC, August 2001).

Other 2000 and projections: NewGen Data and Analysis, RCI Consulting/FT Energy (Boulder, CO, February 2001) and EIA, AEC2002 National Energy Modeling System run aec2002.d102001b.

**Table 73. Electric Generation by Electricity Market Module Region and Source (1 of 3)**  
(Billion Kilowatthour)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>East Central Area Reliability</b>																							
Coordination Agreement																							
Coal	506.79	509.08	512.80	530.42	539.09	549.44	553.71	568.17	571.88	574.99	577.93	578.81	581.44	584.38	586.88	587.60	589.94	592.10	593.11	593.73	594.29	0.8%	
Petroleum	4.62	1.97	1.21	1.24	1.05	0.86	0.69	0.68	0.70	0.69	0.71	0.73	0.74	0.74	0.73	0.73	0.73	0.81	0.83	0.82	0.84	-8.2%	
Natural Gas	17.87	16.44	31.57	32.61	39.48	43.41	52.71	59.63	67.48	74.06	81.63	93.25	101.63	108.11	117.04	124.89	132.02	142.71	151.63	160.28	169.94	11.9%	
Nuclear	55.99	56.75	56.36	56.52	56.64	56.76	56.88	45.99	44.17	44.29	44.40	44.52	44.64	44.76	44.86	44.91	44.96	39.37	39.37	39.37	39.37	-1.7%	
Pumped Storage/Other 1/	-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	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	N/A	
Renewables 2/	4.68	4.73	5.69	6.08	6.63	6.71	6.25	6.31	6.37	6.32	7.57	7.51	7.47	6.79	6.07	6.58	5.02	5.02	5.01	5.08	5.08	0.4%	
Total	588.91	588.95	607.62	626.96	642.89	657.16	670.23	680.79	690.60	700.33	712.23	724.81	735.90	744.77	755.37	764.70	772.74	780.03	790.00	799.33	809.62	1.6%	
<b>Electric Reliability Council of Texas</b>																							
Coal	110.88	109.62	107.95	109.61	111.04	111.79	112.52	113.23	113.23	112.92	112.73	112.74	112.74	112.93	113.23	112.83	113.22	113.23	113.23	113.23	113.23	0.1%	
Petroleum	0.29	2.91	0.22	0.13	0.12	0.12	0.10	0.08	0.07	0.04	0.05	0.05	0.05	0.07	0.05	0.04	0.06	0.05	0.06	0.07	0.06	-7.4%	
Natural Gas	104.74	99.17	106.06	114.85	119.72	124.58	130.11	136.00	141.67	147.54	155.03	162.32	167.66	172.82	178.11	183.06	187.18	190.62	194.11	197.98	201.43	3.3%	
Nuclear	38.10	38.40	40.84	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	38.17	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Renewables 2/	1.30	3.68	5.52	6.96	6.38	6.81	7.15	7.43	7.71	8.48	8.68	8.81	8.95	9.08	8.72	9.36	8.99	9.13	9.26	9.40	9.53	10.5%	
Total	256.31	254.86	260.59	269.73	276.47	282.54	289.15	296.05	302.09	308.51	316.11	323.56	329.07	334.61	339.87	345.08	349.31	353.18	356.70	360.81	364.45	1.8%	
<b>Mid-Atlantic Area Council</b>																							
Coal	110.68	112.06	115.01	118.30	122.53	126.39	130.90	135.34	135.40	135.81	136.59	136.43	136.63	137.09	137.25	137.86	138.05	138.23	139.48	139.68	139.68	1.2%	
Petroleum	5.65	7.36	1.41	1.30	1.04	0.81	0.76	0.80	0.53	0.47	0.51	0.54	0.56	0.56	0.53	0.55	0.57	0.58	0.59	0.59	0.64	-10.3%	
Natural Gas	7.44	9.59	14.13	15.55	19.20	19.90	23.21	28.08	31.26	33.06	37.84	43.45	46.38	51.10	55.24	60.34	62.68	66.77	70.38	72.45	74.98	12.2%	
Nuclear	101.88	103.04	103.73	102.70	102.75	102.80	102.84	95.10	95.10	90.82	90.82	90.82	90.82	90.82	90.82	90.82	90.82	90.82	90.82	90.82	90.82	-0.6%	
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	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Renewables 2/	8.22	7.73	9.05	10.90	11.50	11.82	11.75	12.03	12.64	12.91	13.14	13.36	13.60	13.83	14.06	14.30	14.52	14.61	14.61	14.61	14.60	2.9%	
Total	233.88	239.77	243.33	249.77	257.08	261.84	268.71	271.49	275.36	277.87	279.51	285.31	288.76	294.25	298.63	304.76	307.52	311.98	315.84	319.25	322.08	1.6%	
<b>Mid-America Interconnected Network</b>																							
Coal	148.22	155.74	155.15	162.90	168.75	174.00	180.11	186.65	188.87	190.26	191.35	193.78	195.00	195.86	196.51	197.17	197.68	198.08	193.42	193.79	194.13	1.4%	
Petroleum	3.31	0.67	0.30	0.36	0.35	0.33	0.35	0.32	0.32	0.26	0.26	0.34	0.36	0.37	0.36	0.36	0.36	0.37	0.37	0.37	0.37	-10.4%	
Natural Gas	6.78	4.06	5.90	5.51	5.49	5.58	4.76	4.56	5.04	5.16	6.67	9.18	10.73	11.88	13.46	16.00	18.27	20.36	24.19	27.60	28.56	7.5%	
Nuclear	97.63	98.23	97.46	97.65	97.84	98.02	98.21	98.40	98.59	98.78	98.97	93.24	87.51	87.70	87.89	87.95	88.00	88.01	88.01	88.01	88.01	-0.5%	
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	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Renewables 2/	3.46	3.68	4.51	4.57	4.67	4.98	4.88	4.88	4.99	4.97	5.45	4.89	4.89	4.88	4.85	5.31	5.30	5.30	5.28	5.27	5.26	2.1%	
Total	259.40	262.39	263.32	271.00	277.34	282.98	288.42	294.96	298.01	299.74	303.02	301.77	298.88	301.14	303.59	307.35	310.21	312.79	312.00	315.83	317.15	1.0%	
<b>Mid-Continent Area Power Pool</b>																							
Coal	118.19	120.05	120.06	126.42	132.13	135.77	139.16	142.43	142.81	142.06	142.50	142.79	143.07	143.33	143.51	143.68	143.69	143.85	143.93	143.93	146.63	1.1%	
Petroleum	0.70	0.36	0.35	0.49	0.53	0.54	0.50	0.40	0.40	0.39	0.37	0.42	0.45	0.42	0.44	0.45	0.44	0.46	0.45	0.45	0.45	-2.2%	
Natural Gas	2.71	2.63	3.24	3.32	3.71	3.56	4.55	4.54	5.81	6.56	7.68	9.24	10.78	11.85	14.67	17.53	20.08	23.95	25.87	27.33	29.84	12.6%	
Nuclear	28.80	29.09	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	28.80	25.00	19.77	19.77	19.77	19.77	19.77	19.77	-1.9%	
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	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Renewables 2/	15.77	13.69	17.35	18.33	18.54	18.58	18.57	18.56	18.56	18.55	18.54	18.54	18.53	18.52	18.54	18.53	18.53	18.52	18.51	18.56	18.56	0.8%	
Total	166.16	166.43	168.79	177.35	183.72	187.28	191.63	194.90	196.46	196.46	198.01	199.91	201.79	203.15	202.40	200.24	202.62	206.20	208.93	210.47	214.70	1.3%	

**Table 73. Electric Generation by Electricity Market Module Region and Source (2 of 3)**  
(Billion Kilowatthour)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Northeast Power Coordinating Council/</b>																						
New York																						
Coal	22.90	23.03	22.99	23.33	23.80	24.23	24.66	25.06	24.95	24.86	24.79	24.69	24.71	24.76	24.77	24.79	24.79	24.80	24.80	24.81	24.81	0.4%
Petroleum	11.82	13.46	4.79	2.82	2.70	1.70	1.07	0.82	0.78	0.74	0.73	0.71	0.75	1.11	1.24	1.65	1.95	2.07	2.19	2.52	2.55	-7.4%
Natural Gas	10.91	10.24	14.72	18.09	17.89	22.31	26.08	29.98	33.19	34.76	37.16	39.08	39.87	41.72	43.99	43.65	44.69	45.47	45.68	45.64	45.04	7.3%
Nuclear	39.52	40.01	39.76	39.86	39.96	40.06	40.16	40.26	40.37	40.47	40.57	40.67	40.77	40.87	40.97	41.07	41.17	41.27	41.37	41.47	41.57	-0.7%
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	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewables 2/	17.34	14.75	18.57	20.22	20.55	20.88	21.50	21.65	21.75	21.85	22.29	22.28	22.27	22.27	22.26	22.25	22.25	22.24	22.23	22.23	22.21	1.2%
Total	102.48	101.50	100.83	104.31	104.89	109.19	113.49	115.88	117.84	121.12	123.15	125.51	127.58	128.90	130.97	128.99	128.98	128.14	129.05	129.05	128.96	1.2%
<b>Northeast Power Coordinating Council/</b>																						
<b>New England</b>																						
Coal	17.79	17.81	17.72	18.21	18.63	18.98	19.30	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.63	19.64	19.64	19.64	0.5%
Petroleum	21.17	21.10	5.55	7.54	9.81	7.48	8.00	8.22	5.73	6.09	6.13	5.48	5.89	7.23	7.13	7.49	7.73	8.13	8.58	8.91	9.00	-4.2%
Natural Gas	20.86	25.16	36.54	33.82	33.53	35.74	35.42	39.71	43.08	43.95	46.40	48.42	50.91	54.72	57.13	57.87	59.46	60.94	61.98	63.04	62.83	5.7%
Nuclear	31.24	31.69	31.53	31.67	31.81	31.95	32.07	32.14	32.21	32.28	32.35	32.43	32.50	28.00	28.07	28.14	28.21	28.21	28.21	28.21	28.21	-0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewables 2/	10.88	10.11	11.21	11.53	11.65	11.84	12.11	12.31	12.51	12.71	12.91	12.97	12.97	12.97	13.03	13.19	13.25	13.24	13.24	13.24	13.24	1.0%
Total	101.95	105.88	102.54	102.77	105.44	106.09	106.92	110.07	113.24	114.74	117.51	120.02	121.91	122.66	125.11	126.26	128.45	130.31	131.71	133.21	133.09	1.3%
<b>Florida Reliability Coordinating Council</b>																						
Coal	68.95	68.28	70.37	72.68	67.40	68.78	70.10	71.44	71.44	72.83	72.03	72.03	72.03	72.52	72.52	72.52	73.56	75.38	77.31	80.82	84.55	1.0%
Petroleum	23.33	28.72	12.31	11.23	11.85	11.58	10.34	8.44	7.90	7.39	7.03	7.10	7.24	7.30	7.31	7.41	7.16	7.12	7.15	7.04	7.27	-5.7%
Natural Gas	31.08	32.24	45.58	47.54	58.12	64.26	68.01	72.81	80.13	85.56	93.65	100.66	107.72	115.20	122.89	129.83	135.33	140.75	146.92	151.21	154.12	8.3%
Nuclear	31.02	31.35	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	31.09	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewables 2/	3.88	3.88	3.77	4.33	4.78	4.79	4.80	4.81	4.95	5.07	5.68	5.89	5.89	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.41	1.8%
Total	158.06	164.27	163.12	166.87	173.26	180.52	184.37	188.63	195.57	201.83	209.61	216.69	223.90	231.35	239.18	246.25	252.57	259.80	267.96	275.68	282.82	3.0%
<b>Southeastern Electric Reliability Council</b>																						
Coal	447.50	446.83	452.79	463.47	472.84	483.73	495.17	504.90	506.08	509.96	511.01	514.58	519.69	524.47	525.88	532.30	541.60	550.48	556.73	567.21	578.63	1.3%
Petroleum	9.43	14.49	5.28	5.83	5.15	4.81	4.05	2.95	2.78	2.41	2.48	2.13	2.56	2.34	2.64	2.65	2.79	2.81	2.90	2.88	2.88	-5.8%
Natural Gas	67.73	69.33	87.18	93.36	96.60	96.81	101.17	113.42	127.08	145.04	159.65	173.84	187.49	201.00	217.11	231.56	242.93	251.42	262.25	269.49	275.00	7.3%
Nuclear	244.13	249.42	248.83	245.90	245.11	246.28	246.39	246.43	246.49	246.49	246.49	246.49	246.49	246.49	246.49	246.49	246.49	246.49	246.49	246.49	246.49	0.0%
Pumped Storage/Other 1/	-0.11	-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	-0.17	-0.17	-0.17	-0.17	-0.17	-0.17	2.3%
Renewables 2/	32.52	27.46	34.50	35.50	35.60	35.72	35.59	35.60	35.73	35.72	37.82	38.39	38.35	38.68	38.71	39.08	37.66	38.06	38.05	38.04	38.38	0.6%
Total	801.20	807.96	826.41	843.90	856.12	867.15	882.18	903.14	917.96	938.44	957.28	975.29	994.48	1012.90	1030.86	1052.20	1071.68	1089.56	1106.73	1124.62	1141.97	1.8%
<b>Southwest Power Pool</b>																						
Coal	137.83	138.61	139.21	143.20	146.82	149.82	153.05	152.34	148.81	148.82	148.82	148.86	148.86	148.87	148.87	148.87	148.87	148.88	148.88	148.88	148.88	0.4%
Petroleum	0.83	2.97	0.95	0.94	0.98	0.98	0.97	0.77	0.76	0.70	0.64	0.70	0.73	0.81	0.80	0.84	0.82	0.86	0.87	0.87	0.95	0.7%
Natural Gas	30.75	30.66	36.12	36.17	35.92	36.80	37.20	43.01	49.81	52.93	57.76	63.67	68.19	71.65	75.58	78.50	81.98	84.42	87.91	90.22	93.08	5.7%
Nuclear	9.79	9.89	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	9.79	9.79	9.79	9.79	9.79	0.0%
Pumped Storage/Other 1/	-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	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	-0.05	N/A
Renewables 2/	4.73	4.17	5.39	5.64	5.63	5.64	5.45	5.45	5.45	5.55	5.46	5.46	5.46	5.47	5.47	5.47	5.47	5.48	5.48	5.49	5.49	0.8%
Total	183.89	186.25	191.42	195.69	199.10	203.13	206.42	211.32	214.58	217.64	222.53	228.44	232.99	236.85	240.47	243.43	246.90	249.39	252.89	255.21	258.15	1.7%

**Table 73. Electric Generation by Electricity Market Module Region and Source (3 of 3)**  
(Billion Kilowatthour)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Western Systems Coordinating Council/																						
Northwest Power Pool Area																						
Coal	80.62	81.12	78.97	79.44	80.47	80.95	81.43	81.90	81.90	81.90	83.71	85.62	88.69	90.66	96.35	103.78	111.11	119.51	128.46	136.42	142.62	2.9%
Petroleum	2.50	3.59	0.64	0.47	0.44	0.29	0.25	0.12	0.08	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-20.0%
Natural Gas	18.94	24.23	24.84	31.73	40.01	44.62	51.92	60.25	66.89	71.43	71.15	75.89	79.87	83.14	83.14	81.55	78.63	75.20	73.52	71.73	71.10	6.8%
Nuclear	7.80	7.84	7.93	8.00	8.07	8.14	8.21	8.28	8.35	8.42	8.49	8.56	8.63	8.70	8.77	8.77	8.77	8.77	8.77	8.77	8.77	0.6%
Pumped Storage/Other 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	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	-0.22	N/A
Renewables 2/	142.84	116.81	150.41	158.59	159.08	159.58	160.82	161.24	162.00	163.27	164.27	165.55	166.69	168.24	169.57	170.69	171.75	172.70	173.68	174.69	175.63	1.0%
Total	252.48	235.28	262.57	278.01	287.83	293.38	302.43	311.58	319.02	324.98	327.84	335.67	342.95	350.80	358.09	365.17	370.72	376.74	385.08	392.36	398.96	2.3%
Western System Coordinating Council/ Rocky Mountain Power Area, Arizona, New Mexico, and Southern Nevada																						
Coal	114.15	113.29	112.02	114.12	115.94	124.88	132.00	137.90	146.67	152.34	155.92	156.81	161.68	165.38	168.12	172.73	176.81	181.38	186.34	192.00	197.25	2.8%
Petroleum	1.69	1.81	0.16	0.09	0.09	0.07	0.07	0.06	0.05	0.05	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-16.8%
Natural Gas	22.64	27.51	26.49	28.59	33.19	32.68	31.66	30.54	24.29	21.83	20.96	23.06	21.65	21.03	21.26	19.47	18.82	18.40	17.98	17.06	16.70	-1.5%
Nuclear	22.73	22.95	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	22.73	0.0%
Pumped Storage/Other 1/	-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	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	-0.04	N/A
Renewables 2/	17.16	15.02	18.26	18.86	18.86	18.86	18.86	18.86	18.86	18.87	18.98	18.94	18.89	18.89	19.03	19.07	19.20	19.32	19.59	19.88	19.88	0.7%
Total	178.33	180.54	179.63	184.38	190.76	199.00	205.33	210.11	212.61	215.84	218.67	221.64	225.11	228.16	231.21	234.25	237.80	242.14	246.89	251.95	257.20	1.8%
Western System Coordinating Council/ California																						
Coal	37.54	37.11	36.42	36.97	37.43	37.62	37.82	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	0.1%
Petroleum	2.09	3.20	1.14	1.36	1.42	1.38	1.59	0.81	0.76	0.55	0.53	0.50	0.53	0.80	1.45	1.15	1.62	0.47	0.81	4.04	2.07	-0.1%
Natural Gas	71.43	87.23	59.23	62.37	68.23	74.44	80.38	86.04	95.75	103.34	116.35	123.27	131.43	138.41	146.11	154.01	161.96	170.99	177.60	181.06	186.16	5.0%
Nuclear	42.79	43.33	44.46	43.15	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	43.19	0.0%
Pumped Storage/Other 1/	-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	-0.44	-0.44	-0.44	-0.44	-0.44	-0.44	N/A
Renewables 2/	56.71	50.21	60.99	64.84	65.75	66.97	67.37	67.37	67.37	68.34	68.34	68.34	69.13	69.76	70.18	70.39	70.60	70.81	71.01	71.44	71.86	1.2%
Total	210.12	220.64	201.79	208.28	215.60	223.18	229.96	235.07	245.07	253.22	266.21	273.24	282.33	290.34	299.24	307.19	315.98	324.21	331.50	338.75	346.05	2.5%

1/ Other includes methane, propane and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfur liquor.  
 2/ Renewables include conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.  
 NA = Not applicable.  
 Note: Totals may not equal sum of components due to independent rounding. Values represent generation for utilities and nonutilities (excluding cogenerators). Net summer capability is the steady hourly output that generating equipment is expected to supply to system load as demonstrated by tests during summer peak load.  
 Source: 2000 utility generation: Energy Information Administration (EIA), Form EIA-759, "Monthly Power Plant Report." Other 2000 and projections: EIA, AEO2002 National Energy Modeling System run aeo2002.en2007n.

**Table 74. Electric Generation Capacity by Electricity Market Module Region and Source (1 of 3)  
(Gigawatts)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
East Central Area Reliability																						
Coordination Agreement																						
Coal Steam	83.84	83.84	83.84	83.83	83.66	83.10	81.30	81.30	81.28	81.21	81.21	81.21	81.21	81.21	81.21	81.21	81.21	81.21	81.21	81.21	81.21	-0.2%
Other Fossil Steam 1/	3.73	3.75	3.75	3.75	3.75	3.75	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	3.60	-0.2%
Other Fossil Steam 2/	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.0%
Combined Cycle	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	22.0%
Combustion Turbine/ Diesel	9.67	10.07	11.97	13.38	13.63	14.74	16.78	17.48	17.45	17.59	17.71	17.82	17.88	18.58	18.77	18.88	19.06	19.42	19.76	20.38	21.31	4.0%
Nuclear Power	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	7.58	-1.9%
Pumped Storage/Other 2/	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	3.36	3.36	3.36	3.36	3.36	3.36	3.36	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	1.51	1.54	1.54	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.59	1.61	0.3%
Total	110.17	110.61	112.52	113.96	116.16	117.96	120.00	120.94	122.58	124.61	125.87	127.78	129.38	130.73	132.69	134.24	135.35	136.01	137.54	139.38	141.32	1.3%
Electric Reliability Council of Texas																						
Coal Steam	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	15.25	15.25	15.25	15.25	15.25	15.25	15.25	15.25	N/A
Other Fossil Steam 1/	29.95	29.91	29.83	29.55	29.30	28.77	27.07	24.86	22.95	22.88	22.88	22.79	22.79	22.69	22.69	22.53	22.53	22.53	22.53	22.53	22.31	-1.5%
Other Fossil Steam 2/	4.01	4.01	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	3.98	3.98	3.98	3.98	3.98	9.1%
Combined Cycle	3.12	3.12	4.40	4.77	5.13	5.54	6.77	9.67	10.51	10.88	11.22	11.30	11.45	11.74	11.82	12.09	12.15	12.00	12.15	12.31	12.39	7.1%
Combustion Turbine/ Diesel	4.80	4.80	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	0.0%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	0.77	2.00	2.16	2.30	2.43	2.57	2.64	2.72	2.79	2.87	2.89	2.91	2.93	2.95	2.97	2.99	3.01	3.04	3.06	3.08	3.10	7.2%
Total	57.80	59.08	60.43	60.72	62.08	63.00	65.52	68.05	70.06	72.74	74.62	75.91	76.46	77.40	78.72	79.50	80.25	81.04	81.77	82.64	83.25	1.8%
Mid-Atlantic Area Council																						
Coal Steam	19.19	18.99	18.99	18.99	18.99	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	18.95	19.10	0.0%
Other Fossil Steam 1/	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	8.16	8.16	8.16	8.16	8.16	8.16	8.16	8.16	N/A
Other Fossil Steam 2/	1.87	2.47	2.47	2.47	3.45	3.57	4.86	6.01	7.11	7.55	7.81	8.53	9.10	9.58	10.27	10.88	11.49	12.04	12.60	12.99	13.45	10.4%
Combined Cycle	8.82	8.82	9.96	10.76	10.68	11.71	11.86	12.31	12.37	12.54	12.87	12.87	13.55	13.89	14.38	14.58	14.85	14.85	14.85	14.85	14.85	2.5%
Combustion Turbine/ Diesel	12.98	12.98	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	13.03	-0.3%
Nuclear Power	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	1.31	1.31	1.31	1.31	1.31	1.31	1.31	N/A
Pumped Storage/Other 2/	0.00	0.00	0.01	0.03	0.04	0.06	0.07	0.09	0.11	0.13	0.16	0.22	0.23	0.24	0.25	0.25	0.25	0.25	0.25	0.25	0.25	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	1.76	1.81	1.88	1.95	2.02	2.09	2.16	2.22	2.28	2.33	2.39	2.44	2.49	2.55	2.60	2.66	2.71	2.71	2.71	2.71	2.71	2.2%
Total	54.09	54.54	55.82	56.74	57.79	59.18	60.94	61.75	63.20	64.09	64.33	65.32	66.16	67.56	68.84	70.17	71.21	72.22	72.95	73.65	74.26	1.6%
Mid-America Interconnected Network																						
Coal Steam	27.49	27.49	27.49	27.49	27.49	27.49	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	27.48	-0.1%
Other Fossil Steam 1/	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	3.98	3.98	3.98	3.98	3.98	3.98	3.98	N/A
Other Fossil Steam 2/	0.31	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	1.11	1.23	1.38	1.65	1.87	2.08	2.33	2.55	2.76	3.01	12.0%
Combined Cycle	7.98	8.39	9.49	9.93	11.12	12.48	13.72	14.32	14.53	14.56	14.56	14.56	14.56	14.56	14.92	15.78	16.63	17.59	18.45	19.32	19.32	4.5%
Combustion Turbine/ Diesel	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	-0.6%
Nuclear Power	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	0.44	0.44	0.44	0.44	0.44	0.44	N/A
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	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Fuel Cells	0.90	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.12	1.12	1.12	1.12	1.12	1.12	1.1%
Renewable Sources 3/	54.09	54.82	55.93	56.41	57.67	59.08	59.39	60.45	61.18	61.52	61.99	61.59	61.07	61.35	62.11	63.38	64.56	65.91	66.40	67.61	67.91	1.1%
Total																						
Mid-Continent Area Power Pool																						
Coal Steam	19.86	19.86	19.86	19.86	19.86	19.86	19.83	19.83	19.83	19.83	19.83	19.83	19.83	19.82	19.82	19.82	19.82	19.82	19.82	19.82	20.18	0.1%
Other Fossil Steam 1/	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	0.58	0.58	0.58	0.58	0.58	0.58	0.58	N/A
Other Fossil Steam 2/	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.72	1.09	1.47	1.85	2.17	2.32	2.32	2.32	2.63	3.06	3.43	3.82	4.23	4.47	13.3%
Combined Cycle	5.40	5.79	6.43	6.84	7.59	7.53	7.78	8.07	8.22	8.22	8.24	8.43	8.65	9.03	9.39	9.51	9.84	10.50	10.92	11.42	11.09	3.7%
Combustion Turbine/ Diesel	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.76	3.29	2.53	2.53	2.53	2.53	2.53	2.53	-2.0%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	3.95	4.09	4.24	4.28	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.33	0.5%
Total	33.93	34.47	35.25	35.71	36.52	36.49	37.08	37.78	38.36	38.77	39.14	39.50	39.90	40.26	40.54	40.42	41.21	42.34	43.28	44.11	44.48	1.4%

**Table 74. Electric Generation Capacity by Electricity Market Module Region and Source (2 of 3)  
(Gigawatts)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Northeast Power Coordinating Council</b>																							
New York																							
Coal Steam	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.57	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	3.51	-0.1%
Other Fossil Steam 1/	12.36	12.36	12.36	12.36	11.25	10.35	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20	-1.5%
Combined Cycle	0.63	0.63	0.63	0.63	0.63	1.34	3.04	3.65	4.23	4.74	4.92	5.31	6.13	6.13	5.66	5.97	6.13	6.13	6.25	6.30	6.30	6.30	12.2%
Combustion Turbine/ Diesel	3.64	3.64	3.64	3.64	3.64	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30	0.8%
Nuclear Power	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	4.98	-1.1%
Pumped Storage/Other 2/	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	1.28	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	4.55	4.63	4.78	4.85	4.85	4.92	4.99	5.13	5.13	5.13	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	5.18	0.6%
Total	31.02	31.10	31.24	31.31	30.27	30.84	31.54	32.15	32.73	33.23	33.46	33.65	34.09	34.14	33.48	33.64	33.64	33.76	33.81	33.81	33.81	33.81	0.4%
<b>Northeast Power Coordinating Council</b>																							
New England																							
Coal Steam	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	2.68	N/A
Other Fossil Steam 1/	7.80	7.80	7.80	7.80	7.38	7.07	7.07	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	6.18	-1.2%
Combined Cycle	4.53	5.20	5.20	5.20	5.20	6.01	6.01	6.88	7.56	7.58	7.92	8.38	8.57	8.82	9.20	9.30	9.51	9.70	9.76	9.80	10.01	10.01	4.0%
Combustion Turbine/ Diesel	1.86	1.75	1.75	1.75	1.75	1.75	1.75	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	2.11	0.6%
Nuclear Power	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	4.36	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	3.69	-0.8%
Pumped Storage/Other 2/	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	1.09	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	3.21	3.21	3.22	3.25	3.29	3.34	3.39	3.45	3.50	3.56	3.61	3.61	3.61	3.61	3.63	3.69	3.69	3.69	3.69	3.69	3.69	3.69	0.7%
Total	25.53	26.10	26.10	26.14	25.75	26.30	26.39	26.86	27.64	27.75	28.16	28.65	28.86	29.47	28.88	29.07	29.29	29.49	29.59	29.73	29.85	29.85	0.8%
<b>Florida Reliability Coordinating Council</b>																							
Coal Steam	10.31	10.31	10.84	10.84	9.72	9.72	9.72	9.72	9.72	9.90	9.90	9.90	9.90	9.90	9.90	9.90	10.04	10.28	10.54	11.01	11.52	11.52	0.6%
Other Fossil Steam 1/	13.06	12.75	11.87	11.14	11.08	11.01	11.01	11.01	11.01	10.92	10.92	10.92	10.92	10.68	10.68	10.68	10.18	10.18	10.18	10.18	10.18	10.18	-1.2%
Combined Cycle	4.28	4.53	5.65	5.65	6.05	6.45	6.45	10.76	12.44	13.83	15.06	16.22	17.42	18.57	19.67	20.79	21.58	22.38	23.24	24.08	24.85	25.21	9.3%
Combustion Turbine/ Diesel	6.20	6.73	7.51	8.03	8.15	8.36	8.48	8.52	8.77	9.20	9.42	9.32	9.32	9.70	10.05	10.57	11.07	11.70	12.32	12.91	13.28	13.28	3.9%
Nuclear Power	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	3.90	N/A
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	0.59	0.59	0.59	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	0.60	0.60	0.60	0.64	0.64	0.4%
Total	38.33	38.81	40.35	40.15	41.51	42.87	44.53	46.24	47.88	49.87	51.23	52.33	53.50	54.81	56.35	57.73	59.22	60.53	62.33	64.03	65.57	65.57	2.7%
<b>Southeastern Electric Reliability Council</b>																							
Coal Steam	69.70	69.90	69.75	69.43	69.43	69.43	69.43	69.32	69.32	69.72	70.02	70.41	71.06	71.61	71.72	72.55	73.51	74.68	75.48	76.89	78.41	78.41	0.6%
Other Fossil Steam 1/	19.01	19.01	18.98	18.16	19.14	19.13	19.10	19.10	19.05	19.01	18.83	18.79	18.48	18.48	18.48	18.48	18.29	18.29	18.29	18.18	18.18	18.18	-0.2%
Combined Cycle	7.25	8.17	8.32	8.32	10.53	10.97	14.11	19.58	23.96	28.77	31.44	32.82	34.90	36.43	38.26	40.03	41.31	42.60	43.78	45.06	46.00	46.00	9.7%
Combustion Turbine/ Diesel	19.49	21.04	21.28	21.47	21.52	21.85	23.33	24.29	24.64	24.92	25.02	25.02	26.72	29.15	30.95	32.93	34.66	36.42	37.90	38.95	38.95	38.95	3.5%
Nuclear Power	31.82	31.88	31.93	31.93	31.93	31.93	31.93	31.93	31.93	31.93	31.93	31.93	31.93	30.86	30.86	30.86	30.86	30.86	30.86	30.86	30.86	30.86	-0.2%
Pumped Storage/Other 2/	6.40	6.74	6.78	6.82	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	6.86	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	11.66	11.67	11.67	11.67	11.67	11.67	11.67	11.67	11.67	11.67	11.67	11.75	11.77	11.79	11.95	12.03	12.24	12.37	12.37	12.37	12.42	12.42	0.3%
Total	165.33	168.40	168.71	168.79	171.07	171.84	176.43	181.88	187.08	192.64	195.84	197.75	200.43	204.37	207.73	212.44	217.09	221.43	225.39	229.67	233.44	233.44	1.7%
<b>Southwest Power Pool</b>																							
Coal Steam	21.20	21.20	21.20	21.20	21.20	21.20	21.20	20.67	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	20.19	-0.2%
Other Fossil Steam 1/	13.69	13.61	13.52	13.44	13.36	12.00	11.97	11.06	11.03	11.03	11.03	10.99	10.98	10.94	10.94	10.94	10.94	10.94	10.89	10.89	10.89	10.89	-1.1%
Combined Cycle	1.78	2.94	2.94	2.94	3.41	4.05	4.75	6.74	7.86	8.58	9.29	10.00	10.85	11.15	11.70	11.93	12.62	13.08	13.59	14.06	14.62	14.62	11.1%
Combustion Turbine/ Diesel	4.63	4.64	4.64	4.72	3.60	4.15	5.05	5.20	5.30	5.42	5.55	5.66	5.66	5.77	5.91	6.02	6.12	6.24	6.33	6.45	6.45	6.45	1.7%
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	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	2.47	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.60	2.60	2.60	2.60	2.61	2.61	2.62	2.62	2.62	2.62	2.62	2.62	2.62	0.3%
Total	45.46	46.86	46.56	46.57	45.84	45.86	46.65	47.94	48.65	49.49	50.34	51.12	51.98	52.34	53.03	53.37	54.16	54.75	55.30	55.89	56.45	56.45	1.1%

