

## **Appendix C**

# **Annual Results of the Restricted Natural Gas Supply Cases**

## AEO2004 Reference Case

Table C1. Electricity Supply, Disposition, Prices, and Emissions  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Generation by Fuel Type</b>																								
<b>Electric Power Sector 1/ Power Only 2/</b>																								
Coal.....	1875	1944	1947	2002	2057	2110	2131	2173	2201	2222	2244	2265	2288	2318	2353	2395	2435	2493	2560	2634	2724	2830	2891	2975
Petroleum.....	77	95	51	62	61	64	71	68	62	69	82	88	96	103	101	100	92	87	82	87	82	75	78	77
Natural Gas 3/.....	450	420	504	505	524	537	577	597	642	681	717	755	791	814	854	891	935	961	972	962	959	948	969	969
Nuclear Power.....	780	762	779	791	794	795	796	791	794	800	803	806	809	812	814	816	816	816	816	816	816	816	816	816
Pumped Storage/Other.....	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Renewable Sources 4/.....	304	339	374	379	383	389	392	396	400	405	408	412	416	420	423	426	429	434	442	448	450	452	456	460
Distributed Gen (Natural Gas)	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	4	5	5	5
Non-Utility Gen for Own Use..	-34	-39	-40	-40	-40	-40	-40	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37
Total.....	3443	3512	3606	3690	3770	3845	3918	3977	4054	4129	4206	4279	4352	4423	4500	4583	4663	4747	4829	4906	4989	5079	5169	5257
<b>Combined Heat and Power 5/</b>																								
Coal.....	32	28	29	30	32	33	33	33	33	33	33	34	34	34	34	33	33	33	33	33	33	33	33	33
Petroleum.....	6	2	0	0	0	1	1	1	1	2	2	3	4	5	4	4	3	3	2	3	3	2	2	2
Natural Gas.....	148	152	157	159	161	166	170	176	174	175	176	173	168	165	165	161	163	161	159	156	154	150	150	149
Renewable Sources.....	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Non-Utility Gen for Own Use..	-11	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24
Total.....	183	163	166	170	173	180	184	191	188	189	191	189	185	183	183	179	179	177	175	172	169	165	166	164
Net Available to the Grid.....	3626	3674	3773	3860	3944	4025	4102	4167	4242	4318	4397	4468	4538	4606	4683	4762	4842	4924	5004	5077	5159	5244	5335	5421
<b>End-Use Sector Generation</b>																								
<b>Combined Heat and Power 6/</b>																								
Coal.....	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Petroleum.....	5	5	5	8	9	10	10	11	12	13	13	14	14	15	15	15	16	17	17	17	17	17	17	18
Natural Gas.....	84	84	86	89	94	97	100	105	109	114	118	121	125	129	133	137	142	147	153	158	163	169	175	181
Other Gaseous Fuels 7/.....	5	6	6	8	8	8	9	9	9	10	10	10	10	11	11	11	12	12	12	12	12	13	13	13
Renewable Sources 4/.....	30	31	32	34	35	36	37	38	39	40	41	43	44	45	46	47	48	49	50	51	52	52	53	54
Other 8/.....	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total.....	157	158	162	172	178	183	188	195	202	208	215	220	226	231	237	243	250	257	264	271	277	284	291	299
Other End-Use Generators 9/...	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	7
Generation for Own Use.....	-134	-134	-136	-144	-147	-149	-152	-155	-158	-161	-164	-167	-170	-173	-176	-179	-182	-186	-190	-193	-197	-201	-206	-210
Total Sales to the Grid.....	27	28	31	32	35	38	41	45	48	52	55	58	61	63	66	69	73	76	80	83	86	88	92	95
Total Electricity Generation....	3831	3900	4003	4100	4191	4276	4359	4428	4510	4593	4678	4755	4830	4904	4987	5071	5159	5247	5335	5415	5503	5595	5693	5787
Net Imports.....	22	40	30	32	29	28	28	29	31	32	31	31	30	32	30	27	24	20	21	17	13	11	9	8

**AEO2004 Reference Case**

Table C1. Electricity Supply, Disposition, Prices, and Emissions (Continued)  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Electricity Sales by Sector</b>																								
Residential.....	1268	1282	1302	1319	1338	1360	1386	1405	1428	1450	1474	1490	1510	1531	1554	1571	1592	1615	1641	1657	1678	1701	1729	1747
Commercial.....	1208	1213	1254	1296	1335	1372	1408	1443	1480	1517	1552	1587	1621	1653	1684	1718	1754	1792	1828	1862	1895	1929	1965	2003
Industrial.....	994	978	1003	1030	1053	1073	1089	1103	1120	1140	1159	1180	1197	1216	1235	1256	1276	1292	1310	1327	1348	1372	1395	1422
Transportation.....	22	23	23	24	24	25	25	26	26	27	27	28	28	29	30	30	31	31	32	33	33	34	35	35
Total.....	3492	3495	3582	3669	3750	3830	3909	3977	4055	4133	4212	4285	4357	4429	4502	4576	4653	4730	4811	4879	4955	5036	5123	5207
<b>End-Use Prices 10/ (2002 cents per kilowatthour)</b>																								
Residential.....	8.4	8.5	8.3	8.2	8.1	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
Commercial.....	7.8	7.6	7.4	7.2	7.0	6.9	6.9	7.0	7.0	7.0	7.1	7.0	7.1	7.2	7.2	7.2	7.2	7.2	7.2	7.3	7.3	7.2	7.3	7.3
Industrial.....	5.0	4.8	4.7	4.6	4.6	4.5	4.6	4.6	4.6	4.5	4.6	4.6	4.6	4.7	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.7	4.8	4.8
Transportation.....	7.2	7.3	7.1	6.9	6.7	6.6	6.6	6.7	6.7	6.7	6.8	6.8	6.9	6.9	6.9	6.9	6.9	6.8	6.8	6.9	6.8	6.8	6.8	6.8
All Sectors Average.....	7.2	7.1	7.0	6.8	6.7	6.6	6.6	6.7	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.8	6.9	6.8	6.9	6.9	6.9	6.8	6.9	6.9
<b>Prices by Service Category 10/ (2002 cents per kilowatthour)</b>																								
Generation.....	4.6	4.6	4.4	4.3	4.2	4.2	4.1	4.2	4.1	4.1	4.2	4.2	4.3	4.4	4.4	4.4	4.4	4.4	4.5	4.5	4.5	4.5	4.5	4.5
Transmission.....	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Distribution.....	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
<b>Emissions</b>																								
Sulfur Dioxide (million tons).....	10.54	10.62	10.80	10.18	9.90	10.13	10.30	9.93	9.90	9.86	9.37	9.15	9.09	8.95	8.95	8.95	8.94	8.95	8.94	8.94	8.94	8.94	8.95	8.95
Nitrogen Oxide (million tons).....	4.39	3.70	3.23	3.28	3.36	3.43	3.46	3.48	3.50	3.52	3.54	3.56	3.57	3.60	3.63	3.65	3.64	3.65	3.67	3.66	3.68	3.71	3.73	3.75
Mercury (tons).....	50.95	50.87	49.95	50.12	50.78	52.14	52.26	52.33	52.20	52.81	52.84	52.45	52.45	52.65	53.24	53.19	53.02	53.17	53.59	53.74	53.72	53.87	53.97	54.37

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.

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 NAICS code 22).

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors.

7/ Other gaseous fuels include refinery and still gas.

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

9/ Other end-use generators include 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.

10/ Prices represent average revenue per kilowatthour.

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 power only and combined heat and power generation, sales to utilities, net imports, residential, industrial, and total electricity sales, and emissions: Energy Information Administration (EIA), Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) and supporting databases. 2001 and 2002 commercial and transportation electricity sales: EIA estimates based on Oak Ridge National Laboratory, Transportation Energy Data Book 21 (Oak Ridge, TN, November 2001). 2001 and 2002 prices: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e. Projections: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e.

**AEO2004 Reference Case**

**Table C2. Natural Gas Supply and Disposition  
(Trillion Cubic Feet per Year)**

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Production</b>																								
Dry Gas Production 1/.....	19.05	19.57	19.51	19.58	19.66	19.95	20.21	20.25	20.50	20.80	21.11	21.30	21.43	21.62	21.58	21.99	22.82	23.54	23.79	23.55	23.37	23.51	23.88	23.99
Supplemental Natural Gas 2/..	0.08	0.08	0.08	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>Net Imports.....</b>																								
Canada.....	3.49	3.51	3.60	3.87	4.28	4.43	4.78	5.04	5.50	5.76	5.90	6.05	6.20	6.24	6.76	6.79	6.64	6.43	6.47	6.69	6.99	7.02	7.12	7.24
Mexico.....	3.59	3.40	3.50	3.46	3.42	3.44	3.51	3.60	3.68	3.62	3.60	3.47	3.25	3.17	2.98	2.83	2.71	2.50	2.51	2.53	2.47	2.46	2.51	2.56
Liquefied Natural Gas.....	-0.26	-0.31	-0.42	-0.43	-0.45	-0.41	-0.37	-0.33	-0.34	-0.34	-0.28	-0.21	-0.14	-0.15	-0.16	-0.16	-0.17	-0.18	-0.18	-0.17	-0.16	-0.15	-0.14	-0.12
Total Supply.....	22.62	23.15	23.19	23.54	24.04	24.48	25.09	25.39	26.09	26.65	27.11	27.44	27.73	27.95	28.44	28.88	29.56	30.06	30.36	30.33	30.46	30.63	31.10	31.33
<b>Consumption by Sector</b>																								
Residential.....	4.92	5.07	5.18	5.21	5.29	5.35	5.42	5.47	5.53	5.58	5.62	5.63	5.65	5.68	5.73	5.75	5.80	5.85	5.92	5.93	5.96	6.01	6.06	6.09
Commercial.....	3.12	3.17	3.11	3.17	3.25	3.31	3.35	3.41	3.48	3.52	3.55	3.58	3.60	3.62	3.65	3.69	3.73	3.78	3.83	3.86	3.90	3.94	3.99	4.04
Industrial 3/.....	7.23	7.21	7.55	7.72	7.83	7.95	8.05	8.19	8.39	8.56	8.65	8.75	8.81	8.87	8.99	9.14	9.30	9.44	9.57	9.65	9.79	9.96	10.12	10.29
Electric Generators 4/.....	5.55	4.97	5.67	5.70	5.87	6.02	6.36	6.36	6.66	6.92	7.19	7.38	7.54	7.64	7.92	8.12	8.43	8.59	8.61	8.46	8.39	8.27	8.43	8.39
Transportation 5/.....	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11
Pipeline Fuel.....	0.63	0.66	0.65	0.65	0.65	0.65	0.65	0.66	0.67	0.68	0.69	0.70	0.70	0.70	0.70	0.71	0.75	0.80	0.81	0.81	0.80	0.81	0.83	0.84
Lease and Plant Fuel 6/.....	1.32	1.00	0.99	1.06	1.11	1.18	1.24	1.30	1.36	1.38	1.40	1.42	1.43	1.44	1.44	1.47	1.53	1.59	1.61	1.60	1.60	1.61	1.64	1.65
Total.....	22.78	22.09	23.17	23.53	24.04	24.50	25.12	25.43	26.15	26.71	27.18	27.51	27.80	28.03	28.51	28.96	29.63	30.14	30.44	30.41	30.54	30.71	31.18	31.41
Gas to Liquids.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Discrepancy 7/.....	-0.16	1.06	0.02	0.01	-0.01	-0.02	-0.04	-0.05	-0.06	-0.06	-0.07	-0.07	-0.07	-0.07	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.09	-0.09

1/ Marketed production (wet) minus extraction losses.

2/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

3/ Includes consumption for combined heat and power, which produces electricity and other useful thermal energy.

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

5/ Compressed natural gas used as vehicle fuel.

