

Table 8. Electricity Supply, Disposition, Prices, and Emissions
(billion kilowatthours, unless otherwise noted)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Net Generation by Fuel Type													
Electric Power Sector 1/ Power Only 2/													
Coal	1921	1956	1971	1990	1996	2031	2114	2166	2203	2237	2293	2327	2364
Petroleum	111	111	71	78	80	80	81	81	85	79	79	74	74
Natural Gas 3/	491	546	590	596	651	648	603	593	593	611	594	602	599
Nuclear Power	789	780	787	795	792	788	789	792	804	806	808	814	826
Pumped Storage/Other	-8	-7	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Renewable Sources 4/	321	319	360	387	399	418	431	437	436	438	445	456	462
Distributed Generation (Natural Gas)	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3624	3705	3770	3837	3909	3957	4010	4061	4112	4162	4212	4266	4317
Combined Heat and Power 5/													
Coal	36	37	31	32	31	31	31	31	31	29	29	29	29
Petroleum	5	5	1	1	1	1	1	1	1	1	1	1	1
Natural Gas	137	129	130	132	136	138	133	132	132	132	131	132	132
Renewable Sources	4	4	3	4	4	4	4	4	4	4	4	4	4
Total	185	178	167	168	173	174	169	168	168	166	165	166	166
Total Net Generation	3808	3883	3937	4005	4082	4131	4178	4229	4280	4328	4377	4431	4483
Less Direct Use	35	35	34	34	34	34	34	35	33	33	33	33	33
Net Available to the Grid	3773	3849	3903	3970	4047	4097	4144	4194	4247	4295	4343	4398	4450
End-Use Generation 6/													
Coal	22	22	22	22	22	22	22	30	33	37	42	49	58
Petroleum	6	6	6	11	11	11	11	11	11	11	11	11	11
Natural Gas	82	77	77	86	90	93	96	99	102	105	109	111	114
Other Gaseous Fuels 7/	6	5	4	4	4	4	4	5	5	5	5	5	5
Renewable Sources 4/	37	34	35	36	36	36	37	37	38	38	39	39	40
Other 8/	14	12	11	11	11	11	11	11	11	11	11	11	11
Total	167	155	155	170	175	178	181	193	200	207	217	227	240
Less Direct Use	136	126	125	134	137	140	142	149	153	157	162	167	174
Total Sales to the Grid	31	29	30	36	38	38	39	45	47	51	55	60	67
Total Electricity Generation	3975	4038	4092	4175	4257	4309	4360	4422	4480	4535	4593	4659	4723
Total Net Generation to the Grid	3804	3877	3933	4007	4085	4135	4183	4239	4294	4345	4398	4458	4517
Net Imports	11	25	27	17	15	8	15	12	15	18	16	10	12
Electricity Sales by Sector													
Residential	1294	1365	1386	1402	1433	1454	1478	1499	1523	1540	1560	1580	1603
Commercial	1229	1267	1280	1305	1343	1368	1392	1418	1446	1475	1502	1528	1554
Industrial	1018	1021	1021	1043	1047	1045	1050	1055	1060	1068	1072	1078	1086
Transportation	7	7	8	8	8	8	8	8	9	9	9	9	9
Total	3548	3660	3694	3757	3830	3874	3928	3980	4038	4091	4142	4195	4253
Direct Use	171	161	159	168	172	174	177	183	186	190	195	200	207
Total Electricity Use	3719	3821	3853	3925	4002	4049	4105	4163	4223	4281	4337	4396	4460