**Table 74. Electric Generation Capacity by Electricity Market Module Region and Source (3 of 3)  
(Gigawatts)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020
<b>Western System Coordinating Council/</b>																						
<b>Northwest Power Pool Area</b>																						
Coal Steam	10.74	10.74	10.74	10.74	10.74	10.74	10.74	10.74	10.74	10.99	11.24	11.66	11.92	12.69	13.69	14.67	15.80	17.00	18.07	18.91	19.29	2.3%
Other Fossil Steam 1/	0.71	0.71	0.71	0.71	0.71	0.71	0.71	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	-3.7%
Combined Cycle	1.64	1.64	1.64	1.64	3.02	3.86	3.86	5.84	7.63	9.23	10.54	11.59	12.11	12.45	12.45	12.45	12.45	12.45	12.45	12.45	12.45	10.7%
Combustion Turbine/ Diesel	1.11	1.11	2.04	2.81	2.81	2.81	4.04	4.01	4.01	4.20	4.28	4.28	4.15	4.47	4.96	5.60	5.98	6.09	6.09	6.09	6.33	9.1%
Nuclear Power	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	1.12	1.12	1.12	1.12	1.12	1.12	1.12	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	38.10	38.41	38.41	38.58	38.65	38.90	38.94	37.10	37.19	37.47	37.57	37.88	37.59	38.32	38.47	38.63	38.71	38.90	39.03	39.16	39.28	0.4%
<b>Total</b>	<b>51.73</b>	<b>52.04</b>	<b>52.97</b>	<b>53.91</b>	<b>55.36</b>	<b>56.36</b>	<b>57.75</b>	<b>59.48</b>	<b>61.38</b>	<b>63.68</b>	<b>65.64</b>	<b>67.30</b>	<b>68.29</b>	<b>69.76</b>	<b>71.38</b>	<b>73.42</b>	<b>75.12</b>	<b>76.75</b>	<b>78.27</b>	<b>79.70</b>	<b>81.12</b>	<b>2.3%</b>
<b>Western System Coordinating Council/ Rocky Mountain Power Area, Arizona, New Mexico, and Southern Nevada</b>																						
Coal Steam	15.82	15.82	15.82	15.82	15.82	16.84	17.68	18.31	19.49	20.28	20.75	20.88	21.52	22.01	22.38	23.00	23.55	24.16	24.83	25.59	26.30	2.6%
Other Fossil Steam 1/	2.79	2.79	2.79	2.79	2.79	2.79	2.75	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	-1.4%
Combined Cycle	1.98	2.90	2.90	2.90	4.22	4.92	4.92	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	5.0%
Combustion Turbine/ Diesel	3.17	3.17	3.94	4.70	4.70	4.70	5.62	6.61	6.61	6.61	6.61	6.61	6.61	6.61	7.10	7.16	7.58	7.65	7.98	7.88	8.38	5.0%
Nuclear Power	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	2.71	N/A
Pumped Storage/Other 2/	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	0.75	0.75	0.75	0.75	0.75	0.75	0.75	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	5.83	5.93	5.93	5.93	5.93	5.93	5.94	5.94	5.94	5.95	5.95	5.95	5.96	5.96	5.96	6.02	6.02	6.05	6.09	6.17	6.25	0.3%
<b>Total</b>	<b>33.04</b>	<b>34.07</b>	<b>34.84</b>	<b>35.64</b>	<b>36.96</b>	<b>38.68</b>	<b>40.44</b>	<b>41.80</b>	<b>42.99</b>	<b>43.75</b>	<b>44.27</b>	<b>44.40</b>	<b>45.11</b>	<b>45.67</b>	<b>46.71</b>	<b>48.78</b>	<b>49.64</b>	<b>50.86</b>	<b>51.80</b>	<b>53.17</b>	<b>54.41</b>	<b>2.4%</b>
<b>Western System Coordinating Council/ California</b>																						
Coal Steam	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	4.92	5.0%
Other Fossil Steam 1/	19.14	19.14	19.14	19.14	19.14	19.14	19.20	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	17.61	-0.4%
Combined Cycle	1.41	1.41	1.41	1.41	2.81	4.81	4.81	7.02	9.37	11.04	14.54	16.05	16.13	17.09	18.37	19.83	21.31	22.55	23.21	24.29	24.86	15.4%
Combustion Turbine/ Diesel	2.64	2.68	3.77	5.09	5.07	7.08	7.04	7.04	7.04	8.29	9.22	10.37	11.38	12.32	13.29	14.50	16.02	17.44	19.10	20.44	21.50	10.4%
Nuclear Power	5.33	5.33	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	5.35	0.0%
Pumped Storage/Other 2/	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	3.73	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Renewable Sources 3/	15.84	15.91	16.72	17.07	17.20	17.64	17.64	17.65	17.68	17.78	17.78	17.79	17.90	17.98	18.03	18.07	18.10	18.13	18.16	18.22	18.28	0.7%
<b>Total</b>	<b>53.01</b>	<b>53.12</b>	<b>55.05</b>	<b>56.76</b>	<b>58.40</b>	<b>60.72</b>	<b>62.66</b>	<b>63.55</b>	<b>66.25</b>	<b>68.92</b>	<b>71.53</b>	<b>73.59</b>	<b>75.99</b>	<b>78.45</b>	<b>81.09</b>	<b>83.85</b>	<b>86.67</b>	<b>89.49</b>	<b>92.03</b>	<b>94.89</b>	<b>97.56</b>	<b>3.1%</b>

1/ Includes oil, gas, and dual-fuel capacity.  
 2/ Other includes methane, propane, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfur liquor.  
 3/ Renewable sources include conventional hydroelectric, geothermal, wood, wood waste, municipal solid waste, other biomass, solar thermal, photovoltaics, and wind power.  
 NA = Not applicable.  
 Note: Totals may not equal sum of components due to independent rounding. Values represent net summer capability for utilities and nonutilities (excluding cogenerators). Net summer capability is the steady hourly output that generating equipment is expected to supply to system load as demonstrated by tests during summer peak load.  
 Source: 2000 utility: Energy Information Administration (EIA), Form EIA-860, "Annual Electric Generator Report - Utility." Other 2000 and projections: EIA, AEO2002 National Energy Modeling System (n-aeo2002.n102010).





**Table 75. Renewable Energy Generation by Fuel (2 of 2)**  
**East Central Area Reliability Coordination Agreement**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Other End-Use Generators 6/																							
Generating Capacity (gigawatts)																							
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	0.01	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Solar Photovoltaic	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	
Total	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	
Electricity Generation (billion kilowatt-hours)																							
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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2%	
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Solar Photovoltaic	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	17.6%	
Total	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.08	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	0.11	0.11	3.7%	
Energy Consumption (quadrillion Btu)																							
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2%	
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.2%	

1/ Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators

at industrial and commercial facilities which do not produce steam for other uses.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes projections for energy crops after 2010.

4/ Grid connected generation only.

Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEC999. Net summer capability

is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements

are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Source: 1999 and 1998 generation: EIA, Annual Energy Review 1999, DOE/EIA-0384(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling

System run aec2002.d102001s.

**Table 76. Renewable Energy Generation by Fuel (1 of 2)**  
**Electric Reliability Council of Texas**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generators (excluding cogenerators) 1/</b>																						
<b>Generating Capability (gigawatts)</b>																						
Conventional Hydropower	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	0.52	0.52	0.52	0.52	0.52	0.52	0.52	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.01	0.10	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.28	0.30	0.32	0.34	0.36	0.38	0.40	0.42	0.44	0.46	0.47	19.5%
Wood and Other Biomass 3/	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	N/A
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 4/	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	0.01	0.01	0.01	0.02	0.02	0.02	0.02	15.9%
Wind	0.23	1.37	1.49	1.60	1.72	1.83	1.89	1.95	2.00	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	2.06	11.5%
<b>Total</b>	<b>0.77</b>	<b>2.00</b>	<b>2.16</b>	<b>2.30</b>	<b>2.43</b>	<b>2.57</b>	<b>2.64</b>	<b>2.72</b>	<b>2.79</b>	<b>2.87</b>	<b>2.89</b>	<b>2.91</b>	<b>2.93</b>	<b>2.95</b>	<b>2.97</b>	<b>2.99</b>	<b>3.01</b>	<b>3.04</b>	<b>3.06</b>	<b>3.08</b>	<b>3.10</b>	<b>7.2%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																						
Conventional Hydropower	0.68	0.56	0.71	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.74	0.74	0.74	0.74	0.74	0.74	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.09	0.50	0.85	1.02	1.16	1.29	1.42	1.56	1.69	1.82	1.96	2.09	2.22	2.36	2.49	2.62	2.75	2.89	3.02	3.15	3.29	19.8%
Wood and Other Biomass 3/	0.06	0.11	0.25	0.17	0.16	0.16	0.16	0.16	0.17	0.66	0.67	0.66	0.67	0.66	0.66	0.17	0.66	0.16	0.16	0.16	0.15	5.1%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.01	0.01	0.01	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	0.06	16.1%
Wind	0.47	2.91	3.70	4.00	4.31	4.61	4.80	4.95	5.10	5.24	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	5.29	12.8%
<b>Total</b>	<b>1.30</b>	<b>3.88</b>	<b>5.52</b>	<b>5.96</b>	<b>6.38</b>	<b>6.81</b>	<b>7.15</b>	<b>7.43</b>	<b>7.71</b>	<b>8.48</b>	<b>8.68</b>	<b>8.81</b>	<b>8.95</b>	<b>9.08</b>	<b>9.72</b>	<b>9.36</b>	<b>8.98</b>	<b>9.13</b>	<b>9.28</b>	<b>9.40</b>	<b>9.53</b>	<b>10.5%</b>
<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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	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	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	19.8%
Wood and Other Biomass 3/	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.4%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.1%
Wind	0.00	0.03	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	0.05	0.05	0.05	0.05	0.05	0.05	12.8%
<b>Total</b>	<b>0.01</b>	<b>0.04</b>	<b>0.06</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.08</b>	<b>0.08</b>	<b>0.09</b>	<b>0.09</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.11</b>	<b>0.10</b>	<b>0.10</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>11.0%</b>
<b>Cogenerators 5/</b>																						
<b>Generating Capability (gigawatts)</b>																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>N/A</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																						
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 3/	0.18	0.16	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.25	0.25	0.25	0.26	0.27	0.27	2.6%
<b>Total</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.19</b>	<b>0.20</b>	<b>0.21</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.23</b>	<b>0.24</b>	<b>0.25</b>	<b>0.25</b>	<b>0.26</b>	<b>0.27</b>	<b>0.27</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>2.9%</b>

**Table 76. Renewable Energy Generation by Fuel (2 of 2)**  
**Electric Reliability Council of Texas**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Energy Consumption</b> (quadrillion Btu)																							
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.6%
<b>Total</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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%
<b>Other End-Use Generators 6/</b>																							
<b>Generating Capability</b> (gigawatts)																							
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>Electricity Generation</b> (billion kilowatthours)																							
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	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	0.01	0.01	0.01	0.01	0.01	17.6%
<b>Total</b>	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	4.9%
<b>Energy Consumption</b> (quadrillion Btu)																							
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%

1/ Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes projections for energy crops after 2010.

4/ Grid connected generation only.

Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Sources: 1999 and 1998 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEO2001 National Energy Modeling System run aeo2002\_0102001a.

**Table 77. Renewable Energy Generation by Fuel (1 of 2)**  
**Mid-Atlantic Area Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Electricity Generators (excluding cogenerators) 1/</b>																							
<b>Generating Capacity (gigawatts)</b>																							
Conventional Hydropower	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	1.19	1.19	1.19	1.19	1.19	1.19	1.19	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.53	0.55	0.58	0.61	0.63	0.66	0.68	0.70	0.73	0.75	0.77	0.80	0.82	0.84	0.87	0.89	0.92	0.92	0.92	0.92	0.92	0.92	2.8%
Wood and Other Biomass 3/	0.03	0.03	0.05	0.07	0.09	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	0.19	0.20	0.21	0.22	0.22	0.22	0.22	0.22	0.22	10.3%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.01	0.03	0.06	0.08	0.11	0.13	0.16	0.19	0.22	0.24	0.26	0.28	0.30	0.32	0.34	0.36	0.39	0.39	0.39	0.39	0.39	0.39	19.7%
<b>Total</b>	<b>1.76</b>	<b>1.81</b>	<b>1.88</b>	<b>1.95</b>	<b>2.02</b>	<b>2.09</b>	<b>2.16</b>	<b>2.22</b>	<b>2.28</b>	<b>2.33</b>	<b>2.39</b>	<b>2.44</b>	<b>2.49</b>	<b>2.55</b>	<b>2.60</b>	<b>2.66</b>	<b>2.71</b>	<b>2.71</b>	<b>2.71</b>	<b>2.71</b>	<b>2.71</b>	<b>2.71</b>	<b>2.2%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																							
Conventional Hydropower	4.11	3.38	4.31	4.53	4.53	4.53	4.53	4.53	4.53	4.52	4.52	4.52	4.52	4.52	4.51	4.51	4.51	4.51	4.51	4.51	4.50	4.50	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	3.91	4.05	4.24	4.44	4.62	4.79	4.95	5.12	5.28	5.45	5.61	5.78	5.94	6.11	6.27	6.44	6.60	6.66	6.66	6.66	6.66	6.66	2.7%
Wood and Other Biomass 3/	0.20	0.25	0.41	1.76	2.11	2.18	1.87	1.90	2.27	2.31	2.32	2.32	2.33	2.34	2.35	2.36	2.36	2.38	2.38	2.37	2.37	2.37	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.04	0.10	0.17	0.24	0.31	0.39	0.47	0.56	0.62	0.68	0.74	0.80	0.86	0.93	0.99	1.05	1.07	1.07	1.07	1.07	1.07	50.6%
<b>Total</b>	<b>8.22</b>	<b>7.73</b>	<b>9.05</b>	<b>10.90</b>	<b>11.50</b>	<b>11.82</b>	<b>11.75</b>	<b>12.03</b>	<b>12.64</b>	<b>12.91</b>	<b>13.14</b>	<b>13.36</b>	<b>13.60</b>	<b>13.83</b>	<b>14.06</b>	<b>14.30</b>	<b>14.52</b>	<b>14.61</b>	<b>14.61</b>	<b>14.61</b>	<b>14.60</b>	<b>2.9%</b>	
<b>Energy Consumption (quadrillion Btu)</b>																							
Conventional Hydropower	0.04	0.03	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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.05	0.06	0.06	0.06	0.06	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	2.7%
Wood and Other Biomass 3/	0.00	0.00	0.00	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	0.03	0.03	0.03	0.03	0.03	0.03	13.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	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	50.6%
<b>Total</b>	<b>0.10</b>	<b>0.09</b>	<b>0.11</b>	<b>0.13</b>	<b>0.13</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.15</b>	<b>0.15</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>3.0%</b>
<b>Cogenerators 5/</b>																							
<b>Generating Capacity (gigawatts)</b>																							
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	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.0%
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.5%
<b>Total</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.09</b>	<b>0.1%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																							
Municipal Solid Waste	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	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.0%
Wood and Other Biomass 3/	0.38	0.38	0.38	0.40	0.41	0.43	0.45	0.47	0.47	0.48	0.49	0.51	0.53	0.54	0.56	0.57	0.59	0.60	0.61	0.62	0.64	0.64	2.6%
<b>Total</b>	<b>0.82</b>	<b>0.82</b>	<b>0.82</b>	<b>0.84</b>	<b>0.85</b>	<b>0.87</b>	<b>0.89</b>	<b>0.91</b>	<b>0.91</b>	<b>0.92</b>	<b>0.93</b>	<b>0.95</b>	<b>0.97</b>	<b>0.98</b>	<b>1.00</b>	<b>1.01</b>	<b>1.03</b>	<b>1.04</b>	<b>1.06</b>	<b>1.07</b>	<b>1.08</b>	<b>1.08</b>	<b>1.4%</b>

**Table 77. Renewable Energy Generation by Fuel (2 of 2)**  
**Mid-Atlantic Area Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Energy Consumption</b> (quadrillion Btu)																							
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.8%
<b>Total</b>	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.5%
<b>Other End-Use Generators 6/</b>																							
<b>Generating Capability</b> (gigawatts)																							
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.6%
<b>Total</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.1%
<b>Electricity Generation</b> (billion kilowatt-hours)																							
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	0.01	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	17.6%
<b>Total</b>	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	4.9%
<b>Energy Consumption</b> (quadrillion Btu)																							
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%

1/ Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes projections for energy crops after 2010.

4/ Grid connected generation only.

Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Sources: 1989 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-084(99) (Washington, DC, July 2000). Projections: EIA, AEO2001 National Energy Modeling System run aeo2002\_e102001a.

**Table 78. Renewable Energy Generation by Fuel (1 of 2)  
Mid-America Interconnected Network**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generators (excluding cogenerators) 1/</b>																						
<b>Generating Capacity (gigawatts)</b>																						
Conventional Hydropower	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69	0.69
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.18	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	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wind	0.02	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	0.10	0.10	0.10	0.10	0.10	0.10	0.10
<b>Total</b>	<b>0.90</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.06</b>	<b>1.12</b>	<b>1.12</b>	<b>1.12</b>	<b>1.12</b>	<b>1.12</b>	<b>1.12</b>	<b>1.1%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																						
Conventional Hydropower	2.29	1.89	2.40	2.53	2.53	2.53	2.53	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.52	2.51	2.51	2.51	2.51	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	1.03	1.46	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	1.64	2.11	2.11	2.11	2.11	3.6%
Wood and Other Biomass 3/	0.07	0.16	0.23	0.16	0.47	0.57	0.47	0.49	0.59	0.57	1.05	0.49	0.49	0.49	0.45	0.45	0.44	0.44	0.42	0.41	0.40	8.8%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.06	0.18	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	0.24	0.24	0.24	0.24	0.24	6.8%
<b>Total</b>	<b>3.46</b>	<b>3.68</b>	<b>4.51</b>	<b>4.57</b>	<b>4.87</b>	<b>4.88</b>	<b>4.88</b>	<b>4.89</b>	<b>4.89</b>	<b>4.87</b>	<b>5.45</b>	<b>4.89</b>	<b>4.89</b>	<b>4.89</b>	<b>4.85</b>	<b>5.31</b>	<b>5.30</b>	<b>5.30</b>	<b>5.29</b>	<b>5.27</b>	<b>5.26</b>	<b>2.1%</b>
<b>Energy Consumption (quadrillion Btu)</b>																						
Conventional Hydropower	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	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	0.02	0.02	0.02	0.02	0.03	0.03	0.03	3.6%
Wood and Other Biomass 3/	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.8%
<b>Total</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.05</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>2.3%</b>
<b>Cogenerators 5/</b>																						
<b>Generating Capacity (gigawatts)</b>																						
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 3/	0.15	0.15	0.15	0.16	0.16	0.17	0.18	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.22	0.23	0.23	0.24	0.24	0.24	2.5%
<b>Total</b>	<b>0.16</b>	<b>0.16</b>	<b>0.16</b>	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.19</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.21</b>	<b>0.21</b>	<b>0.22</b>	<b>0.22</b>	<b>0.23</b>	<b>0.23</b>	<b>0.24</b>	<b>0.25</b>	<b>0.25</b>	<b>0.26</b>	<b>0.26</b>	<b>2.5%</b>

**Table 78. Renewable Energy Generation by Fuel (2 of 2)  
Mid-America Interconnected Network**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatt-hours)																						
Municipal Solid Waste <sup>1</sup>	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	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.0%
Wood and Other Biomass <sup>2</sup>	1.44	1.44	1.44	1.51	1.57	1.65	1.72	1.79	1.79	1.83	1.87	1.95	2.01	2.07	2.12	2.18	2.24	2.29	2.34	2.39	2.43	2.6%
<b>Total</b>	<b>1.60</b>	<b>1.60</b>	<b>1.60</b>	<b>1.67</b>	<b>1.73</b>	<b>1.81</b>	<b>1.88</b>	<b>1.95</b>	<b>1.96</b>	<b>1.98</b>	<b>2.02</b>	<b>2.11</b>	<b>2.17</b>	<b>2.23</b>	<b>2.28</b>	<b>2.33</b>	<b>2.39</b>	<b>2.45</b>	<b>2.50</b>	<b>2.54</b>	<b>2.59</b>	<b>2.4%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3</sup>	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.6%
<b>Total</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>2.1%</b>
<b>Other End-Use Generators<sup>4</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
Conventional Hydropower	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	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	17.6%
<b>Total</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>1.5%</b>
<b>Electricity Generation</b>																						
(billion kilowatt-hours)																						
Conventional Hydropower	0.19	0.16	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	0.21	0.21	0.21	0.21	0.21	0.21	0.4%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.05	0.05	0.05	0.05	0.05	0.05	17.6%
<b>Total</b>	<b>0.19</b>	<b>0.17</b>	<b>0.21</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.23</b>	<b>0.23</b>	<b>0.24</b>	<b>0.24</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.26</b>	<b>0.26</b>	<b>0.26</b>	<b>0.26</b>	<b>0.26</b>	<b>0.26</b>	<b>1.4%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.4%</b>

<sup>1</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
<sup>2</sup> Includes hydrothermal resources only (hot water and steam).  
<sup>3</sup> Includes projections for energy crops after 2010.  
<sup>4</sup> Grid connected generation only.  
 Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
 Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 79. Renewable Energy Generation by Fuel (1 of 2)  
Mid-Continent Area Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Electricity Generators (excluding cogenerators) 1/</b>																							
Generating Capability (gigawatts)																							
Conventional Hydropower	3.18	3.18	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	3.19	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.10	0.11	0.11	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	2.0%
Wood and Other Biomass 3/	0.12	0.13	0.18	0.18	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	0.20	0.20	0.20	0.20	2.7%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.54	0.67	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.76	0.78	0.78	1.5%
Total	3.95	4.09	4.24	4.28	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.31	4.33	4.33	0.5%	
<b>Electricity Generation</b>																							
(billion kilowatt-hours)																							
Conventional Hydropower	13.65	11.22	14.31	15.07	15.06	15.06	15.05	15.04	15.04	15.03	15.03	15.02	15.01	15.01	15.00	14.99	14.99	14.98	14.97	14.97	14.96	14.96	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.64	0.65	0.65	0.87	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.3%
Wood and Other Biomass 3/	0.44	0.55	0.85	0.77	0.88	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	3.8%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	1.94	1.27	1.54	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.62	1.67	1.67	2.4%	
Total	15.77	13.69	17.35	18.35	18.54	18.58	18.57	18.56	18.56	18.55	18.54	18.54	18.53	18.52	18.54	18.53	18.53	18.52	18.51	18.56	18.56	0.8%	
<b>Energy Consumption</b>																							
(quadrillion Btu)																							
Conventional Hydropower	0.14	0.12	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	0.15	0.15	0.15	0.15	0.15	0.15	0.5%
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	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	2.3%
Wood and Other Biomass 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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	3.8%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.02	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	0.02	0.02	0.02	0.02	0.02	0.02	2.4%
Total	0.17	0.14	0.18	0.18	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	0.20	0.20	0.20	0.20	0.9%
<b>Cogenerators 5/</b>																							
Generating Capability (gigawatts)																							
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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Wood and Other Biomass 3/	0.17	0.17	0.17	0.18	0.19	0.20	0.20	0.21	0.21	0.22	0.22	0.23	0.24	0.24	0.25	0.25	0.26	0.27	0.27	0.28	0.28	0.28	2.4%
Total	0.19	0.19	0.19	0.20	0.20	0.21	0.22	0.23	0.23	0.23	0.24	0.25	0.25	0.26	0.26	0.27	0.28	0.28	0.28	0.29	0.30	0.30	2.3%



**Table 79. Renewable Energy Generation by Fuel (2 of 2)**  
**Mid-Continent Area Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste <sup>1</sup>	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	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.02%
Wood and Other Biomass <sup>3/</sup>	0.69	0.69	0.69	0.73	0.76	0.79	0.83	0.86	0.86	0.88	0.90	0.94	0.97	1.00	1.02	1.05	1.07	1.10	1.13	1.15	1.17	2.6%
Total	0.80	0.80	0.80	0.84	0.86	0.90	0.93	0.97	0.97	0.99	1.01	1.05	1.08	1.10	1.13	1.15	1.18	1.21	1.23	1.25	1.28	2.4%
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	2.6%
Total	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.9%
<b>Other End-Use Generators<sup>6/</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	0.01	0.01	0.01	0.01	0.01	0.02	0.02	17.6%
Total	0.05	0.05	0.05	0.05	0.05	0.05	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	0.07	0.07	1.2%
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	0.25	0.21	0.26	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	0.27	0.27	0.27	0.27	0.4%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	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	0.02	0.02	0.02	0.02	0.02	17.6%
Total	0.25	0.21	0.26	0.27	0.28	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.29	0.6%
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%

<sup>1</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.

<sup>2</sup> Includes hydrothermal resources only (hot water and steam).

<sup>3</sup> Includes projections for energy crops after 2010.

<sup>4</sup> Grid connected generation only.

Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 80. Renewable Energy Generation by Fuel (1 of 2)**  
**Northeast Power Coordinating Council / New York**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generators (excluding cogenerators) 1/</b>																						
<b>Generating Capability (gigawatts)</b>																						
Conventional Hydropower	4.25	4.32	4.47	4.54	4.61	4.68	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	4.82	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	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	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.32	0.9%
Wood and Other Biomass 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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
<b>Total</b>	<b>4.55</b>	<b>4.63</b>	<b>4.78</b>	<b>4.85</b>	<b>4.92</b>	<b>4.99</b>	<b>5.13</b>	<b>5.13</b>	<b>5.13</b>	<b>5.13</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>0.6%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																						
Conventional Hydropower	15.33	12.70	16.49	17.68	17.90	18.11	18.61	18.64	18.63	18.62	18.61	18.60	18.59	18.59	18.58	18.57	18.56	18.55	18.55	18.54	18.53	1.0%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	1.82	1.85	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	1.0%
Wood and Other Biomass 3/	0.16	0.17	0.18	0.64	0.75	0.87	0.99	1.12	1.22	1.33	1.44	1.43	1.43	1.44	1.44	1.44	1.44	1.44	1.44	1.44	1.44	11.6%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.03	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	0.03	0.03	0.03	0.03	0.03	0.03	2.0%
<b>Total</b>	<b>17.34</b>	<b>14.75</b>	<b>18.57</b>	<b>20.22</b>	<b>20.55</b>	<b>20.88</b>	<b>21.50</b>	<b>21.66</b>	<b>21.75</b>	<b>21.85</b>	<b>22.29</b>	<b>22.28</b>	<b>22.27</b>	<b>22.27</b>	<b>22.26</b>	<b>22.26</b>	<b>22.26</b>	<b>22.24</b>	<b>22.23</b>	<b>22.23</b>	<b>22.21</b>	<b>1.2%</b>
<b>Energy Consumption (quadrillion Btu)</b>																						
Conventional Hydropower	0.16	0.13	0.17	0.18	0.18	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	0.19	0.19	1.0%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.0%
Wood and Other Biomass 3/	0.00	0.00	0.00	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	0.02	0.02	0.02	0.02	0.02	10.8%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.0%
<b>Total</b>	<b>0.18</b>	<b>0.16</b>	<b>0.20</b>	<b>0.21</b>	<b>0.22</b>	<b>0.22</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.23</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>1.2%</b>
<b>Cogenerators 5/</b>																						
<b>Generating Capability (gigawatts)</b>																						
Municipal Solid Waste	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	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.0%
Wood and Other Biomass 3/	0.10	0.10	0.10	0.10	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	0.14	0.14	0.15	2.1%
<b>Total</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.18</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>0.22</b>	<b>1.3%</b>

**Table 80. Renewable Energy Generation by Fuel (2 of 2)**  
**Northeast Power Coordinating Council / New York**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste	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	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.0%
Wood and Other Biomass 3/	0.40	0.40	0.40	0.42	0.44	0.46	0.48	0.50	0.50	0.51	0.52	0.54	0.56	0.58	0.59	0.61	0.62	0.64	0.65	0.66	0.68	2.6%
<b>Total</b>	<b>0.95</b>	<b>0.95</b>	<b>0.95</b>	<b>0.97</b>	<b>0.98</b>	<b>1.01</b>	<b>1.03</b>	<b>1.04</b>	<b>1.04</b>	<b>1.06</b>	<b>1.07</b>	<b>1.09</b>	<b>1.11</b>	<b>1.12</b>	<b>1.14</b>	<b>1.15</b>	<b>1.17</b>	<b>1.19</b>	<b>1.20</b>	<b>1.21</b>	<b>1.22</b>	<b>1.3%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.0%
<b>Total</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.8%</b>
<b>Other End-Use Generators 6/</b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	17.6%
<b>Total</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>1.3%</b>
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	0.09	0.07	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	0.10	0.10	0.10	0.10	0.10	0.10	0.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	17.6%
<b>Total</b>	<b>0.09</b>	<b>0.08</b>	<b>0.09</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>1.1%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.4%</b>

1/ Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.

2/ Includes hydrothermal resources only (hot water and steam).

3/ Includes projections for energy crops after 2010.

4/ Grid-connected generation only.

Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 81. Renewable Energy Generation by Fuel (1 of 2)  
Northeast Power Coordinating Council / New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Electricity Generators (excluding cogenerators) 1/																						
Generating Capability (gigawatts)																						
Conventional Hydropower	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	2.33	2.33	2.33	2.33	2.33	2.33	2.33	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.51	0.52	0.53	0.53	0.53	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	0.55	0.55	0.3%
Wood and Other Biomass 3/	0.35	0.35	0.35	0.36	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.43	0.43	0.43	0.43	0.44	0.44	0.44	0.44	0.44	0.44	1.2%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wind	0.01	0.01	0.01	0.04	0.06	0.09	0.13	0.17	0.21	0.25	0.29	0.29	0.29	0.29	0.31	0.36	0.36	0.36	0.36	0.36	0.36	18.3%
Total	3.21	3.21	3.22	3.25	3.29	3.34	3.39	3.45	3.50	3.56	3.61	3.61	3.61	3.61	3.63	3.69	3.69	3.69	3.69	3.69	3.69	0.7%
Electricity Generation (billion kilowatt-hours)																						
Conventional Hydropower	4.69	3.85	4.91	5.17	5.17	5.17	5.17	5.16	5.16	5.16	5.15	5.15	5.15	5.15	5.15	5.14	5.14	5.14	5.14	5.14	5.13	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	4.00	4.04	4.08	4.09	4.09	4.26	4.26	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	4.27	0.3%
Wood and Other Biomass 3/	2.17	2.18	2.19	2.19	2.24	2.29	2.37	2.45	2.53	2.61	2.70	2.72	2.72	2.72	2.72	2.77	2.79	2.79	2.79	2.79	2.79	1.3%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.08	0.15	0.22	0.32	0.43	0.55	0.69	0.78	0.82	0.82	0.82	0.88	1.01	1.04	1.04	1.04	1.04	1.04	19.6%
Total	10.88	10.11	11.21	11.53	11.65	11.84	12.11	12.31	12.51	12.71	12.91	12.97	12.97	12.97	13.03	13.19	13.25	13.24	13.24	13.24	13.24	1.0%
Energy Consumption (quadrillion Btu)																						
Conventional Hydropower	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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	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	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.3%
Wood and Other Biomass 3/	0.03	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	0.04	0.04	0.04	0.04	0.04	0.04	1.3%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	19.6%
Total	0.13	0.12	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.16	0.9%
Cogenerators 5/																						
Generating Capability (gigawatts)																						
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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0%
Wood and Other Biomass 3/	0.68	0.68	0.68	0.69	0.71	0.74	0.77	0.79	0.80	0.81	0.83	0.86	0.88	0.91	0.93	0.95	0.97	0.99	1.01	1.03	1.05	2.4%
Total	0.70	0.70	0.70	0.73	0.76	0.79	0.81	0.84	0.84	0.86	0.87	0.91	0.93	0.95	0.97	0.99	1.02	1.04	1.06	1.08	1.09	2.2%

**Table 81. Renewable Energy Generation by Fuel (2 of 2)  
Northeast Power Coordinating Council / New England**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste <sup>1</sup>	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	0.31	0.31	0.31	0.31	0.31	0.31	0.0%
Wood and Other Biomass <sup>3/</sup>	3.46	3.46	3.46	3.63	3.76	3.93	4.09	4.25	4.25	4.33	4.43	4.61	4.75	4.88	5.00	5.12	5.25	5.37	5.48	5.59	5.68	2.5%
<b>Total</b>	3.78	3.78	3.78	3.94	4.07	4.25	4.40	4.56	4.56	4.65	4.74	4.92	5.06	5.19	5.31	5.43	5.56	5.69	5.80	5.90	5.99	2.3%
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3/</sup>	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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	2.2%
<b>Total</b>	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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	1.9%
<b>Other End-Use Generators<sup>6/</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
Conventional Hydropower	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	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	17.6%
<b>Total</b>	0.28	0.28	0.29	0.29	0.29	0.29	0.30	0.30	0.31	0.32	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.33	0.34	0.9%
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	1.31	1.09	1.37	1.44	1.44	1.44	1.44	1.44	1.44	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	0.4%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.06	0.07	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.11	17.6%
<b>Total</b>	1.31	1.10	1.38	1.46	1.46	1.47	1.48	1.49	1.51	1.53	1.53	1.53	1.53	1.53	1.53	1.54	1.54	1.54	1.54	1.54	1.54	0.8%
<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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.4%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.4%

<sup>1</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.

<sup>2</sup> Includes hydrothermal resources only (hot water and steam).

<sup>3</sup> Includes projections for energy crops after 2010.

<sup>4</sup> Grid connected generation only.

Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO99. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.

Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0249(98) (Washington, DC, July 2000). Projections: EIA, AEO2001 National Energy Modeling System run aeo2002\_d102001b.

**Table 82. Renewable Energy Generation by Fuel (1 of 2)**  
**Florida Reliability Coordinating Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generators (excluding cogenerators) 1/</b>																						
<b>Generating Capability (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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Municipal Solid Waste	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.52	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54	0.54
Wood and Other Biomass 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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Solar Photovoltaic 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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Total</b>	<b>0.59</b>	<b>0.59</b>	<b>0.59</b>	<b>0.59</b>	<b>0.59</b>	<b>0.59</b>	<b>0.59</b>	<b>0.59</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.60</b>	<b>0.64</b>	<b>0.4%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																						
Conventional Hydropower	0.20	0.16	0.21	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	0.22	0.22	0.22	0.22	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	3.45	3.45	3.45	3.45	3.45	3.45	3.45	3.45	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	0.2%
Wood and Other Biomass 3/	0.04	0.07	0.11	0.66	1.11	1.12	1.13	1.14	1.14	1.26	1.87	1.87	1.87	1.87	1.37	1.37	1.37	1.37	1.37	1.37	1.60	20.9%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>3.68</b>	<b>3.68</b>	<b>3.77</b>	<b>4.33</b>	<b>4.78</b>	<b>4.79</b>	<b>4.80</b>	<b>4.81</b>	<b>4.85</b>	<b>5.07</b>	<b>5.68</b>	<b>5.68</b>	<b>5.68</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.18</b>	<b>5.41</b>	<b>1.8%</b>
<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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.5%
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	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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.2%
Wood and Other Biomass 3/	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	20.6%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.07</b>	<b>1.5%</b>
<b>Cogenerators 5/</b>																						
<b>Generating Capability (gigawatts)</b>																						
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 3/	0.24	0.24	0.24	0.25	0.26	0.27	0.28	0.29	0.29	0.30	0.30	0.32	0.33	0.33	0.34	0.35	0.36	0.37	0.38	0.38	0.38	2.5%
<b>Total</b>	<b>0.25</b>	<b>0.25</b>	<b>0.25</b>	<b>0.26</b>	<b>0.27</b>	<b>0.28</b>	<b>0.30</b>	<b>0.31</b>	<b>0.31</b>	<b>0.31</b>	<b>0.32</b>	<b>0.33</b>	<b>0.34</b>	<b>0.35</b>	<b>0.36</b>	<b>0.37</b>	<b>0.37</b>	<b>0.38</b>	<b>0.38</b>	<b>0.40</b>	<b>0.40</b>	<b>2.4%</b>

**Table 82. Renewable Energy Generation by Fuel (2 of 2)**  
**Florida Reliability Coordinating Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste <sup>1</sup>	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	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07
Wood and Other Biomass <sup>2</sup>	0.88	0.88	0.88	0.93	0.96	1.01	1.05	1.09	1.09	1.12	1.14	1.19	1.23	1.27	1.30	1.33	1.37	1.40	1.43	1.46	1.49	2.6%
Total	0.95	0.95	0.95	0.99	1.03	1.08	1.12	1.16	1.16	1.18	1.21	1.26	1.30	1.33	1.37	1.40	1.43	1.47	1.50	1.53	1.55	2.5%
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3</sup>	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	0.01	0.01	0.01	0.01	0.01	0.01	3.6%
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	3.1%
<b>Other End-Use Generators<sup>4</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	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	0.02	0.02	0.02	0.02	17.6%
Total	0.00	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	0.02	0.02	0.02	0.02	0.02	0.03	9.1%
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Geothermal <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	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	17.6%
Total	0.02	0.02	0.02	0.02	0.02	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	0.05	0.05	0.05	4.9%
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%

<sup>1</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
<sup>2</sup> Includes hydrothermal resources only (hot water and steam).  
<sup>3</sup> Includes projections for energy crops after 2010.  
<sup>4</sup> Grid connected generation only.  
 Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO99. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
 Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0849(9) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 83. Renewable Energy Generation by Fuel (1 of 2)  
Southeastern Electric Reliability Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generators (excluding cogenerators) 1/</b>																						
Generating Capacity (gigawatts)																						
Conventional Hydropower	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	11.24	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.18	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	0.22	1.0%
Wood and Other Biomass 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	0.24	0.28	0.32	0.32	0.32	0.32	0.38	2.3%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wind	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.08	0.10	0.26	0.30	0.46	0.59	0.59	0.59	0.59	32.9%
<b>Total</b>	<b>11.66</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.67</b>	<b>11.75</b>	<b>11.77</b>	<b>11.78</b>	<b>11.95</b>	<b>12.03</b>	<b>12.24</b>	<b>12.37</b>	<b>12.37</b>	<b>12.37</b>	<b>12.42</b>	<b>0.3%</b>
<b>Electricity Generation</b>																						
(billion kilowatt-hours)																						
Conventional Hydropower	30.17	24.80	31.58	33.26	33.25	33.24	33.22	33.21	33.20	33.18	33.17	33.16	33.14	33.13	33.11	33.10	33.09	33.07	33.06	33.05	33.03	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	1.10	1.17	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.19	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.42	1.3%
Wood and Other Biomass 3/	1.25	1.48	1.72	1.04	1.15	1.28	1.17	1.18	1.33	1.34	3.45	3.63	3.52	3.78	3.30	3.55	1.59	1.59	1.59	1.59	1.95	2.3%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wind	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.18	0.27	0.34	0.87	1.01	1.56	1.98	1.98	1.98	1.98	36.8%
<b>Total</b>	<b>32.52</b>	<b>27.46</b>	<b>34.50</b>	<b>35.50</b>	<b>35.60</b>	<b>35.72</b>	<b>35.59</b>	<b>35.60</b>	<b>35.73</b>	<b>35.72</b>	<b>37.92</b>	<b>38.38</b>	<b>38.35</b>	<b>38.68</b>	<b>38.71</b>	<b>39.08</b>	<b>37.68</b>	<b>38.06</b>	<b>38.05</b>	<b>38.04</b>	<b>38.38</b>	<b>0.8%</b>
<b>Energy Consumption (quadrillion Btu)</b>																						
Conventional Hydropower	0.31	0.25	0.32	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	0.34	0.34	0.34	0.34	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.3%
Wood and Other Biomass 3/	0.02	0.02	0.02	0.01	0.01	0.02	0.01	0.01	0.02	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.02	0.02	0.02	0.02	0.02	1.7%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	0.02	0.02	0.02	0.02	0.02	36.8%
<b>Total</b>	<b>0.34</b>	<b>0.29</b>	<b>0.36</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.37</b>	<b>0.39</b>	<b>0.40</b>	<b>0.40</b>	<b>0.40</b>	<b>0.40</b>	<b>0.41</b>	<b>0.39</b>	<b>0.40</b>	<b>0.40</b>	<b>0.40</b>	<b>0.40</b>	<b>0.8%</b>
<b>Cogenerators 5/</b>																						
Generating Capacity (gigawatts)																						
Municipal Solid Waste	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	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.0%
Wood and Other Biomass 3/	2.84	2.84	2.84	2.96	2.96	3.06	3.30	3.32	3.44	3.45	3.52	3.59	3.73	3.84	3.84	4.03	4.13	4.23	4.32	4.41	4.49	2.4%
<b>Total</b>	<b>3.02</b>	<b>3.02</b>	<b>3.02</b>	<b>3.14</b>	<b>3.24</b>	<b>3.37</b>	<b>3.50</b>	<b>3.62</b>	<b>3.63</b>	<b>3.63</b>	<b>3.69</b>	<b>3.77</b>	<b>3.91</b>	<b>4.02</b>	<b>4.02</b>	<b>4.21</b>	<b>4.30</b>	<b>4.41</b>	<b>4.50</b>	<b>4.67</b>	<b>4.75</b>	<b>2.3%</b>



**Table 83. Renewable Energy Generation by Fuel (2 of 2)**  
**Southeastern Electric Reliability Council**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste	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	1.17	1.17	1.17	1.17	1.17	1.17	0.0%
Wood and Other Biomass 3/	15.31	15.31	15.31	16.06	16.66	17.44	18.15	18.86	19.25	19.66	20.48	21.13	21.70	22.25	22.78	23.38	23.94	24.45	24.92	25.35	25.81	2.6%
<b>Total</b>	<b>16.48</b>	<b>16.48</b>	<b>16.48</b>	<b>17.23</b>	<b>17.83</b>	<b>18.61</b>	<b>19.32</b>	<b>20.03</b>	<b>20.03</b>	<b>20.42</b>	<b>20.83</b>	<b>21.65</b>	<b>22.30</b>	<b>22.87</b>	<b>23.42</b>	<b>23.95</b>	<b>24.55</b>	<b>25.10</b>	<b>25.62</b>	<b>26.09</b>	<b>26.52</b>	<b>2.4%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Wood and Other Biomass 3/	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.11	0.11	0.11	0.12	0.12	0.12	0.12	0.12	0.13	2.3%
<b>Total</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>0.14</b>	<b>2.0%</b>
<b>Other End-Use Generators 6/</b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
Conventional Hydropower	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	0.52	0.52	0.52	0.52	0.52	0.52	0.52	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.01	0.02	0.03	0.03	0.05	0.06	0.08	0.10	0.13	0.17	0.21	0.21	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.25	0.25	17.6%
<b>Total</b>	<b>0.53</b>	<b>0.54</b>	<b>0.55</b>	<b>0.56</b>	<b>0.57</b>	<b>0.58</b>	<b>0.60</b>	<b>0.63</b>	<b>0.66</b>	<b>0.69</b>	<b>0.73</b>	<b>0.74</b>	<b>0.74</b>	<b>0.75</b>	<b>0.75</b>	<b>0.75</b>	<b>0.76</b>	<b>0.76</b>	<b>0.77</b>	<b>0.77</b>	<b>0.78</b>	<b>1.9%</b>
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	1.77	1.50	1.83	1.92	1.92	1.92	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	1.91	0.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.02	0.03	0.05	0.07	0.09	0.12	0.16	0.21	0.27	0.34	0.42	0.43	0.44	0.45	0.46	0.46	0.47	0.48	0.49	0.50	0.51	17.6%
<b>Total</b>	<b>1.79</b>	<b>1.53</b>	<b>1.88</b>	<b>1.99</b>	<b>2.01</b>	<b>2.04</b>	<b>2.08</b>	<b>2.12</b>	<b>2.18</b>	<b>2.25</b>	<b>2.34</b>	<b>2.34</b>	<b>2.35</b>	<b>2.38</b>	<b>2.37</b>	<b>2.37</b>	<b>2.38</b>	<b>2.39</b>	<b>2.40</b>	<b>2.40</b>	<b>2.41</b>	<b>1.5%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.08	0.09	0.10	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.20	0.20	N/A
<b>Total</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.4%</b>

1/ Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
2/ Includes hydrothermal resources only (hot water and steam).  
3/ Includes projections for energy crops after 2010.  
4/ Grid connected generation only.  
Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO99. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 84. Renewable Energy Generation by Fuel (1 of 2)**  
**Southwest Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generators (excluding cogenerators) 1/</b>																						
<b>Generating Capability (gigawatts)</b>																						
Conventional Hydropower	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	2.47	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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic 4/	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	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.04
Wind	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	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.11
<b>Total</b>	<b>2.47</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.59</b>	<b>2.60</b>	<b>2.60</b>	<b>2.60</b>	<b>2.60</b>	<b>2.61</b>	<b>2.61</b>	<b>2.61</b>	<b>2.61</b>	<b>2.62</b>	<b>2.62</b>	<b>2.62</b>	<b>2.62</b>	<b>0.3%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																						
Conventional Hydropower	4.66	3.83	4.88	5.14	5.14	5.14	5.13	5.13	5.13	5.13	5.13	5.12	5.12	5.12	5.12	5.11	5.11	5.11	5.11	5.10	5.10	0.5%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Municipal Solid Waste	0.00	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	0.03	0.03	0.03	0.03	0.03	0.03	N/A
Wood and Other Biomass 3/	0.07	0.14	0.21	0.19	0.18	0.19	0.00	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-100.0%
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.08	0.09	N/A
Wind	0.00	0.19	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	0.28	0.28	0.28	0.28	0.28	N/A
<b>Total</b>	<b>4.73</b>	<b>4.17</b>	<b>5.39</b>	<b>5.64</b>	<b>5.63</b>	<b>5.64</b>	<b>5.45</b>	<b>5.45</b>	<b>5.45</b>	<b>5.45</b>	<b>5.55</b>	<b>5.46</b>	<b>5.48</b>	<b>5.47</b>	<b>5.47</b>	<b>5.47</b>	<b>5.48</b>	<b>5.48</b>	<b>5.48</b>	<b>5.48</b>	<b>5.48</b>	<b>0.8%</b>
<b>Energy Consumption (quadrillion Btu)</b>																						
Conventional Hydropower	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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.5%
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	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wood and Other Biomass 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
<b>Total</b>	<b>0.05</b>	<b>0.04</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.8%</b>
<b>Cogenerators 5/</b>																						
<b>Generating Capability (gigawatts)</b>																						
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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Wood and Other Biomass 3/	0.29	0.29	0.29	0.30	0.31	0.33	0.34	0.35	0.35	0.36	0.37	0.38	0.40	0.41	0.42	0.43	0.44	0.45	0.46	0.46	0.47	2.5%
<b>Total</b>	<b>0.32</b>	<b>0.32</b>	<b>0.32</b>	<b>0.34</b>	<b>0.35</b>	<b>0.36</b>	<b>0.37</b>	<b>0.38</b>	<b>0.38</b>	<b>0.39</b>	<b>0.40</b>	<b>0.42</b>	<b>0.43</b>	<b>0.44</b>	<b>0.45</b>	<b>0.46</b>	<b>0.47</b>	<b>0.48</b>	<b>0.48</b>	<b>0.50</b>	<b>0.51</b>	<b>2.5%</b>

**Table 84. Renewable Energy Generation by Fuel (2 of 2)**  
**Southwest Power Pool**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste <sup>1</sup>	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	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.0%
Wood and Other Biomass <sup>3/</sup>	2.00	2.00	2.00	2.11	2.19	2.30	2.39	2.49	2.46	2.54	2.60	2.71	2.80	2.88	2.95	3.03	3.11	3.19	3.26	3.32	3.38	2.6%
<b>Total</b>	<b>2.16</b>	<b>2.16</b>	<b>2.16</b>	<b>2.26</b>	<b>2.34</b>	<b>2.45</b>	<b>2.55</b>	<b>2.64</b>	<b>2.64</b>	<b>2.70</b>	<b>2.75</b>	<b>2.87</b>	<b>2.96</b>	<b>3.03</b>	<b>3.11</b>	<b>3.18</b>	<b>3.26</b>	<b>3.34</b>	<b>3.41</b>	<b>3.47</b>	<b>3.53</b>	<b>2.5%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3/</sup>	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	0.01	0.01	0.01	0.01	0.02	0.02	0.02	2.6%
<b>Total</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>2.2%</b>
<b>Other End-Use Generators<sup>6/</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	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	0.02	0.03	0.03	0.03	0.03	17.6%
<b>Total</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>0.03</b>	<b>9.1%</b>
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	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	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.01	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	0.06	0.07	0.07	0.07	0.07	17.6%
<b>Total</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.06</b>	<b>0.06</b>	<b>0.07</b>	<b>0.08</b>	<b>0.09</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.10</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>0.11</b>	<b>4.9%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>

<sup>1</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
<sup>2</sup> Includes hydrothermal resources only (hot water and steam).  
<sup>3</sup> Includes projections for energy crops after 2010.  
<sup>4</sup> Grid connected generation only.  
 Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO99. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
 Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 85. Renewable Energy Generation by Fuel (1 of 2)**  
**Western Systems Coordinating Council / Northwest Power Pool Area**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Electricity Generators (excluding cogenerators) 1/</b>																							
<b>Generating Capability (gigawatts)</b>																							
Conventional Hydropower	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.64	35.62	35.62	35.62	35.62	35.62	35.62	35.62	35.62	35.62	35.62	35.62	35.62	0.0%
Geothermal 2/	0.23	0.24	0.24	0.28	0.33	0.37	0.50	0.54	0.61	0.76	0.87	1.01	1.13	1.30	1.43	1.57	1.69	1.82	1.94	2.07	2.19	12.0%	
Municipal Solid Waste	0.09	0.09	0.09	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	0.10	0.10	0.10	0.10	0.10	0.10	0.5%
Wood and Other Biomass 3/	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	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.1%
Solar Thermal 4/	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	0.03	0.03	0.03	0.03	0.03	0.04	0.04	0.04	0.04	N/A
Solar Photovoltaic 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	0.04	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.07	0.08	N/A
Wind	0.03	0.32	0.32	0.43	0.44	0.55	0.56	0.67	0.68	0.80	0.81	0.94	0.96	1.10	1.12	1.14	1.14	1.14	1.14	1.14	1.14	1.14	21.0%
<b>Total</b>	<b>36.10</b>	<b>36.41</b>	<b>36.41</b>	<b>36.58</b>	<b>36.65</b>	<b>36.80</b>	<b>36.94</b>	<b>37.10</b>	<b>37.19</b>	<b>37.47</b>	<b>37.57</b>	<b>37.86</b>	<b>37.99</b>	<b>38.32</b>	<b>38.47</b>	<b>38.63</b>	<b>38.77</b>	<b>38.90</b>	<b>39.03</b>	<b>39.16</b>	<b>39.28</b>	<b>0.4%</b>	
<b>Electricity Generation (billion kilowatt-hours)</b>																							
Conventional Hydropower	139.98	115.09	146.52	154.36	154.31	154.22	154.16	154.11	154.03	153.97	153.79	153.69	153.61	153.55	153.49	153.43	153.39	153.29	153.22	153.17	153.11	153.11	0.4%
Geothermal 2/	1.51	1.57	1.61	1.84	2.22	2.57	3.72	3.96	4.66	5.74	6.75	7.86	8.91	10.20	11.45	12.55	13.61	14.65	15.69	16.72	17.71	13.1%	
Municipal Solid Waste	0.67	0.67	0.67	0.67	0.67	0.72	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	0.74	0.74	0.5%
Wood and Other Biomass 3/	0.59	0.65	0.69	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	0.57	0.57	0.57	0.57	0.57	-0.2%
Solar Thermal 4/	0.00	0.00	0.00	0.01	0.02	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.07	0.09	0.10	0.10	0.11	0.11	0.12	0.12	0.13	N/A	
Solar Photovoltaic	0.00	0.00	0.00	0.01	0.03	0.03	0.04	0.04	0.05	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	0.16	0.17	0.18	N/A	
Wind	0.09	0.64	0.91	1.12	1.24	1.45	1.56	1.76	1.91	2.14	2.28	2.53	2.66	2.95	3.12	3.17	3.19	3.19	3.19	3.19	3.19	19.6%	
<b>Total</b>	<b>142.84</b>	<b>116.61</b>	<b>150.41</b>	<b>156.68</b>	<b>159.06</b>	<b>159.58</b>	<b>160.92</b>	<b>161.24</b>	<b>162.00</b>	<b>163.27</b>	<b>164.27</b>	<b>165.55</b>	<b>166.69</b>	<b>168.24</b>	<b>169.57</b>	<b>170.69</b>	<b>171.75</b>	<b>172.70</b>	<b>173.68</b>	<b>174.69</b>	<b>175.63</b>	<b>1.0%</b>	
<b>Energy Consumption (quadrillion Btu)</b>																							
Conventional Hydropower	1.44	1.18	1.51	1.59	1.59	1.59	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.58	1.57	1.57	0.4%	
Geothermal 2/	0.03	0.03	0.03	0.04	0.05	0.07	0.10	0.11	0.13	0.17	0.20	0.24	0.27	0.31	0.35	0.39	0.42	0.46	0.49	0.52	0.55	15.4%	
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.5%	
Wood and Other Biomass 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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-0.1%	
Solar Thermal 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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A	
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	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	0.03	0.03	0.03	0.03	0.03	19.6%	
<b>Total</b>	<b>1.49</b>	<b>1.24</b>	<b>1.57</b>	<b>1.66</b>	<b>1.67</b>	<b>1.68</b>	<b>1.72</b>	<b>1.73</b>	<b>1.76</b>	<b>1.79</b>	<b>1.82</b>	<b>1.86</b>	<b>1.90</b>	<b>1.94</b>	<b>1.98</b>	<b>2.02</b>	<b>2.05</b>	<b>2.08</b>	<b>2.12</b>	<b>2.15</b>	<b>2.18</b>	<b>1.9%</b>	
<b>Cogenerators 5/</b>																							
<b>Generating Capability (gigawatts)</b>																							
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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Wood and Other Biomass 3/	0.53	0.53	0.53	0.55	0.57	0.59	0.61	0.64	0.64	0.65	0.66	0.69	0.71	0.73	0.74	0.76	0.77	0.79	0.81	0.82	0.83	2.3%	
<b>Total</b>	<b>0.56</b>	<b>0.56</b>	<b>0.56</b>	<b>0.58</b>	<b>0.60</b>	<b>0.62</b>	<b>0.64</b>	<b>0.67</b>	<b>0.67</b>	<b>0.68</b>	<b>0.69</b>	<b>0.72</b>	<b>0.74</b>	<b>0.75</b>	<b>0.77</b>	<b>0.78</b>	<b>0.80</b>	<b>0.82</b>	<b>0.84</b>	<b>0.85</b>	<b>0.86</b>	<b>2.3%</b>	

**Table 85. Renewable Energy Generation by Fuel (2 of 2)**  
**Western Systems Coordinating Council / Northwest Power Pool Area**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste <sup>1</sup>	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	0.13	0.13	0.13	0.13	0.13	0.13	0.13	0.0%
Wood and Other Biomass <sup>3/</sup>	2.01	2.01	2.01	2.10	2.17	2.26	2.35	2.46	2.46	2.51	2.55	2.65	2.73	2.79	2.86	2.92	2.99	3.06	3.12	3.17	3.22	2.4%
<b>Total</b>	<b>2.14</b>	<b>2.14</b>	<b>2.14</b>	<b>2.23</b>	<b>2.30</b>	<b>2.39</b>	<b>2.48</b>	<b>2.59</b>	<b>2.59</b>	<b>2.64</b>	<b>2.68</b>	<b>2.78</b>	<b>2.86</b>	<b>2.90</b>	<b>2.99</b>	<b>3.05</b>	<b>3.12</b>	<b>3.19</b>	<b>3.25</b>	<b>3.30</b>	<b>3.35</b>	<b>2.3%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3/</sup>	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	1.5%
<b>Total</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>1.7%</b>
<b>Other End-Use Generators<sup>6/</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	17.6%
<b>Total</b>	<b>0.03</b>	<b>0.03</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.05</b>	<b>0.06</b>	<b>0.06</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.07</b>	<b>0.08</b>	<b>0.08</b>	<b>4.2%</b>
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	0.21	0.18	0.22	0.23	0.23	0.23	0.23	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	0.4%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.03	0.04	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	17.6%
<b>Total</b>	<b>0.21</b>	<b>0.18</b>	<b>0.22</b>	<b>0.23</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.25</b>	<b>0.26</b>	<b>0.26</b>	<b>0.27</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>0.28</b>	<b>1.5%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.4%</b>

<sup>1</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
<sup>2</sup> Includes hydrothermal resources only (hot water and steam).  
<sup>3</sup> Includes projections for energy crops after 2010.  
<sup>4</sup> Grid connected generation only.  
 Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
 Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEO2001 National Energy Modeling System run aeo2002\_d102001b.



**Table 86. Renewable Energy Generation by Fuel (2 of 2)**  
**Western Systems Coordinating Council / Rocky Mountain Power Area, Arizona, New Mexico, and Southern Nevada**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste <sup>1/</sup>	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02%
Wood and Other Biomass <sup>3/</sup>	0.12	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.19	0.20	0.20	0.20	2.6%
<b>Total</b>	<b>0.13</b>	<b>0.13</b>	<b>0.13</b>	<b>0.14</b>	<b>0.14</b>	<b>0.15</b>	<b>0.15</b>	<b>0.16</b>	<b>0.16</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>	<b>0.20</b>	<b>0.21</b>	<b>0.21</b>	<b>0.21</b>	<b>2.5%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.6%
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>2.2%</b>
<b>Other End-Use Generators<sup>6/</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.6%
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>9.1%</b>
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.6%
<b>Total</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>4.9%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2/</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>

<sup>1/</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
<sup>2/</sup> Includes hydrothermal resources only (hot water and steam).  
<sup>3/</sup> Includes projections for energy crops after 2010.  
<sup>4/</sup> Grid connected generation only.  
 Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
 Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 87. Renewable Energy Generation by Fuel (1 of 2)**  
**Western Systems Coordinating Council / California**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generators (excluding cogenerators) 1/</b>																						
<b>Generating Capability (gigawatts)</b>																						
Conventional Hydropower	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	11.09	0.0%
Geothermal 2/	2.29	2.29	2.33	2.38	2.31	2.35	2.35	2.35	2.37	2.37	2.37	2.37	2.47	2.55	2.60	2.62	2.65	2.67	2.70	2.75	2.80	1.0%
Municipal Solid Waste	0.32	0.38	0.40	0.42	0.43	0.45	0.45	0.45	0.45	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	0.55	2.7%
Wood and Other Biomass 3/	0.36	0.37	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	0.38	0.38	0.38	0.38	0.38	0.3%
Solar Thermal 4/	0.33	0.33	0.33	0.33	0.33	0.33	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.34	0.35	0.35	0.35	0.35	0.35	0.35	0.35	0.3%
Solar Photovoltaic 4/	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.04	0.05	0.06	0.06	0.07	0.07	0.08	16.2%
Wind	1.44	1.44	2.18	2.46	2.74	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.02	3.6%
<b>Total</b>	<b>15.84</b>	<b>15.91</b>	<b>16.72</b>	<b>17.07</b>	<b>17.30</b>	<b>17.64</b>	<b>17.64</b>	<b>17.65</b>	<b>17.68</b>	<b>17.78</b>	<b>17.78</b>	<b>17.79</b>	<b>17.90</b>	<b>17.98</b>	<b>18.03</b>	<b>18.07</b>	<b>18.10</b>	<b>18.13</b>	<b>18.16</b>	<b>18.22</b>	<b>18.28</b>	<b>0.7%</b>
<b>Electricity Generation (billion kilowatt-hours)</b>																						
Conventional Hydropower	30.37	32.38	41.22	43.43	43.41	43.40	43.38	43.36	43.34	43.32	43.31	43.29	43.27	43.25	43.24	43.22	43.20	43.18	43.16	43.15	43.13	0.5%
Geothermal 2/	8.63	8.98	9.20	9.54	9.55	9.89	10.00	10.00	10.21	10.21	10.21	10.21	11.00	11.62	12.04	12.25	12.46	12.66	12.87	13.29	13.70	2.2%
Municipal Solid Waste	2.29	2.67	2.81	2.95	3.06	3.17	3.20	3.20	3.20	3.98	3.99	3.99	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	2.8%
Wood and Other Biomass 3/	2.08	2.15	2.23	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	2.19	2.19	2.19	2.19	0.2%
Solar Thermal	0.87	0.87	0.87	0.87	0.87	0.87	0.88	0.89	0.89	0.90	0.90	0.90	0.91	0.91	0.92	0.92	0.93	0.93	0.94	0.94	0.95	0.4%
Solar Photovoltaic	0.00	0.01	0.02	0.03	0.03	0.04	0.05	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.14	0.16	0.17	0.19	0.20	0.22	20.9%
Wind	3.26	3.36	4.64	5.65	6.63	7.41	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	7.67	4.4%
<b>Total</b>	<b>66.71</b>	<b>69.21</b>	<b>69.99</b>	<b>64.84</b>	<b>65.75</b>	<b>66.97</b>	<b>67.37</b>	<b>67.37</b>	<b>67.56</b>	<b>68.33</b>	<b>68.34</b>	<b>68.34</b>	<b>69.13</b>	<b>69.79</b>	<b>70.18</b>	<b>70.38</b>	<b>70.60</b>	<b>70.81</b>	<b>71.01</b>	<b>71.44</b>	<b>71.86</b>	<b>1.2%</b>
<b>Energy Consumption (quadrillion Btu)</b>																						
Conventional Hydropower	0.40	0.33	0.42	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.44	0.5%
Geothermal 2/	0.19	0.20	0.26	0.24	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.26	0.28	0.30	0.30	0.31	0.31	0.32	0.33	0.34	3.0%
Municipal Solid Waste	0.03	0.04	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	0.05	0.05	0.05	0.05	0.05	2.9%
Wood and Other Biomass 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	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.2%
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.4%
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.9%
Wind	0.03	0.03	0.05	0.06	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	0.08	0.08	0.08	0.08	4.4%
<b>Total</b>	<b>0.70</b>	<b>0.64</b>	<b>0.75</b>	<b>0.80</b>	<b>0.81</b>	<b>0.84</b>	<b>0.84</b>	<b>0.84</b>	<b>0.85</b>	<b>0.86</b>	<b>0.86</b>	<b>0.86</b>	<b>0.88</b>	<b>0.90</b>	<b>0.92</b>	<b>0.92</b>	<b>0.93</b>	<b>0.93</b>	<b>0.94</b>	<b>0.95</b>	<b>0.96</b>	<b>1.6%</b>
<b>Cogenerators 5/</b>																						
<b>Generating Capability (gigawatts)</b>																						
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Wood and Other Biomass 3/	0.16	0.16	0.16	0.17	0.17	0.18	0.19	0.19	0.19	0.19	0.20	0.20	0.21	0.21	0.22	0.23	0.23	0.24	0.24	0.24	0.25	2.1%
<b>Total</b>	<b>0.17</b>	<b>0.17</b>	<b>0.17</b>	<b>0.18</b>	<b>0.18</b>	<b>0.19</b>	<b>0.19</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.21</b>	<b>0.21</b>	<b>0.22</b>	<b>0.22</b>	<b>0.23</b>	<b>0.23</b>	<b>0.24</b>	<b>0.24</b>	<b>0.25</b>	<b>0.25</b>	<b>0.26</b>	<b>2.0%</b>



**Table 87. Renewable Energy Generation by Fuel (2 of 2)**  
**Western Systems Coordinating Council / California**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste <sup>1</sup>	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	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06
Wood and Other Biomass <sup>2</sup>	1.03	1.03	1.03	1.07	1.11	1.15	1.19	1.23	1.25	1.28	1.32	1.36	1.39	1.42	1.45	1.49	1.52	1.55	1.57	1.60	1.64	2.2%
<b>Total</b>	<b>1.09</b>	<b>1.09</b>	<b>1.09</b>	<b>1.13</b>	<b>1.17</b>	<b>1.21</b>	<b>1.25</b>	<b>1.29</b>	<b>1.29</b>	<b>1.31</b>	<b>1.34</b>	<b>1.39</b>	<b>1.42</b>	<b>1.46</b>	<b>1.49</b>	<b>1.52</b>	<b>1.55</b>	<b>1.59</b>	<b>1.61</b>	<b>1.64</b>	<b>1.66</b>	<b>2.1%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Wood and Other Biomass <sup>3</sup>	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.5%
<b>Total</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>1.4%</b>
<b>Other End-Use Generators<sup>4</sup></b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Geothermal <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	17.6%
<b>Total</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>0.02</b>	<b>3.4%</b>
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.3%
Geothermal <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	17.6%
<b>Total</b>	<b>0.05</b>	<b>0.04</b>	<b>0.05</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.06</b>	<b>0.07</b>	<b>0.07</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>0.08</b>	<b>2.4%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Geothermal <sup>2</sup>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.0%</b>

<sup>1</sup> Includes grid-connected utilities and nonutilities other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
<sup>2</sup> Includes hydrothermal resources only (hot water and steam).  
<sup>3</sup> Includes projections for energy crops after 2010.  
<sup>4</sup> Grid connected generation only.  
 Note: Totals may not equal sum of components due to independent rounding. Net summer capability has been estimated for nonutility generators for AEO1999. Net summer capability is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
 Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0349(98) (Washington, DC, July 2000). Projections: EIA, AEO2001 National Energy Modeling System run aeo2002\_d102001b.