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

7/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 2001 and 2002 values include net storage injections.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 supply values: Energy Information Administration (EIA), Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 supply values: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). 2001 and 2002 consumption based on: EIA, Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) Projections: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e.

**AEO2004 Reference Case**

Table C3. Oil and Gas Supply

Production and Supply	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Crude Oil</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per barrel).....	24.54	27.29	24.36	22.75	22.89	23.13	23.28	23.47	23.61	24.11	23.98	24.18	24.41	24.56	24.78	24.97	25.43	25.39	25.82	25.78	26.28	26.54	26.50	26.72
<b>Production (mmbbls per day) 2/</b>																								
United States Total.....	5.62	5.69	5.80	5.86	5.93	6.09	6.11	6.05	5.93	5.82	5.71	5.66	5.56	5.53	5.42	5.27	5.26	5.14	4.95	4.84	4.73	4.76	4.75	4.61
Lower 48 Onshore.....	3.11	2.93	2.95	2.90	2.83	2.77	2.72	2.66	2.61	2.56	2.51	2.47	2.42	2.38	2.34	2.30	2.27	2.23	2.20	2.17	2.13	2.11	2.08	2.04
Lower 48 Offshore.....	1.53	1.78	1.90	2.06	2.22	2.40	2.46	2.45	2.40	2.34	2.28	2.26	2.19	2.21	2.17	2.10	2.17	2.14	2.03	2.00	1.96	2.07	2.13	2.06
Alaska.....	0.98	0.98	0.95	0.90	0.88	0.91	0.93	0.94	0.92	0.92	0.92	0.93	0.95	0.93	0.91	0.87	0.82	0.77	0.72	0.67	0.63	0.58	0.54	0.51
L48 EOY Oil Reserves (bbls) 2/..	19.05	19.23	18.96	18.59	18.61	18.89	18.86	18.66	18.36	18.05	17.72	17.52	17.20	17.13	16.87	16.55	16.62	16.46	16.20	15.84	15.50	15.51	15.36	14.98
<b>Natural Gas</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per tcf).....	2.95	4.90	3.88	3.54	3.48	3.53	3.64	3.47	3.40	3.56	3.75	3.93	4.01	4.19	4.22	4.23	4.17	4.13	4.28	4.45	4.42	4.42	4.42	4.40
<b>Dry Production (tcf) 3/</b>																								
United States Total.....	19.05	19.57	19.51	19.58	19.67	19.96	20.22	20.25	20.50	20.80	21.12	21.31	21.43	21.62	21.58	21.99	22.82	23.55	23.79	23.55	23.38	23.52	23.88	23.99
Lower 48 Onshore.....	13.76	13.82	13.92	13.99	14.10	14.28	14.54	14.54	14.48	14.79	15.20	15.43	15.66	16.11	16.18	16.42	16.28	16.10	16.41	16.53	16.42	16.32	16.22	16.26
Associated-Dissolved 4/.....	1.60	1.54	1.54	1.52	1.50	1.47	1.45	1.43	1.41	1.38	1.37	1.35	1.33	1.31	1.29	1.28	1.26	1.25	1.23	1.22	1.21	1.19	1.18	1.17
Non-Associated.....	12.16	12.29	12.37	12.47	12.61	12.80	13.09	13.11	13.08	13.40	13.84	14.09	14.33	14.81	14.89	15.15	15.02	14.85	15.18	15.31	15.22	15.13	15.04	15.09
Conventional.....	6.23	6.07	6.26	6.29	6.16	6.09	6.03	5.87	5.80	5.86	5.98	6.01	6.01	6.13	6.06	6.10	6.04	5.96	6.07	6.10	6.02	6.00	5.96	5.92
Unconventional.....	5.93	6.22	6.12	6.18	6.45	6.71	7.06	7.24	7.28	7.54	7.86	8.08	8.32	8.67	8.83	9.04	8.98	8.89	9.11	9.21	9.20	9.13	9.08	9.16
Lower 48 Offshore.....	4.86	5.23	5.06	5.03	4.99	5.10	5.09	5.12	5.41	5.40	5.30	5.25	5.14	4.87	4.76	4.92	5.07	5.17	5.09	4.72	4.64	4.69	4.97	5.03
Associated-Dissolved 4/.....	1.05	1.13	1.16	1.16	1.16	1.48	1.76	1.70	1.61	1.52	1.44	1.37	1.36	1.33	1.38	1.38	1.33	1.35	1.34	1.25	1.25	1.24	1.38	1.43
Non-Associated.....	3.81	4.10	3.90	3.88	3.83	3.62	3.33	3.43	3.80	3.88	3.86	3.88	3.78	3.54	3.38	3.53	3.74	3.82	3.75	3.47	3.39	3.45	3.59	3.60
Alaska.....	0.43	0.51	0.54	0.56	0.57	0.58	0.59	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.65	0.66	1.47	2.29	2.29	2.30	2.31	2.50	2.70	2.71
L48 EOY Dry Gas Reserves (tcf)..	180.0	182.5	187.4	191.1	194.1	195.4	197.7	199.9	201.2	202.2	203.1	204.2	204.0	203.7	203.7	204.3	204.2	203.5	201.0	199.5	197.6	196.5	195.6	193.5
Supplemental Gas Supplies (tcf)5/	0.08	0.08	0.08	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
Lower 48 Wells (thousands).....	24.47	28.27	27.67	26.60	25.83	25.68	26.11	25.07	24.78	25.31	25.78	26.11	26.26	26.80	26.98	27.12	27.30	26.74	26.83	26.98	26.70	26.70	26.38	26.00

1/ Represents lower 48 onshore and offshore supplies.

2/ Includes lease condensate.

3/ Marketed production (wet) minus extraction losses.

4/ Gas which occurs in crude oil reserves either as free gas (associated) or as gas in solution with crude oil (dissolved).

5/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

tcf = trillion cubic feet

L48 = Lower 48 States

EOY = End-of-year

bbls = billion barrels

mmbbls = million barrels

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 lower 48 onshore, lower 48 offshore, and Alaska crude oil production: Energy Information Administration (EIA), Petroleum Supply Annual 2002, DOE/EIA-0340(2002)/1 (Washington, DC, June 2003). 2001 U.S. crude oil and natural gas reserves: EIA, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, DOE/EIA-0216(2001) (Washington, DC, November 2002). 2001 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). Other 2001 and 2002 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e.

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Table C4. Electricity Supply, Disposition, Prices, and Emissions  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Generation by Fuel Type																								
Electric Power Sector 1/ Power Only 2/																								
Coal.....	1875	1944	1947	2003	2058	2110	2131	2170	2195	2210	2234	2257	2280	2312	2347	2388	2432	2489	2557	2634	2731	2825	2904	2999
Petroleum.....	77	95	51	62	61	64	71	68	62	69	83	90	97	103	102	100	100	106	105	115	114	98	90	83
Natural Gas 3/.....	450	420	505	506	524	538	576	599	643	687	721	755	792	816	857	893	924	932	939	925	910	915	929	926
Nuclear Power.....	780	762	779	791	794	795	796	791	794	800	803	806	809	812	814	816	816	816	816	816	816	816	816	816
Pumped Storage/Other.....	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Renewable Sources 4/.....	304	339	374	379	383	389	393	396	406	410	413	417	420	424	427	429	431	436	440	443	447	452	458	464
Distributed Gen (Natural Gas)	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	3	3	4	4	4	4	5
Non-Utility Gen for Own Use..	-34	-39	-40	-40	-40	-40	-40	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37
Total.....	3443	3511	3607	3691	3770	3846	3918	3976	4054	4129	4207	4279	4352	4421	4501	4581	4658	4736	4814	4890	4975	5065	5155	5247
Combined Heat and Power 5/																								
Coal.....	32	28	29	30	32	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	33	33	33
Petroleum.....	6	2	0	0	0	1	1	1	1	2	2	3	4	5	4	4	4	4	4	4	4	3	3	3
Natural Gas.....	148	152	157	159	161	165	170	176	173	174	174	173	169	166	165	163	164	162	159	155	153	151	151	148
Renewable Sources.....	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Non-Utility Gen for Own Use..	-11	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24
Total.....	183	163	166	169	174	179	185	191	187	189	190	190	186	184	182	180	181	179	176	173	171	167	167	164
Net Available to the Grid.....	3626	3675	3773	3860	3944	4025	4102	4167	4241	4317	4397	4469	4538	4606	4683	4761	4840	4915	4990	5063	5146	5232	5322	5410
End-Use Sector Generation																								
Combined Heat and Power 6/																								
Coal.....	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Petroleum.....	5	5	5	8	9	10	10	11	12	13	13	14	15	15	15	15	16	17	18	18	18	18	18	18
Natural Gas.....	84	84	86	89	94	97	100	105	109	114	118	121	125	128	133	137	142	147	152	156	161	166	172	179
Other Gaseous Fuels 7/.....	5	6	6	8	8	8	9	9	9	10	10	10	10	11	11	11	12	12	12	12	12	13	13	13
Renewable Sources 4/.....	30	31	32	34	35	36	37	38	39	40	41	43	44	45	46	47	48	49	50	51	51	52	53	54
Other 8/.....	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total.....	157	158	162	172	178	183	188	195	202	208	215	220	226	231	237	243	250	256	263	269	275	282	289	296
Other End-Use Generators 9/...	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	7
Generation for Own Use.....	-134	-134	-136	-144	-147	-149	-152	-155	-158	-161	-164	-167	-170	-173	-176	-179	-182	-186	-189	-193	-196	-200	-204	-209
Total Sales to the Grid.....	27	28	31	32	35	38	41	45	48	52	55	58	61	64	66	69	73	76	80	82	85	88	91	94
Total Electricity Generation....	3831	3900	4003	4100	4191	4276	4359	4428	4510	4592	4678	4756	4830	4903	4987	5070	5156	5238	5321	5399	5489	5581	5679	5775
Net Imports.....	22	40	30	32	29	28	28	29	31	32	31	31	30	32	30	27	24	21	23	19	15	11	9	7

## No Alaska Pipeline Case

Table C4. Electricity Supply, Disposition, Prices, and Emissions (Continued)  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Electricity Sales by Sector</b>																								
Residential.....	1268	1282	1302	1319	1339	1360	1386	1405	1428	1449	1474	1490	1511	1531	1554	1571	1592	1613	1638	1653	1674	1697	1725	1744
Commercial.....	1208	1213	1254	1296	1335	1371	1408	1443	1480	1517	1551	1587	1621	1653	1683	1717	1753	1788	1823	1857	1890	1924	1959	1998
Industrial.....	994	978	1003	1030	1053	1073	1089	1103	1120	1140	1159	1180	1197	1216	1235	1257	1275	1290	1306	1324	1346	1369	1391	1418
Transportation.....	22	23	23	24	24	25	25	26	26	27	27	28	28	29	30	30	31	31	32	33	33	34	35	35
Total.....	3492	3495	3582	3669	3751	3830	3909	3977	4054	4132	4212	4285	4357	4428	4502	4575	4650	4722	4799	4866	4944	5024	5110	5195
<b>End-Use Prices 10/ (2002 cents per kilowatthour)</b>																								
Residential.....	8.4	8.5	8.3	8.2	8.1	8.0	8.0	8.0	8.0	7.9	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.2
Commercial.....	7.8	7.6	7.4	7.2	7.0	6.9	6.9	7.0	7.0	7.0	7.1	7.0	7.1	7.2	7.2	7.2	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.4
Industrial.....	5.0	4.8	4.7	4.6	4.6	4.5	4.6	4.6	4.6	4.5	4.6	4.6	4.6	4.7	4.8	4.8	4.8	4.8	4.9	4.9	4.9	4.8	4.9	4.8
Transportation.....	7.2	7.3	7.1	6.9	6.7	6.6	6.6	6.7	6.7	6.7	6.8	6.8	6.9	6.9	6.9	6.9	6.9	7.0	6.9	6.9	6.9	6.9	6.9	6.8
All Sectors Average.....	7.2	7.1	7.0	6.8	6.7	6.6	6.6	6.7	6.6	6.6	6.7	6.7	6.8	6.8	6.9	6.9	6.9	7.0	7.0	7.0	7.0	6.9	7.0	6.9
<b>Prices by Service Category 10/ (2002 cents per kilowatthour)</b>																								
Generation.....	4.6	4.6	4.4	4.3	4.2	4.2	4.2	4.2	4.1	4.2	4.2	4.2	4.3	4.4	4.4	4.4	4.5	4.5	4.6	4.6	4.6	4.6	4.6	4.6
Transmission.....	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Distribution.....	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
<b>Emissions</b>																								
Sulfur Dioxide (million tons) .	10.55	10.62	10.81	10.19	9.91	10.11	10.29	9.96	9.67	9.64	9.63	9.30	9.13	8.95	8.95	8.95	8.94	8.95	8.95	8.93	8.96	8.94	8.95	8.94
Nitrogen Oxide (million tons) .	4.39	3.70	3.23	3.28	3.35	3.43	3.46	3.48	3.50	3.51	3.54	3.56	3.57	3.60	3.62	3.65	3.65	3.66	3.67	3.67	3.69	3.71	3.73	3.75
Mercury (tons).....	50.88	51.01	50.12	50.24	50.86	52.06	52.57	52.69	52.11	52.59	52.83	52.16	52.15	52.35	52.71	52.92	52.84	52.97	53.34	53.63	53.69	54.04	54.20	54.48