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	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
End-Use Prices													
(2005 cents per kilowatthour)													
Residential	9.2	9.4	9.4	9.4	9.4	9.4	9.4	9.3	9.3	9.2	9.2	9.2	9.3
Commercial	8.4	8.6	8.8	8.7	8.7	8.7	8.6	8.5	8.5	8.4	8.4	8.4	8.5
Industrial	5.4	5.7	6.2	6.4	6.5	6.5	6.4	6.2	6.0	5.9	5.9	5.9	6.0
Transportation	8.9	8.6	8.9	8.8	8.9	8.9	8.8	8.6	8.6	8.5	8.5	8.5	8.6
All Sectors Average	7.9	8.1	8.3	8.3	8.4	8.4	8.3	8.2	8.1	8.0	8.0	8.0	8.1
Prices by Service Category 9/													
(2005 cents per kilowatthour)													
Generation	5.2	5.4	5.7	5.7	5.7	5.7	5.7	5.5	5.5	5.4	5.4	5.4	5.4
Transmission	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7
Distribution	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Electric Power Sector Emissions 1/													
Sulfur Dioxide (million tons)	10.26	10.21	10.20	9.98	8.95	7.99	6.67	5.93	5.38	4.80	4.69	4.28	4.18
Nitrogen Oxide (million tons)	3.75	3.60	3.89	3.82	3.86	2.41	2.41	2.43	2.44	2.44	2.44	2.20	2.18
Mercury (tons)	47.15	51.25	52.02	52.04	50.34	48.87	37.17	37.02	34.37	29.59	26.25	23.56	22.34

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	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2005-2030
Net Generation by Fuel Type															
Electric Power Sector 1/ Power Only 2/															
Coal	2410	2459	2516	2572	2612	2663	2712	2769	2826	2893	2969	3051	3112	3188	2.0%
Petroleum	74	75	75	75	76	77	78	78	78	79	79	79	80	80	-1.3%
Natural Gas 3/	569	559	541	517	492	480	469	462	451	433	417	402	388	398	-1.3%
Nuclear Power	844	862	880	901	919	930	939	952	966	977	985	995	1002	990	1.0%
Pumped Storage/Other	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	1.1%
Renewable Sources 4/	466	462	461	472	473	475	476	477	476	474	473	473	476	477	1.6%
Distributed Generation (Natural Gas)	0	0	0	0	0	1	1	1	2	3	3	4	4	5	N/A
Total	4355	4407	4464	4529	4563	4616	4666	4731	4789	4850	4918	4995	5053	5129	1.3%
Combined Heat and Power 5/															
Coal	29	29	29	29	28	28	28	28	28	27	27	26	27	27	-1.3%
Petroleum	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-5.3%
Natural Gas	129	126	123	120	118	115	114	114	113	109	105	103	97	98	-1.1%
Renewable Sources	4	4	3	3	3	4	4	4	4	4	4	4	4	4	0.2%
Total	163	160	157	154	151	149	147	147	146	141	137	134	129	130	-1.3%
Total Net Generation	4519	4567	4620	4683	4714	4765	4813	4877	4935	4991	5055	5129	5182	5259	1.2%
Less Direct Use	33	33	33	33	33	33	33	33	33	33	33	33	33	33	-0.2%
Net Available to the Grid	4486	4534	4587	4650	4681	4732	4780	4844	4903	4958	5022	5097	5149	5226	1.2%
End-Use Generation 6/															
Coal	71	88	111	141	180	201	225	239	261	274	307	312	343	353	11.7%
Petroleum	11	11	11	11	11	11	13	13	13	13	13	13	13	13	3.2%
Natural Gas	118	121	125	128	131	134	138	141	143	146	148	150	151	152	2.8%
Other Gaseous Fuels 7/	5	5	5	5	5	5	5	5	5	5	5	5	5	5	0.2%
Renewable Sources 4/	40	41	42	43	43	44	45	46	48	49	50	52	54	56	2.0%
Other 8/	11	11	11	11	11	11	11	11	11	11	11	11	11	11	0.0%
Total	257	278	305	339	382	407	438	456	481	498	534	543	578	591	5.5%
Less Direct Use	182	191	204	218	237	248	262	271	282	290	306	311	326	332	3.9%
Total Sales to the Grid	75	87	102	121	146	159	175	185	199	207	228	232	252	259	9.2%
Total Electricity Generation	4776	4846	4926	5022	5096	5172	5251	5333	5417	5489	5590	5673	5760	5850	1.5%
Total Net Generation to the Grid	4561	4621	4689	4771	4827	4891	4956	5029	5101	5166	5251	5329	5401	5484	1.4%
Net Imports	17	13	15	11	12	13	14	15	14	14	19	23	27	25	0.0%
Electricity Sales by Sector															
Residential	1619	1640	1664	1692	1707	1727	1747	1772	1789	1810	1831	1855	1872	1892	1.3%
Commercial	1581	1609	1640	1672	1704	1737	1770	1804	1840	1877	1915	1954	1994	2034	1.9%
Industrial	1089	1093	1105	1117	1124	1134	1142	1153	1168	1180	1194	1208	1223	1238	0.8%
Transportation	9	9	10	10	10	10	10	10	11	11	11	11	11	11	1.7%
Total	4299	4352	4418	4491	4545	4607	4669	4739	4807	4877	4950	5028	5100	5175	1.4%
Direct Use	215	225	237	252	270	281	295	304	315	323	339	344	358	365	3.3%
Total Electricity Use	4514	4576	4655	4743	4815	4888	4964	5043	5122	5200	5289	5372	5459	5540	1.5%