**Table 88. Renewable Energy Capacity, Generation, and Consumption (1 of 2)**  
**United States**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Electricity Generators (excluding cogenerators) 1/</b>																							
<b>Generating Capacity (gigawatts)</b>																							
Conventional Hydropower	79.29	79.36	79.51	79.63	79.71	79.78	79.92	79.92	79.92	79.92	79.90	79.90	79.90	79.90	79.90	79.90	79.90	79.90	79.90	79.90	79.90	79.90	0.0%
Geothermal 2/	2.85	2.86	2.91	2.99	2.97	3.05	3.18	3.22	3.32	3.46	3.57	3.72	3.93	4.18	4.37	4.52	4.67	4.82	4.97	5.15	5.33	3.2%	
Municipal Solid Waste	2.84	3.15	3.24	3.35	3.41	3.50	3.55	3.59	3.65	3.79	3.88	3.95	3.99	4.04	4.08	4.18	4.23	4.25	4.26	4.28	4.30	2.1%	
Wood and Other Biomass 3/	1.39	1.41	1.51	1.54	1.59	1.61	1.64	1.66	1.68	1.71	1.73	1.74	1.75	1.76	1.76	1.82	1.88	1.88	1.88	1.88	1.88	1.88	1.8%
Solar Thermal 4/	0.33	0.33	0.33	0.34	0.34	0.34	0.34	0.35	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	1.0%	
Solar Photovoltaic 4/	0.01	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.09	0.09	0.11	0.12	0.14	0.15	0.17	0.19	0.20	0.22	0.24	0.26	0.27	19.6%	
Wind	2.42	4.29	5.26	5.82	6.27	6.82	6.96	7.20	7.33	7.57	7.65	7.85	7.91	8.09	8.31	8.46	8.67	8.83	8.87	8.98	9.06	6.6%	
<b>Total</b>	<b>88.13</b>	<b>91.43</b>	<b>92.78</b>	<b>93.70</b>	<b>94.33</b>	<b>95.16</b>	<b>95.65</b>	<b>96.01</b>	<b>96.34</b>	<b>96.90</b>	<b>97.19</b>	<b>97.64</b>	<b>97.99</b>	<b>98.46</b>	<b>98.97</b>	<b>99.46</b>	<b>99.94</b>	<b>100.26</b>	<b>100.52</b>	<b>100.84</b>	<b>101.22</b>	<b>0.6%</b>	
<b>Electricity Generation (billion kilowatt-hours)</b>																							
Conventional Hydropower	272.33	273.99	285.38	301.03	301.17	301.26	301.68	301.60	301.48	301.35	301.14	300.98	300.86	300.76	300.64	300.54	300.47	300.31	300.19	300.11	300.00	0.5%	
Geothermal 2/	13.52	13.73	14.00	14.58	14.59	15.67	16.95	17.18	18.09	19.18	20.20	21.32	23.16	25.11	26.75	28.06	29.34	30.59	31.84	33.30	34.71	4.8%	
Municipal Solid Waste	20.15	21.81	22.96	23.72	24.26	24.90	25.27	25.58	26.03	27.11	27.78	28.32	28.63	28.94	29.27	30.05	30.35	30.55	30.69	30.83	30.98	2.2%	
Wood and Other Biomass 3/	8.37	9.61	11.08	12.31	14.34	14.96	14.00	14.35	15.20	15.99	20.86	20.30	20.16	19.18	17.46	18.84	14.77	14.79	14.76	14.74	15.32	3.1%	
Solar Thermal 4/	0.87	0.87	0.87	0.88	0.89	0.90	0.91	0.92	0.94	0.95	0.96	0.98	1.00	1.02	1.04	1.05	1.06	1.08	1.09	1.10	1.12	1.3%	
Solar Photovoltaic	0.01	0.03	0.04	0.07	0.09	0.11	0.14	0.16	0.19	0.22	0.26	0.29	0.33	0.37	0.41	0.46	0.50	0.55	0.59	0.63	0.68	22.8%	
Wind	5.30	8.64	12.05	13.96	15.30	16.74	17.49	18.05	18.52	19.09	19.45	19.98	20.28	20.68	21.50	21.95	22.71	23.28	23.40	23.79	24.07	7.9%	
<b>Total</b>	<b>320.54</b>	<b>278.67</b>	<b>348.36</b>	<b>366.54</b>	<b>371.04</b>	<b>374.55</b>	<b>376.41</b>	<b>377.65</b>	<b>380.44</b>	<b>383.89</b>	<b>390.65</b>	<b>392.17</b>	<b>394.42</b>	<b>398.07</b>	<b>397.08</b>	<b>400.95</b>	<b>399.20</b>	<b>401.12</b>	<b>402.56</b>	<b>404.52</b>	<b>406.87</b>	<b>1.2%</b>	
<b>Energy Consumption (quadrillion Btu)</b>																							
Conventional Hydropower	2.80	2.30	2.93	3.09	3.10	3.10	3.10	3.10	3.10	3.10	3.10	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09	0.5%	
Geothermal 2/	0.28	0.28	0.30	0.32	0.33	0.36	0.40	0.41	0.44	0.47	0.50	0.54	0.60	0.66	0.71	0.75	0.78	0.83	0.87	0.92	0.96	6.3%	
Municipal Solid Waste	0.28	0.30	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.37	0.38	0.39	0.39	0.40	0.41	0.42	0.42	0.42	0.42	0.42	0.42	2.3%	
Wood and Other Biomass 3/	0.11	0.12	0.14	0.16	0.18	0.18	0.18	0.18	0.19	0.20	0.25	0.24	0.24	0.23	0.21	0.23	0.19	0.19	0.19	0.19	0.19	2.7%	
Solar Thermal 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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	1.3%	
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	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	0.01	0.01	22.8%	
Wind	0.05	0.09	0.12	0.14	0.16	0.17	0.18	0.19	0.19	0.20	0.20	0.21	0.21	0.21	0.21	0.22	0.23	0.24	0.24	0.24	0.25	7.9%	
<b>Total</b>	<b>3.53</b>	<b>3.11</b>	<b>3.82</b>	<b>4.05</b>	<b>4.11</b>	<b>4.16</b>	<b>4.21</b>	<b>4.23</b>	<b>4.28</b>	<b>4.34</b>	<b>4.44</b>	<b>4.48</b>	<b>4.54</b>	<b>4.60</b>	<b>4.65</b>	<b>4.72</b>	<b>4.73</b>	<b>4.78</b>	<b>4.82</b>	<b>4.87</b>	<b>4.92</b>	<b>1.7%</b>	
<b>Cogenerators 5/</b>																							
<b>Generating Capacity (gigawatts)</b>																							
Municipal Solid Waste	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	0.51	0.51	0.51	0.51	0.51	0.51	0.51	0.0%	
Wood and Other Biomass 3/	5.26	5.26	5.26	5.49	5.88	5.92	6.15	6.37	6.38	6.51	6.64	6.90	7.10	7.28	7.45	7.62	7.81	7.98	8.15	8.29	8.43	2.4%	
<b>Total</b>	<b>5.77</b>	<b>5.77</b>	<b>5.77</b>	<b>6.00</b>	<b>6.19</b>	<b>6.43</b>	<b>6.66</b>	<b>6.88</b>	<b>6.89</b>	<b>7.01</b>	<b>7.15</b>	<b>7.41</b>	<b>7.61</b>	<b>7.79</b>	<b>7.96</b>	<b>8.13</b>	<b>8.32</b>	<b>8.49</b>	<b>8.66</b>	<b>8.80</b>	<b>8.94</b>	<b>2.2%</b>	

**Table 88. Renewable Energy Capacity, Generation, and Consumption (2 of 2)**  
**United States**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Municipal Solid Waste	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	3.29	0.0%
Wood and Other Biomass 3/	29.63	29.63	29.63	31.06	32.23	33.72	35.10	36.50	37.24	38.04	39.62	40.87	41.87	43.02	44.04	45.19	46.26	47.26	48.15	48.99	52.28	2.5%
<b>Total</b>	<b>32.93</b>	<b>32.93</b>	<b>32.93</b>	<b>34.36</b>	<b>35.53</b>	<b>37.02</b>	<b>38.40</b>	<b>39.79</b>	<b>39.79</b>	<b>40.54</b>	<b>41.34</b>	<b>42.91</b>	<b>44.16</b>	<b>45.26</b>	<b>46.31</b>	<b>47.33</b>	<b>48.48</b>	<b>49.56</b>	<b>50.55</b>	<b>51.44</b>	<b>52.28</b>	<b>2.3%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.0%
Wood and Other Biomass 3/	0.16	0.16	0.16	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.21	0.22	0.22	0.23	0.23	0.24	0.24	0.24	0.25	2.4%
<b>Total</b>	<b>0.20</b>	<b>0.20</b>	<b>0.20</b>	<b>0.21</b>	<b>0.22</b>	<b>0.22</b>	<b>0.23</b>	<b>0.24</b>	<b>0.24</b>	<b>0.24</b>	<b>0.25</b>	<b>0.25</b>	<b>0.26</b>	<b>0.26</b>	<b>0.27</b>	<b>0.27</b>	<b>0.28</b>	<b>0.28</b>	<b>0.29</b>	<b>0.29</b>	<b>0.29</b>	<b>1.9%</b>
<b>Other End-Use Generators 6/</b>																						
<b>Generating Capability</b>																						
(gigawatts)																						
Conventional Hydropower	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.02	0.03	0.05	0.06	0.08	0.11	0.15	0.19	0.24	0.31	0.39	0.39	0.40	0.41	0.41	0.42	0.43	0.44	0.44	0.45	0.46	17.6%
<b>Total</b>	<b>0.99</b>	<b>1.01</b>	<b>1.02</b>	<b>1.04</b>	<b>1.06</b>	<b>1.09</b>	<b>1.13</b>	<b>1.17</b>	<b>1.22</b>	<b>1.29</b>	<b>1.36</b>	<b>1.37</b>	<b>1.38</b>	<b>1.38</b>	<b>1.39</b>	<b>1.40</b>	<b>1.41</b>	<b>1.41</b>	<b>1.42</b>	<b>1.43</b>	<b>1.44</b>	<b>1.9%</b>
<b>Electricity Generation</b>																						
(billion kilowatthours)																						
Conventional Hydropower	3.98	3.97	4.14	4.33	4.33	4.33	4.33	4.33	4.32	4.32	4.32	4.32	4.32	4.32	4.32	4.31	4.31	4.31	4.31	4.31	4.31	0.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.04	0.06	0.10	0.13	0.18	0.23	0.32	0.40	0.51	0.65	0.81	0.83	0.85	0.86	0.88	0.89	0.91	0.93	0.94	0.96	0.98	17.6%
<b>Total</b>	<b>4.02</b>	<b>3.43</b>	<b>4.24</b>	<b>4.47</b>	<b>4.51</b>	<b>4.56</b>	<b>4.64</b>	<b>4.73</b>	<b>4.84</b>	<b>4.98</b>	<b>5.14</b>	<b>5.16</b>	<b>5.16</b>	<b>5.18</b>	<b>5.19</b>	<b>5.21</b>	<b>5.22</b>	<b>5.24</b>	<b>5.25</b>	<b>5.27</b>	<b>5.29</b>	<b>1.4%</b>
<b>Energy Consumption</b>																						
(quadrillion Btu)																						
Conventional Hydropower	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	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.4%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Solar Photovoltaic	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	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>0.04</b>	<b>0.04</b>	<b>0.04</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.05</b>	<b>0.4%</b>

1/ Includes grid-connected utilities and nonutilites other than cogenerators. These nonutility facilities include small power producers, exempt wholesale generators and generators at industrial and commercial facilities which do not produce steam for other uses.  
 2/ Includes hydrothermal resources only (hot water and steam).  
 3/ Includes projections for energy crops after 2010.  
 4/ Grid connected generation only.  
 Note: Totals may not equal sum of components due to independent rounding. Net summer capacity has been estimated for nonutility generators for AEO1999. Net summer capacity is used to be consistent with electric utility capacity estimates. Data for electric utility capacity data are the most recently available data as of August 31, 1997. Additional retirements are also determined on the basis of the size and age of the units. Therefore, capacity estimates may differ from other Energy Information Administration sources.  
 Sources: 1998 and 1999 generation: EIA, Annual Energy Review 1999, DOE/EIA-0249(98) (Washington, DC, July 2000). Projections: EIA, AEC2001 National Energy Modeling System run aec2002\_d102001b.

**Table 89. Domestic Refinery Distillation Base Capacity, Expansion, and Utilization (1 of 1)**  
(Million Barrels per Day)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>PAD District I</b>																						
Base Capacity	1.7	1.7	1.7	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	1.5	1.5	1.5	1.5	-0.5%
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	0.0	0.0	0.1	0.1	0.1	0.2	0.2	N/A
Total Capacity	1.7	1.7	1.7	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	1.6	1.7	1.7	1.7	1.7	0.2%
Utilization	92.0	90.0	92.0	93.0	93.0	93.0	92.8	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	93.0	92.9	92.9	92.9	92.9	0.0%
<b>PAD Districts II to IV</b>																						
Base Capacity	11.7	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	11.8	0.1%
Capacity Additions	0.1	0.0	0.0	0.2	0.7	1.0	1.1	1.2	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	N/A
Total Capacity	11.8	11.8	11.8	12.2	12.5	12.9	13.0	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	13.1	0.6%
Utilization	94.0	95.8	94.0	93.1	93.0	92.6	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	93.3	93.3	0.0%
<b>PAD District V</b>																						
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	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	3.1	3.1	3.1	3.1	3.1	3.2	3.2	0.2%
Utilization	88.0	89.0	88.0	73.9	75.6	77.7	76.9	80.4	81.2	83.1	84.4	87.8	89.1	91.3	92.9	93.0	93.0	93.0	93.0	93.0	93.0	0.3%
<b>United States</b>																						
Base Capacity	16.5	16.6	16.6	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	0.0%
Capacity Additions	0.1	0.0	0.0	0.3	0.7	1.0	1.1	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.5	1.6	1.6	N/A
Total Capacity	16.6	16.6	16.6	16.8	17.2	17.6	17.7	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.9	17.9	18.0	18.1	18.2	0.5%
Utilization	93.0	94.0	93.0	86.5	88.8	90.0	90.3	91.0	91.1	91.5	91.7	92.3	92.5	92.9	93.2	93.2	93.2	93.2	93.2	93.2	93.2	0.0%

PAD = Petroleum Administration for Defense.

N/A = Not applicable.

Note: Base capacity is for the beginning of the year.

Source: 2000: Energy Information Administration (EIA), Petroleum Supply Annual 2000, DOE/EIA-0340(2000)/1 (Washington, DC, June 2001). Projections: EIA, AE02002

National Energy Modeling System run aec2002.d102001b.

**Table 90. Components of Selected Petroleum Product Prices (1 of 1)**  
(2000 Dollars per Gallon)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Diesel</b>																						
End-User Price	1.50	1.45	1.36	1.28	1.29	1.28	1.31	1.37	1.38	1.39	1.41	1.41	1.41	1.41	1.40	1.40	1.40	1.39	1.39	1.38	1.38	-0.4%
Federal Taxes	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	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.14	-2.6%
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	0.21	0.21	0.21	0.21	0.21	0.21	0.21	0.0%
Distribution Costs	0.13	0.15	0.15	0.15	0.15	0.15	0.16	0.16	0.16	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.0%
Wholesale Price	0.91	0.85	0.77	0.69	0.70	0.70	0.72	0.79	0.81	0.82	0.85	0.86	0.86	0.86	0.86	0.87	0.87	0.87	0.87	0.87	0.88	-0.2%
<b>Motor Gasoline</b>																						
End-User Price	1.53	1.52	1.37	1.35	1.35	1.37	1.39	1.39	1.39	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	-0.4%
Federal Taxes	0.18	0.18	0.18	0.17	0.17	0.16	0.16	0.15	0.15	0.15	0.14	0.14	0.14	0.13	0.13	0.12	0.12	0.12	0.11	0.11	0.11	2.7%
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	0.23	0.23	0.23	0.23	0.23	0.23	0.23	0.0%
Distribution Costs	0.13	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	0.14	0.14	0.14	0.14	0.14	0.14	0.4%
Wholesale Price	0.98	0.97	0.82	0.82	0.82	0.84	0.87	0.87	0.88	0.88	0.88	0.89	0.90	0.90	0.90	0.91	0.91	0.91	0.91	0.92	0.92	-0.3%
<b>Jet Fuel</b>																						
End-User Price	0.99	0.80	0.77	0.74	0.74	0.75	0.74	0.76	0.76	0.78	0.79	0.81	0.81	0.82	0.83	0.85	0.86	0.86	0.86	0.86	0.86	-0.7%
Federal Taxes	0.04	0.04	0.04	0.04	0.04	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	0.03	0.03	-2.6%
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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.0%
Distribution Costs	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	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	N/A
Wholesale Price	0.93	0.75	0.71	0.68	0.69	0.70	0.69	0.71	0.72	0.74	0.75	0.76	0.77	0.78	0.79	0.81	0.82	0.82	0.82	0.82	0.82	-0.6%
<b>Residential Distillate Fuel/Heating Oil</b>																						
End-User Price	1.31	1.25	1.15	1.06	1.06	1.07	1.06	1.06	1.08	1.09	1.10	1.10	1.11	1.13	1.16	1.17	1.17	1.18	1.18	1.18	1.18	-0.5%
Distribution Costs	0.41	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	0.40	0.40	0.40	0.40	0.40	0.40	-0.1%
Wholesale Price	0.90	0.85	0.75	0.65	0.66	0.66	0.66	0.67	0.67	0.69	0.71	0.71	0.72	0.74	0.77	0.78	0.79	0.79	0.79	0.79	0.80	-0.6%
<b>World Oil Price</b>	0.66	0.54	0.50	0.53	0.54	0.54	0.54	0.55	0.55	0.55	0.56	0.56	0.56	0.57	0.57	0.57	0.57	0.58	0.58	0.58	0.58	-0.6%

1/ Includes a 2 cent average local tax.

NA = Not applicable.

Sources: 2000 distribution costs and wholesale prices: estimated based on Energy Information Administration (EIA) Form EIA-785A, "Refiners/Gas Plant Operators' Monthly Petroleum Product Sales Report" and EIA-782B, "Wholesaler/Retailer Monthly Petroleum Product Sales Report"; 2000 diesel and gasoline taxes: Federal Highway Administration, Table 16F-121T, <http://www.fhwa.dot.gov/ohim/mh/mhpage.htm>, March 2000. 2000 jet fuel taxes: EIA, Office of Oil and Gas. 2000 end-user prices: estimated as the sum of the components.

Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.

**Table 91. Lower 48 Crude Oil Production and Wellhead Prices by Supply Region (1 of 1)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020	
Production 1/																							
(million barrels per day)																							
<b>Lower 48 Total</b>	4.85	4.87	4.88	4.77	4.65	4.58	4.53	4.54	4.48	4.44	4.38	4.34	4.31	4.44	4.57	4.65	4.68	4.67	4.65	4.57	4.53	-0.3%	
<b>Lower 48 Onshore</b>																							
Northeast	0.10	0.09	0.09	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.07	0.08	0.08	-1.0%	
Gulf Coast	0.62	0.60	0.58	0.53	0.49	0.45	0.42	0.39	0.36	0.34	0.32	0.30	0.29	0.28	0.27	0.26	0.25	0.24	0.23	0.22	0.22	-5.1%	
Midcontinent	0.33	0.33	0.32	0.33	0.32	0.31	0.30	0.30	0.29	0.29	0.29	0.28	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29	-0.7%	
Southwest	1.30	1.07	1.04	1.07	1.03	1.00	0.98	0.95	0.93	0.92	0.91	0.90	0.89	0.89	0.89	0.89	0.89	0.90	0.90	0.90	0.91	-1.0%	
Rocky Mountain	0.40	0.38	0.38	0.42	0.40	0.38	0.36	0.35	0.34	0.33	0.32	0.32	0.32	0.32	0.32	0.33	0.34	0.35	0.36	0.37	0.39	-0.1%	
West Coast	0.69	0.67	0.66	0.69	0.69	0.70	0.71	0.72	0.73	0.74	0.75	0.77	0.78	0.79	0.80	0.82	0.82	0.83	0.83	0.83	0.82	0.8%	
<b>Lower 48 Offshore</b>																							
Gulf	1.47	1.58	1.70	1.52	1.51	1.54	1.56	1.64	1.64	1.62	1.58	1.56	1.53	1.66	1.77	1.83	1.84	1.81	1.77	1.67	1.61	0.5%	
Pacific	0.15	0.13	0.12	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.17	0.16	0.18	0.18	0.20	0.20	0.21	0.22	2.0%	
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	NA	
<b>Wellhead Prices (2000 dollars per barrel)</b>																							
<b>Lower 48 Average</b>	27.59	22.76	21.22	21.98	22.33	22.28	22.19	22.37	22.43	22.62	22.70	22.89	22.86	22.97	23.06	23.15	23.28	23.42	23.51	23.67	23.79	-0.7%	
<b>Lower 48 Onshore</b>																							
Northeast	28.05	23.13	21.55	22.17	22.62	22.47	22.21	22.43	22.42	22.60	22.70	22.90	22.90	23.00	23.06	23.16	23.34	23.50	23.60	23.82	23.97	-0.6%	
Gulf Coast	28.55	23.54	21.94	22.01	22.39	22.29	22.08	22.27	22.30	22.48	22.60	22.79	22.80	22.90	22.98	23.09	23.26	23.41	23.50	23.69	23.83	-0.9%	
Midcontinent	28.70	23.66	22.05	22.01	22.41	22.31	22.13	22.34	22.34	22.51	22.62	22.81	22.83	22.92	22.98	23.09	23.26	23.42	23.52	23.74	23.89	-0.9%	
Southwest	28.67	23.64	22.02	21.74	22.08	22.06	21.88	22.18	22.21	22.36	22.47	22.67	22.71	22.80	22.86	22.97	23.12	23.28	23.40	23.60	23.75	-0.9%	
Rocky Mountain	27.72	22.86	21.30	22.06	22.45	22.33	22.11	22.30	22.34	22.52	22.63	22.82	22.83	22.93	23.00	23.11	23.28	23.43	23.53	23.72	23.86	-0.7%	
West Coast	24.88	20.52	19.12	20.91	21.00	21.09	21.35	21.44	21.59	21.88	21.87	22.09	21.94	22.00	22.08	22.06	22.14	22.21	22.32	22.42	22.53	-0.5%	
<b>Lower 48 Offshore</b>																							
Gulf	27.72	22.86	21.30	22.89	23.29	23.18	22.96	23.16	23.20	23.38	23.50	23.70	23.71	23.82	23.90	24.01	24.19	24.34	24.44	24.64	24.78	-0.6%	
Pacific	23.58	19.44	18.12	19.36	19.53	19.62	19.86	19.94	20.08	20.35	20.34	20.54	20.40	20.46	20.53	20.52	20.59	20.66	20.76	20.85	20.95	-0.6%	
Atlantic	27.72	22.86	21.30	22.17	22.62	22.47	22.21	22.43	22.42	22.60	22.70	22.90	22.90	23.00	23.06	23.16	23.34	23.50	23.60	23.82	23.97	-0.7%	

1/ Includes lease condensate.

NA = Not applicable.

Note: Supply regions are defined in "Documentation of the Oil and Gas Supply Models," Energy Information Administration (EIA), DOE/EIA-M03(2000) (Washington, DC, January 2000).

Values may not equal sum of components due to independent rounding. Data for 2020 may differ slightly from official EIA data reports due to internal conversion factors within the

AEO2002 National Energy Modeling System.

Sources: 2000: Energy Information Administration (EIA), Office of Integrated Analysis and Forecasting, and Petroleum Supply Annual 2000, DOE/EIA-0340(2000)

(Washington, DC, June 2001). Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102001b.

**Table 92. Lower 48 Natural Gas Production and Wellhead Prices by Supply Region (1 of 1)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020-2020
Div Production (trillion cubic feet) 1/																						
Lower 48 Total	18.85	18.83	19.07	19.72	20.03	20.23	20.75	21.19	21.77	22.27	22.95	23.67	24.20	24.71	25.21	25.75	26.23	26.69	27.17	27.49	27.88	2.0%
Lower 48 Onshore																						
Northeast	0.93	0.91	0.99	1.05	1.09	1.14	1.21	1.28	1.34	1.39	1.46	1.55	1.63	1.71	1.76	1.81	1.84	1.90	1.98	2.08	2.19	4.4%
Gulf Coast	4.81	4.70	4.93	5.07	5.07	5.02	5.06	5.09	5.14	5.24	5.47	5.76	6.03	6.27	6.46	6.65	6.76	6.81	6.80	6.71	6.64	1.6%
Midcontinent	2.58	2.59	2.79	2.86	2.87	2.86	2.88	2.90	2.93	2.96	3.05	3.15	3.24	3.31	3.38	3.47	3.55	3.63	3.71	3.77	3.83	2.0%
Southwest	1.61	1.60	1.59	1.54	1.53	1.55	1.61	1.65	1.72	1.78	1.87	1.95	2.01	2.05	2.09	2.12	2.15	2.18	2.21	2.24	2.28	1.8%
Rocky Mountain	3.08	3.49	3.12	3.35	3.42	3.46	3.63	3.72	3.87	4.04	4.24	4.46	4.60	4.73	4.86	4.97	5.11	5.28	5.46	5.59	5.75	3.2%
West Coast	0.31	0.34	0.32	0.28	0.33	0.33	0.34	0.34	0.35	0.35	0.36	0.36	0.37	0.38	0.38	0.38	0.40	0.40	0.41	0.42	0.44	1.9%
Lower 48 Offshore																						
Gulf	5.28	5.16	5.31	5.51	5.67	5.81	5.97	6.15	6.37	6.45	6.44	6.37	6.25	6.20	6.22	6.29	6.37	6.43	6.53	6.62	6.68	1.2%
Pacific	0.06	0.06	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	0.06	0.06	0.07	0.07	0.07	0.8%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A
Wellhead Prices (2000 dollars per thousand cubic feet)																						
Lower 48 Average	3.60	3.94	1.98	2.37	2.58	2.66	2.70	2.71	2.79	2.81	2.85	2.91	2.97	3.01	3.03	3.07	3.09	3.13	3.17	3.20	3.26	-0.5%
Lower 48 Onshore																						
Northeast	4.17	4.62	2.32	2.65	2.87	2.94	2.96	3.01	3.12	3.16	3.19	3.23	3.27	3.33	3.41	3.49	3.53	3.62	3.61	3.51	3.55	-0.8%
Gulf Coast	3.74	3.83	1.94	2.34	2.58	2.68	2.69	2.73	2.79	2.79	2.80	2.84	2.90	2.95	2.99	3.03	3.08	3.16	3.24	3.30	3.36	-0.5%
Midcontinent	3.56	3.74	1.91	2.40	2.65	2.72	2.73	2.77	2.84	2.85	2.87	2.92	2.98	3.03	3.05	3.08	3.10	3.15	3.20	3.24	3.30	-0.4%
Southwest	3.71	4.17	2.06	2.57	2.73	2.66	2.66	2.68	2.73	2.74	2.76	2.85	2.93	2.99	3.04	3.08	3.11	3.14	3.19	3.22	3.26	-0.7%
Rocky Mountain	3.26	3.98	1.87	2.22	2.48	2.59	2.68	2.62	2.71	2.71	2.70	2.72	2.78	2.86	2.86	2.91	2.92	2.91	2.92	2.96	3.00	-0.4%
West Coast	3.78	4.96	2.55	3.12	3.12	3.03	3.11	3.03	3.12	3.08	3.00	3.00	3.04	3.08	3.14	3.21	3.24	3.25	3.26	3.24	3.28	-0.7%
Lower 48 Offshore																						
Gulf	3.54	3.83	1.88	2.31	2.49	2.59	2.64	2.66	2.72	2.81	2.93	3.04	3.10	3.09	3.09	3.10	3.09	3.14	3.16	3.19	3.26	-0.4%
Pacific	4.26	5.52	2.53	2.60	2.71	2.89	3.37	3.38	3.42	3.32	3.22	3.21	3.26	3.37	3.45	3.52	3.56	3.58	3.57	3.55	3.57	-0.9%
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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	N/A

1/ Marketed production (well) minus extraction losses.