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- 1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.
  - 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 NAICS code 22).
  - 6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors.
  - 7/ Other gaseous fuels include refinery and still gas.
  - 8/ Other includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
  - 9/ Other end-use generators include 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.
  - 10/ Prices represent average revenue per kilowatthour.
- Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.
- Sources: 2001 and 2002 power only and combined heat and power generation, sales to utilities, net imports, residential, industrial, and total electricity sales, and emissions: Energy Information Administration (EIA), Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) and supporting databases. 2001 and 2002 commercial and transportation electricity sales: EIA estimates based on Oak Ridge National Laboratory, Transportation Energy Data Book 21 (Oak Ridge, TN, November 2001). 2001 and 2002 prices: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e. Projections: EIA, AEO2004 National Energy Modeling System run noak.d012604b.

## No Alaska Pipeline Case

Table C5. Natural Gas Supply and Disposition  
(Trillion Cubic Feet per Year)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Production</b>																								
Dry Gas Production 1/.....	19.05	19.57	19.51	19.58	19.66	19.95	20.21	20.26	20.47	20.79	21.08	21.27	21.45	21.64	21.59	22.01	22.49	22.68	22.46	22.36	22.19	22.26	22.64	22.66
Supplemental Natural Gas 2/..	0.08	0.08	0.08	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>Net Imports.....</b>																								
Canada.....	3.49	3.51	3.60	3.87	4.28	4.43	4.78	5.04	5.51	5.79	5.93	6.07	6.19	6.24	6.76	6.82	6.79	6.79	7.19	7.23	7.46	7.65	7.70	7.87
Mexico.....	3.59	3.40	3.50	3.46	3.42	3.44	3.51	3.60	3.68	3.65	3.62	3.48	3.23	3.16	2.98	2.85	2.80	2.69	2.65	2.64	2.60	2.63	2.68	2.75
Liquefied Natural Gas.....	-0.26	-0.31	-0.42	-0.43	-0.45	-0.41	-0.37	-0.33	-0.34	-0.34	-0.28	-0.21	-0.14	-0.15	-0.16	-0.16	-0.16	-0.16	-0.16	-0.14	-0.13	-0.11	-0.09	0.00
Total Supply.....	0.17	0.43	0.52	0.84	1.31	1.40	1.64	1.77	2.16	2.48	2.59	2.80	3.11	3.22	3.94	4.13	4.16	4.27	4.70	4.73	4.98	5.13	5.11	5.12
<b>Consumption by Sector</b>																								
Residential.....	22.62	23.15	23.19	23.54	24.03	24.48	25.09	25.40	26.07	26.67	27.10	27.44	27.74	27.97	28.45	28.92	29.38	29.57	29.74	29.69	29.74	30.01	30.43	30.62
Commercial.....	4.92	5.07	5.18	5.21	5.29	5.35	5.42	5.47	5.53	5.58	5.62	5.62	5.65	5.68	5.73	5.75	5.79	5.82	5.86	5.88	5.91	5.96	6.03	6.06
Industrial 3/.....	3.12	3.17	3.11	3.17	3.25	3.31	3.35	3.41	3.48	3.52	3.55	3.57	3.60	3.62	3.65	3.69	3.72	3.76	3.79	3.82	3.85	3.90	3.96	4.01
Electric Generators 4/.....	7.23	7.21	7.55	7.72	7.83	7.96	8.05	8.19	8.38	8.56	8.65	8.74	8.80	8.87	8.99	9.14	9.27	9.37	9.47	9.56	9.69	9.85	10.02	10.18
Transportation 5/.....	5.55	4.97	5.67	5.70	5.87	6.02	6.36	6.37	6.65	6.95	7.19	7.39	7.56	7.66	7.93	8.16	8.37	8.38	8.38	8.19	8.06	8.06	8.14	8.08
Pipeline Fuel.....	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11
Lease and Plant Fuel 6/.....	0.63	0.66	0.65	0.65	0.65	0.65	0.65	0.66	0.67	0.68	0.69	0.70	0.70	0.70	0.70	0.71	0.72	0.73	0.72	0.72	0.71	0.72	0.73	0.73
Total.....	1.32	1.00	0.99	1.06	1.11	1.18	1.24	1.30	1.36	1.38	1.40	1.41	1.43	1.44	1.44	1.47	1.49	1.51	1.50	1.50	1.50	1.51	1.53	1.53
Gas to Liquids.....	22.78	22.09	23.18	23.53	24.04	24.50	25.12	25.44	26.14	26.73	27.17	27.51	27.81	28.04	28.53	29.00	29.45	29.65	29.82	29.77	29.83	30.09	30.52	30.71
Discrepancy 7/.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Discrepancy 7/.....</b>																								
	-0.16	1.06	0.02	0.01	-0.01	-0.02	-0.04	-0.05	-0.06	-0.07	-0.07	-0.07	-0.07	-0.07	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.09

1/ Marketed production (wet) minus extraction losses.

2/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

3/ Includes consumption for combined heat and power, which produces electricity and other useful thermal energy.

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

5/ Compressed natural gas used as vehicle fuel.

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

7/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 2001 and 2002 values include net storage injections.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 supply values: Energy Information Administration (EIA), Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 supply values: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). 2001 and 2002 consumption based on: EIA, Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) Projections: EIA, AEO2004 National Energy Modeling System run noak.d012604b.

## No Alaska Pipeline Case

Table C6. Oil and Gas Supply

Production and Supply	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Crude Oil</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per barrel).....	24.54	27.29	24.36	22.75	22.89	23.13	23.28	23.47	23.61	24.10	23.98	24.18	24.41	24.56	24.78	24.97	25.39	25.39	25.57	26.06	26.00	26.29	26.51	26.76
<b>Production (mmbbls per day) 2/</b>																								
United States Total.....	5.62	5.69	5.80	5.86	5.93	6.09	6.11	6.05	5.93	5.82	5.71	5.66	5.56	5.53	5.42	5.27	5.27	5.15	4.96	4.84	4.72	4.75	4.74	4.65
Lower 48 Onshore.....	3.11	2.93	2.95	2.90	2.83	2.77	2.72	2.66	2.61	2.56	2.51	2.47	2.42	2.38	2.34	2.30	2.27	2.23	2.20	2.17	2.14	2.10	2.07	2.04
Lower 48 Offshore.....	1.53	1.78	1.90	2.06	2.22	2.40	2.46	2.45	2.40	2.34	2.28	2.26	2.19	2.21	2.17	2.10	2.18	2.15	2.04	2.00	1.96	2.07	2.13	2.10
Alaska.....	0.98	0.98	0.95	0.90	0.88	0.91	0.93	0.94	0.92	0.92	0.92	0.93	0.95	0.93	0.91	0.87	0.82	0.77	0.72	0.67	0.63	0.58	0.54	0.51
L48 EOY Oil Reserves (bbls) 2/..	19.05	19.23	18.96	18.59	18.61	18.89	18.86	18.66	18.36	18.05	17.72	17.52	17.20	17.13	16.87	16.55	16.63	16.48	16.19	15.86	15.50	15.49	15.35	15.07
<b>Natural Gas</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per tcf).....	2.95	4.90	3.88	3.54	3.48	3.53	3.64	3.47	3.40	3.58	3.78	3.94	4.03	4.20	4.23	4.23	4.30	4.43	4.52	4.70	4.65	4.63	4.56	4.60
<b>Dry Production (tcf) 3/</b>																								
United States Total.....	19.05	19.57	19.51	19.58	19.66	19.96	20.21	20.26	20.48	20.79	21.08	21.27	21.46	21.64	21.60	22.01	22.50	22.69	22.46	22.37	22.20	22.26	22.64	22.66
Lower 48 Onshore.....	13.76	13.83	13.92	13.99	14.10	14.28	14.54	14.54	14.46	14.77	15.16	15.40	15.68	16.13	16.19	16.44	16.71	16.75	16.74	16.90	16.81	16.87	16.94	16.84
Associated-Dissolved 4/.....	1.60	1.54	1.54	1.52	1.50	1.47	1.45	1.43	1.41	1.38	1.37	1.35	1.33	1.31	1.29	1.28	1.26	1.25	1.23	1.22	1.21	1.19	1.18	1.17
Non-Associated.....	12.16	12.29	12.38	12.47	12.61	12.80	13.09	13.11	13.05	13.39	13.80	14.06	14.35	14.82	14.90	15.16	15.45	15.51	15.51	15.68	15.60	15.68	15.76	15.67
Conventional.....	6.23	6.07	6.26	6.29	6.16	6.09	6.03	5.87	5.80	5.87	5.99	6.02	6.02	6.14	6.06	6.11	6.16	6.14	6.14	6.25	6.16	6.16	6.12	6.07
Unconventional.....	5.93	6.22	6.12	6.18	6.45	6.71	7.06	7.24	7.25	7.52	7.80	8.04	8.33	8.68	8.84	9.05	9.29	9.37	9.37	9.43	9.45	9.52	9.64	9.61
Lower 48 Offshore.....	4.86	5.23	5.06	5.03	4.99	5.10	5.09	5.13	5.42	5.41	5.30	5.25	5.14	4.87	4.76	4.92	5.12	5.26	5.04	4.78	4.69	4.70	4.99	5.11
Associated-Dissolved 4/.....	1.05	1.13	1.16	1.16	1.16	1.48	1.76	1.70	1.61	1.52	1.44	1.37	1.36	1.33	1.38	1.38	1.33	1.35	1.34	1.26	1.25	1.24	1.37	1.43
Non-Associated.....	3.81	4.10	3.90	3.88	3.83	3.62	3.33	3.43	3.81	3.89	3.86	3.88	3.79	3.54	3.38	3.53	3.79	3.91	3.71	3.53	3.44	3.46	3.62	3.68
Alaska.....	0.43	0.51	0.54	0.56	0.57	0.58	0.59	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.65	0.66	0.66	0.67	0.68	0.68	0.69	0.70	0.71	0.71
L48 EOY Dry Gas Reserves (tcf)..	180.0	182.5	187.4	191.1	194.1	195.3	197.7	199.9	201.0	201.8	202.7	204.0	203.8	203.6	203.6	204.2	203.9	203.0	200.6	199.2	197.5	196.9	195.5	193.4
Supplemental Gas Supplies (tcf)5/	0.08	0.08	0.08	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
Lower 48 Wells (thousands).....	24.47	28.28	27.67	26.60	25.83	25.66	26.11	25.07	24.67	25.26	25.84	26.17	26.34	26.83	27.02	27.31	27.58	27.50	27.26	27.49	27.14	27.17	26.62	26.73

1/ Represents lower 48 onshore and offshore supplies.