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	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2005- 2030
End-Use Prices															
(2005 cents per kilowatthour)															
Residential	9.3	9.4	9.2	9.2	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	9.3	-0.1%
Commercial	8.6	8.6	8.5	8.4	8.5	8.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0%
Industrial	6.1	6.1	6.0	5.9	6.0	6.0	6.0	6.1	6.1	6.1	6.1	6.1	6.0	6.0	0.2%
Transportation	8.7	8.7	8.6	8.5	8.5	8.5	8.6	8.6	8.6	8.6	8.6	8.6	8.6	8.6	0.0%
All Sectors Average	8.2	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.2	8.3	0.1%
Prices by Service Category 9/															
(2005 cents per kilowatthour)															
Generation	5.5	5.5	5.4	5.4	5.5	5.5	5.6	5.6	5.6	5.6	5.6	5.6	5.6	5.6	0.1%
Transmission	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	1.0%
Distribution	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	-0.3%
Electric Power Sector Emissions 1/															
Sulfur Dioxide (million tons)	4.04	3.95	3.89	3.85	3.72	3.64	3.63	3.60	3.56	3.54	3.55	3.57	3.54	3.52	-4.2%
Nitrogen Oxide (million tons)	2.18	2.19	2.18	2.18	2.17	2.18	2.19	2.19	2.19	2.19	2.19	2.19	2.19	2.20	-2.0%
Mercury (tons)	22.01	20.62	19.16	18.23	17.54	17.32	16.74	16.28	15.86	15.48	15.42	15.24	14.81	14.57	-4.9%

Table 8. Electricity Supply, Disposition, Prices, and Emissions
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1/ Includes electricity-only and combined heat and power plants whose primary business is to sell electricity, or electricity and heat, to the public.

2/ Includes plants that only produce electricity.

3/ Includes electricity generation from fuel cells.

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

5/ Includes combined heat and power plants whose primary business is to sell electricity and heat to the public (i.e., those that report North American Industry Classification System code 22).

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

7/ Includes refinery gas and still gas.

8/ Includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2004 and 2005 are model results and may differ slightly from official EIA data reports.

Sources: 2004 and 2005 electric power sector generation; sales to utilities; net imports; electricity sales; and emissions: Energy Information Administration (EIA), Annual Energy Review 2005, DOE/EIA-0384(2005) (Washington, DC, July 2006) and supporting databases. 2004 and 2005 prices: EIA, AEO2007 National Energy Modeling System run aeo2007.d112106a. Projections: EIA, AEO2007 National Energy Modeling System run hp2007.d112106a.