NA = Not applicable.

Note: Supply regions are defined in "Documentation of the Oil and Gas Supply Module," Energy Information Administration, DOE/EIA-M003(2005) (Washington, DC, January 2005).

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

Source: 2000: Energy Information Administration (EIA), Office of Integrated Analysis and Forecasting, and Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001).

Projections: EIA, AEO2002 National Energy Modeling System run aeo2002\_01102001b.

Table 93. Oil and Gas End-of-Year Reserves and Annual Reserve Additions (1 of 1)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020-2020	
Lower 48 Reserves																							
Crude Oil (billion barrels) 1/																							
Lower 48 Total	18.29	17.92	16.81	16.24	15.81	15.44	15.22	14.93	14.65	14.41	14.23	14.09	14.26	14.46	14.57	14.63	14.61	14.57	14.42	14.33	14.45	-1.2%	
Lower 48 Onshore	14.03	13.49	13.02	12.53	12.11	11.74	11.44	11.18	10.97	10.80	10.67	10.58	10.52	10.50	10.50	10.52	10.55	10.55	10.54	10.54	10.55	10.55	-1.4%
Conventional	11.65	11.16	10.63	10.10	9.63	9.21	8.84	8.52	8.24	8.00	7.80	7.63	7.50	7.39	7.31	7.25	7.21	7.19	7.19	7.19	7.19	7.21	-2.4%
Enhanced Oil Recovery	2.38	2.33	2.38	2.43	2.48	2.52	2.59	2.66	2.73	2.80	2.88	2.95	3.02	3.11	3.19	3.26	3.33	3.35	3.36	3.35	3.34	3.34	1.7%
Lower 48 Offshore	4.25	4.03	3.80	3.71	3.70	3.70	3.78	3.75	3.69	3.61	3.55	3.51	3.74	3.95	4.08	4.12	4.07	4.03	3.87	3.79	3.90	-0.4%	
Dry Natural Gas (trillion cubic feet)																							
Lower 48 Total	162.3	166.9	162.4	163.6	165.1	167.2	169.4	171.0	172.2	173.2	174.1	174.9	177.0	178.4	180.3	181.5	183.0	185.2	186.4	187.5	187.8	187.8	0.7%
Lower 48 Onshore	132.2	136.1	131.0	131.1	132.0	133.1	134.4	135.2	136.5	138.1	139.6	141.0	142.6	144.2	145.5	146.7	148.9	150.8	152.4	154.1	155.3	155.3	0.8%
Associated-Dissolved 2/	15.0	15.4	15.0	14.5	14.3	13.7	13.2	12.8	12.5	12.2	12.0	11.8	11.7	11.6	11.5	11.5	11.5	11.5	11.5	11.5	11.5	11.5	-1.3%
Non-Associated	117.2	120.7	116.0	116.6	117.7	119.4	121.2	122.4	124.0	125.9	127.6	129.1	130.9	132.6	134.0	135.2	137.4	139.3	141.0	142.7	143.8	143.8	1.0%
Conventional	94.0	96.5	93.7	93.9	95.8	97.8	99.7	101.9	103.9	106.8	108.4	110.9	112.6	114.3	115.9	117.4	119.9	121.6	123.3	125.0	126.7	126.7	0.2%
Unconventional	53.1	54.0	55.4	55.7	56.9	58.7	60.4	61.5	62.7	64.1	65.2	66.2	68.3	68.3	69.1	69.8	71.8	73.2	74.7	76.3	77.8	77.8	1.5%
Lower 48 Offshore	30.1	30.8	31.4	32.6	33.0	34.0	35.0	35.8	35.8	35.1	34.5	33.9	34.4	34.2	34.7	34.8	34.1	34.4	34.0	33.4	32.5	32.5	0.4%
Associated-Dissolved 2/	7.0	7.1	7.3	7.4	7.2	7.2	7.2	7.4	7.4	7.3	7.2	7.3	7.3	7.2	7.4	7.6	7.4	7.8	7.7	7.6	7.5	7.5	0.4%
Non-Associated	23.2	23.7	24.1	25.2	25.9	26.9	27.8	28.6	28.4	27.7	27.2	26.6	27.1	26.9	27.3	27.1	26.4	26.7	26.3	25.7	25.0	25.0	0.4%
Lower 48 Reserve Additions																							
Crude Oil (billion barrels) 1/																							
Lower 48 Total	1.80	1.01	1.08	1.17	1.26	1.30	1.44	1.36	1.37	1.38	1.41	1.45	1.74	1.81	1.80	1.76	1.69	1.67	1.54	1.58	1.77	-0.1%	
Lower 48 Onshore	1.14	0.61	0.64	0.65	0.67	0.68	0.73	0.75	0.77	0.81	0.83	0.87	0.89	0.93	0.96	0.98	1.00	0.98	0.97	0.98	0.98	0.98	-0.7%
Conventional	1.01	0.44	0.36	0.37	0.39	0.40	0.42	0.43	0.45	0.47	0.49	0.52	0.54	0.56	0.58	0.61	0.63	0.65	0.66	0.68	0.70	-1.8%	
Enhanced Oil Recovery	0.13	0.17	0.29	0.28	0.29	0.28	0.31	0.32	0.32	0.34	0.34	0.35	0.35	0.37	0.37	0.38	0.37	0.35	0.31	0.30	0.29	4.0%	
Lower 48 Offshore	0.65	0.40	0.43	0.52	0.59	0.61	0.71	0.61	0.59	0.57	0.58	0.58	0.85	0.88	0.84	0.77	0.69	0.69	0.57	0.60	0.78	0.9%	
Dry Natural Gas (trillion cubic feet)																							
Lower 48 Total	22.5	23.5	14.5	21.0	21.5	22.3	23.0	22.8	23.0	23.3	23.8	24.5	26.3	26.1	27.1	27.0	27.8	28.9	28.4	28.5	28.2	1.1%	
Lower 48 Onshore	17.1	17.5	8.6	14.2	15.3	15.5	16.0	15.8	16.6	17.4	17.9	18.6	19.5	20.1	20.2	20.6	22.0	22.1	22.2	22.5	22.3	1.3%	
Associated-Dissolved 2/	1.2	2.2	1.4	1.2	1.5	1.1	1.1	1.1	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	0.5%	
Non-Associated	15.8	15.4	7.2	13.0	13.8	14.4	14.9	14.7	15.4	16.2	16.7	17.4	18.3	18.8	18.9	19.3	20.6	20.7	20.8	21.1	20.9	1.4%	
Conventional	9.6	9.6	0.9	7.1	6.8	6.8	7.0	7.3	7.6	8.0	8.5	8.9	9.4	9.9	10.3	10.5	10.6	10.7	10.5	10.7	10.5	0.5%	
Unconventional	6.2	5.8	6.3	5.9	6.9	7.6	7.8	7.4	7.8	8.2	8.3	8.4	8.8	8.9	8.7	8.8	10.0	10.0	10.1	10.4	10.4	2.6%	
Lower 48 Offshore	5.4	5.9	5.9	6.8	6.2	6.8	7.0	7.0	6.4	5.9	5.9	6.2	6.8	6.0	6.8	6.4	5.8	6.8	6.2	6.0	5.9	0.4%	
Associated-Dissolved 2/	1.0	1.3	1.4	1.4	0.9	1.2	1.2	1.3	1.4	1.2	1.2	1.2	1.2	1.2	1.5	1.4	1.3	1.2	1.2	1.1	1.1	0.4%	
Non-Associated	4.4	4.6	4.5	5.4	5.3	5.7	5.8	5.7	5.0	4.6	4.7	4.7	5.6	4.9	5.4	4.9	4.4	5.5	5.0	4.8	4.8	0.4%	

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 roundings.

Source: 2000: Energy Information Administration (EIA), Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.d102010b.



**Table 94. Natural Gas Imports and Exports (1 of 1)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Volumes (trillion cubic feet)																						
Total Net Imports	3.52	3.68	3.74	4.04	4.31	4.50	4.58	4.68	4.72	4.80	4.89	4.97	5.06	5.13	5.20	5.26	5.31	5.36	5.42	5.47	5.51	2.3%
Pipeline																						
Imports from Canada	3.53	3.59	3.61	3.83	4.03	4.16	4.27	4.40	4.46	4.51	4.59	4.68	4.78	4.86	4.92	4.98	5.03	5.07	5.11	5.13	5.14	1.9%
Exports to Canada	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	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.3%
Imports from Mexico	0.01	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	0.04	0.04	0.04	0.04	0.04	0.04	5.8%
Exports to Mexico	0.11	0.09	0.12	0.16	0.21	0.26	0.32	0.38	0.46	0.47	0.48	0.49	0.50	0.51	0.51	0.51	0.50	0.49	0.47	0.45	0.42	7.1%
Liquefied Natural Gas																						
Imports	0.22	0.29	0.37	0.48	0.60	0.70	0.74	0.77	0.82	0.87	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	7.1%
Exports	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	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.0%
Border Prices (2000 dollars per thousand cubic feet)																						
Average Import Price	3.94	4.03	1.97	2.29	2.53	2.68	2.74	2.81	2.85	2.88	2.91	2.96	3.01	3.05	3.09	3.13	3.18	3.22	3.26	3.33	3.40	-0.7%
Pipeline Import Prices																						
From Canada	3.97	4.02	1.96	2.27	2.51	2.67	2.74	2.82	2.85	2.88	2.92	2.96	3.01	3.05	3.10	3.14	3.19	3.23	3.29	3.34	3.41	-0.8%
From Mexico	5.43	3.97	2.06	2.47	2.71	2.80	2.81	2.85	2.92	2.94	3.00	3.06	3.11	3.15	3.19	3.23	3.29	3.36	3.41	3.47	3.47	-2.2%
LNG Price (including regasification)	3.41	4.21	2.09	2.43	2.64	2.73	2.75	2.79	2.84	2.86	2.90	2.96	3.00	3.03	3.06	3.09	3.12	3.17	3.22	3.27	3.33	-0.1%

LNG = Liquefied natural gas.

NA = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 may differ slightly from official EIA data reports due to internal conversion factors within the AEO2002 National Energy Modeling System.

Sources: 2000 import and export volumes and import prices: Energy Information Administration (EIA), Natural Gas Monthly, DOE/EIA-0130(2001/06) (Washington, DC, June 2001).

Other 2000: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2002 National Energy Modeling System run aeo2002-d102001b.

**Table 95. Natural Gas Consumption by End-Use Sector and Census Division (1 of 2)**  
(Trillion Cubic Feet per Year)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Residential</b>																						
New England	0.18	0.18	0.18	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	0.20	0.20	0.20	0.20	0.20	0.68
Middle Atlantic	0.85	0.86	0.88	0.89	0.90	0.89	0.89	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	0.88
East North Central	1.47	1.47	1.54	1.57	1.58	1.57	1.57	1.58	1.59	1.59	1.59	1.60	1.61	1.61	1.62	1.62	1.63	1.64	1.65	1.66	1.67	0.74
West North Central	0.46	0.47	0.48	0.49	0.50	0.49	0.50	0.50	0.50	0.50	0.51	0.51	0.51	0.51	0.52	0.52	0.52	0.53	0.53	0.53	0.54	0.84
South Atlantic	0.46	0.45	0.47	0.48	0.49	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.56	0.56	0.57	0.58	0.59	0.60	0.61	0.62	0.63	1.68
East South Central	0.21	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.24	0.25	0.25	0.25	0.26	0.26	0.26	0.26	0.27	0.28	0.28	1.34
West South Central	0.40	0.42	0.43	0.44	0.44	0.45	0.45	0.46	0.46	0.46	0.47	0.47	0.47	0.48	0.48	0.49	0.49	0.50	0.50	0.51	0.51	1.24
Mountain	0.32	0.33	0.35	0.36	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.40	0.41	0.41	0.42	0.42	0.43	0.44	0.44	0.45	0.46	1.83
Pacific	0.64	0.65	0.67	0.69	0.70	0.70	0.71	0.71	0.72	0.72	0.73	0.74	0.75	0.75	0.76	0.77	0.78	0.78	0.79	0.80	0.81	1.24
<b>Total</b>	<b>5.00</b>	<b>5.05</b>	<b>5.22</b>	<b>5.33</b>	<b>5.39</b>	<b>5.37</b>	<b>5.40</b>	<b>5.43</b>	<b>5.48</b>	<b>5.49</b>	<b>5.53</b>	<b>5.57</b>	<b>5.63</b>	<b>5.65</b>	<b>5.69</b>	<b>5.73</b>	<b>5.78</b>	<b>5.81</b>	<b>5.86</b>	<b>5.81</b>	<b>5.98</b>	<b>0.94</b>
<b>Commercial</b>																						
New England	0.12	0.12	0.12	0.12	0.13	0.13	0.13	0.13	0.13	0.13	0.14	0.14	0.14	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	1.68
Middle Atlantic	0.52	0.52	0.55	0.57	0.58	0.58	0.59	0.59	0.60	0.60	0.61	0.62	0.63	0.64	0.65	0.65	0.66	0.66	0.67	0.68	0.68	1.43
East North Central	0.78	0.78	0.79	0.81	0.83	0.83	0.84	0.84	0.84	0.85	0.85	0.85	0.85	0.86	0.86	0.86	0.87	0.87	0.88	0.88	0.89	0.89
West North Central	0.34	0.35	0.35	0.37	0.37	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.40	0.40	0.40	0.41	0.41	0.41	0.41	0.42	0.42	1.14
South Atlantic	0.38	0.38	0.39	0.41	0.42	0.43	0.44	0.45	0.46	0.46	0.49	0.50	0.51	0.53	0.54	0.55	0.57	0.58	0.60	0.61	0.63	2.60
East South Central	0.20	0.20	0.21	0.22	0.22	0.22	0.23	0.23	0.23	0.24	0.24	0.24	0.24	0.25	0.25	0.26	0.26	0.26	0.26	0.27	0.27	1.54
West South Central	0.31	0.32	0.33	0.34	0.35	0.35	0.36	0.36	0.37	0.37	0.38	0.38	0.39	0.39	0.39	0.40	0.40	0.40	0.41	0.41	0.41	1.44
Mountain	0.25	0.25	0.27	0.28	0.29	0.29	0.30	0.30	0.31	0.32	0.33	0.34	0.34	0.35	0.36	0.37	0.38	0.39	0.40	0.41	0.42	2.70
Pacific	0.41	0.41	0.43	0.44	0.45	0.46	0.47	0.48	0.49	0.50	0.51	0.52	0.53	0.54	0.55	0.57	0.58	0.59	0.61	0.62	0.64	2.23
<b>Total</b>	<b>3.27</b>	<b>3.31</b>	<b>3.43</b>	<b>3.56</b>	<b>3.64</b>	<b>3.67</b>	<b>3.72</b>	<b>3.77</b>	<b>3.82</b>	<b>3.87</b>	<b>3.93</b>	<b>3.99</b>	<b>4.04</b>	<b>4.09</b>	<b>4.15</b>	<b>4.21</b>	<b>4.27</b>	<b>4.33</b>	<b>4.39</b>	<b>4.45</b>	<b>4.52</b>	<b>1.60</b>
<b>Industrial 1/</b>																						
New England	0.24	0.21	0.24	0.24	0.25	0.25	0.25	0.25	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.28	0.28	0.28	0.28	0.29	0.29	0.94
Middle Atlantic	0.69	0.63	0.70	0.74	0.75	0.76	0.76	0.74	0.74	0.74	0.74	0.75	0.75	0.76	0.77	0.77	0.78	0.79	0.79	0.79	0.80	0.74
East North Central	1.36	1.22	1.37	1.47	1.48	1.50	1.53	1.55	1.56	1.58	1.60	1.62	1.63	1.64	1.65	1.66	1.68	1.69	1.70	1.70	1.70	1.13
West North Central	0.42	0.37	0.42	0.45	0.46	0.46	0.47	0.48	0.48	0.48	0.49	0.50	0.50	0.51	0.51	0.51	0.52	0.52	0.52	0.52	0.52	1.24
South Atlantic	0.71	0.64	0.72	0.74	0.74	0.75	0.76	0.77	0.78	0.78	0.79	0.81	0.81	0.82	0.83	0.83	0.84	0.85	0.85	0.86	0.86	1.04
East South Central	0.55	0.50	0.55	0.57	0.57	0.58	0.59	0.59	0.60	0.60	0.61	0.62	0.62	0.63	0.63	0.64	0.65	0.65	0.65	0.65	0.65	0.94
West South Central	3.11	2.85	3.14	3.19	3.20	3.23	3.29	3.32	3.34	3.37	3.39	3.44	3.47	3.50	3.51	3.55	3.58	3.59	3.59	3.57	3.58	0.74
Mountain	0.23	0.21	0.23	0.24	0.24	0.24	0.25	0.25	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.28	0.28	0.28	0.28	0.28	0.28	0.94
Pacific	1.11	1.03	1.12	1.08	1.10	1.12	1.15	1.18	1.20	1.23	1.25	1.26	1.28	1.28	1.28	1.27	1.29	1.32	1.36	1.38	1.38	1.10
<b>Total</b>	<b>8.41</b>	<b>7.67</b>	<b>8.49</b>	<b>8.72</b>	<b>8.79</b>	<b>8.89</b>	<b>9.04</b>	<b>9.14</b>	<b>9.20</b>	<b>9.31</b>	<b>9.39</b>	<b>9.51</b>	<b>9.61</b>	<b>9.65</b>	<b>9.69</b>	<b>9.79</b>	<b>9.88</b>	<b>9.96</b>	<b>10.02</b>	<b>10.02</b>	<b>10.06</b>	<b>0.94</b>

**Table 95. Natural Gas Consumption by End-Use Sector and Census Division (2 of 2)**  
(Trillion Cubic Feet per Year)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Electric Generators 2/</b>																						
New England	0.19	0.21	0.31	0.28	0.28	0.29	0.29	0.31	0.33	0.34	0.35	0.37	0.38	0.41	0.43	0.43	0.44	0.45	0.46	0.46	0.46	4.6%
Middle Atlantic	0.17	0.16	0.25	0.31	0.33	0.36	0.38	0.43	0.45	0.48	0.53	0.59	0.62	0.66	0.70	0.75	0.78	0.79	0.82	0.83	0.85	8.5%
East North Central	0.30	0.22	0.42	0.42	0.44	0.46	0.51	0.54	0.60	0.63	0.70	0.79	0.86	0.92	0.98	1.05	1.11	1.20	1.28	1.38	1.46	8.2%
West North Central	0.12	0.12	0.14	0.14	0.14	0.13	0.13	0.11	0.12	0.12	0.13	0.15	0.16	0.17	0.19	0.21	0.23	0.25	0.27	0.28	0.29	4.3%
South Atlantic	0.55	0.47	0.67	0.69	0.73	0.76	0.75	0.73	0.77	0.79	0.84	0.90	0.94	0.98	1.02	1.06	1.10	1.13	1.16	1.19	1.21	4.0%
East South Central	0.20	0.18	0.24	0.25	0.29	0.32	0.38	0.52	0.63	0.76	0.85	0.94	1.04	1.13	1.25	1.36	1.44	1.50	1.58	1.64	1.68	11.4%
West South Central	1.58	1.53	1.71	1.83	1.82	1.82	1.81	1.76	1.78	1.79	1.87	1.96	2.02	2.08	2.13	2.18	2.22	2.25	2.29	2.31	2.35	2.0%
Mountain	0.24	0.31	0.25	0.27	0.29	0.28	0.27	0.25	0.19	0.17	0.16	0.18	0.17	0.16	0.17	0.16	0.15	0.15	0.15	0.14	0.14	-2.7%
Pacific	0.89	1.07	0.84	0.93	1.01	1.08	1.17	1.23	1.32	1.36	1.41	1.49	1.56	1.64	1.69	1.72	1.74	1.78	1.81	1.82	1.86	3.8%
<b>Total</b>	<b>4.24</b>	<b>4.27</b>	<b>4.82</b>	<b>5.12</b>	<b>5.33</b>	<b>5.48</b>	<b>5.69</b>	<b>5.89</b>	<b>6.19</b>	<b>6.44</b>	<b>6.85</b>	<b>7.37</b>	<b>7.78</b>	<b>8.16</b>	<b>8.55</b>	<b>8.91</b>	<b>9.19</b>	<b>9.50</b>	<b>9.83</b>	<b>10.06</b>	<b>10.30</b>	<b>4.5%</b>
<b>Transportation 3/</b>																						
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.8%
Middle Atlantic	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	0.01	0.01	0.01	0.01	0.01	0.01	0.02	8.6%
East North Central	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.3%
West 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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.3%
South Atlantic	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	0.02	0.02	0.02	0.02	0.02	0.02	0.02	9.5%
East South Central	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.8%
West South 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	0.01	0.01	0.01	0.01	0.01	0.02	0.02	10.3%
Mountain	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	0.01	0.01	0.01	0.01	0.01	0.01	0.02	12.8%
Pacific	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	0.02	0.02	0.02	0.02	0.02	0.02	9.5%
<b>Total</b>	<b>0.02</b>	<b>0.03</b>	<b>0.03</b>	<b>0.04</b>	<b>0.05</b>	<b>0.06</b>	<b>0.06</b>	<b>0.07</b>	<b>0.07</b>	<b>0.08</b>	<b>0.09</b>	<b>0.10</b>	<b>0.10</b>	<b>0.11</b>	<b>0.11</b>	<b>0.12</b>	<b>0.12</b>	<b>0.13</b>	<b>0.13</b>	<b>0.14</b>	<b>0.14</b>	<b>9.8%</b>
<b>All Sectors 4/</b>																						
New England	0.72	0.72	0.85	0.84	0.84	0.85	0.86	0.89	0.91	0.92	0.94	0.97	0.99	1.02	1.04	1.05	1.07	1.08	1.10	1.11	1.11	2.2%
Middle Atlantic	2.23	2.16	2.38	2.51	2.56	2.60	2.62	2.65	2.67	2.72	2.77	2.84	2.89	2.94	2.99	3.06	3.08	3.13	3.16	3.19	3.22	1.6%
East North Central	3.90	3.69	4.13	4.26	4.35	4.38	4.46	4.52	4.60	4.65	4.75	4.87	4.98	5.03	5.12	5.21	5.30	5.41	5.53	5.63	5.73	2.0%
West North Central	1.33	1.31	1.39	1.45	1.47	1.47	1.48	1.47	1.49	1.51	1.53	1.56	1.58	1.60	1.63	1.66	1.68	1.72	1.74	1.76	1.78	1.4%
South Atlantic	2.10	1.95	2.26	2.33	2.39	2.44	2.46	2.48	2.54	2.58	2.67	2.76	2.83	2.90	2.97	3.05	3.11	3.17	3.24	3.30	3.34	2.4%
East South Central	1.16	1.10	1.22	1.26	1.32	1.35	1.43	1.58	1.70	1.84	1.95	2.05	2.16	2.26	2.39	2.51	2.60	2.67	2.76	2.82	2.87	4.6%
West South Central	5.39	5.12	5.60	5.79	5.81	5.84	5.90	5.89	5.94	5.99	6.10	6.24	6.38	6.45	6.51	6.61	6.69	6.74	6.78	6.80	6.85	1.2%
Mountain	1.04	1.10	1.10	1.15	1.18	1.19	1.19	1.19	1.14	1.14	1.15	1.19	1.20	1.21	1.23	1.24	1.25	1.27	1.29	1.30	1.31	1.1%
Pacific	3.05	3.17	3.05	3.14	3.27	3.34	3.50	3.60	3.74	3.82	3.90	4.01	4.13	4.20	4.27	4.33	4.40	4.48	4.58	4.63	4.71	2.2%
<b>Total</b>	<b>20.92</b>	<b>20.31</b>	<b>21.98</b>	<b>22.76</b>	<b>23.18</b>	<b>23.45</b>	<b>23.89</b>	<b>24.27</b>	<b>24.73</b>	<b>25.17</b>	<b>25.76</b>	<b>26.49</b>	<b>27.10</b>	<b>27.61</b>	<b>28.15</b>	<b>28.70</b>	<b>29.19</b>	<b>29.67</b>	<b>30.17</b>	<b>30.53</b>	<b>30.93</b>	<b>2.0%</b>

1/ Excludes lease and plant fuel, and includes consumption by coproductors.  
 2/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.  
 3/ Compressed natural gas used as a vehicle fuel.  
 4/ Excludes lease and plant fuel and natural gas used for pipeline compressor station fuel.  
 NA = Not applicable.  
 Note: Totals may not equal sum of components due to independent rounding. Data for 2000 may differ slightly from official EIA data reports due to internal conversion factors in the AEO2002 National Energy Modeling System.  
 Source: 2000 values: Energy Information Administration (EIA), Short-Term Energy Outlook, October 2001, <http://www.eia.doe.gov/pub/forecasting/shortterm/sectors/cenr1.pdf>.  
 Projections: EIA, AEO2002 National Energy Modeling System run aeo2002.t10c2001b.

**Table 96. Natural Gas Delivered Prices by End-Use Sector and Census Division (1 of 2)**  
 (2000 Dollars per Thousand Cubic Feet)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Residential</b>																						
New England	10.19	11.61	8.97	9.18	9.33	9.39	9.35	9.33	9.32	9.28	9.26	9.26	9.23	9.22	9.22	9.22	9.23	9.26	9.28	9.30	9.32	-0.4%
Middle Atlantic	9.05	10.45	7.81	8.05	8.21	8.26	8.23	8.21	8.22	8.19	8.16	8.21	8.23	8.28	8.28	8.32	8.34	8.38	8.42	8.44	8.48	-0.3%
East North Central	6.85	8.04	5.58	5.88	6.04	6.08	6.03	5.99	6.00	5.98	5.98	6.03	6.07	6.09	6.11	6.14	6.16	6.19	6.22	6.24	6.27	-0.4%
West North Central	7.40	8.38	6.00	6.33	6.50	6.55	6.51	6.48	6.48	6.45	6.43	6.47	6.51	6.54	6.54	6.57	6.59	6.62	6.64	6.67	6.72	-0.5%
South Atlantic	9.55	10.26	7.77	8.06	8.21	8.21	8.15	8.09	8.09	8.06	8.03	8.05	8.06	8.05	8.04	8.05	8.05	8.09	8.11	8.12	8.16	-0.8%
East South Central	7.89	9.06	6.70	7.03	7.22	7.24	7.19	7.15	7.16	7.14	7.13	7.18	7.20	7.20	7.19	7.20	7.21	7.25	7.29	7.31	7.35	-0.4%
West South Central	7.43	8.44	6.13	6.44	6.63	6.67	6.63	6.59	6.60	6.59	6.59	6.64	6.68	6.68	6.68	6.69	6.70	6.75	6.78	6.81	6.86	-0.4%
Mountain	6.49	8.29	5.70	6.00	6.21	6.25	6.24	6.14	6.17	6.14	6.10	6.10	6.16	6.24	6.25	6.30	6.33	6.33	6.36	6.41	6.49	0.0%
Pacific	7.94	9.28	6.63	6.90	7.09	7.14	7.16	7.08	7.07	7.02	6.94	6.93	6.96	7.02	7.01	7.04	7.03	7.02	7.03	7.03	7.05	-0.6%
Average	7.85	9.06	6.55	6.83	7.00	7.04	7.01	6.96	6.97	6.94	6.92	6.95	6.98	7.00	7.01	7.04	7.05	7.09	7.10	7.12	7.16	-0.5%
<b>Commercial</b>																						
New England	7.86	9.42	6.73	6.97	7.12	7.18	7.15	7.15	7.15	7.11	7.08	7.10	7.09	7.09	7.10	7.12	7.14	7.17	7.20	7.23	7.27	-0.4%
Middle Atlantic	5.53	7.19	4.53	4.80	4.97	5.03	5.02	5.02	5.03	5.01	5.00	5.05	5.08	5.12	5.16	5.21	5.24	5.28	5.32	5.36	5.42	-0.1%
East North Central	6.34	7.61	5.09	5.40	5.55	5.57	5.54	5.50	5.52	5.49	5.49	5.54	5.59	5.61	5.63	5.67	5.69	5.73	5.75	5.78	5.82	-0.4%
West North Central	6.39	7.43	4.99	5.33	5.51	5.55	5.52	5.48	5.49	5.47	5.45	5.50	5.55	5.58	5.59	5.62	5.65	5.68	5.71	5.75	5.80	-0.5%
South Atlantic	7.40	8.57	6.06	6.39	6.55	6.56	6.51	6.47	6.49	6.47	6.45	6.50	6.54	6.55	6.56	6.58	6.60	6.64	6.68	6.71	6.76	-0.4%
East South Central	6.84	8.13	5.72	6.06	6.24	6.27	6.23	6.20	6.21	6.20	6.20	6.25	6.30	6.30	6.31	6.33	6.35	6.40	6.44	6.47	6.53	-0.2%
West South Central	5.95	7.02	4.65	4.97	5.16	5.20	5.17	5.14	5.16	5.15	5.16	5.22	5.28	5.29	5.30	5.33	5.35	5.40	5.45	5.49	5.55	-0.4%
Mountain	5.45	7.36	4.71	5.03	5.25	5.29	5.30	5.21	5.25	5.22	5.17	5.19	5.28	5.35	5.36	5.42	5.45	5.46	5.50	5.56	5.64	0.2%
Pacific	6.99	8.46	5.87	6.14	6.32	6.37	6.40	6.33	6.33	6.28	6.21	6.21	6.25	6.31	6.31	6.34	6.34	6.33	6.34	6.35	6.38	-0.5%
Average	6.40	7.76	5.22	5.58	5.70	5.74	5.72	5.68	5.70	5.68	5.66	5.70	5.75	5.78	5.80	5.84	5.86	5.90	5.93	5.97	6.02	-0.3%
<b>Industrial 1/</b>																						
New England	5.45	5.86	3.61	3.92	4.12	4.25	4.28	4.34	4.38	4.40	4.43	4.45	4.48	4.47	4.50	4.53	4.56	4.60	4.64	4.68	4.73	-0.7%
Middle Atlantic	5.74	5.66	3.42	3.74	3.94	4.05	4.09	4.15	4.21	4.24	4.28	4.33	4.37	4.41	4.46	4.51	4.55	4.59	4.64	4.68	4.74	-1.0%
East North Central	4.72	5.08	2.99	3.34	3.53	3.61	3.62	3.64	3.70	3.72	3.76	3.83	3.88	3.91	3.95	3.99	4.02	4.05	4.09	4.12	4.17	-0.6%
West North Central	4.47	4.87	2.84	3.21	3.42	3.51	3.53	3.54	3.60	3.61	3.65	3.70	3.75	3.79	3.82	3.86	3.89	3.92	3.96	4.01	4.06	-0.5%
South Atlantic	4.73	4.99	2.93	3.32	3.52	3.69	3.60	3.63	3.70	3.73	3.78	3.85	3.90	3.93	3.96	4.00	4.03	4.08	4.13	4.18	4.24	-0.5%
East South Central	3.96	4.46	2.49	2.88	3.10	3.18	3.20	3.23	3.30	3.34	3.39	3.46	3.52	3.55	3.58	3.61	3.63	3.69	3.74	3.80	3.86	-0.1%
West South Central	4.04	4.25	2.31	2.69	2.91	3.00	3.02	3.05	3.12	3.16	3.22	3.29	3.36	3.39	3.41	3.44	3.47	3.53	3.58	3.64	3.70	-0.4%
Mountain	4.16	4.88	2.74	3.12	3.37	3.48	3.53	3.49	3.59	3.62	3.63	3.66	3.74	3.84	3.87	3.95	3.99	4.02	4.07	4.15	4.24	0.1%
Pacific	4.24	4.88	2.77	3.12	3.36	3.47	3.56	3.55	3.61	3.61	3.59	3.61	3.67	3.75	3.77	3.82	3.83	3.84	3.85	3.87	3.92	-0.4%
Average	4.43	4.75	2.71	3.08	3.30	3.39	3.42	3.44	3.50	3.53	3.57	3.63	3.68	3.73	3.75	3.79	3.82	3.86	3.91	3.96	4.01	-0.5%