2/ Includes lease condensate.

3/ Marketed production (wet) minus extraction losses.

4/ Gas which occurs in crude oil reserves either as free gas (associated) or as gas in solution with crude oil (dissolved).

5/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

tcf = trillion cubic feet

L48 = Lower 48 States

EOY = End-of-year

bbls = billion barrels

mmbbls = million barrels

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 lower 48 onshore, lower 48 offshore, and Alaska crude oil production: Energy Information Administration (EIA), Petroleum Supply Annual 2002, DOE/EIA-0340(2002)/1 (Washington, DC, June 2003). 2001 U.S. crude oil and natural gas reserves: EIA, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, DOE/EIA-0216(2001) (Washington, DC, November 2002). 2001 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). Other 2001 and 2002 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2004 National Energy Modeling System run noak.d012604b.

Low LNG Import Case

Table C7. Electricity Supply, Disposition, Prices, and Emissions  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Generation by Fuel Type</b>																								
<b>Electric Power Sector 1/ Power Only 2/</b>																								
Coal.....	1875	1944	1947	2002	2057	2110	2132	2172	2200	2222	2245	2261	2283	2314	2350	2392	2440	2505	2584	2671	2778	2908	2990	3073
Petroleum.....	77	94	51	61	61	64	71	68	66	75	91	102	119	138	184	159	129	125	124	139	132	117	113	112
Natural Gas 3/.....	450	420	504	505	524	537	577	595	637	671	702	740	761	769	751	804	863	877	871	835	819	798	809	813
Nuclear Power.....	780	762	779	791	794	795	796	791	794	800	803	806	809	812	814	816	816	816	816	816	816	816	816	816
Pumped Storage/Other.....	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Renewable Sources 4/.....	304	339	374	379	383	389	393	396	400	405	408	413	417	422	425	432	439	449	459	475	479	482	486	493
Distributed Gen (Natural Gas)	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	3	3	3	4	4	4	5
Non-Utility Gen for Own Use..	-34	-39	-40	-40	-40	-40	-40	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37
Total.....	3443	3511	3607	3689	3770	3845	3918	3976	4052	4127	4203	4275	4343	4409	4480	4558	4642	4728	4811	4894	4981	5079	5173	5266
<b>Combined Heat and Power 5/</b>																								
Coal.....	32	28	29	30	32	33	33	33	33	33	33	33	34	34	33	34	33	33	33	34	33	33	33	33
Petroleum.....	6	2	0	0	0	1	1	1	1	2	3	4	6	7	10	7	5	5	5	6	5	5	4	4
Natural Gas.....	148	152	157	160	161	165	170	176	174	173	174	172	168	164	159	157	161	159	159	152	148	143	144	141
Renewable Sources.....	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Non-Utility Gen for Own Use..	-11	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24
Total.....	183	163	166	170	174	179	184	191	189	189	190	189	187	184	183	178	179	177	177	171	167	160	161	159
Net Available to the Grid.....	3626	3674	3773	3860	3944	4025	4102	4167	4240	4316	4393	4464	4530	4592	4662	4736	4821	4905	4988	5065	5148	5240	5334	5424
<b>End-Use Sector Generation</b>																								
<b>Combined Heat and Power 6/</b>																								
Coal.....	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Petroleum.....	5	5	5	8	9	10	10	11	12	13	14	15	15	16	17	18	18	18	18	18	18	18	18	18
Natural Gas.....	84	84	86	89	94	97	100	105	109	113	117	121	124	127	131	135	139	144	148	153	157	161	166	171
Other Gaseous Fuels 7/.....	5	6	6	8	8	8	9	9	9	10	10	10	10	11	11	11	11	12	12	12	12	12	13	13
Renewable Sources 4/.....	30	31	32	34	35	36	37	37	39	40	41	43	44	45	46	47	48	49	50	51	51	52	53	54
Other 8/.....	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total.....	157	158	162	172	178	183	188	195	202	208	215	221	226	232	237	243	249	254	260	266	271	276	282	288
Other End-Use Generators 9/...	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	7
Generation for Own Use.....	-134	-134	-136	-144	-147	-149	-152	-155	-158	-161	-164	-167	-170	-172	-175	-178	-181	-184	-188	-191	-194	-198	-201	-205
Total Sales to the Grid.....	27	28	31	32	35	38	41	45	48	52	55	59	62	64	67	70	73	75	78	80	83	85	87	90
Total Electricity Generation....	3831	3900	4003	4100	4191	4276	4359	4428	4509	4590	4674	4751	4823	4891	4966	5046	5136	5226	5315	5398	5486	5584	5683	5780
Net Imports.....	22	40	30	32	29	28	28	29	31	32	31	31	30	33	33	30	26	21	21	17	14	10	8	7

Low LNG Import Case

Table C7. Electricity Supply, Disposition, Prices, and Emissions (Continued)  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Electricity Sales by Sector</b>																								
Residential.....	1268	1282	1302	1319	1338	1360	1386	1405	1427	1448	1472	1488	1508	1527	1549	1565	1586	1609	1635	1651	1673	1697	1725	1744
Commercial.....	1208	1213	1254	1296	1335	1372	1408	1443	1480	1516	1550	1585	1618	1648	1677	1710	1746	1783	1819	1854	1888	1923	1960	1999
Industrial.....	994	978	1003	1030	1053	1073	1089	1103	1120	1140	1158	1179	1197	1214	1230	1251	1273	1289	1308	1326	1348	1374	1398	1426
Transportation.....	22	23	23	24	24	25	25	26	26	27	27	28	28	29	30	30	31	31	32	33	33	34	35	35
Total.....	3492	3495	3582	3669	3750	3830	3909	3977	4054	4131	4208	4281	4351	4418	4486	4556	4635	4712	4794	4865	4942	5028	5117	5204
<b>End-Use Prices 10/ (2002 cents per kilowatthour)</b>																								
Residential.....	8.4	8.5	8.3	8.2	8.1	8.0	8.0	8.0	8.0	8.0	8.0	8.1	8.2	8.2	8.3	8.3	8.2	8.2	8.3	8.3	8.3	8.2	8.2	8.2
Commercial.....	7.8	7.6	7.4	7.2	7.0	6.9	6.9	7.0	7.0	7.0	7.1	7.1	7.2	7.3	7.4	7.4	7.4	7.4	7.5	7.4	7.4	7.3	7.4	7.4
Industrial.....	5.0	4.8	4.7	4.6	4.6	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.7	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.8	4.8	4.8
Transportation.....	7.2	7.3	7.1	6.9	6.7	6.6	6.6	6.7	6.7	6.7	6.8	6.9	7.0	7.0	7.1	7.1	7.0	7.0	7.0	7.0	6.9	6.8	6.8	6.8
All Sectors Average.....	7.2	7.1	7.0	6.8	6.7	6.6	6.6	6.7	6.7	6.7	6.7	6.8	6.9	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9	6.9
<b>Prices by Service Category 10/ (2002 cents per kilowatthour)</b>																								
Generation.....	4.6	4.6	4.4	4.3	4.2	4.2	4.1	4.2	4.2	4.2	4.3	4.3	4.4	4.5	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.6	4.6
Transmission.....	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Distribution.....	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
<b>Emissions</b>																								
Sulfur Dioxide (million tons).....	10.55	10.62	10.80	10.16	9.96	10.15	10.29	9.92	9.63	9.54	9.66	9.32	9.14	8.99	8.96	8.96	8.95	8.95	8.94	8.96	8.95	8.93	8.95	8.96
Nitrogen Oxide (million tons).....	4.39	3.70	3.23	3.27	3.35	3.43	3.46	3.48	3.50	3.52	3.54	3.57	3.58	3.60	3.63	3.65	3.65	3.66	3.67	3.65	3.67	3.69	3.71	3.73
Mercury (tons).....	50.96	50.99	50.06	50.37	51.05	52.23	52.42	52.28	51.87	52.13	52.62	52.73	52.78	52.95	53.35	53.48	53.28	53.47	53.77	54.18	54.50	54.45	54.59	54.83

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.  
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 NAICS code 22).  
6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors.  
7/ Other gaseous fuels include refinery and still gas.  
8/ Other includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.  
9/ Other end-use generators include 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.  
10/ Prices represent average revenue per kilowatthour.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.  
Sources: 2001 and 2002 power only and combined heat and power generation, sales to utilities, net imports, residential, industrial, and total electricity sales, and emissions: Energy Information Administration (EIA), Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) and supporting databases. 2001 and 2002 commercial and transportation electricity sales: EIA estimates based on Oak Ridge National Laboratory, Transportation Energy Data Book 21 (Oak Ridge, TN, November 2001). 2001 and 2002 prices: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e. Projections: EIA, AEO2004 National Energy Modeling System run lowlng.d020404a.

Low LNG Import Case

Table C8. Natural Gas Supply and Disposition  
(Trillion Cubic Feet per Year)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Production</b>																								
Dry Gas Production 1/.....	19.05	19.57	19.51	19.58	19.66	19.95	20.21	20.34	20.67	21.21	21.54	21.79	22.12	22.23	22.53	23.25	24.14	24.57	24.71	24.45	24.46	24.40	24.71	24.86
Supplemental Natural Gas 2/..	0.08	0.08	0.08	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>Net Imports.....</b>																								
Canada.....	3.49	3.51	3.60	3.87	4.28	4.43	4.78	4.94	5.27	5.25	5.32	5.39	5.25	5.20	5.07	4.89	4.72	4.64	4.67	4.67	4.68	4.77	4.83	4.95
Mexico.....	3.59	3.40	3.50	3.46	3.42	3.44	3.51	3.61	3.70	3.66	3.65	3.53	3.30	3.25	3.12	2.94	2.77	2.68	2.70	2.68	2.67	2.73	2.76	2.84
Liquefied Natural Gas.....	-0.26	-0.31	-0.42	-0.43	-0.45	-0.41	-0.37	-0.33	-0.34	-0.34	-0.28	-0.20	-0.13	-0.13	-0.13	-0.12	-0.12	-0.12	-0.11	-0.09	-0.07	-0.04	-0.01	0.03
Total Supply.....	0.17	0.43	0.52	0.84	1.31	1.40	1.64	1.66	1.91	1.93	1.95	2.07	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08
<b>Consumption by Sector</b>																								
Residential.....	22.62	23.15	23.19	23.54	24.04	24.48	25.09	25.38	26.04	26.56	26.96	27.27	27.46	27.52	27.70	28.24	28.96	29.31	29.48	29.22	29.24	29.26	29.64	29.90
Commercial.....	4.92	5.07	5.18	5.21	5.29	5.35	5.42	5.47	5.53	5.57	5.61	5.60	5.62	5.63	5.66	5.68	5.74	5.79	5.85	5.86	5.89	5.93	6.00	6.02
Industrial 3/.....	3.12	3.17	3.11	3.17	3.25	3.31	3.35	3.41	3.47	3.51	3.54	3.55	3.57	3.58	3.59	3.62	3.67	3.72	3.77	3.80	3.83	3.87	3.92	3.97
Electric Generators 4/.....	7.23	7.21	7.55	7.72	7.84	7.95	8.05	8.19	8.37	8.54	8.62	8.71	8.76	8.81	8.89	9.03	9.19	9.31	9.41	9.48	9.61	9.76	9.92	10.07
Transportation 5/.....	5.55	4.97	5.67	5.70	5.87	6.02	6.36	6.34	6.62	6.84	7.06	7.26	7.34	7.31	7.32	7.58	7.91	7.99	7.92	7.56	7.38	7.17	7.25	7.25
Pipeline Fuel.....	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11	0.11
Lease and Plant Fuel 6/.....	0.63	0.66	0.65	0.65	0.65	0.65	0.65	0.66	0.68	0.70	0.71	0.71	0.72	0.72	0.73	0.77	0.82	0.84	0.85	0.85	0.85	0.85	0.86	0.87
Total.....	1.32	1.00	0.99	1.06	1.11	1.18	1.24	1.30	1.37	1.40	1.42	1.44	1.46	1.47	1.49	1.54	1.61	1.64	1.66	1.65	1.66	1.66	1.68	1.69
Gas to Liquids.....	22.78	22.09	23.17	23.53	24.04	24.50	25.12	25.43	26.10	26.62	27.03	27.34	27.53	27.60	27.75	28.30	29.04	29.39	29.56	29.30	29.32	29.35	29.72	29.98
Discrepancy 7/.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Discrepancy 7/.....</b>																								
	-0.16	1.06	0.02	0.01	-0.01	-0.02	-0.03	-0.05	-0.06	-0.07	-0.07	-0.07	-0.07	-0.07	-0.05	-0.07	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.08	-0.09

1/ Marketed production (wet) minus extraction losses.

2/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

3/ Includes consumption for combined heat and power, which produces electricity and other useful thermal energy.

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

5/ Compressed natural gas used as vehicle fuel.

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

7/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 2001 and 2002 values include net storage injections.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 supply values: Energy Information Administration (EIA), Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 supply values: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). 2001 and 2002 consumption based on: EIA, Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) Projections: EIA, AEO2004 National Energy Modeling System run lowlng.d020404a.

## Low LNG Import Case

Table C9. Oil and Gas Supply

Production and Supply	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Crude Oil</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per barrel).....	24.54	27.29	24.36	22.75	22.89	23.13	23.28	23.48	23.62	24.09	23.97	24.20	24.41	24.60	24.75	25.04	25.43	25.44	25.81	25.79	26.28	26.30	26.51	26.79
<b>Production (mmbbls per day) 2/</b>																								
United States Total.....	5.62	5.69	5.80	5.86	5.93	6.09	6.11	6.05	5.93	5.82	5.71	5.66	5.57	5.54	5.42	5.28	5.28	5.15	4.97	4.85	4.73	4.75	4.78	4.69
Lower 48 Onshore.....	3.11	2.93	2.95	2.90	2.83	2.77	2.72	2.66	2.61	2.56	2.51	2.47	2.42	2.38	2.34	2.31	2.27	2.24	2.20	2.17	2.14	2.11	2.08	2.05
Lower 48 Offshore.....	1.53	1.78	1.90	2.06	2.22	2.40	2.46	2.45	2.40	2.34	2.28	2.26	2.19	2.22	2.17	2.10	2.19	2.15	2.04	2.00	1.96	2.06	2.16	2.13
Alaska.....	0.98	0.98	0.95	0.90	0.88	0.91	0.93	0.94	0.92	0.92	0.92	0.93	0.95	0.93	0.91	0.87	0.82	0.77	0.72	0.67	0.63	0.58	0.54	0.51
L48 EOY Oil Reserves (bbls) 2/..	19.05	19.23	18.96	18.59	18.61	18.89	18.86	18.66	18.36	18.06	17.72	17.52	17.22	17.16	16.89	16.58	16.67	16.52	16.24	15.88	15.53	15.50	15.46	15.18
<b>Natural Gas</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per tcf).....	2.95	4.90	3.88	3.54	3.48	3.53	3.64	3.49	3.45	3.67	3.88	4.09	4.26	4.49	4.65	4.61	4.47	4.48	4.61	4.76	4.80	4.81	4.72	4.74
<b>Dry Production (tcf) 3/</b>																								
United States Total.....	19.05	19.57	19.51	19.58	19.67	19.96	20.21	20.35	20.68	21.21	21.55	21.79	22.12	22.23	22.54	23.25	24.15	24.58	24.71	24.45	24.46	24.40	24.71	24.86
Lower 48 Onshore.....	13.76	13.83	13.91	13.99	14.10	14.28	14.54	14.61	14.59	15.15	15.60	15.89	16.27	16.62	16.98	16.78	16.71	16.81	16.95	16.99	17.01	16.98	16.98	17.00
Associated-Dissolved 4/.....	1.60	1.54	1.54	1.52	1.50	1.47	1.45	1.43	1.41	1.38	1.37	1.35	1.33	1.31	1.29	1.28	1.26	1.25	1.23	1.22	1.21	1.19	1.18	1.17
Non-Associated.....	12.16	12.29	12.37	12.47	12.61	12.80	13.09	13.18	13.19	13.77	14.24	14.54	14.94	15.31	15.68	15.50	15.45	15.56	15.72	15.77	15.81	15.78	15.80	15.83
Conventional.....	6.23	6.07	6.26	6.29	6.16	6.09	6.03	5.90	5.85	6.02	6.09	6.14	6.24	6.31	6.38	6.32	6.29	6.29	6.35	6.36	6.36	6.32	6.26	6.21
Unconventional.....	5.93	6.22	6.12	6.18	6.45	6.71	7.06	7.27	7.33	7.75	8.15	8.40	8.71	8.99	9.30	9.18	9.16	9.27	9.36	9.40	9.45	9.46	9.53	9.63
Lower 48 Offshore.....	4.86	5.23	5.06	5.03	4.99	5.10	5.09	5.15	5.48	5.45	5.32	5.27	5.22	4.97	4.91	5.01	5.16	5.29	5.10	4.79	4.76	4.73	5.03	5.15
Associated-Dissolved 4/.....	1.05	1.13	1.16	1.16	1.16	1.48	1.76	1.70	1.61	1.52	1.44	1.37	1.36	1.33	1.38	1.38	1.34	1.35	1.34	1.26	1.26	1.24	1.37	1.44
Non-Associated.....	3.81	4.10	3.90	3.88	3.83	3.62	3.33	3.45	3.87	3.93	3.89	3.91	3.86	3.64	3.53	3.63	3.82	3.94	3.76	3.53	3.51	3.49	3.66	3.70
Alaska.....	0.43	0.51	0.54	0.56	0.57	0.58	0.59	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.65	1.46	2.28	2.47	2.67	2.68	2.68	2.69	2.70	2.71
L48 EOY Dry Gas Reserves (tcf)..	180.0	182.5	187.4	191.1	194.1	195.4	197.7	199.9	201.2	202.1	202.9	204.0	203.8	203.7	203.7	204.6	204.8	203.8	201.2	199.5	197.6	196.8	195.2	192.7
Supplemental Gas Supplies (tcf)5/	0.08	0.08	0.08	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
Lower 48 Wells (thousands).....	24.47	28.27	27.67	26.60	25.83	25.68	26.11	25.34	25.07	25.52	26.12	26.55	26.91	27.66	28.25	28.36	28.14	27.66	27.49	27.52	27.52	27.51	27.09	26.96

1/ Represents lower 48 onshore and offshore supplies.

2/ Includes lease condensate.

3/ Marketed production (wet) minus extraction losses.

4/ Gas which occurs in crude oil reserves either as free gas (associated) or as gas in solution with crude oil (dissolved).

5/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

tcf = trillion cubic feet

L48 = Lower 48 States

EOY = End-of-year

bbls = billion barrels

mmbbls = million barrels

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 lower 48 onshore, lower 48 offshore, and Alaska crude oil production: Energy Information Administration (EIA), Petroleum Supply Annual 2002, DOE/EIA-0340(2002)/1 (Washington, DC, June 2003). 2001 U.S. crude oil and natural gas reserves: EIA, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, DOE/EIA-0216(2001) (Washington, DC, November 2002). 2001 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). Other 2001 and 2002 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2004 National Energy Modeling System run lowlng.d020404a.

## Low Unconventional Gas Recovery Case

Table C10. Electricity Supply, Disposition, Prices, and Emissions  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Generation by Fuel Type</b>																								
<b>Electric Power Sector 1/ Power Only 2/</b>																								
Coal.....	1875	1946	1946	2002	2059	2111	2127	2163	2189	2212	2234	2256	2280	2313	2348	2395	2445	2504	2581	2668	2761	2873	2969	3073
Petroleum.....	77	103	62	75	74	75	82	79	80	97	122	116	124	123	106	128	134	143	134	157	127	121	109	108
Natural Gas 3/.....	450	407	490	484	502	518	560	580	612	638	657	707	746	771	824	832	847	846	845	815	833	820	827	818
Nuclear Power.....	780	762	779	791	794	795	796	791	794	800	803	806	809	812	814	816	816	816	816	816	816	816	816	816
Pumped Storage/Other.....	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Renewable Sources 4/.....	304	337	374	379	383	388	393	397	407	411	416	420	430	437	443	450	457	462	472	474	478	479	484	489
Distributed Gen (Natural Gas)	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	3	3	3	4	4	4	5
Non-Utility Gen for Own Use..	-34	-39	-40	-40	-40	-40	-40	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37
Total.....	3443	3508	3603	3682	3763	3838	3907	3963	4035	4112	4185	4259	4343	4411	4489	4576	4654	4727	4806	4887	4972	5066	5164	5263
<b>Combined Heat and Power 5/</b>																								
Coal.....	32	28	29	30	32	33	33	33	33	33	33	34	34	34	34	34	34	34	34	34	34	33	33	33
Petroleum.....	6	5	1	2	1	1	2	2	2	4	6	5	6	5	4	5	5	6	5	6	5	4	4	4
Natural Gas.....	148	153	157	157	158	162	168	173	174	171	170	170	165	168	166	158	156	154	155	150	151	147	147	142
Renewable Sources.....	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Non-Utility Gen for Own Use..	-11	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24
Total.....	183	166	167	169	171	177	183	189	189	188	189	189	185	187	183	176	175	173	174	169	169	165	164	159
Net Available to the Grid.....	3626	3673	3770	3851	3934	4015	4090	4152	4225	4300	4374	4447	4528	4597	4672	4752	4829	4900	4980	5057	5142	5231	5327	5422
<b>End-Use Sector Generation</b>																								
<b>Combined Heat and Power 6/</b>																								
Coal.....	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Petroleum.....	5	5	5	8	9	10	10	11	12	13	14	14	15	15	15	15	16	17	18	18	18	18	18	18
Natural Gas.....	84	84	85	88	92	94	98	102	106	110	113	117	120	124	129	133	137	141	146	150	154	159	164	168
Other Gaseous Fuels 7/.....	5	6	6	8	8	8	9	9	9	10	10	10	10	11	11	11	12	12	12	12	12	12	13	13
Renewable Sources 4/.....	30	31	32	34	35	36	36	37	39	40	41	43	44	45	46	47	48	49	50	51	51	52	53	54
Other 8/.....	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total.....	157	158	161	171	176	180	185	192	198	205	211	216	222	227	233	238	245	251	258	262	268	274	280	286
Other End-Use Generators 9/...	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	7
Generation for Own Use.....	-134	-134	-136	-144	-147	-148	-150	-153	-157	-160	-162	-165	-168	-171	-174	-177	-180	-183	-186	-189	-193	-196	-200	-203
Total Sales to the Grid.....	27	28	30	31	34	37	39	43	47	50	53	56	59	61	64	67	70	73	77	79	81	84	87	89
Total Electricity Generation....	3831	3899	3999	4090	4179	4264	4344	4410	4490	4571	4650	4730	4816	4891	4972	5057	5140	5217	5304	5386	5476	5572	5674	5775
Net Imports.....	22	40	30	33	29	28	30	32	34	34	34	32	30	33	30	28	26	22	23	21	14	11	8	7