**Table 96. Natural Gas Delivered Prices by End-Use Sector and Census Division (2 of 2)**  
(2000 Dollars per Thousand Cubic Feet)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Electric Generators 2/</b>																							
New England	4.69	4.90	3.08	3.40	3.64	3.75	3.75	3.80	3.83	3.83	3.84	3.88	3.88	3.91	3.94	3.97	4.01	4.04	4.09	4.13	4.18	-0.6%	
Middle Atlantic	4.70	4.83	2.80	3.08	3.30	3.40	3.54	3.62	3.71	3.74	3.76	3.83	3.89	3.93	3.99	4.06	4.10	4.15	4.20	4.25	4.31	-0.2%	
East North Central	3.72	3.85	2.07	2.41	2.65	2.74	2.77	2.82	2.90	2.94	2.98	3.10	3.18	3.22	3.28	3.35	3.40	3.44	3.48	3.53	3.58	-0.2%	
West North Central	4.38	4.25	2.51	2.87	3.04	3.10	3.13	3.16	3.23	3.27	3.31	3.40	3.47	3.52	3.60	3.69	3.77	3.83	3.90	3.96	4.03	-0.4%	
South Atlantic	4.60	4.44	2.81	3.19	3.38	3.43	3.42	3.43	3.50	3.54	3.59	3.70	3.78	3.83	3.88	3.93	3.97	4.02	4.07	4.12	4.17	-0.5%	
East South Central	4.35	4.19	2.53	2.87	3.15	3.22	3.31	3.45	3.55	3.62	3.67	3.75	3.82	3.85	3.88	3.92	3.94	4.00	4.05	4.10	4.16	-0.2%	
West South Central	4.29	4.09	2.46	2.80	2.99	3.05	3.05	3.10	3.12	3.16	3.24	3.31	3.35	3.38	3.41	3.44	3.50	3.56	3.61	3.67	3.67	-0.8%	
Mountain	4.67	4.88	3.00	3.36	3.65	3.74	3.81	3.77	3.84	3.78	3.71	3.73	3.79	3.90	3.92	3.98	3.98	4.00	4.03	4.05	4.11	-0.6%	
Pacific	4.95	5.02	2.90	3.19	3.25	3.42	3.49	3.50	3.53	3.55	3.59	3.65	3.72	3.78	3.81	3.84	3.86	3.88	3.91	3.94	3.95	-1.1%	
Average	4.49	4.47	2.64	2.98	3.18	3.25	3.29	3.32	3.38	3.41	3.44	3.53	3.59	3.64	3.68	3.72	3.76	3.80	3.85	3.89	3.94	-0.6%	
<b>Transportation 3/</b>																							
New England	9.68	9.96	7.61	7.83	7.98	8.08	8.11	8.18	8.23	8.25	8.28	8.31	8.30	8.31	8.33	8.35	8.36	8.38	8.40	8.41	8.43	-0.7%	
Middle Atlantic	10.89	10.59	8.36	8.58	8.73	8.80	8.82	8.87	8.92	8.95	8.97	9.01	9.04	9.07	9.09	9.13	9.14	9.16	9.17	9.18	9.18	-0.8%	
East North Central	7.97	8.11	6.51	6.18	6.34	6.40	6.44	6.49	6.57	6.62	6.69	6.77	6.83	6.88	6.91	6.96	6.99	7.02	7.04	7.06	7.09	-0.6%	
West North Central	7.76	7.96	5.84	6.15	6.32	6.40	6.43	6.47	6.54	6.58	6.63	6.69	6.76	6.80	6.83	6.87	6.91	6.93	6.96	6.99	7.03	-0.5%	
South Atlantic	8.38	8.52	6.44	6.77	6.93	6.98	7.00	7.04	7.12	7.18	7.23	7.32	7.37	7.40	7.43	7.47	7.49	7.53	7.57	7.59	7.63	-0.5%	
East South Central	8.39	8.87	6.85	7.20	7.39	7.46	7.48	7.51	7.57	7.61	7.66	7.73	7.78	7.81	7.83	7.85	7.87	7.89	7.92	7.96	7.99	8.04	-0.2%
West South Central	6.10	6.12	4.06	4.35	4.54	4.64	4.71	4.80	4.92	5.01	5.11	5.22	5.32	5.38	5.43	5.48	5.53	5.60	5.65	5.70	5.76	-0.3%	
Mountain	7.62	8.34	6.00	6.33	6.58	6.68	6.79	6.79	6.91	6.93	6.93	6.97	7.06	7.18	7.22	7.30	7.34	7.37	7.41	7.46	7.54	-0.1%	
Pacific	7.53	8.27	5.84	6.15	6.39	6.51	6.64	6.67	6.77	6.79	6.80	6.83	6.86	7.02	7.05	7.12	7.15	7.16	7.18	7.20	7.25	-0.2%	
Average	8.26	8.48	6.28	6.57	6.75	6.83	6.88	6.92	7.00	7.04	7.08	7.14	7.20	7.26	7.29	7.33	7.38	7.39	7.42	7.44	7.48	-0.5%	
<b>All Sectors 4/</b>																							
New England	6.83	7.61	5.03	5.36	5.59	5.67	5.67	5.65	5.63	5.60	5.58	5.58	5.56	5.53	5.54	5.57	5.58	5.61	5.64	5.67	5.73	-0.9%	
Middle Atlantic	6.89	7.85	5.24	5.44	5.60	5.64	5.63	5.63	5.65	5.62	5.60	5.60	5.62	5.63	5.65	5.67	5.69	5.72	5.75	5.78	5.83	-0.8%	
East North Central	5.76	6.71	4.27	4.57	4.74	4.78	4.74	4.71	4.73	4.72	4.71	4.74	4.77	4.78	4.80	4.82	4.84	4.85	4.86	4.87	4.90	-0.8%	
West North Central	5.95	6.75	4.45	4.77	4.96	5.02	5.01	5.02	5.03	5.03	5.01	5.05	5.08	5.10	5.11	5.13	5.16	5.17	5.20	5.24	5.29	-0.8%	
South Atlantic	6.24	6.80	4.46	4.82	4.99	5.02	5.02	5.03	5.07	5.09	5.09	5.14	5.18	5.20	5.22	5.25	5.27	5.32	5.36	5.40	5.46	-0.7%	
East South Central	5.26	6.01	3.82	4.18	4.37	4.41	4.37	4.33	4.35	4.34	4.35	4.40	4.43	4.44	4.44	4.45	4.46	4.51	4.55	4.60	4.65	-0.6%	
West South Central	4.48	4.73	2.79	3.15	3.36	3.44	3.44	3.46	3.51	3.54	3.58	3.65	3.72	3.74	3.77	3.79	3.82	3.88	3.93	3.98	4.05	-0.5%	
Mountain	5.31	6.48	4.22	4.55	4.78	4.86	4.90	4.85	4.97	4.97	4.95	4.95	5.04	5.14	5.16	5.23	5.27	5.29	5.34	5.41	5.50	0.2%	
Pacific	5.61	6.32	4.10	4.41	4.58	4.64	4.65	4.62	4.62	4.60	4.58	4.60	4.64	4.70	4.71	4.75	4.76	4.78	4.80	4.84	4.84	-0.7%	
Average	5.98	6.26	4.01	4.33	4.52	4.57	4.57	4.56	4.59	4.59	4.59	4.63	4.67	4.70	4.71	4.74	4.76	4.79	4.83	4.86	4.92	-0.6%	

1/ Excludes lease and plant fuel and includes consumption by cogenerators.

2/ Includes all electric power generators except cogenerators, which produce electricity and other useful thermal energy.

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.

NA = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2000 may differ slightly from official EIA data reports due to internal conversion factors in the AEO2002 National Energy Modeling System.

Sources: 2000 residential and commercial sector values: Energy Information Administration (EIA), Natural Gas Monthly, ODEIA-01362001-06 (Washington, DC, June 2001).

2000 industrial natural gas delivered prices are based on EIA, Manufacturing Energy Consumption Survey 1994. Other 2000 values and projections: EIA, AEO2002 National Energy Modeling System run aeo2002\_d100001b.

**Table 97. Natural Gas Pipeline Capacity By Census Division (1 of 1)**  
**(Design Capacity in Billions of Cubic Feet per Year)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Capacity Entering Region 1<sup>1/</sup></b>																						
New England	1205	1263	1409	1463	1463	1468	1483	1498	1513	1528	1543	1579	1659	1739	1819	1899	1969	2019	2069	2119	2169	3.0%
Mid Atlantic	4529	4614	4942	4949	4949	4949	4949	4949	4949	4949	4949	4949	4975	4975	4982	4982	4982	4982	4982	4982	4982	0.5%
East North Central	8481	8860	8860	8860	8860	8860	8860	8860	8860	8860	8860	8860	8917	8917	9045	9159	9200	9412	9508	9568	9611	0.6%
West North Central	6204	6298	6488	6488	6488	6488	6488	6488	6500	6619	6716	6800	6861	6935	6999	7066	7155	7251	7335	7415	7415	0.9%
South Atlantic	5605	5678	5845	6088	6088	6088	6088	6096	6148	6182	6247	6293	6340	6391	6444	6496	6535	6571	6614	6644	6665	0.9%
East South Central	9134	9134	9162	9218	9218	9218	9218	9218	9218	9218	9218	9218	9218	9277	9434	9575	9720	9825	9949	10038	10118	0.5%
West South Central	1812	1833	1876	1901	1901	1903	1907	1913	1914	1917	1922	1928	1928	1928	1931	1932	1936	1941	1944	1946	1948	0.4%
Mountain	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	2482	N/A
Pacific	3864	3893	3992	3992	4001	4021	4065	4143	4229	4366	4478	4562	4641	4717	4786	4860	4943	5046	5156	5263	5347	1.6%
Total	43317	44057	44957	45442	45451	45478	45541	45648	45813	46204	46319	46900	46904	47288	47859	48385	48832	49434	49955	50377	50738	0.8%
United States (Pipeline Imports)	4899	5102	5641	5695	5695	5700	5715	5778	5804	5841	5885	5955	6078	6169	6281	6384	6479	6566	6645	6730	6783	1.6%
<b>Capacity Exiting Region 2<sup>2/</sup></b>																						
New England	104	104	131	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184	2.9%
Mid Atlantic	2025	2080	2157	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	2210	0.4%
East North Central	3166	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	3342	0.3%
West North Central	4835	5214	5214	5214	5214	5214	5214	5214	5214	5214	5214	5214	5214	5271	5398	5513	5653	5766	5862	5921	5965	1.1%
South Atlantic	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	3353	N/A
East South Central	7450	7523	7690	7933	7933	7933	7940	7993	8027	8092	8138	8185	8236	8288	8340	8390	8416	8458	8489	8510	8510	0.7%
West South Central	14263	14263	14323	14445	14445	14445	14445	14445	14445	14445	14445	14445	14445	14503	14661	14802	14946	15092	15176	15284	15345	0.4%
Mountain	4597	4663	4737	4762	4771	4793	4841	4877	4963	5103	5289	5454	5591	5837	5952	6081	6241	6421	6578	6742	6742	1.5%
Pacific	290	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	376	1.3%
Total	40083	40897	41323	41820	41829	41851	41899	41943	42081	42256	42506	42717	42901	43191	43651	44073	44526	44941	45382	45719	46027	0.7%
United States (Pipeline Exports)	1665	1942	2006	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	2072	1.1%

<sup>1/</sup> Includes only the sum of capacity levels for the States bounding the respective regions including pipeline import capacity.

<sup>2/</sup> Includes only the sum of capacity levels for the States bounding the respective regions including pipeline export capacity.

NA = Not applicable.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

**Table 98. Natural Gas Pipeline Capacity Utilization 1/ by Census Division (1 of 1)  
(Fraction)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Utilization Entering Region</b>																						
New England	0.52	0.58	0.54	0.54	0.55	0.56	0.56	0.58	0.60	0.61	0.62	0.62	0.60	0.59	0.58	0.56	0.55	0.54	0.54	0.53	0.52	0.0%
Mid Atlantic	0.68	0.61	0.60	0.62	0.63	0.63	0.64	0.65	0.66	0.67	0.68	0.69	0.69	0.70	0.70	0.71	0.71	0.72	0.72	0.72	0.73	0.5%
East North Central	0.59	0.59	0.62	0.64	0.64	0.64	0.65	0.65	0.66	0.67	0.68	0.69	0.70	0.70	0.70	0.70	0.70	0.70	0.70	0.71	0.71	0.9%
West North Central	0.63	0.60	0.59	0.61	0.62	0.62	0.62	0.62	0.62	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.0%
South Atlantic	0.66	0.64	0.61	0.58	0.57	0.57	0.56	0.57	0.57	0.58	0.58	0.59	0.59	0.59	0.60	0.60	0.61	0.61	0.61	0.62	0.62	-0.3%
East South Central	0.62	0.65	0.67	0.68	0.69	0.69	0.71	0.73	0.76	0.78	0.81	0.83	0.84	0.85	0.86	0.87	0.87	0.88	0.88	0.88	0.88	1.8%
West South Central	0.22	0.21	0.19	0.19	0.17	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.19	0.19	-0.7%
Mountain	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	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.5%
Pacific	0.68	0.76	0.66	0.69	0.72	0.74	0.76	0.79	0.81	0.81	0.81	0.82	0.82	0.83	0.83	0.83	0.83	0.83	0.82	0.82	0.81	0.9%
Average 2/	0.58	0.58	0.58	0.58	0.59	0.59	0.60	0.61	0.62	0.63	0.64	0.65	0.66	0.66	0.66	0.67	0.67	0.67	0.67	0.67	0.67	0.7%
United States (Pipeline Import)	0.63	0.62	0.75	0.79	0.83	0.85	0.87	0.88	0.89	0.89	0.90	0.90	0.90	0.90	0.89	0.89	0.88	0.88	0.87	0.86	0.86	0.2%
<b>Utilization Exiting Region</b>																						
New England	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	N/A
Mid Atlantic	0.29	0.31	0.30	0.29	0.29	0.29	0.29	0.30	0.31	0.31	0.32	0.32	0.31	0.30	0.29	0.28	0.28	0.27	0.26	0.26	0.25	-0.8%
East North Central	0.55	0.50	0.49	0.48	0.47	0.46	0.45	0.45	0.44	0.44	0.44	0.44	0.44	0.43	0.43	0.43	0.43	0.43	0.43	0.43	0.43	-1.2%
West North Central	0.58	0.56	0.58	0.60	0.60	0.59	0.60	0.60	0.61	0.61	0.63	0.64	0.66	0.66	0.65	0.65	0.65	0.65	0.65	0.65	0.65	0.6%
South Atlantic	0.60	0.54	0.53	0.53	0.53	0.53	0.54	0.55	0.56	0.57	0.57	0.57	0.57	0.58	0.58	0.59	0.59	0.60	0.60	0.60	0.60	0.0%
East South Central	0.67	0.68	0.69	0.68	0.69	0.69	0.69	0.70	0.71	0.72	0.73	0.74	0.74	0.74	0.75	0.76	0.76	0.77	0.77	0.77	0.77	0.7%
West South Central	0.50	0.52	0.53	0.54	0.55	0.55	0.57	0.59	0.60	0.62	0.64	0.65	0.66	0.67	0.67	0.68	0.68	0.69	0.69	0.68	0.68	1.5%
Mountain	0.51	0.54	0.49	0.51	0.51	0.51	0.53	0.54	0.56	0.57	0.58	0.59	0.60	0.60	0.61	0.61	0.62	0.62	0.63	0.63	0.63	1.1%
Pacific	0.09	0.03	0.04	0.06	0.07	0.08	0.10	0.13	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.17	0.16	0.16	0.16	0.15	0.14	2.3%
Average 2/	0.54	0.54	0.54	0.55	0.55	0.55	0.56	0.57	0.58	0.59	0.60	0.62	0.62	0.63	0.63	0.63	0.63	0.64	0.64	0.64	0.64	0.8%
United States (Pipeline Export)	0.41	0.38	0.41	0.44	0.46	0.48	0.51	0.54	0.58	0.58	0.59	0.60	0.60	0.60	0.60	0.60	0.60	0.59	0.59	0.57	0.56	1.5%

1/ Capacity utilization is defined as the annual throughput volume divided by the design capacity (Table 97).  
2/ Weighted average utilization. Weights used are the regional pipeline capacity levels provided in Table 97.  
NA = Not applicable.  
Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002\_d102001b.

**Table 99. Domestic Coal Supply, Disposition, and Prices (1 of 1)**  
**(Quantities in Million Short Tons; Prices in 2000 Dollars per Short Ton)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Sources of Supply</b>																						
<b>Distribution from</b>																						
Appalachia 1/	383.6	393.5	385.6	380.7	379.4	378.3	392.7	392.2	388.3	388.4	384.5	380.4	380.2	380.5	377.6	374.8	376.5	374.8	369.9	385.2	382.9	-0.3%
Interior	166.4	150.5	143.4	143.8	140.3	157.1	165.1	164.4	164.0	156.4	158.3	144.3	143.5	143.7	145.9	146.1	141.8	142.5	144.3	141.7	143.1	-0.7%
Northern Great Plains	422.9	461.1	447.3	471.2	489.7	500.1	504.0	533.0	545.8	560.1	573.7	594.2	604.2	614.4	621.9	634.9	650.5	667.5	665.0	705.8	721.6	2.7%
Other West and Non-Contiguous	100.3	107.4	107.8	110.0	117.9	119.8	116.7	118.4	115.6	115.1	113.8	116.0	115.8	114.5	114.9	116.0	115.8	115.2	115.1	114.1	114.8	0.7%
<b>Total Distribution</b>																						
(excludes exports)	1073.2	1112.6	1084.1	1105.8	1127.3	1155.3	1178.5	1206.1	1214.6	1222.1	1230.3	1234.9	1243.7	1253.1	1260.4	1271.8	1284.6	1299.9	1311.3	1326.9	1342.4	1.1%
<b>Imports</b>																						
	12.5	16.7	17.7	17.8	17.9	18.0	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	19.1	19.2	19.3	19.4	19.5	19.6	19.7	2.3%
<b>Total Supply</b>	1085.7	1129.3	1101.8	1123.6	1145.3	1173.4	1196.7	1224.4	1232.9	1240.6	1248.9	1253.6	1262.5	1272.1	1279.4	1291.0	1303.9	1319.3	1330.8	1346.5	1362.2	1.1%
<b>Consumption</b>																						
Residential/Commercial	4.9	4.6	4.8	4.9	5.0	5.1	5.1	5.2	5.3	5.4	5.5	5.5	5.5	5.5	5.6	5.6	5.6	5.6	5.7	5.7	5.7	0.8%
Industrial	82.2	78.3	76.0	77.8	78.8	79.6	79.9	80.3	80.3	80.6	80.8	81.6	82.1	82.5	82.5	83.0	83.7	84.3	85.0	85.6	86.1	0.2%
Coke Plants	29.3	26.4	26.7	26.4	26.1	25.8	25.5	25.2	25.0	24.5	24.1	23.6	23.2	22.8	22.3	21.9	21.5	21.1	20.8	20.4	20.0	-1.9%
Electric Generators	964.6	978.3	984.3	1016.9	1037.4	1065.4	1088.2	1115.8	1124.8	1132.7	1141.0	1145.2	1154.3	1164.1	1171.9	1183.3	1196.0	1211.3	1222.6	1238.1	1253.6	1.3%
<b>Total Consumption</b>	1081.0	1087.7	1091.8	1126.0	1147.3	1175.9	1198.8	1226.6	1235.1	1243.2	1251.3	1255.9	1265.1	1274.9	1282.4	1293.8	1306.8	1322.4	1334.0	1349.7	1365.5	1.2%
<b>Discrepancy 2/</b>	4.7	41.6	10.0	-2.4	-2.1	-2.5	-2.1	-2.2	-2.2	-2.7	-2.4	-2.3	-2.5	-2.9	-2.9	-2.9	-2.9	-3.1	-3.2	-3.2	-3.3	N/A
<b>Delivered Prices</b>																						
Industrial	31.86	30.52	30.02	29.62	29.45	29.19	29.02	28.80	28.58	28.27	28.11	28.02	27.89	27.58	27.43	27.21	27.06	26.92	26.57	26.34	26.14	-1.0%
Coke Plants	44.41	44.20	43.93	43.45	43.18	42.93	42.68	42.45	42.07	41.96	41.86	41.60	41.45	41.26	40.83	40.71	40.56	40.15	40.00	39.61	39.22	-0.6%
Electric Generators	24.36	24.23	23.40	23.22	23.17	22.89	22.19	21.85	21.54	21.26	21.02	21.00	20.78	20.54	20.37	20.15	20.00	19.72	19.44	19.21	19.00	-1.2%
<b>Average Price 3/</b>	25.42	25.17	24.37	24.14	24.06	23.58	23.08	22.74	22.42	22.13	21.89	21.84	21.62	21.37	21.18	20.95	20.79	20.51	20.22	19.97	19.75	-1.3%

1/ Includes waste coal delivered to Independent Power Producers (IPP) that is not included in other Energy Information Administration coal distribution tables. The totals for this table include this waste coal tonnage.

2/ Includes stock changes.

3/ Weighted average includes residential/commercial prices.

Appalachia: Pennsylvania, Ohio, Maryland, West Virginia, Virginia, Tennessee, Alabama, Mississippi, Eastern Kentucky.

Interior: Western Kentucky, Illinois, Indiana, Iowa, Missouri, Kansas, Oklahoma, Arkansas, Texas, Louisiana.

Northern Great Plains: North Dakota, Montana, Wyoming.

Other West and Non-Contiguous: Colorado, Utah, Arizona, New Mexico, Washington, Alaska.

NA = Not applicable.

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

Source: Energy Information Administration, AEO2020 National Energy Modeling System run aeo2020\_4f02001b.



**Table 100. Coal Production and Minemouth Prices by Region (1 of 1)**  
**(Production in Million Short Tons; Prices in 2000 Dollars per Short Ton)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Production</b>																						
Appalachia 2/	429.92	438.98	432.60	426.73	424.55	423.71	436.10	437.79	434.04	434.26	427.64	426.55	425.87	422.01	419.30	416.71	418.64	417.10	409.48	408.11	405.92	-0.3%
Interior	143.95	150.58	143.49	143.91	140.41	157.19	165.20	164.44	164.90	158.46	158.29	144.26	143.59	143.71	145.92	146.09	141.85	142.51	144.28	141.67	143.14	0.0%
Northern Great Plains	408.69	466.28	452.33	475.86	493.96	504.36	508.14	537.13	549.84	564.17	577.73	598.21	608.16	618.36	625.94	638.93	654.54	671.57	689.21	710.05	725.86	2.9%
Other West and Non-Contiguous	101.46	112.06	112.95	115.85	124.41	126.16	123.05	122.91	122.15	121.77	120.50	122.79	122.71	121.47	121.93	123.14	122.97	122.44	122.45	121.53	122.29	0.9%
<b>Appalachia 2/</b>	<b>429.92</b>	<b>438.98</b>	<b>432.60</b>	<b>426.73</b>	<b>424.55</b>	<b>423.71</b>	<b>436.10</b>	<b>437.79</b>	<b>434.04</b>	<b>434.26</b>	<b>427.64</b>	<b>426.55</b>	<b>425.87</b>	<b>422.01</b>	<b>419.30</b>	<b>416.71</b>	<b>418.64</b>	<b>417.10</b>	<b>409.48</b>	<b>408.11</b>	<b>405.92</b>	<b>-0.3%</b>
<b>Interior</b>	<b>143.95</b>	<b>150.58</b>	<b>143.49</b>	<b>143.91</b>	<b>140.41</b>	<b>157.19</b>	<b>165.20</b>	<b>164.44</b>	<b>164.90</b>	<b>158.46</b>	<b>158.29</b>	<b>144.26</b>	<b>143.59</b>	<b>143.71</b>	<b>145.92</b>	<b>146.09</b>	<b>141.85</b>	<b>142.51</b>	<b>144.28</b>	<b>141.67</b>	<b>143.14</b>	<b>0.0%</b>
<b>West</b>	<b>510.35</b>	<b>578.34</b>	<b>565.28</b>	<b>591.71</b>	<b>618.37</b>	<b>630.53</b>	<b>631.19</b>	<b>660.04</b>	<b>671.99</b>	<b>685.94</b>	<b>698.22</b>	<b>721.00</b>	<b>730.87</b>	<b>739.84</b>	<b>747.88</b>	<b>762.07</b>	<b>777.51</b>	<b>794.01</b>	<b>811.65</b>	<b>831.58</b>	<b>848.14</b>	<b>2.6%</b>
East of Mississippi River	518.32	533.19	518.87	518.18	512.96	526.33	545.05	545.47	543.28	540.14	533.43	529.54	528.40	523.96	522.42	520.13	519.48	517.48	512.45	510.34	510.10	-0.1%
West of Mississippi River	585.90	634.72	622.50	644.17	670.38	685.10	689.44	716.60	727.66	736.52	750.73	762.27	771.84	781.60	790.68	804.75	818.54	836.14	852.97	871.01	887.10	2.3%
<b>U.S. Total</b>	<b>1084.22</b>	<b>1167.90</b>	<b>1141.37</b>	<b>1162.35</b>	<b>1183.34</b>	<b>1211.43</b>	<b>1234.49</b>	<b>1262.28</b>	<b>1270.94</b>	<b>1278.66</b>	<b>1284.16</b>	<b>1291.81</b>	<b>1300.24</b>	<b>1305.66</b>	<b>1313.10</b>	<b>1324.87</b>	<b>1338.00</b>	<b>1353.62</b>	<b>1365.42</b>	<b>1381.36</b>	<b>1387.20</b>	<b>1.3%</b>
<b>Minemouth Prices</b>																						
Appalachia	25.48	25.49	24.91	24.68	24.56	24.28	24.39	24.27	24.17	24.04	24.02	24.11	23.97	23.79	23.73	23.59	23.57	23.42	23.30	23.21	23.13	-0.5%
Interior	17.07	18.28	17.62	17.84	17.62	18.46	18.58	18.56	18.53	18.27	18.25	18.23	18.17	18.05	18.04	17.95	17.96	17.88	17.89	17.84	17.88	0.2%
Northern Great Plains	6.11	5.84	5.50	5.35	5.28	5.13	4.99	4.97	4.88	4.79	4.83	4.84	4.86	4.86	4.89	4.93	5.00	5.06	5.10	5.15	5.19	-0.8%
Other West and Non-Contiguous	19.03	19.32	19.04	18.73	19.01	18.87	18.68	18.56	18.42	18.33	18.22	18.24	18.16	18.08	17.96	17.94	17.94	17.82	17.80	17.74	17.63	-0.4%
<b>Appalachia</b>	<b>25.48</b>	<b>25.49</b>	<b>24.91</b>	<b>24.68</b>	<b>24.56</b>	<b>24.28</b>	<b>24.39</b>	<b>24.27</b>	<b>24.17</b>	<b>24.04</b>	<b>24.02</b>	<b>24.11</b>	<b>23.97</b>	<b>23.79</b>	<b>23.73</b>	<b>23.59</b>	<b>23.57</b>	<b>23.42</b>	<b>23.30</b>	<b>23.21</b>	<b>23.13</b>	<b>-0.5%</b>
<b>Interior</b>	<b>17.07</b>	<b>18.28</b>	<b>17.62</b>	<b>17.84</b>	<b>17.62</b>	<b>18.46</b>	<b>18.58</b>	<b>18.56</b>	<b>18.53</b>	<b>18.27</b>	<b>18.25</b>	<b>18.23</b>	<b>18.17</b>	<b>18.05</b>	<b>18.04</b>	<b>17.95</b>	<b>17.96</b>	<b>17.88</b>	<b>17.84</b>	<b>17.88</b>	<b>0.2%</b>	
<b>West</b>	<b>8.68</b>	<b>8.45</b>	<b>8.21</b>	<b>7.97</b>	<b>8.03</b>	<b>7.88</b>	<b>7.86</b>	<b>7.50</b>	<b>7.34</b>	<b>7.24</b>	<b>7.11</b>	<b>7.08</b>	<b>7.03</b>	<b>7.02</b>	<b>7.03</b>	<b>7.05</b>	<b>7.02</b>	<b>7.02</b>	<b>6.99</b>	<b>6.98</b>	<b>-1.1%</b>	
East of Mississippi River	24.25	24.72	24.17	23.98	23.85	23.71	23.62	23.72	23.61	23.45	23.42	23.46	23.33	23.15	23.09	22.96	22.95	22.82	22.68	22.59	22.52	-0.4%
West of Mississippi River	9.04	8.90	8.68	8.37	8.39	8.28	8.12	7.93	7.76	7.63	7.50	7.37	7.33	7.30	7.29	7.30	7.30	7.28	7.27	7.21	7.20	-1.1%
<b>U.S. Total</b>	<b>16.45</b>	<b>16.12</b>	<b>15.72</b>	<b>15.33</b>	<b>15.10</b>	<b>14.99</b>	<b>15.06</b>	<b>14.76</b>	<b>14.54</b>	<b>14.31</b>	<b>14.11</b>	<b>13.97</b>	<b>13.83</b>	<b>13.66</b>	<b>13.58</b>	<b>13.44</b>	<b>13.38</b>	<b>13.22</b>	<b>13.05</b>	<b>12.89</b>	<b>12.79</b>	<b>-1.3%</b>

1/ Coal Production Regions:

Appalachia: Pennsylvania, Ohio, Maryland, West Virginia, Virginia, Tennessee, Alabama, Mississippi, Eastern Kentucky.

Interior: Western Kentucky, Illinois, Indiana, Iowa, Missouri, Kansas, Oklahoma, Arkansas, Texas, Louisiana.

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 distribution tables. The totals for this table include this waste coal tonnage.