**Low Unconventional Gas Recovery Case**

Table C10. Electricity Supply, Disposition, Prices, and Emissions (Continued)  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Electricity Sales by Sector</b>																								
Residential.....	1268	1282	1301	1316	1335	1357	1383	1401	1423	1444	1467	1483	1505	1528	1551	1567	1587	1607	1633	1650	1672	1696	1725	1744
Commercial.....	1208	1213	1252	1293	1331	1366	1402	1436	1472	1508	1541	1576	1612	1645	1675	1711	1745	1780	1815	1850	1882	1918	1955	1995
Industrial.....	994	978	1002	1028	1050	1072	1088	1101	1118	1138	1155	1178	1198	1217	1235	1258	1276	1289	1306	1325	1347	1372	1396	1426
Transportation.....	22	23	23	24	24	25	25	26	26	27	27	28	28	29	30	30	31	31	32	33	33	34	35	35
Total.....	3492	3495	3579	3661	3741	3820	3897	3964	4040	4115	4191	4264	4343	4419	4491	4566	4639	4708	4786	4858	4935	5019	5110	5201
<b>End-Use Prices 10/ (2002 cents per kilowatthour)</b>																								
Residential.....	8.4	8.5	8.4	8.3	8.2	8.1	8.1	8.1	8.1	8.1	8.2	8.2	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.3	8.3	8.2	8.2	8.2
Commercial.....	7.8	7.6	7.4	7.3	7.2	7.0	7.0	7.1	7.1	7.2	7.3	7.2	7.2	7.3	7.3	7.3	7.4	7.4	7.4	7.5	7.4	7.4	7.4	7.4
Industrial.....	5.0	4.8	4.7	4.7	4.6	4.6	4.6	4.7	4.7	4.7	4.8	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.8
Transportation.....	7.2	7.3	7.1	7.0	6.8	6.7	6.7	6.8	6.8	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9	6.9	6.9	6.8
All Sectors Average.....	7.2	7.2	7.0	6.9	6.8	6.7	6.7	6.8	6.8	6.8	6.9	6.9	6.9	6.9	7.0	6.9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	6.9
<b>Prices by Service Category 10/ (2002 cents per kilowatthour)</b>																								
Generation.....	4.6	4.6	4.5	4.4	4.3	4.3	4.2	4.3	4.3	4.3	4.4	4.4	4.4	4.4	4.5	4.5	4.6	4.6	4.6	4.7	4.6	4.6	4.6	4.6
Transmission.....	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Distribution.....	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
<b>Emissions</b>																								
Sulfur Dioxide (million tons).....	10.57	10.65	10.73	10.17	10.19	10.05	9.87	9.63	9.60	10.04	9.65	9.34	9.23	9.04	8.92	8.94	8.93	8.94	8.93	8.97	8.94	8.95	8.95	8.95
Nitrogen Oxide (million tons).....	4.39	3.71	3.22	3.28	3.36	3.43	3.46	3.48	3.50	3.52	3.54	3.56	3.58	3.60	3.62	3.63	3.63	3.64	3.65	3.65	3.67	3.69	3.71	3.72
Mercury (tons).....	51.07	51.02	49.90	50.27	51.29	52.19	51.75	52.09	51.99	53.37	53.45	52.67	52.86	52.93	53.11	53.19	53.19	53.56	53.94	54.37	54.38	54.86	54.75	54.83

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.  
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 NAICS code 22).  
6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors.  
7/ Other gaseous fuels include refinery and still gas.  
8/ Other includes batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.  
9/ Other end-use generators include 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.  
10/ Prices represent average revenue per kilowatthour.  
Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.  
Sources: 2001 and 2002 power only and combined heat and power generation, sales to utilities, net imports, residential, industrial, and total electricity sales, and emissions: Energy Information Administration (EIA), Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) and supporting databases. 2001 and 2002 commercial and transportation electricity sales: EIA estimates based on Oak Ridge National Laboratory, Transportation Energy Data Book 21 (Oak Ridge, TN, November 2001). 2001 and 2002 prices: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e. Projections: EIA, AEO2004 National Energy Modeling System run ug0tec03.d020404b.

## Low Unconventional Gas Recovery Case

Table C11. Natural Gas Supply and Disposition  
(Trillion Cubic Feet per Year)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Production</b>																								
Dry Gas Production 1/.....	19.05	19.43	19.07	18.72	18.66	18.78	18.78	18.80	19.23	19.37	19.50	19.85	20.36	20.72	20.99	21.05	21.11	21.22	21.26	21.01	20.84	20.66	20.84	20.81
Supplemental Natural Gas 2/..	0.08	0.08	0.08	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>Net Imports.....</b>																								
Canada.....	3.49	3.54	3.79	4.25	4.79	5.14	5.75	5.98	6.15	6.42	6.53	6.62	6.73	6.74	6.89	7.12	7.30	7.31	7.46	7.68	8.08	8.36	8.52	8.67
Mexico.....	3.59	3.43	3.69	3.82	3.88	3.89	3.95	4.06	4.08	3.94	3.85	3.55	3.17	3.11	3.07	2.92	2.73	2.53	2.59	2.60	2.65	2.70	2.78	2.85
Liquefied Natural Gas.....	-0.26	-0.31	-0.42	-0.42	-0.43	-0.39	-0.34	-0.30	-0.29	-0.29	-0.21	-0.13	-0.05	-0.06	-0.05	-0.05	-0.04	-0.02	0.01	0.10	0.20	0.30	0.34	0.39
Total Supply.....	0.17	0.43	0.52	0.86	1.35	1.63	2.14	2.22	2.36	2.76	2.89	3.20	3.62	3.68	3.88	4.25	4.61	4.80	4.87	4.98	5.24	5.36	5.40	5.43
<b>Consumption by Sector</b>																								
Residential.....	22.62	23.05	22.94	23.07	23.55	24.02	24.63	24.88	25.47	25.88	26.13	26.56	27.19	27.56	27.98	28.26	28.51	28.62	28.82	28.79	29.02	29.12	29.46	29.58
Commercial.....	4.92	5.07	5.14	5.15	5.22	5.29	5.36	5.40	5.46	5.50	5.53	5.54	5.59	5.64	5.70	5.71	5.73	5.76	5.81	5.83	5.88	5.93	5.99	6.02
Industrial 3/.....	3.12	3.17	3.09	3.14	3.21	3.27	3.31	3.36	3.42	3.46	3.48	3.50	3.54	3.58	3.62	3.64	3.67	3.70	3.74	3.77	3.82	3.86	3.91	3.96
Electric Generators 4/.....	7.23	7.21	7.50	7.58	7.73	7.86	7.94	8.08	8.27	8.43	8.50	8.62	8.72	8.82	8.95	9.07	9.18	9.26	9.36	9.44	9.60	9.73	9.90	10.05
Transportation 5/.....	5.55	4.87	5.56	5.52	5.67	5.84	6.20	6.18	6.39	6.54	6.65	6.87	7.21	7.36	7.54	7.65	7.70	7.66	7.66	7.50	7.50	7.36	7.41	7.29
Pipeline Fuel.....	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.11	0.11
Lease and Plant Fuel 6/.....	0.63	0.66	0.63	0.62	0.61	0.61	0.61	0.62	0.63	0.64	0.64	0.67	0.71	0.72	0.72	0.72	0.73	0.73	0.74	0.73	0.72	0.72	0.73	0.73
Total.....	1.32	1.00	0.98	1.03	1.08	1.13	1.18	1.24	1.31	1.32	1.33	1.37	1.42	1.44	1.46	1.47	1.48	1.49	1.50	1.49	1.49	1.48	1.50	1.50
Gas to Liquids.....	22.78	21.99	22.93	23.06	23.55	24.04	24.66	24.93	25.53	25.95	26.19	26.64	27.25	27.63	28.08	28.34	28.58	28.70	28.89	28.86	29.11	29.20	29.54	29.66
Discrepancy 7/.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Discrepancy 7/.....</b>																								
	-0.16	1.06	0.02	0.01	-0.01	-0.02	-0.03	-0.05	-0.06	-0.06	-0.07	-0.09	-0.07	-0.07	-0.10	-0.08	-0.08	-0.08	-0.08	-0.06	-0.08	-0.08	-0.08	-0.08

1/ Marketed production (wet) minus extraction losses.

2/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

3/ Includes consumption for combined heat and power, which produces electricity and other useful thermal energy.

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

5/ Compressed natural gas used as vehicle fuel.

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

7/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 2001 and 2002 values include net storage injections.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 supply values: Energy Information Administration (EIA), Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 supply values: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). 2001 and 2002 consumption based on: EIA, Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) Projections: EIA, AEO2004 National Energy Modeling System run ug0tec03.d020404b.

## Low Unconventional Gas Recovery Case

Table C12. Oil and Gas Supply

Production and Supply	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Crude Oil</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per barrel).....	24.54	27.29	24.36	22.79	22.90	23.11	23.24	23.44	23.58	24.07	23.94	24.18	24.49	24.58	24.91	24.97	25.37	25.37	25.80	25.75	26.33	26.26	26.52	26.77
<b>Production (mmbbls per day) 2/</b>																								
United States Total.....	5.62	5.69	5.80	5.86	5.94	6.10	6.12	6.06	5.95	5.83	5.69	5.64	5.61	5.59	5.50	5.35	5.32	5.16	4.95	4.82	4.71	4.74	4.77	4.68
Lower 48 Onshore.....	3.11	2.93	2.95	2.91	2.83	2.78	2.72	2.67	2.61	2.56	2.52	2.47	2.43	2.39	2.35	2.31	2.27	2.24	2.21	2.18	2.14	2.11	2.08	2.05
Lower 48 Offshore.....	1.53	1.78	1.90	2.06	2.23	2.41	2.46	2.46	2.41	2.34	2.25	2.24	2.23	2.27	2.24	2.17	2.22	2.16	2.02	1.97	1.94	2.05	2.15	2.12
Alaska.....	0.98	0.98	0.95	0.90	0.88	0.91	0.93	0.94	0.92	0.92	0.92	0.93	0.95	0.93	0.91	0.87	0.82	0.77	0.72	0.67	0.63	0.58	0.54	0.51
L48 EOY Oil Reserves (bbls) 2/..	19.05	19.24	18.98	18.62	18.65	18.93	18.89	18.70	18.41	18.10	17.68	17.51	17.34	17.32	17.10	16.78	16.79	16.59	16.29	15.93	15.59	15.46	15.43	15.16
<b>Natural Gas</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per tcf).....	2.95	5.21	4.31	4.02	3.91	3.90	3.97	3.84	3.77	3.99	4.29	4.38	4.17	4.28	4.48	4.54	4.65	4.73	4.79	4.89	4.88	4.84	4.77	4.85
<b>Dry Production (tcf) 3/</b>																								
United States Total.....	19.05	19.43	19.08	18.72	18.66	18.79	18.79	18.80	19.23	19.37	19.50	19.85	20.36	20.72	20.99	21.05	21.11	21.22	21.26	21.02	20.85	20.67	20.84	20.81
Lower 48 Onshore.....	13.76	13.69	13.39	12.96	13.01	12.99	13.08	13.00	13.02	13.23	13.47	13.22	12.89	13.24	13.50	13.51	13.51	13.46	13.56	13.56	13.45	13.30	13.15	12.99
Associated-Dissolved 4/.....	1.60	1.54	1.54	1.52	1.50	1.47	1.45	1.43	1.41	1.39	1.37	1.35	1.33	1.31	1.29	1.28	1.26	1.25	1.23	1.22	1.21	1.20	1.18	1.17
Non-Associated.....	12.16	12.15	11.85	11.44	11.51	11.52	11.63	11.57	11.62	11.84	12.11	11.87	11.57	11.93	12.21	12.23	12.25	12.21	12.32	12.33	12.24	12.10	11.97	11.83
Conventional.....	6.23	6.16	6.31	6.24	6.22	6.14	6.17	6.15	6.19	6.31	6.46	6.38	6.22	6.40	6.48	6.44	6.45	6.47	6.50	6.51	6.41	6.30	6.21	6.12
Unconventional.....	5.93	5.99	5.54	5.20	5.29	5.37	5.46	5.42	5.43	5.53	5.64	5.49	5.35	5.53	5.72	5.79	5.79	5.74	5.82	5.82	5.83	5.80	5.76	5.71
Lower 48 Offshore.....	4.86	5.23	5.15	5.20	5.09	5.22	5.12	5.21	5.61	5.53	5.41	5.20	5.22	5.23	5.23	5.27	5.14	5.10	5.04	4.78	4.71	4.68	4.99	5.11
Associated-Dissolved 4/.....	1.05	1.13	1.16	1.16	1.16	1.48	1.76	1.70	1.61	1.52	1.44	1.36	1.35	1.35	1.40	1.41	1.36	1.37	1.34	1.25	1.24	1.23	1.36	1.44
Non-Associated.....	3.81	4.10	3.99	4.05	3.93	3.74	3.35	3.51	3.99	4.01	3.97	3.84	3.87	3.88	3.83	3.86	3.77	3.73	3.69	3.54	3.47	3.45	3.63	3.67
Alaska.....	0.43	0.51	0.54	0.56	0.57	0.58	0.59	0.59	0.60	0.61	0.62	1.43	2.25	2.25	2.26	2.27	2.47	2.66	2.67	2.68	2.68	2.69	2.70	2.71
L48 EOY Dry Gas Reserves (tcf)..	176.9	175.3	176.3	177.3	178.2	176.6	176.2	176.8	176.1	175.2	173.7	174.0	173.4	172.1	171.3	170.0	168.0	166.8	164.8	163.4	161.5	160.3	158.2	155.8
Supplemental Gas Supplies (tcf)5/	0.08	0.08	0.08	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
Lower 48 Wells (thousands).....	24.47	27.52	26.50	26.80	26.40	25.54	25.44	25.39	24.71	24.92	25.32	25.59	25.16	25.41	25.89	25.99	26.02	26.11	26.56	26.61	26.44	26.23	25.97	25.89

1/ Represents lower 48 onshore and offshore supplies.

2/ Includes lease condensate.

3/ Marketed production (wet) minus extraction losses.

4/ Gas which occurs in crude oil reserves either as free gas (associated) or as gas in solution with crude oil (dissolved).

5/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

tcf = trillion cubic feet

L48 = Lower 48 States

EOY = End-of-year

bbl = billion barrels

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 lower 48 onshore, lower 48 offshore, and Alaska crude oil production: Energy Information Administration (EIA), Petroleum Supply Annual 2002, DOE/EIA-0340(2002)/1 (Washington, DC, June 2003). 2001 U.S. crude oil and natural gas reserves: EIA, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, DOE/EIA-0216(2001) (Washington, DC, November 2002). 2001 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). Other 2001 and 2002 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2004 National Energy Modeling System run ug0tec03.d020404b.

**Combined Low Supply Case**

Table C13. Electricity Supply, Disposition, Prices, and Emissions  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Generation by Fuel Type</b>																								
<b>Electric Power Sector 1/ Power Only 2/</b>																								
Coal.....	1875	1945	1946	2002	2059	2111	2129	2165	2193	2219	2243	2269	2294	2334	2375	2427	2480	2551	2638	2731	2854	2995	3085	3199
Petroleum.....	77	103	62	74	74	75	82	80	85	109	134	178	211	201	325	296	279	290	284	266	268	204	212	191
Natural Gas 3/.....	450	407	490	486	502	519	556	574	603	616	627	617	613	640	550	593	623	610	598	588	551	573	571	564
Nuclear Power.....	780	762	779	791	794	795	796	791	794	800	803	806	809	812	814	816	816	816	816	816	816	816	816	816
Pumped Storage/Other.....	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9	-9
Renewable Sources 4/.....	304	339	374	379	384	388	393	397	407	411	415	419	429	437	443	448	461	476	491	511	513	515	519	528
Distributed Gen (Natural Gas)	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	2	2	2	2	3	3	3	3
Non-Utility Gen for Own Use..	-34	-39	-40	-40	-40	-40	-40	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37	-37
Total.....	3443	3508	3602	3683	3763	3838	3906	3961	4036	4109	4175	4242	4310	4378	4461	4536	4614	4699	4784	4868	4959	5061	5160	5256
<b>Combined Heat and Power 5/</b>																								
Coal.....	32	28	29	30	32	33	34	33	33	33	33	33	33	34	34	34	33	33	33	33	33	33	33	33
Petroleum.....	6	5	1	2	1	1	2	2	3	5	8	12	14	12	19	16	15	14	14	13	14	10	11	9
Natural Gas.....	148	152	158	156	158	162	167	174	172	169	167	160	155	154	143	144	144	141	140	136	133	132	132	131
Renewable Sources.....	5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Non-Utility Gen for Own Use..	-11	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24	-24
Total.....	183	165	168	168	171	176	183	189	188	187	188	185	182	180	175	174	172	169	167	162	160	155	156	153
Net Available to the Grid.....	3626	3674	3770	3851	3934	4015	4089	4150	4224	4296	4364	4427	4493	4558	4636	4710	4786	4868	4951	5030	5120	5216	5315	5409
<b>End-Use Sector Generation</b>																								
<b>Combined Heat and Power 6/</b>																								
Coal.....	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Petroleum.....	5	5	5	8	9	10	10	11	12	13	15	16	18	18	18	19	19	19	19	19	19	19	19	19
Natural Gas.....	84	84	85	88	92	94	98	102	106	109	113	115	118	121	124	126	129	132	135	138	141	144	147	150
Other Gaseous Fuels 7/.....	5	6	6	8	8	8	9	9	9	10	10	10	11	11	11	11	12	12	12	13	13	13	13	13
Renewable Sources 4/.....	30	31	32	34	35	36	36	37	39	40	41	43	44	45	46	47	48	49	49	50	51	52	53	54
Other 8/.....	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
Total.....	157	158	161	171	177	180	185	192	198	204	211	217	223	227	231	235	240	244	248	252	256	260	264	268
Other End-Use Generators 9/...	4	4	4	4	4	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6	6	6	7	7
Generation for Own Use.....	-134	-134	-136	-144	-147	-148	-150	-153	-157	-159	-162	-164	-167	-169	-172	-174	-177	-179	-182	-185	-187	-190	-193	-196
Total Sales to the Grid.....	27	28	30	31	34	37	39	43	47	50	54	57	61	63	65	67	68	70	72	73	75	76	78	80
Total Electricity Generation....	3831	3899	3999	4090	4179	4264	4343	4408	4489	4567	4641	4710	4782	4851	4933	5011	5092	5178	5266	5350	5443	5543	5647	5746
Net Imports.....	22	40	30	33	29	28	30	32	33	34	37	41	38	36	39	36	32	26	27	22	19	13	8	7

**Combined Low Supply Case**

Table C13. Electricity Supply, Disposition, Prices, and Emissions (Continued)  
(Billion Kilowatthours, Unless Otherwise Noted)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Electricity Sales by Sector</b>																								
Residential.....	1268	1282	1301	1316	1335	1357	1383	1400	1422	1442	1464	1479	1498	1518	1542	1558	1577	1597	1622	1639	1663	1689	1717	1735
Commercial.....	1208	1213	1252	1293	1331	1366	1401	1435	1471	1506	1538	1572	1604	1634	1665	1695	1727	1763	1799	1833	1868	1903	1940	1979
Industrial.....	994	978	1002	1028	1050	1072	1087	1101	1119	1138	1154	1176	1189	1205	1228	1249	1269	1286	1306	1325	1349	1375	1399	1428
Transportation.....	22	23	23	24	24	25	25	26	26	27	27	28	28	29	30	30	31	31	32	33	33	34	35	35
Total.....	3492	3495	3579	3661	3740	3820	3897	3962	4038	4112	4184	4254	4320	4387	4465	4533	4604	4678	4759	4830	4913	5000	5091	5177
<b>End-Use Prices 10/ (2002 cents per kilowatthour)</b>																								
Residential.....	8.4	8.5	8.4	8.3	8.2	8.1	8.1	8.1	8.1	8.2	8.3	8.3	8.4	8.4	8.5	8.5	8.5	8.5	8.6	8.5	8.5	8.3	8.4	8.4
Commercial.....	7.8	7.6	7.4	7.3	7.2	7.0	7.0	7.1	7.2	7.3	7.4	7.4	7.5	7.5	7.7	7.7	7.8	7.8	7.8	7.8	7.7	7.6	7.6	7.6
Industrial.....	5.0	4.8	4.7	4.7	4.6	4.6	4.7	4.7	4.7	4.8	4.8	4.9	4.9	5.0	5.1	5.1	5.2	5.2	5.2	5.2	5.1	5.0	5.0	5.0
Transportation.....	7.2	7.3	7.1	7.0	6.8	6.7	6.7	6.8	6.8	6.9	7.0	7.1	7.2	7.2	7.3	7.3	7.3	7.2	7.2	7.2	7.1	7.0	7.0	7.0
All Sectors Average.....	7.2	7.2	7.0	6.9	6.8	6.7	6.7	6.8	6.8	6.9	7.0	7.0	7.1	7.1	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.1	7.2	7.1
<b>Prices by Service Category 10/ (2002 cents per kilowatthour)</b>																								
Generation.....	4.6	4.6	4.5	4.4	4.3	4.3	4.3	4.3	4.3	4.4	4.5	4.6	4.6	4.7	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.7	4.8	4.7
Transmission.....	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Distribution.....	2.0	2.0	2.0	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.7
<b>Emissions</b>																								
Sulfur Dioxide (million tons).....	10.57	10.63	10.70	10.19	10.17	10.01	9.59	9.61	9.81	10.09	9.61	9.45	9.30	9.03	9.01	8.99	8.94	8.95	8.95	8.95	8.97	8.94	8.95	8.94
Nitrogen Oxide (million tons).....	4.39	3.71	3.22	3.28	3.36	3.43	3.46	3.48	3.50	3.53	3.55	3.58	3.59	3.61	3.64	3.67	3.65	3.65	3.67	3.66	3.68	3.70	3.72	3.73
Mercury (tons).....	51.55	51.66	50.45	50.89	51.98	52.74	51.78	52.50	53.04	53.74	53.81	53.42	53.55	53.40	54.14	54.01	54.03	54.24	54.77	54.88	55.38	55.99	56.02	56.28

1/ Includes electricity-only and combined heat and power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.

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 NAICS code 22).

6/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors.

7/ Other gaseous fuels include refinery and still gas.

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

9/ Other end-use generators include 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.

10/ Prices represent average revenue per kilowatthour.

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 power only and combined heat and power generation, sales to utilities, net imports, residential, industrial, and total electricity sales, and emissions: Energy Information Administration (EIA), Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) and supporting databases. 2001 and 2002 commercial and transportation electricity sales: EIA estimates based on Oak Ridge National Laboratory, Transportation Energy Data Book 21 (Oak Ridge, TN, November 2001). 2001 and 2002 prices: EIA, AEO2004 National Energy Modeling System run aeo2004.d101703e. Projections: EIA, AEO2004 National Energy Modeling System run lowgas01.d020404a.