NA = Not applicable.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

**Table 101. Coal Production by Region and Type (1 of 2)**  
(Million Short Tons)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-	
<b>Northern Appalachia</b>	149.14	159.01	157.14	150.36	148.71	162.88	163.86	180.82	178.40	181.01	178.53	165.58	168.47	168.90	169.85	169.37	171.32	173.15	171.76	169.85	169.66	0.6%	
Medium Sulfur (Premium) 1/	9.51	10.59	11.42	10.97	10.22	9.82	9.94	9.69	9.64	9.42	9.23	8.94	8.89	8.82	8.75	8.75	8.47	8.28	8.20	7.90	7.75	7.43	-1.2%
Low Sulfur (Bituminous) 2/	2.38	1.98	1.75	2.21	2.57	2.76	3.23	3.60	3.72	3.90	3.76	4.22	4.21	4.13	3.94	3.63	3.61	3.19	2.87	2.66	2.43	0.1%	
Medium Sulfur (Bituminous) 2/	71.02	82.07	78.65	82.23	86.65	89.96	96.71	98.40	98.59	99.74	98.43	87.86	88.80	89.87	91.25	91.03	92.59	94.89	94.56	93.43	93.93	1.4%	
High Sulfur (Bituminous)	56.23	53.47	55.87	43.52	37.63	49.80	62.54	57.69	54.96	56.51	55.67	53.13	53.13	54.84	54.67	54.80	55.51	55.64	54.99	54.67	54.42	-0.2%	
High Sulfur (Gob) 3/	10.00	10.89	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	11.44	0.7%	
<b>Central Appalachia</b>	259.97	262.71	259.57	260.04	258.82	244.00	237.50	240.06	238.79	236.46	232.55	244.36	243.15	237.11	233.62	231.64	231.78	228.67	222.66	223.39	221.62	-0.8%	
Medium Sulfur (Premium) 1/	47.37	40.84	41.58	41.80	41.93	42.28	42.11	42.33	42.35	42.40	42.43	42.57	42.47	42.40	42.33	42.48	42.56	42.54	42.74	42.90	42.68	-0.5%	
Low Sulfur (Bituminous)	71.95	85.31	77.05	77.20	75.54	86.40	99.60	99.65	98.83	98.87	97.55	87.33	87.38	83.73	82.99	81.12	81.16	84.69	84.33	85.11	84.69	-1.4%	
Medium Sulfur (Bituminous)	139.65	136.55	140.94	141.13	141.35	135.32	135.79	138.08	137.61	135.19	132.57	134.46	133.29	130.98	128.30	128.04	128.06	127.44	125.59	125.48	124.26	-0.6%	
<b>Southern Appalachia</b>	21.81	17.28	15.89	16.33	17.02	16.82	16.74	16.91	16.85	16.79	16.57	16.61	16.25	16.00	15.83	15.71	15.54	15.28	15.05	14.88	14.63	-2.0%	
Low Sulfur (Premium) 1/	4.83	4.26	4.41	4.38	4.35	4.36	4.36	4.37	4.38	4.38	4.38	4.23	3.96	3.76	3.64	3.61	3.47	3.35	3.31	3.23	3.11	-2.2%	
Low Sulfur (Bituminous)	6.88	4.56	2.80	3.41	3.33	3.19	3.37	3.51	3.52	3.50	3.41	3.87	3.79	3.62	3.51	3.45	3.46	3.33	3.22	3.20	3.13	-3.9%	
Medium Sulfur (Bituminous)	9.29	7.45	6.87	6.34	6.64	6.35	6.07	6.11	6.02	5.99	5.85	5.58	5.57	5.70	5.76	5.72	5.68	5.67	5.60	5.52	5.46	-2.6%	
Medium Sulfur (Lignite)	0.90	1.00	1.81	2.20	2.71	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	2.93	6.1%	
<b>Eastern Interior</b>	88.40	94.20	86.27	91.45	88.41	102.62	106.95	107.68	109.23	105.88	105.78	102.99	102.52	101.95	103.12	103.41	100.82	100.38	102.97	102.23	104.18	0.8%	
Medium Sulfur (Bituminous)	27.62	31.93	29.04	30.02	28.01	27.78	26.76	26.73	26.49	26.04	25.83	25.12	25.10	24.98	25.54	25.54	24.53	25.25	25.63	25.93	26.41	-0.2%	
High Sulfur (Bituminous)	60.78	62.27	57.24	61.43	60.40	74.85	80.19	80.95	82.74	79.84	79.95	77.87	77.42	76.97	77.58	77.87	76.29	75.13	77.33	76.31	77.77	1.2%	
<b>Western Interior High Sulfur (Bituminous)</b>	2.35	2.32	2.17	2.20	2.23	2.24	2.24	2.25	2.25	2.24	2.24	2.23	2.24	2.24	2.21	2.22	2.23	2.23	2.24	2.25	2.26	-0.2%	
<b>Gulf</b>	53.20	54.06	55.05	50.26	49.77	52.33	56.01	54.51	53.43	50.34	50.27	38.04	38.74	38.53	40.59	40.46	38.80	39.89	39.07	37.18	36.70	-1.8%	
Medium Sulfur (Lignite)	33.36	32.77	31.78	30.18	28.53	30.02	32.56	30.22	28.24	27.40	26.52	20.60	20.41	20.84	20.98	20.73	19.78	20.12	19.60	18.65	18.33	-3.0%	
High Sulfur (Lignite)	19.84	21.29	23.27	20.08	21.24	22.31	23.44	24.29	25.18	22.94	23.74	18.44	18.33	18.69	19.62	19.73	19.02	19.78	19.47	18.53	18.38	-0.4%	
<b>Dakota Medium Sulfur (Lignite)</b>	31.27	31.95	31.84	32.25	32.57	32.84	33.04	33.28	33.47	33.73	33.97	32.80	31.54	32.95	33.35	33.56	33.19	33.97	33.53	33.26	33.51	0.3%	
<b>Powder/Green River</b>	377.62	434.32	420.48	443.61	461.39	471.52	475.10	503.85	516.37	530.44	543.75	565.41	576.62	585.41	592.59	605.38	621.35	637.70	655.67	676.78	692.34	3.1%	
Low Sulfur (Bituminous)	1.21	0.10	0.10	0.10	0.10	0.10	0.15	0.18	0.18	0.17	0.15	0.14	0.13	0.12	0.11	0.10	0.09	0.08	0.07	0.06	0.05	-14.8%	
Low Sulfur (Sub-Bituminous)	345.80	404.86	396.07	419.59	438.20	448.16	448.07	476.30	489.29	503.87	517.97	539.79	552.12	563.25	571.26	583.60	600.95	615.64	631.35	649.66	665.24	3.3%	
Medium Sulfur (Sub-Bituminous)	30.61	29.36	24.31	23.92	23.09	23.26	26.88	27.37	26.91	26.40	25.63	25.47	24.37	22.04	21.22	21.68	20.31	21.88	24.26	27.07	27.05	-0.6%	
<b>Rocky Mountain</b>	56.28	69.27	71.26	74.13	82.52	84.27	81.15	81.01	80.04	79.68	78.43	80.74	81.16	80.43	81.05	82.42	82.42	82.05	82.22	81.45	82.35	1.9%	
Low Sulfur (Bituminous)	46.64	59.19	61.70	65.30	74.25	76.74	74.25	74.42	73.54	73.60	72.97	75.84	76.63	75.89	76.68	78.20	78.08	77.94	78.04	77.26	78.17	2.6%	
Low Sulfur (Sub-Bituminous)	9.64	10.08	9.55	8.83	8.27	7.53	6.90	6.60	6.50	6.08	5.45	4.89	4.53	4.54	4.37	4.22	4.50	4.34	4.11	4.18	4.18	-1.1%	

**Table 101. Coal Production by Region and Type (1 of 2)**  
(Million Short Tons)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Arizona/New Mexico	39.27	36.60	35.43	35.37	35.45	35.42	35.41	35.38	35.56	35.52	35.48	35.43	34.91	34.38	34.20	34.01	33.83	33.65	33.46	33.29	33.12	-0.8%
Low Sulfur (Bituminous)	19.22	18.28	16.34	16.40	16.36	16.32	16.28	16.24	16.19	16.15	16.11	16.06	16.03	15.98	15.95	15.90	15.86	15.82	15.78	15.74	15.71	-1.0%
Medium Sulfur (Sub-Bituminous)	20.05	18.32	19.09	18.98	19.09	19.10	19.13	19.14	19.36	19.36	19.37	19.37	18.89	18.40	18.26	18.11	17.97	17.82	17.68	17.55	17.41	-0.7%
Washington/Alaska																						
Medium Sulfur (Sub-Bituminous)	5.91	6.18	6.26	6.35	6.45	6.47	6.50	6.52	6.55	6.57	6.60	6.62	6.64	6.66	6.68	6.70	6.72	6.74	6.76	6.79	6.81	0.7%
Subtotals: All Regions																						
Premium Metallurgical 1/	61.71	55.69	57.41	56.95	56.49	56.45	56.42	56.39	56.37	56.30	56.04	55.73	55.33	54.98	54.72	54.56	54.31	54.08	53.95	53.78	53.22	-0.7%
Bituminous	515.13	545.49	528.53	531.58	535.26	550.91	567.18	567.79	564.70	561.74	554.50	553.72	549.83	548.28	547.61	547.03	545.10	540.26	537.51	538.71	538.71	0.2%
Sub-Bituminous	412.01	468.81	455.29	477.67	495.03	504.52	507.47	535.93	548.60	562.28	575.01	596.15	606.54	614.90	621.78	634.31	650.30	666.30	684.23	705.25	720.69	2.8%
Lignite	95.37	97.91	100.14	96.15	96.49	99.54	103.41	102.16	101.27	98.44	98.61	86.20	84.65	86.85	88.31	88.38	86.36	88.13	86.98	84.81	84.58	-0.6%
Low Sulfur	509.55	588.63	589.80	597.51	622.96	625.56	616.21	644.96	656.21	670.52	691.75	716.38	728.77	735.02	742.32	753.83	770.92	782.15	793.15	811.11	828.72	2.5%
Medium Sulfur	426.47	429.03	421.58	426.17	427.43	425.22	436.42	440.80	438.16	435.17	429.36	412.31	408.50	406.36	405.35	404.98	402.59	407.25	406.76	407.14	406.20	-0.2%
High Sulfur	149.20	150.24	149.99	138.67	132.84	160.64	179.85	176.62	176.57	172.97	173.04	163.12	162.56	164.18	165.42	166.06	164.49	164.22	165.48	163.10	164.27	0.5%
Underground	370.90	394.26	385.88	392.87	399.75	412.39	423.81	423.65	420.95	419.37	415.66	414.05	415.79	413.97	416.76	417.86	416.69	416.66	414.74	413.19	415.00	0.6%
Surface	713.32	773.64	755.49	769.47	783.58	799.04	810.68	838.62	849.99	859.28	868.50	877.76	884.45	891.58	896.33	907.01	921.30	936.96	950.68	968.16	982.10	1.6%
U.S. Total	1084.22	1167.90	1141.37	1162.34	1183.33	1211.42	1234.49	1262.27	1270.94	1278.66	1284.16	1291.81	1300.23	1305.55	1313.09	1324.67	1337.99	1353.62	1365.41	1381.35	1397.19	1.3%

1/ "Premium" coal is used to make metallurgical coke.  
2/ Includes Pennsylvania anthracite.  
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 (Pennsylvania anthracite is included under low and medium sulfur bituminous).  
Central Appalachia: Southern West Virginia, Virginia, Eastern Kentucky.  
Southern Appalachia: Alabama, Tennessee, Mississippi.  
Eastern Interior: Illinois, Indiana, Western Kentucky.  
Western Interior (Bituminous Only): Iowa, Missouri, Kansas, Oklahoma, Arkansas, Texas.  
Gulf (Lignite Only): Texas, Louisiana, Arkansas.  
Dakota: North Dakota, Eastern Montana (Lignite Only).  
Powder/Green River: Wyoming, Montana (Sub-Bituminous and Bituminous).  
Rocky Mountains: Colorado, Utah.  
Sulfur Definitions:  
Low Sulfur: 0 - 0.60 pounds of sulfur per million Btu.  
Medium Sulfur: 0.61 - 1.67 pounds of sulfur per million Btu.  
High Sulfur: Over 1.67 pounds of sulfur per million Btu.  
Btu = British thermal unit.  
Note: Totals may not equal sum of components due to independent rounding.  
Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002\_d102001b.

Table 102. Coal Prices by Region and Type (1 of 2)  
(2000 Dollars per Short Ton)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
<b>Northern Appalachia</b>	23.89	23.95	23.43	23.14	23.17	23.51	24.21	23.91	23.73	23.65	23.62	23.19	23.08	23.11	23.11	22.96	22.90	22.83	22.70	22.57	22.52	-0.3%	
Medium Sulfur (Premium) 1/	35.00	36.50	36.31	36.00	35.82	35.64	36.50	36.36	35.05	35.00	34.96	34.79	34.74	34.65	34.30	34.26	34.22	33.91	33.87	33.60	33.32	-0.2%	
Low Sulfur (Bituminous) 2/	37.89	36.07	33.72	35.02	35.87	36.07	36.84	36.88	36.90	36.75	36.82	37.18	38.81	36.87	36.41	36.06	35.89	35.40	34.98	34.76	34.46	-0.5%	
Medium Sulfur (Bituminous) 2/	23.27	23.77	23.94	23.26	23.57	23.69	24.11	24.02	23.91	23.82	23.10	22.98	23.06	23.06	23.14	23.01	22.97	22.98	22.89	22.76	22.77	-0.1%	
High Sulfur (Bituminous)	24.16	23.99	23.08	21.42	20.77	22.35	23.83	23.01	22.63	22.55	22.56	22.30	22.21	22.29	22.26	22.12	22.12	22.05	21.93	21.86	21.83	-0.5%	
High Sulfur (Gcb) 3/	12.86	13.86	13.93	13.93	13.86	13.80	13.66	13.66	13.66	13.66	13.66	13.73	13.73	13.87	13.87	14.01	14.01	14.01	14.01	14.15	14.15	0.5%	
<b>Central Appalachia</b>	25.62	26.07	25.55	25.32	25.10	24.51	24.25	24.26	24.20	24.04	24.02	24.45	24.33	24.04	23.96	23.83	23.85	23.67	23.55	23.50	23.43	-0.4%	
Medium Sulfur (Premium) 1/	30.57	28.42	26.39	26.33	26.30	26.25	26.25	26.25	26.07	26.11	26.14	26.05	26.09	26.09	25.83	25.90	25.98	25.82	25.80	25.80	25.67	-0.5%	
Low Sulfur (Bituminous)	25.11	26.91	27.48	27.29	26.58	25.54	24.80	24.72	24.73	24.64	24.63	25.78	25.59	25.55	24.91	24.71	24.71	24.41	24.30	24.19	24.07	-0.2%	
Medium Sulfur (Bituminous)	24.21	24.24	24.24	23.99	23.95	23.46	23.39	23.45	23.40	23.13	23.07	23.28	23.14	22.90	22.88	22.73	22.73	22.60	22.46	22.42	22.37	-0.4%	
<b>Southern Appalachia</b>	34.64	30.94	29.23	28.79	28.50	28.28	28.30	28.32	28.29	28.25	28.26	28.25	27.73	27.30	27.09	26.96	26.78	26.47	26.30	26.08	25.81	-1.5%	
Low Sulfur (Premium) 1/	44.50	40.89	41.49	41.49	41.69	41.90	41.90	41.89	41.89	41.89	41.89	41.35	40.56	40.01	39.56	39.57	39.28	38.97	38.97	38.58	38.19	-0.8%	
Low Sulfur (Bituminous)	36.62	31.36	27.55	28.26	29.25	28.98	29.54	29.70	29.63	29.49	29.44	30.62	30.39	29.78	29.59	29.31	29.24	28.64	28.53	28.44	28.24	-1.3%	
Medium Sulfur (Bituminous)	30.23	27.88	26.99	26.08	26.52	26.38	25.98	25.82	25.70	25.80	25.58	25.24	25.10	25.24	25.35	25.18	25.11	25.03	24.87	24.71	24.60	-1.0%	
Medium Sulfur (Lignite)	11.77	9.44	10.45	10.60	11.29	11.62	11.62	11.62	11.74	11.85	11.91	11.91	11.91	11.92	12.00	12.16	12.26	12.28	12.28	12.28	12.28	0.2%	
<b>Eastern Interior</b>	20.05	21.13	20.46	20.67	20.47	21.38	21.53	21.49	21.41	21.02	21.00	20.79	20.67	20.51	20.50	20.37	20.38	20.31	20.21	20.12	20.11	0.0%	
Medium Sulfur (Bituminous)	21.44	22.84	22.18	22.40	21.86	21.89	21.62	21.54	21.47	21.16	21.15	21.02	20.90	20.72	20.73	20.59	20.59	20.50	20.41	20.32	20.31	-0.3%	
High Sulfur (Bituminous)	19.42	20.26	19.59	19.83	19.82	21.19	21.50	21.48	21.38	20.98	20.95	20.71	20.60	20.44	20.43	20.30	20.32	20.25	20.15	20.05	20.04	0.2%	
<b>Western Interior High Sulfur (Bituminous)</b>	24.19	25.50	24.61	24.37	24.49	24.61	24.61	24.61	24.61	24.61	24.61	24.73	24.73	24.73	24.73	24.73	24.98	24.98	24.98	25.23	25.23	0.2%	
<b>Gulf</b>	11.79	12.89	12.89	12.39	12.27	12.47	12.71	12.51	12.39	12.19	12.17	11.12	11.17	11.34	11.40	11.38	11.28	11.38	11.35	11.13	11.11	-0.3%	
Medium Sulfur (Lignite)	12.13	14.00	13.75	13.34	13.03	13.58	13.22	12.94	12.84	12.72	11.61	11.85	11.77	11.83	11.80	11.70	11.73	11.73	11.52	11.48	11.48	-0.3%	
High Sulfur (Lignite)	11.21	11.44	11.72	10.97	11.25	11.41	11.51	11.82	11.77	11.42	11.55	10.58	10.64	10.85	10.95	10.93	10.84	10.98	10.96	10.74	10.73	-0.2%	
<b>Dakota Medium Sulfur (Lignite)</b>	8.03	8.18	7.98	7.90	7.78	7.75	7.67	7.67	7.67	7.67	7.61	7.50	7.31	7.41	7.43	7.43	7.43	7.46	7.45	7.39	7.39	-0.4%	
<b>Powder/Green River</b>	5.95	5.67	5.32	5.16	5.08	4.95	4.80	4.79	4.70	4.67	4.61	4.67	4.71	4.72	4.74	4.79	4.87	4.93	4.98	5.04	5.08	-0.8%	
Low Sulfur (Bituminous)	19.48	23.30	22.83	22.02	21.69	21.30	20.85	20.62	20.30	20.14	19.95	19.91	19.82	19.72	19.60	19.48	19.39	19.22	19.03	18.86	18.68	-0.2%	
Low Sulfur (Sub-Bituminous)	5.67	5.54	5.21	5.06	4.98	4.84	4.67	4.67	4.58	4.55	4.50	4.67	4.62	4.65	4.67	4.72	4.82	4.86	4.91	4.96	5.01	-0.6%	
Medium Sulfur (Sub-Bituminous)	6.80	7.41	6.97	6.90	6.87	6.88	6.95	6.88	6.78	6.74	6.67	6.68	6.65	6.52	6.52	6.59	6.53	6.68	6.80	6.85	6.77	-1.2%	
<b>Rocky Mountain</b>	17.28	17.77	17.59	17.28	17.80	17.68	17.33	17.12	16.84	16.69	16.50	16.61	16.55	16.48	16.32	16.31	16.31	16.31	16.13	16.12	16.00	15.90	-0.4%
Low Sulfur (Bituminous)	16.75	17.29	17.20	17.03	17.70	17.67	17.35	17.15	16.87	16.74	16.58	16.74	16.69	16.62	16.45	16.44	16.44	16.26	16.24	16.13	16.02	-0.2%	
Low Sulfur (Sub-Bituminous)	19.72	20.59	20.08	19.17	18.69	17.75	17.05	16.71	16.55	16.05	15.33	14.64	14.15	14.10	13.95	13.95	13.96	13.80	13.80	13.71	13.63	-1.8%	
<b>Arizona/New Mexico</b>	20.51	20.83	20.50	20.29	20.39	20.29	20.29	20.29	20.41	20.41	20.41	20.31	20.19	20.07	20.07	20.07	20.07	20.07	20.07	20.07	20.07	19.96	-0.1%
Low Sulfur (Bituminous)	20.40	20.96	19.91	19.70	19.80	19.70	19.70	19.70	19.70	19.70	19.80	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	19.60	-0.2%
Medium Sulfur (Sub-Bituminous)	20.61	20.70	21.01	20.80	20.90	20.80	20.80	20.80	21.01	21.01	21.01	20.90	20.69	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.49	20.28	-0.1%

**Table 102. Coal Prices by Region and Type (2 of 2)**  
(2000 Dollars per Short Ton)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020	
Washington/Alaska																							
Medium Sulfur (Sub-Bituminous)	26.03	27.67	27.26	26.99	26.85	26.72	26.72	26.98	26.98	26.98	26.98	27.12	27.12	27.11	27.11	27.11	27.11	27.11	27.11	27.11	27.11	27.11	0.2%
Average by Type: All Regions																							
Premium Metallurgical 1/	32.34	29.44	29.52	29.36	29.21	29.09	29.09	29.03	28.84	28.83	28.83	28.61	28.52	28.41	28.10	28.10	28.09	27.87	27.90	27.69	27.47	-0.8%	
Bluminous	22.99	23.56	22.92	22.69	22.59	22.47	22.61	22.49	22.37	22.19	22.13	22.18	22.05	21.88	21.82	21.66	21.67	21.54	21.39	21.31	21.24	-0.4%	
Sub-Bituminous	7.24	6.86	6.58	6.33	6.20	6.02	5.85	5.78	5.67	5.61	5.52	5.53	5.52	5.50	5.51	5.53	5.59	5.62	5.66	5.69	5.71	-1.2%	
Lignite	10.67	11.46	11.40	11.09	10.92	11.04	11.19	11.04	10.95	10.80	10.76	10.12	10.10	10.20	10.24	10.24	10.19	10.25	10.23	10.11	10.06	-0.3%	
Low Sulfur	11.23	11.39	10.67	10.36	10.20	9.88	9.25	9.04	8.83	8.89	8.49	8.81	8.73	8.52	8.44	8.35	8.33	8.18	8.04	7.99	7.94	-1.7%	
Medium Sulfur	21.53	21.35	21.27	21.22	21.24	21.01	20.96	20.96	20.92	20.80	20.77	20.67	20.65	20.59	20.58	20.47	20.55	20.41	20.28	20.12	20.06	-0.4%	
High Sulfur	19.75	19.74	19.31	18.63	18.28	19.71	20.55	20.15	19.94	19.79	19.74	19.65	19.57	19.55	19.51	19.41	19.45	19.37	19.30	19.25	19.26	-0.1%	
U.S. Average	16.45	16.12	15.72	15.33	15.10	14.99	15.06	14.76	14.54	14.31	14.11	13.97	13.83	13.66	13.56	13.44	13.36	13.22	13.05	12.89	12.79	-1.3%	

1/ "Premium" coal is used to make metallurgical coke.

2/ Includes Pennsylvania anthracite.

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 (Pennsylvania anthracite is included under low and medium sulfur bituminous).

Central Appalachia: Southern West Virginia, Virginia, Eastern Kentucky.

Southern Appalachia: Alabama, Tennessee, Mississippi.

Eastern Interior: Illinois, Indiana, Western Kentucky.

Western Interior (Bituminous Only): Iowa, Missouri, Kansas, Oklahoma, Arkansas, Texas.

Gulf (Lignite Only): Texas, Louisiana, Arkansas.

Dakota: North Dakota, Eastern Montana (Lignite Only).

Powder/Green River: Wyoming, Montana (Sub-Bituminous and Bituminous).

Rocky Mountains: Colorado, Utah.

Sulfur Definitions:

Low Sulfur: 0 - 0.60 pounds of sulfur per million Btu.

Medium Sulfur: 0.61 - 1.67 pounds of sulfur per million Btu.

High Sulfur: Over 1.67 pounds of sulfur per million Btu.

Btu = British thermal unit.

W = Withheld.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

**Table 103. World Steam Coal Flows By Importing Regions and Exporting Countries 1,2/ (1 of 2)**  
(Million Short Tons)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Steam Coal Exports to Europe 3/</b>																						
Australia	9.9	10.0	10.2	10.3	10.8	10.6	10.4	10.4	10.3	10.3	10.2	9.5	8.2	6.5	4.0	3.7	3.6	3.4	5.4	6.7	6.9	-1.8%
United States	3.9	3.8	4.2	4.3	4.4	5.5	5.8	6.5	7.4	7.8	4.9	8.0	7.8	3.7	3.9	4.1	4.3	4.5	4.7	5.0	5.1	1.2%
South Africa	53.0	53.3	53.3	53.4	53.2	53.3	53.0	52.2	50.8	48.9	50.6	46.0	47.0	47.9	48.8	47.0	46.8	46.8	46.4	46.1	46.1	-0.7%
Former U.S.S.R.	11.0	11.1	11.2	11.4	11.5	11.6	11.7	11.8	11.9	12.0	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	12.1	0.5%
Poland	13.2	12.8	12.4	12.0	11.6	11.2	10.6	10.0	9.3	8.7	8.0	7.8	7.5	7.3	7.0	6.7	6.5	6.2	6.0	5.8	5.5	-4.3%
Canada	5.3	5.5	5.8	6.0	6.3	6.5	6.7	6.9	7.1	7.3	7.5	7.7	7.9	8.1	8.3	8.5	8.7	8.9	9.1	9.3	9.5	1.9%
China	0.0	0.0	0.3	0.7	1.1	1.5	1.4	1.4	1.3	1.3	1.2	1.6	1.9	2.2	2.5	2.8	2.9	3.0	3.1	3.3	3.4	N/A
South America	28.0	29.2	29.6	30.4	31.0	31.9	31.7	32.4	33.0	34.1	35.3	37.0	38.7	40.4	42.1	42.1	41.8	40.8	38.4	36.8	36.2	1.2%
Indonesia	11.2	10.8	10.5	10.1	9.7	9.4	9.3	9.2	9.1	9.1	9.0	7.9	5.7	6.3	6.9	7.7	7.5	7.7	7.4	7.1	6.8	-2.5%
<b>Total</b>	<b>135.6</b>	<b>136.6</b>	<b>137.6</b>	<b>138.6</b>	<b>139.6</b>	<b>140.5</b>	<b>139.6</b>	<b>138.7</b>	<b>137.9</b>	<b>137.0</b>	<b>136.5</b>	<b>134.9</b>	<b>133.9</b>	<b>133.4</b>	<b>132.3</b>	<b>131.3</b>	<b>130.5</b>	<b>129.7</b>	<b>128.9</b>	<b>128.2</b>	<b>127.4</b>	<b>-0.3%</b>
<b>Steam Coal Exports to Asia</b>																						
Australia	92.1	98.2	100.7	101.9	105.4	108.8	111.9	114.6	116.4	118.3	123.4	117.9	116.6	120.2	119.8	121.5	123.0	125.4	126.9	128.3	132.6	1.8%
United States	4.6	4.6	5.2	5.8	6.5	6.3	6.4	6.5	6.6	6.6	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.3	7.4	7.5	7.5	2.5%
South Africa	18.4	18.1	17.3	16.7	15.9	15.0	14.1	13.2	12.3	11.4	10.5	9.6	8.7	7.8	6.9	6.0	5.1	4.2	3.3	2.4	1.5	-1.2%
Former U.S.S.R.	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.9	2.0%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	1.9	1.9	2.0	2.1	2.2	2.3	2.5	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.1	4.3	4.5	4.7	4.9	5.1	5.3	1.9%
China	45.6	48.2	50.5	52.7	55.0	57.2	58.8	60.3	61.9	63.5	65.1	65.7	66.3	66.8	67.4	68.0	68.5	69.1	69.6	70.2	70.7	2.2%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia	42.8	45.5	48.3	51.2	54.0	56.8	58.4	59.9	61.5	63.0	64.5	66.8	70.3	69.9	71.6	72.0	73.0	73.6	74.9	75.9	74.1	2.8%
<b>Total</b>	<b>208.0</b>	<b>217.3</b>	<b>226.8</b>	<b>236.2</b>	<b>245.7</b>	<b>255.1</b>	<b>262.8</b>	<b>270.5</b>	<b>278.3</b>	<b>286.0</b>	<b>293.7</b>	<b>297.2</b>	<b>300.6</b>	<b>303.9</b>	<b>307.4</b>	<b>310.8</b>	<b>314.5</b>	<b>318.1</b>	<b>321.7</b>	<b>325.3</b>	<b>328.9</b>	<b>2.3%</b>
<b>Steam Coal Export to America</b>																						
Australia	0.4	1.0	0.5	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	0.7	0.7	0.7	0.7	2.8%
United States	16.9	16.0	15.6	14.3	13.1	12.1	11.3	10.5	9.5	9.1	8.8	8.6	8.3	8.2	8.0	7.9	7.8	7.7	7.6	7.5	7.3	-4.1%
South Africa	3.1	3.3	3.4	3.5	3.7	3.8	4.0	4.1	4.3	4.4	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.2	1.6%
Former U.S.S.R.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	19.8	21.7	24.3	26.5	28.9	32.0	32.9	33.9	34.9	35.4	35.9	36.0	36.1	36.3	36.4	36.5	36.5	36.6	36.7	36.7	36.8	3.1%
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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</b>	<b>40.2</b>	<b>41.9</b>	<b>43.7</b>	<b>44.9</b>	<b>46.3</b>	<b>48.5</b>	<b>48.9</b>	<b>49.1</b>	<b>49.3</b>	<b>49.6</b>	<b>50.0</b>	<b>49.8</b>	<b>49.6</b>	<b>49.6</b>	<b>49.5</b>	<b>49.5</b>	<b>49.4</b>	<b>49.3</b>	<b>49.2</b>	<b>49.1</b>	<b>49.0</b>	<b>1.0%</b>

**Table 103. World Steam Coal Flows By Importing Regions and Exporting Countries 1,2/ (2 of 2)**  
(Million Short Tons)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Total Steam Coal Exports</b>																						
Australia	102.7	109.2	111.4	112.8	116.7	120.0	123.0	125.7	127.4	129.2	134.3	128.1	125.5	127.4	124.4	125.9	127.2	129.5	133.0	135.7	140.2	1.6%
United States	25.4	24.4	25.0	24.4	24.0	23.9	23.5	23.5	23.4	23.4	20.4	23.3	23.0	18.8	19.0	19.1	19.3	19.4	19.6	19.8	20.0	-1.2%
South Africa	74.6	72.7	74.0	76.7	76.7	79.0	79.0	80.0	81.0	82.0	83.0	84.2	85.3	86.4	87.6	88.7	88.8	88.8	89.9	88.9	89.0	0.9%
Former U.S.S.R.	13.7	13.8	13.9	14.1	14.2	14.3	14.4	14.6	14.7	14.8	14.9	15.0	15.1	15.2	15.3	15.4	15.5	15.7	15.8	15.9	16.0	0.8%
Poland	13.2	12.8	12.4	12.0	11.6	11.2	10.6	10.0	9.3	8.7	8.0	7.8	7.5	7.3	7.0	6.7	6.5	6.2	6.0	5.8	5.5	-4.3%
Canada	7.2	7.5	7.8	8.2	8.5	8.8	8.2	7.6	7.8	8.1	8.4	8.6	8.7	8.9	9.1	8.6	6.6	6.6	6.6	6.6	6.6	-0.4%
China	45.6	48.2	50.8	53.4	56.0	58.6	60.2	61.7	63.3	64.8	66.4	67.2	68.1	69.0	69.9	70.8	71.4	72.1	72.8	73.4	74.1	2.5%
South America	47.8	50.9	53.9	56.9	59.9	62.9	64.6	66.3	67.9	69.5	71.2	73.0	74.8	76.6	78.4	78.6	76.5	77.4	75.1	73.5	73.0	2.1%
Indonesia	53.8	55.3	56.8	58.3	60.7	63.2	65.7	68.1	70.6	72.1	73.5	74.8	76.0	77.2	78.5	79.7	80.5	81.4	82.2	83.0	83.9	2.1%
<b>Total</b>	<b>383.8</b>	<b>395.8</b>	<b>408.1</b>	<b>419.7</b>	<b>431.5</b>	<b>444.1</b>	<b>451.3</b>	<b>458.4</b>	<b>465.5</b>	<b>472.6</b>	<b>480.1</b>	<b>481.9</b>	<b>484.1</b>	<b>486.9</b>	<b>489.3</b>	<b>491.6</b>	<b>494.4</b>	<b>497.1</b>	<b>499.9</b>	<b>502.6</b>	<b>505.3</b>	<b>1.4%</b>

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.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002\_d102001b.