**Combined Low Supply Case**

Table C14. Natural Gas Supply and Disposition  
(Trillion Cubic Feet per Year)

Supply, Disposition, and Prices	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Production</b>																								
Dry Gas Production 1/.....	19.05	19.43	19.06	18.73	18.66	18.84	18.98	19.04	19.54	19.87	19.91	19.94	20.19	20.30	20.53	20.75	20.72	20.67	20.60	20.49	20.50	20.37	20.34	20.18
Supplemental Natural Gas 2/..	0.08	0.08	0.08	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>Net Imports.....</b>																								
Canada.....	3.49	3.54	3.80	4.25	4.79	5.09	5.53	5.71	5.76	5.69	5.80	5.66	5.50	5.48	5.40	5.39	5.36	5.37	5.50	5.66	5.82	6.08	6.33	6.52
Mexico.....	3.59	3.43	3.70	3.81	3.87	3.91	3.97	4.07	4.12	3.99	3.93	3.70	3.45	3.41	3.30	3.21	3.08	2.99	3.07	3.16	3.24	3.36	3.45	3.54
Liquefied Natural Gas.....	-0.26	-0.31	-0.42	-0.42	-0.43	-0.39	-0.34	-0.29	-0.29	-0.28	-0.20	-0.12	-0.02	-0.01	0.02	0.11	0.20	0.31	0.36	0.42	0.50	0.64	0.80	0.90
	0.17	0.43	0.52	0.86	1.35	1.57	1.90	1.93	1.93	1.98	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08	2.08
<b>Total Supply.....</b>	<b>22.62</b>	<b>23.04</b>	<b>22.94</b>	<b>23.08</b>	<b>23.54</b>	<b>24.02</b>	<b>24.60</b>	<b>24.85</b>	<b>25.39</b>	<b>25.65</b>	<b>25.80</b>	<b>25.70</b>	<b>25.79</b>	<b>25.87</b>	<b>26.02</b>	<b>26.24</b>	<b>26.18</b>	<b>26.14</b>	<b>26.20</b>	<b>26.24</b>	<b>26.42</b>	<b>26.54</b>	<b>26.76</b>	<b>26.80</b>
<b>Consumption by Sector</b>																								
Residential.....	4.92	5.07	5.14	5.15	5.22	5.29	5.36	5.40	5.45	5.48	5.50	5.48	5.50	5.53	5.55	5.56	5.59	5.62	5.67	5.69	5.73	5.78	5.85	5.87
Commercial.....	3.12	3.17	3.09	3.14	3.21	3.27	3.31	3.36	3.41	3.44	3.45	3.45	3.47	3.49	3.49	3.52	3.55	3.57	3.60	3.64	3.67	3.73	3.77	3.81
Industrial 3/.....	7.23	7.21	7.50	7.58	7.72	7.86	7.94	8.07	8.25	8.39	8.45	8.52	8.56	8.64	8.65	8.76	8.85	8.92	9.02	9.10	9.24	9.38	9.50	9.62
Electric Generators 4/.....	5.55	4.87	5.56	5.52	5.67	5.84	6.17	6.14	6.32	6.36	6.41	6.24	6.23	6.19	6.21	6.28	6.10	5.94	5.82	5.71	5.65	5.54	5.54	5.38
Transportation 5/.....	0.01	0.02	0.03	0.03	0.04	0.04	0.05	0.05	0.06	0.06	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.10	0.10	0.10	0.10	0.11
Pipeline Fuel.....	0.63	0.66	0.63	0.62	0.61	0.62	0.62	0.63	0.64	0.65	0.65	0.65	0.65	0.66	0.66	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Lease and Plant Fuel 6/.....	1.32	1.00	0.98	1.03	1.08	1.14	1.19	1.25	1.32	1.34	1.35	1.35	1.37	1.38	1.40	1.41	1.41	1.42	1.42	1.42	1.42	1.42	1.42	1.42
Total.....	22.78	21.99	22.92	23.07	23.55	24.05	24.64	24.89	25.45	25.72	25.87	25.77	25.85	25.96	26.04	26.28	26.25	26.22	26.29	26.32	26.48	26.62	26.85	26.88
Gas to Liquids.....	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Discrepancy 7/.....</b>	<b>-0.16</b>	<b>1.06</b>	<b>0.02</b>	<b>0.01</b>	<b>-0.01</b>	<b>-0.02</b>	<b>-0.03</b>	<b>-0.05</b>	<b>-0.06</b>	<b>-0.06</b>	<b>-0.07</b>	<b>-0.07</b>	<b>-0.06</b>	<b>-0.09</b>	<b>-0.02</b>	<b>-0.04</b>	<b>-0.08</b>	<b>-0.08</b>	<b>-0.08</b>	<b>-0.08</b>	<b>-0.07</b>	<b>-0.08</b>	<b>-0.08</b>	<b>-0.08</b>

1/ Marketed production (wet) minus extraction losses.

2/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

3/ Includes consumption for combined heat and power, which produces electricity and other useful thermal energy.

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

5/ Compressed natural gas used as vehicle fuel.

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

7/ Balancing item. Natural gas lost as a result of converting flow data measured at varying temperatures and pressures to a standard temperature and pressure and the merger of different data reporting systems which vary in scope, format, definition, and respondent type. In addition, 2001 and 2002 values include net storage injections.

Btu = British thermal unit.

N/A = Not applicable.

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 supply values: Energy Information Administration (EIA), Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 supply values: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). 2001 and 2002 consumption based on: EIA, Annual Energy Review 2001, DOE/EIA-0384(2001) (Washington, DC, October 2002) Projections: EIA, AEO2004 National Energy Modeling System run lowgas01.d020404a.

**Combined Low Supply Case**

Table C15. Oil and Gas Supply

Production and Supply	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
<b>Crude Oil</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per barrel).....	24.54	27.29	24.36	22.79	22.90	23.12	23.25	23.45	23.59	24.07	23.95	24.23	24.43	24.74	24.81	25.17	25.12	25.60	25.52	26.13	26.02	26.66	26.54	26.76
<b>Production (mmbbls per day) 2/</b>																								
United States Total.....	5.62	5.69	5.80	5.86	5.94	6.10	6.12	6.06	5.95	5.83	5.69	5.65	5.61	5.60	5.51	5.36	5.30	5.14	4.99	4.90	4.87	5.01	4.96	4.78
Lower 48 Onshore.....	3.11	2.93	2.95	2.91	2.83	2.78	2.72	2.67	2.61	2.56	2.52	2.47	2.43	2.39	2.35	2.32	2.28	2.25	2.22	2.18	2.15	2.12	2.09	2.06
Lower 48 Offshore.....	1.53	1.78	1.90	2.06	2.23	2.41	2.46	2.46	2.41	2.34	2.25	2.24	2.23	2.27	2.24	2.18	2.19	2.13	2.05	2.04	2.08	2.31	2.33	2.21
Alaska.....	0.98	0.98	0.95	0.90	0.88	0.91	0.93	0.94	0.92	0.92	0.92	0.93	0.95	0.93	0.91	0.87	0.82	0.77	0.72	0.67	0.63	0.58	0.54	0.51
L48 EOY Oil Reserves (bbls) 2/..	19.05	19.24	18.98	18.62	18.65	18.93	18.89	18.70	18.41	18.11	17.69	17.52	17.35	17.35	17.13	16.85	16.74	16.59	16.19	15.98	15.90	16.10	15.82	15.32
<b>Natural Gas</b>																								
L48 Average Wellhead Price 1/ (2002 dollars per tcf).....	2.95	5.21	4.30	4.02	3.91	3.89	3.99	3.86	3.87	4.19	4.51	4.77	4.85	5.02	5.16	5.21	5.37	5.54	5.53	5.60	5.51	5.50	5.51	5.61
<b>Dry Production (tcf) 3/</b>																								
United States Total.....	19.05	19.43	19.06	18.74	18.66	18.84	18.98	19.04	19.54	19.87	19.91	19.95	20.19	20.30	20.53	20.75	20.73	20.67	20.61	20.49	20.50	20.37	20.34	20.18
Lower 48 Onshore.....	13.76	13.69	13.37	12.97	13.01	13.10	13.24	13.21	13.30	13.63	13.87	14.02	14.19	14.35	14.56	14.71	14.90	14.90	14.87	14.74	14.58	14.35	14.19	14.10
Associated-Dissolved 4/.....	1.60	1.54	1.54	1.52	1.50	1.47	1.45	1.43	1.41	1.39	1.37	1.35	1.33	1.31	1.30	1.28	1.27	1.25	1.24	1.22	1.21	1.20	1.19	1.17
Non-Associated.....	12.16	12.15	11.83	11.45	11.51	11.62	11.78	11.78	11.89	12.24	12.51	12.67	12.86	13.04	13.26	13.43	13.63	13.64	13.63	13.52	13.37	13.15	13.01	12.93
Conventional.....	6.23	6.16	6.31	6.24	6.22	6.22	6.25	6.20	6.32	6.50	6.64	6.69	6.79	6.88	6.94	6.98	7.05	7.02	7.02	6.96	6.88	6.76	6.69	6.65
Unconventional.....	5.93	5.99	5.53	5.21	5.30	5.41	5.53	5.58	5.57	5.74	5.87	5.98	6.07	6.16	6.33	6.45	6.59	6.63	6.61	6.56	6.50	6.40	6.32	6.28
Lower 48 Offshore.....	4.86	5.23	5.15	5.20	5.09	5.17	5.16	5.24	5.64	5.63	5.42	5.30	5.37	5.31	5.33	5.39	5.17	5.11	5.06	5.06	5.22	5.32	5.44	5.37
Associated-Dissolved 4/.....	1.05	1.13	1.16	1.16	1.16	1.48	1.76	1.70	1.61	1.52	1.44	1.36	1.35	1.35	1.40	1.41	1.37	1.36	1.33	1.29	1.30	1.33	1.53	1.52
Non-Associated.....	3.81	4.10	3.99	4.05	3.93	3.68	3.40	3.55	4.03	4.11	3.98	3.95	4.03	3.96	3.93	3.97	3.80	3.75	3.73	3.78	3.92	3.98	3.91	3.85
Alaska.....	0.43	0.51	0.54	0.56	0.57	0.58	0.59	0.59	0.60	0.61	0.62	0.62	0.63	0.64	0.65	0.65	0.66	0.67	0.68	0.68	0.69	0.70	0.71	0.72
L48 EOY Dry Gas Reserves (tcf)..	176.9	175.3	176.4	177.3	178.2	176.9	176.5	176.8	176.1	175.2	173.8	174.1	173.7	173.6	174.0	173.9	172.1	171.4	169.6	168.6	166.4	163.4	159.8	156.5
Supplemental Gas Supplies (tcf)5/	0.08	0.08	0.08	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
Lower 48 Wells (thousands).....	24.47	27.52	26.49	26.79	26.40	25.92	25.73	25.18	24.99	25.46	25.83	26.65	27.01	27.96	28.54	28.61	28.60	28.68	28.51	28.66	28.33	28.59	28.40	28.19

1/ Represents lower 48 onshore and offshore supplies.

2/ Includes lease condensate.

3/ Marketed production (wet) minus extraction losses.

4/ Gas which occurs in crude oil reserves either as free gas (associated) or as gas in solution with crude oil (dissolved).

5/ Synthetic natural gas, propane air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

tcf = trillion cubic feet

L48 = Lower 48 States

EOY = End-of-year

bbl = billion barrels

Note: Totals may not equal sum of components due to independent rounding. Data for 2001 and 2002 are model results and may differ slightly from official EIA data reports.

Sources: 2001 and 2002 lower 48 onshore, lower 48 offshore, and Alaska crude oil production: Energy Information Administration (EIA), Petroleum Supply Annual 2002, DOE/EIA-0340(2002)/1 (Washington, DC, June 2003). 2001 U.S. crude oil and natural gas reserves: EIA, U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, DOE/EIA-0216(2001) (Washington, DC, November 2002). 2001 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Annual 2001, DOE/EIA-0131(2001) (Washington, DC, February 2003). 2002 natural gas lower 48 average wellhead price, natural gas production, and supplemental gas supplies: EIA, Natural Gas Monthly, DOE/EIA-0130(2003/06) (Washington, DC, June 2003). Other 2001 and 2002 values: EIA, Office of Integrated Analysis and Forecasting. Projections: EIA, AEO2004 National Energy Modeling System run lowgas01.d020404a.