**Table 104. World Metallurgical Coal Flows By Importing Regions and Exporting Countries 1,2/ (1 of 2)  
(Million Short Tons)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Metallurgical Coal Exports to Europe 3/</b>																						
Australia	16.2	25.5	25.0	29.6	34.0	34.5	34.5	34.4	34.3	34.3	34.2	34.7	35.1	35.4	36.2	36.1	36.0	35.9	35.9	35.8	35.8	4.0%
United States	18.4	16.2	17.3	17.0	16.8	16.6	16.6	16.6	16.6	16.6	16.6	16.4	16.1	15.8	15.6	15.5	15.4	15.3	15.3	15.3	15.2	-1.0%
South Africa	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.2	1.2	1.2	1.1	0.9	0.8	0.8	0.0	0.1	0.1	0.1	0.0	0.0	0.0	N/A
Former U.S.S.R.	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	-0.6%
Poland	5.0	4.7	4.5	4.2	4.0	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.4	3.4	-1.9%
Canada	17.6	11.9	11.6	8.0	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.4	4.4	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	-6.9%
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	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia	1.4	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	0.9	0.9	0.9	0.9	0.9	0.9	-2.5%
<b>Total</b>	<b>61.8</b>	<b>62.3</b>	<b>62.4</b>	<b>62.7</b>	<b>63.0</b>	<b>63.2</b>	<b>63.1</b>	<b>63.0</b>	<b>62.9</b>	<b>62.7</b>	<b>62.6</b>	<b>62.5</b>	<b>62.4</b>	<b>62.2</b>	<b>62.1</b>	<b>62.0</b>	<b>61.8</b>	<b>61.6</b>	<b>61.4</b>	<b>61.2</b>	<b>61.0</b>	<b>-0.1%</b>
<b>Metallurgical Coal Exports to Asia</b>																						
Australia	77.5	77.9	78.4	78.8	79.3	79.8	80.2	80.6	81.1	81.5	82.0	82.5	83.0	83.5	84.0	84.5	84.9	85.2	85.6	86.0	86.3	0.5%
United States	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.5	1.5	1.5%
South Africa	6.1	6.1	6.1	6.0	6.0	6.0	6.0	6.0	5.9	5.9	5.9	6.1	6.2	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	0.4%
Former U.S.S.R.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	20.5	20.0	20.0	20.0	20.1	20.1	20.1	20.2	20.2	20.2	20.1	20.0	20.0	20.0	19.4	19.6	19.7	19.8	19.8	19.9	19.9	-0.1%
China	7.6	7.7	7.7	7.8	7.9	7.9	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.4	8.5	8.6	8.6	8.7	8.8	8.8	0.7%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia	3.5	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	0.8%
<b>Total</b>	<b>116.3</b>	<b>116.8</b>	<b>117.4</b>	<b>117.8</b>	<b>118.5</b>	<b>119.0</b>	<b>119.6</b>	<b>120.1</b>	<b>120.7</b>	<b>121.2</b>	<b>121.7</b>	<b>122.4</b>	<b>123.0</b>	<b>123.6</b>	<b>124.2</b>	<b>124.8</b>	<b>125.3</b>	<b>125.8</b>	<b>126.3</b>	<b>126.8</b>	<b>127.3</b>	<b>0.5%</b>
<b>Metallurgical Coal Exports to America</b>																						
Australia	6.6	6.7	6.8	7.0	7.1	7.2	7.3	7.5	7.7	7.8	8.0	8.2	8.5	8.7	11.1	11.4	11.6	11.8	12.0	12.2	12.4	3.2%
United States	13.2	13.6	13.9	14.0	14.2	14.4	14.7	14.9	15.1	15.3	15.5	15.8	16.2	16.5	16.8	17.1	17.3	17.5	17.7	17.9	18.1	1.6%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Former U.S.S.R.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	1.6	1.8	2.1	2.3	2.5	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	0.2%
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	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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</b>	<b>21.4</b>	<b>22.2</b>	<b>22.8</b>	<b>23.3</b>	<b>23.8</b>	<b>24.4</b>	<b>24.9</b>	<b>25.3</b>	<b>25.8</b>	<b>26.3</b>	<b>26.8</b>	<b>27.5</b>	<b>28.1</b>	<b>28.8</b>	<b>29.5</b>	<b>30.1</b>	<b>30.5</b>	<b>31.0</b>	<b>31.4</b>	<b>31.8</b>	<b>32.2</b>	<b>2.1%</b>



**Table 104. World Metallurgical Coal Flows By Importing Regions and Exporting Countries 1,2/ (2 of 2)  
(Million Short Tons)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Total Metallurgical Coal Exports</b>																						
Australia	100.2	110.2	110.2	115.4	120.4	121.5	122.0	122.5	123.1	123.6	124.1	125.4	126.5	127.6	131.3	132.1	132.6	133.1	133.5	134.0	134.5	1.5%
United States	32.7	30.9	32.3	32.1	32.0	32.2	32.5	32.7	33.0	33.2	33.5	33.6	33.6	33.6	34.0	34.1	34.2	34.5	34.7	34.7	34.8	0.3%
South Africa	7.5	7.5	7.4	7.4	7.3	7.3	7.2	7.2	7.1	7.1	7.1	7.0	7.0	6.9	6.9	6.8	6.8	6.7	6.7	6.7	6.7	-0.6%
Former U.S.S.R.	1.8	1.8	1.8	1.7	1.7	1.7	1.6	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	-0.6%
Poland	5.0	4.7	4.5	4.2	4.0	3.7	3.7	3.7	3.7	3.7	3.6	3.6	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.4	3.4	-1.9%
Canada	39.7	33.7	33.7	30.3	27.2	27.4	27.5	27.7	27.8	27.9	28.1	27.9	28.0	28.0	25.3	25.5	25.6	25.7	25.7	25.8	25.9	-2.1%
China	7.6	7.7	7.7	7.8	7.9	7.9	8.0	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.4	8.5	8.6	8.6	8.7	8.8	8.8	0.7%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia	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	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.0%
<b>Total</b>	<b>199.4</b>	<b>201.4</b>	<b>202.6</b>	<b>203.9</b>	<b>205.3</b>	<b>206.6</b>	<b>207.5</b>	<b>208.4</b>	<b>209.3</b>	<b>210.2</b>	<b>211.1</b>	<b>212.3</b>	<b>213.5</b>	<b>214.6</b>	<b>215.8</b>	<b>216.9</b>	<b>217.6</b>	<b>218.4</b>	<b>219.1</b>	<b>219.8</b>	<b>220.6</b>	<b>0.5%</b>

1/ Import Regions:

Europe: Algeria, Austria, Belgium, Bulgaria, Croatia, Denmark, Egypt, Finland, France, Germany, Greece, Ireland, 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.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002\_d102001b.

**Table 105. World Total Coal Flows By Importing Regions and Exporting Countries 1,2/ (1 of 2)**  
(Million Short Tons)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Total Coal Exports to Europe 3/</b>																						
Australia	26.1	35.5	35.1	39.9	44.8	45.1	44.9	44.8	44.7	44.5	44.4	44.1	43.3	41.9	40.2	39.8	39.6	39.4	41.4	42.6	42.7	2.5%
United States	22.3	20.0	21.6	21.2	21.0	22.0	22.4	23.1	24.0	24.2	21.5	24.4	23.9	19.5	19.5	19.6	19.7	19.8	20.0	20.2	20.3	-0.5%
South Africa	54.4	54.6	54.7	54.8	54.5	54.6	54.2	53.4	51.8	50.1	51.8	48.9	47.7	48.5	48.8	47.1	46.7	47.0	46.7	46.4	46.1	-0.8%
Former U.S.S.R.	12.8	12.9	13.0	13.1	13.2	13.2	13.3	13.4	13.5	13.6	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	13.7	0.3%
Poland	18.2	17.5	16.9	16.3	15.6	15.0	14.3	13.7	13.0	12.3	11.7	11.4	11.1	10.8	10.5	10.3	10.0	9.7	9.5	9.2	8.9	-3.5%
Canada	22.9	17.4	17.4	14.0	10.8	11.0	10.2	9.4	9.5	9.5	9.6	9.5	9.5	9.4	9.4	9.3	9.3	9.3	9.3	9.3	9.3	-4.4%
China	0.0	0.0	0.3	0.7	1.1	1.5	1.4	1.4	1.3	1.3	1.2	1.6	1.9	2.2	2.5	2.8	2.9	3.0	3.1	3.3	3.4	N/A
South America	28.0	29.2	29.6	30.4	31.0	31.9	31.7	32.4	33.0	34.1	35.3	37.0	38.7	40.4	42.1	42.1	41.9	40.8	38.4	36.8	36.2	1.3%
Indonesia	12.6	11.7	11.4	11.0	10.6	10.3	10.2	10.1	10.0	10.0	9.9	9.9	9.8	9.7	9.6	9.4	9.4	9.3	9.3	9.3	9.3	-2.5%
<b>Total</b>	197.4	198.9	200.0	201.3	202.6	203.7	202.7	201.7	200.8	199.7	199.1	197.4	196.2	195.7	194.5	193.3	192.3	191.3	190.4	189.4	188.4	-0.2%
<b>Total Coal Exports to Asia</b>																						
Australia	169.6	176.1	179.1	180.8	184.7	188.6	192.1	195.2	197.5	199.8	205.4	200.4	199.6	203.7	203.8	206.0	207.9	210.7	212.5	214.3	218.9	1.3%
United States	5.7	5.7	6.3	7.0	7.7	7.5	7.6	7.7	7.8	7.9	8.0	8.1	8.3	8.3	8.4	8.5	8.6	8.7	8.8	8.9	9.0	2.3%
South Africa	24.5	22.2	23.3	25.8	25.9	26.9	28.1	29.7	32.1	34.8	33.7	39.7	40.0	40.3	41.2	44.1	44.5	44.3	44.6	45.0	45.2	3.1%
Former U.S.S.R.	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8	2.8	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.9	2.0%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	22.4	21.9	22.1	22.2	22.3	22.4	22.7	22.9	23.1	23.3	23.5	23.5	23.7	23.9	23.5	21.2	21.3	21.4	21.4	21.4	21.5	-0.2%
China	53.2	55.9	58.3	60.6	62.8	65.1	66.8	68.4	70.1	71.7	73.4	74.0	74.6	75.2	75.8	76.5	77.1	77.7	78.3	78.9	79.5	2.0%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Indonesia	46.1	49.5	52.4	55.2	58.1	60.9	62.4	64.0	65.5	67.9	68.6	70.9	74.4	73.0	75.6	76.1	77.1	77.7	78.8	80.0	78.2	2.7%
<b>Total</b>	324.3	334.2	344.2	354.2	364.2	374.1	382.4	390.6	398.9	407.2	415.4	419.5	423.8	427.5	431.6	435.7	439.8	443.9	448.0	452.2	459.2	1.7%
<b>Total Coal Exports to America</b>																						
Australia	7.0	7.7	7.3	7.5	7.7	7.8	8.0	8.2	8.3	8.5	8.7	8.9	9.2	9.4	11.8	12.1	12.3	12.5	12.7	12.9	13.1	3.2%
United States	30.1	29.6	29.4	28.3	27.3	26.5	26.0	25.4	24.6	24.4	24.3	24.4	24.4	24.6	24.8	25.0	25.1	25.2	25.3	25.4	25.5	-0.8%
South Africa	3.1	3.3	3.4	3.5	3.7	3.8	4.0	4.1	4.3	4.4	4.6	4.5	4.5	4.5	4.4	4.4	4.4	4.3	4.3	4.3	4.2	1.6%
Former U.S.S.R.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
Canada	1.6	1.8	2.1	2.3	2.5	2.8	2.9	3.0	3.1	3.2	3.3	3.4	3.5	3.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	0.2%
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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A
South America	19.8	21.7	24.3	26.5	28.9	32.0	32.9	33.9	34.9	35.4	35.9	36.0	36.1	36.3	36.4	36.5	36.5	36.6	36.7	36.7	36.8	3.1%
Indonesia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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</b>	61.6	64.1	65.5	68.2	70.1	72.9	73.7	74.5	75.1	75.9	76.7	77.2	77.7	78.4	79.0	79.6	80.0	80.3	80.6	80.9	81.3	1.4%

**Table 105. World Total Coal Flows By Importing Regions and Exporting Countries 1,2/ (2 of 2)**  
(Million Short Tons)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
<b>Total Coal Exports</b>																						
Australia	202.9	219.3	221.6	228.2	237.1	241.5	245.0	248.2	250.5	252.8	258.4	253.4	252.0	255.0	255.7	258.0	259.8	262.6	266.6	269.8	274.8	1.5%
United States	58.1	55.3	57.3	56.5	56.0	56.1	56.0	56.2	56.4	56.6	53.9	56.9	56.6	52.9	52.7	53.1	53.4	53.7	54.1	54.5	54.8	-0.3%
South Africa	82.0	80.1	81.4	84.1	84.0	85.3	86.3	87.2	88.2	89.1	90.1	91.2	92.3	93.4	94.5	95.6	95.8	95.6	95.6	95.6	95.6	0.8%
Former U.S.S.R.	15.5	15.6	15.7	15.8	15.9	16.0	16.1	16.2	16.2	16.3	16.4	16.5	16.6	16.8	16.9	17.0	17.1	17.2	17.3	17.4	17.5	0.6%
Poland	18.2	17.5	16.9	16.3	15.6	15.0	14.3	13.7	13.0	12.3	11.7	11.4	11.1	10.8	10.5	10.3	10.0	9.7	9.5	9.2	8.9	-3.5%
Canada	46.9	41.2	41.5	38.5	35.6	36.2	35.7	35.2	35.6	36.0	36.4	36.5	36.7	36.9	34.5	32.1	32.2	32.3	32.3	32.4	32.5	-1.8%
China	53.2	55.9	58.6	61.2	63.9	66.6	68.2	69.8	71.4	73.0	74.6	75.6	76.5	77.4	78.3	79.3	80.0	80.7	81.4	82.2	82.9	2.2%
South America	47.8	50.9	53.9	56.9	59.9	62.9	64.6	66.3	67.9	69.5	71.2	73.0	74.8	76.6	78.4	79.6	79.5	77.4	75.1	73.5	73.0	2.1%
Indonesia	58.9	61.3	63.7	66.2	68.7	71.2	72.6	74.1	75.5	77.0	78.5	79.7	81.0	82.2	83.4	84.7	85.5	86.3	87.1	88.0	88.9	1.9%
<b>Total</b>	<b>583.2</b>	<b>597.2</b>	<b>610.6</b>	<b>623.7</b>	<b>636.8</b>	<b>650.8</b>	<b>658.8</b>	<b>666.8</b>	<b>674.8</b>	<b>682.8</b>	<b>691.2</b>	<b>694.2</b>	<b>697.6</b>	<b>701.6</b>	<b>705.0</b>	<b>708.6</b>	<b>712.0</b>	<b>715.5</b>	<b>719.0</b>	<b>722.5</b>	<b>725.9</b>	<b>1.1%</b>

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.

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

Source: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002.d102001b.

**Table 106. Indicators of Macroeconomic Activity (1 of 1)**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020
<b>Real Output, National (billion 1992 dollars)</b>																						
Total Industrial	5081.6	4989.4	5102.7	5315.2	5489.9	5670.8	5829.7	6001.5	6173.9	6300.9	6584.5	6798.2	6978.6	7170.0	7352.1	7535.0	7705.7	7892.2	8095.1	8295.1	8447.4	2.6%
Total Manufacturing	4022.4	3916.7	4023.6	4234.5	4386.3	4549.8	4696.3	4857.7	5009.6	5174.4	5373.5	5589.6	5734.9	5900.6	6056.1	6210.3	6367.1	6529.3	6703.1	6885.9	7032.0	2.8%
Coal Mining	29.1	31.2	30.5	31.0	31.5	32.2	32.8	33.4	33.6	33.8	34.0	34.1	34.1	34.1	34.3	34.5	34.8	35.1	35.3	35.6	36.0	1.1%
Oil and Gas Extraction	107.4	107.8	109.1	110.9	110.9	112.3	114.0	115.5	116.8	118.8	121.2	123.2	123.2	126.3	129.2	132.2	135.0	137.1	138.8	139.2	140.5	1.3%
Refining	152.6	151.5	155.9	154.3	157.6	160.8	162.6	165.9	167.5	169.5	171.5	173.2	174.4	175.7	177.0	177.9	178.4	178.9	179.6	180.4	181.1	0.9%
Paper	154.5	155.1	159.5	164.0	167.6	172.2	176.4	180.6	179.3	181.4	183.6	188.3	192.0	195.1	198.0	200.8	204.1	207.1	209.8	212.2	214.3	1.6%
Chemicals	356.2	353.9	368.4	375.4	381.5	392.8	404.4	417.8	428.8	442.1	459.3	476.1	486.7	496.4	505.4	516.7	531.7	545.1	559.4	574.2	586.7	2.5%
Stone, Clay, and Glass	81.2	82.1	83.8	84.2	85.7	86.3	88.0	89.4	90.5	92.0	91.2	92.9	93.5	94.3	94.9	95.9	97.1	98.5	99.7	100.8	101.7	1.1%
Primary Metals	182.2	174.8	180.3	186.8	189.6	192.6	196.7	200.0	202.9	205.9	210.1	214.2	216.2	218.2	220.0	221.4	222.9	224.7	226.6	227.9	228.5	1.1%
Basic Steel	70.4	68.0	69.8	72.2	72.8	73.8	74.7	75.6	76.4	77.2	78.7	79.7	80.3	80.8	81.5	82.2	82.7	83.4	84.0	84.4	84.6	0.9%
Primary Aluminum	36.1	33.7	35.0	36.3	37.1	38.0	39.3	40.2	41.0	41.6	42.4	43.4	43.9	44.2	44.4	44.6	44.9	45.1	45.6	45.8	45.9	1.2%
Fabricated Metals	221.8	222.5	229.0	238.2	243.4	248.9	253.7	258.6	263.0	266.8	273.4	278.9	283.1	286.9	290.9	295.4	298.8	302.5	306.8	310.8	313.9	1.6%
Industrial Machinery	392.5	383.6	405.4	440.1	469.1	488.9	511.0	534.2	558.7	584.8	615.8	643.6	664.7	689.5	707.6	721.2	732.8	746.2	761.7	777.4	786.5	3.5%
Electrical Machinery	507.5	486.1	524.9	577.1	630.5	681.9	736.9	794.6	857.1	925.2	1000.2	1080.7	1155.5	1232.1	1307.3	1384.0	1464.1	1550.0	1640.0	1728.0	1807.1	6.1%
Transportation Equipment	501.0	484.5	495.4	527.4	545.2	573.7	598.6	616.8	631.8	640.9	655.1	665.9	676.3	684.9	693.9	703.6	709.6	720.4	734.6	746.9	753.4	2.1%
<b>Real Disposable Income by Census</b>																						
<b>Division (billion 1996 dollars)</b>																						
New England	383	394	401	413	422	432	440	448	459	472	484	498	512	525	538	551	566	579	593	607	618	2.4%
Middle Atlantic	1027	1080	1081	1115	1142	1189	1190	1211	1242	1275	1307	1342	1378	1412	1446	1479	1515	1548	1590	1614	1641	2.4%
East North Central	1043	1073	1089	1120	1146	1172	1191	1213	1243	1278	1311	1348	1385	1420	1455	1491	1529	1566	1601	1638	1666	2.4%
West North Central	422	435	442	456	467	479	488	498	512	527	541	557	573	588	604	620	637	654	670	687	701	2.6%
South Atlantic	1174	1220	1253	1303	1347	1393	1433	1476	1530	1590	1650	1713	1778	1843	1908	1975	2045	2115	2183	2256	2321	3.5%
East South Central	331	342	348	359	369	379	384	394	405	417	429	443	459	479	496	511	525	538	556	565	565	2.7%
West South Central	655	680	698	726	749	773	793	814	842	873	904	937	971	1004	1037	1070	1105	1139	1172	1207	1238	3.2%
Mountain	383	401	415	435	454	473	490	508	531	556	580	607	634	662	690	719	749	779	810	842	871	4.2%
Pacific	1122	1186	1196	1242	1281	1322	1356	1390	1436	1488	1535	1588	1642	1694	1746	1801	1859	1914	1968	2025	2074	3.1%
United States	6559	6772	6924	7169	7376	7593	7787	7952	8200	8474	8742	9033	9329	9616	9908	10202	10515	10850	11114	11427	11698	3.0%
<b>Non-Agricultural Employment by Census Division (millions)</b>																						
New England	6.9	6.9	6.9	7.0	7.1	7.2	7.2	7.3	7.3	7.4	7.4	7.5	7.5	7.5	7.5	7.5	7.6	7.6	7.6	7.6	7.6	0.5%
Middle Atlantic	18.0	18.0	18.0	18.2	18.3	18.5	18.7	18.9	19.0	19.1	19.2	19.2	19.2	19.2	19.1	19.1	19.2	19.2	19.1	19.1	19.0	0.3%
East North Central	21.8	21.7	21.6	21.8	22.0	22.2	22.4	22.5	22.7	22.8	23.0	23.1	23.1	23.1	23.2	23.2	23.3	23.4	23.4	23.4	23.4	0.4%
West North Central	9.8	9.7	9.7	9.8	9.9	10.1	10.2	10.3	10.3	10.4	10.5	10.6	10.6	10.6	10.6	10.7	10.7	10.8	10.8	10.8	10.8	0.5%
South Atlantic	24.4	24.6	24.7	25.1	25.6	26.1	26.6	27.0	27.4	27.8	28.2	28.7	28.9	29.2	29.5	29.8	30.1	30.4	30.7	30.9	31.1	1.2%
East South Central	7.6	7.6	7.6	7.6	7.7	7.8	7.9	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.3	8.4	8.4	8.4	8.5	8.5	8.5	0.6%
West South Central	13.9	13.9	14.0	14.2	14.5	14.8	15.0	15.3	15.5	15.7	15.9	16.1	16.3	16.4	16.5	16.7	16.8	17.0	17.1	17.2	17.4	1.1%
Mountain	8.4	8.5	8.7	8.9	9.1	9.4	9.6	9.8	10.1	10.3	10.5	10.7	10.9	11.1	11.2	11.4	11.6	11.8	12.0	12.1	12.3	1.5%
Pacific	19.4	19.5	19.7	20.0	20.4	20.8	21.2	21.5	21.8	22.1	22.4	22.7	22.9	23.0	23.2	23.4	23.6	23.9	24.1	24.2	24.4	1.2%
United States	130.1	130.5	130.7	132.7	134.6	136.9	138.8	140.5	142.0	143.5	145.2	146.8	147.6	148.4	149.3	150.2	151.3	152.4	153.2	153.9	154.5	0.9%

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

Source: 2009: DRW/WEFA, Simulation CTL0891. Projections: Energy Information Administration, AEO2002 National Energy Modeling System run aeo2002-0102001b.

Table 107. Imported Petroleum by Source (1 of 2)  
(Million Barrels per Day)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020	
<b>Crude Oil</b>																							
Canada	1.34	1.24	1.26	1.24	1.26	1.29	1.31	1.32	1.33	1.34	1.35	1.35	1.36	1.34	1.34	1.33	1.32	1.32	1.33	1.33	1.33	1.33	0.0%
Mexico	1.31	1.33	1.40	1.38	1.39	1.41	1.43	1.45	1.46	1.47	1.47	1.48	1.48	1.47	1.47	1.45	1.45	1.45	1.46	1.48	1.48	1.50	0.7%
North Sea	0.60	0.51	0.53	0.49	0.52	0.55	0.57	0.58	0.60	0.60	0.61	0.62	0.62	0.59	0.57	0.55	0.53	0.52	0.52	0.51	0.49	0.49	-1.0%
OPEC	4.56	4.44	4.79	4.90	5.13	5.39	5.49	5.61	5.74	5.85	5.91	6.00	6.03	6.03	6.00	5.97	5.92	5.90	5.94	6.08	6.16	6.16	1.5%
Latin America	1.22	1.28	1.41	1.43	1.54	1.61	1.63	1.65	1.67	1.69	1.70	1.72	1.73	1.74	1.75	1.76	1.74	1.74	1.76	1.81	1.84	1.84	2.1%
North Africa	0.01	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.11	0.11	0.10	0.10	0.09	0.09	0.09	0.08	0.08	0.08	0.08	11.0%
West Africa	0.88	0.72	0.74	0.73	0.75	0.79	0.80	0.83	0.87	0.87	0.88	0.89	0.89	0.88	0.86	0.85	0.84	0.83	0.84	0.87	0.88	0.88	0.0%
Indonesia	0.04	0.08	0.09	0.09	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.09	0.09	0.07	0.06	0.06	0.05	0.05	0.05	0.05	0.05	1.1%
Persian Gulf	2.41	2.33	2.51	2.51	2.69	2.83	2.89	2.95	3.01	3.09	3.12	3.18	3.21	3.22	3.22	3.21	3.19	3.19	3.21	3.27	3.31	3.31	1.6%
Other Middle East	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-5.3%
Other Latin America	0.58	0.56	0.62	0.59	0.65	0.67	0.67	0.68	0.67	0.67	0.67	0.67	0.66	0.64	0.62	0.60	0.58	0.58	0.58	0.58	0.58	0.58	0.0%
Other Africa	0.50	0.78	0.79	0.77	0.82	0.87	0.88	0.90	0.91	0.92	0.93	0.95	0.95	0.94	0.92	0.91	0.90	0.90	0.91	0.93	0.95	0.95	3.3%
Other Asia	0.15	0.19	0.19	0.18	0.19	0.22	0.23	0.23	0.24	0.25	0.26	0.27	0.27	0.26	0.25	0.25	0.25	0.25	0.25	0.25	0.24	0.24	2.4%
<b>Light Refined Products 1/</b>																							
Canada	0.39	0.30	0.27	0.33	0.32	0.29	0.30	0.31	0.32	0.34	0.36	0.40	0.41	0.42	0.42	0.44	0.45	0.47	0.49	0.52	0.53	0.53	1.5%
Northern Europe	0.11	0.14	0.12	0.16	0.16	0.16	0.16	0.17	0.18	0.18	0.18	0.17	0.17	0.17	0.18	0.18	0.18	0.19	0.19	0.21	0.21	0.21	3.3%
Southern Europe	0.06	0.06	0.05	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	0.06	0.06	0.06	0.06	0.06	0.06	0.0%
OPEC	0.26	0.35	0.33	0.46	0.48	0.49	0.50	0.55	0.63	0.71	0.78	0.94	1.05	1.13	1.21	1.29	1.40	1.49	1.60	1.73	1.84	1.84	10.3%
Latin America	0.19	0.22	0.21	0.27	0.27	0.27	0.28	0.30	0.34	0.38	0.42	0.47	0.51	0.56	0.62	0.66	0.71	0.75	0.80	0.86	0.91	0.91	8.1%
North Africa	0.02	0.05	0.05	0.05	0.06	0.06	0.06	0.07	0.08	0.08	0.08	0.08	0.08	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	0.07	6.5%
West Africa	0.01	0.02	0.02	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	0.02	0.02	0.02	0.02	0.03	5.6%
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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0%
Persian Gulf	0.03	0.05	0.04	0.10	0.11	0.12	0.12	0.14	0.17	0.21	0.25	0.36	0.43	0.47	0.49	0.53	0.59	0.64	0.70	0.77	0.82	0.82	18.0%
Caribbean Basin	0.33	0.33	0.28	0.35	0.36	0.36	0.36	0.38	0.41	0.45	0.50	0.61	0.69	0.75	0.81	0.86	0.92	0.99	1.05	1.11	1.16	1.16	6.5%
Asian Exporters	0.12	0.11	0.11	0.13	0.12	0.12	0.12	0.13	0.15	0.17	0.17	0.17	0.18	0.19	0.19	0.19	0.21	0.23	0.25	0.26	0.26	0.26	3.9%
Other	0.07	0.10	0.10	0.12	0.13	0.13	0.13	0.13	0.13	0.15	0.15	0.16	0.16	0.16	0.17	0.17	0.18	0.19	0.20	0.20	0.21	0.21	5.6%

Table 107. Imported Petroleum by Source (2 of 2)  
(Million Barrels per Day)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2000-2020
Heavy Refined Products 2/																						
Canada	0.07	0.07	0.07	0.08	0.09	0.09	0.10	0.09	0.09	0.10	0.10	0.10	0.09	0.10	0.10	0.10	0.10	0.09	0.09	0.08	0.08	0.7%
Northern Europe	0.14	0.06	0.06	0.07	0.08	0.08	0.09	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.07	0.06	0.06	0.05	0.05	0.05	0.05	-5.0%
Southern Europe	0.05	0.03	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	-7.7%
OPEC	0.41	0.38	0.34	0.47	0.46	0.48	0.52	0.44	0.48	0.51	0.55	0.52	0.54	0.57	0.58	0.62	0.64	0.67	0.67	0.69	0.70	2.7%
Latin America	0.13	0.14	0.14	0.17	0.17	0.18	0.20	0.18	0.19	0.20	0.22	0.20	0.20	0.21	0.22	0.24	0.24	0.26	0.26	0.26	0.26	3.5%
North Africa	0.20	0.13	0.10	0.14	0.13	0.13	0.13	0.11	0.12	0.12	0.11	0.11	0.11	0.11	0.10	0.10	0.09	0.09	0.09	0.09	0.09	-3.9%
West Africa	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	0.01	0.01	0.01	0.01	0.01	0.01	0.01	-3.4%
Indonesia	0.01	0.03	0.02	0.03	0.02	0.02	0.02	0.01	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	0.0%
Persian Gulf	0.05	0.07	0.07	0.12	0.13	0.14	0.16	0.13	0.14	0.16	0.19	0.21	0.23	0.24	0.24	0.26	0.29	0.30	0.30	0.32	0.33	9.9%
Caribbean Basin	0.21	0.12	0.12	0.15	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.17	0.19	0.21	0.22	0.25	0.28	0.29	0.30	0.31	0.32	2.1%
Asian Exporters	0.09	0.06	0.05	0.06	0.05	0.05	0.06	0.04	0.05	0.04	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-5.3%
Other	0.08	0.05	0.04	0.05	0.04	0.04	0.04	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	-4.8%

1/ Includes gasoline, distillate, jet fuel, and liquefied petroleum gases.

2/ Includes residual fuel oil and other refined products.

OPEC = Organization of Petroleum Exporting Countries - Algeria, Gabon, 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, AEO2002 National Energy Modeling System run aeo2002.d102001b.