

Short-Term Energy Outlook

August 2005

Short-Term Energy Outlook - Regional Enhancements

Starting with this edition of the Short-Term Energy Outlook (STEO), EIA is introducing regional projections (the scope of which will vary by fuel) of energy prices, consumption, and production. The addition of regional data and forecasts will allow us to examine regional fuel demands and prices, regional fuel inventory trends, the interaction between regional electricity demand shifts, and regional electric generating capacity. This edition of STEO includes regional projections for heating oil, propane, and gasoline prices and natural gas and electricity demand and prices. Over the next 2 months, we will include additional regional detail on electricity generation.

2005 Summer Outlook Update (Figures 1 to 3)

Crude oil and petroleum product prices remain high in the United States as world oil market fundamentals stay tight and conditions for continued economic growth in key consuming regions appear to be favorable. Despite some declines during July, regular-grade [gasoline prices](#) averaged xx per gallon nationally on August 8, 2005, compared to \$2.33 per gallon a month earlier (July 11, 2005). The pattern for on-highway diesel fuel was similar, and the current average retail diesel price is still xx cents per gallon above regular gasoline. EIA projects that gasoline and diesel fuel prices will show increases of about 35 cents and 55 cents, respectively, for the 2005 driving season (April-September) relative to the 2004 levels. These changes would result in increases in motor fuel prices for the third year in a row.

Hot weather across much of the United States in June, July and early August is likely to result in strong summer growth rates in [electricity demand](#) due to high cooling loads for parts of the country, particularly in the Northeast and Midwest [Census Regions](#) and the West South Central Census Division (Texas and nearby States). For the second and third quarters combined, electricity demand growth over 2004 levels is expected to be 3.4 percent nationally and about 7.1 percent in the West North Central Census Division (from Kansas and Missouri north to North Dakota and Minnesota) and 5.5 percent in the West South Central Division. Nationally, growth in summer electricity demand between 1999 and 2004 averaged about 2 percent per year. These projections presume that the degree-day forecasts from the National Oceanographic and Atmospheric Administration (NOAA), released in mid-July, hold through September.

Crude Oil and Petroleum Products (Figures 4 to 9)

The [West Texas Intermediate \(WTI\) crude oil price](#) averaged \$59 per barrel in July and is now expected to average over \$59 per barrel for the third quarter of 2005, approximately \$15 per barrel above the year-ago level. Quarterly averages for the WTI price are projected to remain above \$56 per barrel for the rest of 2005 and 2006. Oil prices remain sensitive to any

Table A2. Annual U.S. Macroeconomic and Weather Indicators: Base Case

	Year														
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Macroeconomic															
Real Gross Domestic Product (billion chained 2000 dollars).....	7337	7533	7835	8032	8329	8704	9067	9470	9817	9891	10075	10381	10842	<i>11224</i>	<i>11538</i>
GDP Implicit Price Deflator (Index, 2000=100).....	86.4	88.4	90.3	92.1	93.9	95.4	96.5	97.9	100.0	102.4	104.1	106.0	108.3	<i>110.8</i>	<i>113.1</i>
Real Disposable Personal Income (billion chained 2000 Dollars).....	5536	5594	5746	5906	6081	6296	6664	6862	7194	7333	7560	7734	8019	<i>8252</i>	<i>8536</i>
Manufacturing Production (Index, 1997=100).....	75.5	78.3	83.3	87.9	92.2	100.0	106.6	112.3	117.6	112.7	112.7	112.7	118.1	<i>122.5</i>	<i>125.7</i>
Real Fixed Investment (billion chained 2000 dollars).....	878	953	1042	1110	1209	1321	1455	1576	1679	1629	1549	1627	1794	<i>1928</i>	<i>1989</i>
Business Inventory Change (billion chained 2000 dollars).....	-4.5	3.4	11.5	13.4	9.7	20.7	18.6	17.0	7.9	-21.3	-7.5	-15.2	5.9	<i>10.8</i>	<i>0.3</i>
Producer Price Index (index, 1982=1.000).....	1.172	1.189	1.205	1.248	1.277	1.276	1.244	1.255	1.328	1.342	1.311	1.381	1.467	<i>1.553</i>	<i>1.578</i>
Consumer Price Index (index, 1982-1984=1.000).....	1.403	1.445	1.482	1.524	1.569	1.605	1.630	1.666	1.722	1.771	1.798	1.840	1.889	<i>1.947</i>	<i>1.992</i>
Petroleum Product Price Index (index, 1982=1.000).....	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.609	0.913	0.853	0.795	0.977	1.198	<i>1.521</i>	<i>1.558</i>
Non-Farm Employment (millions).....	108.7	110.8	114.3	117.3	119.7	122.8	125.9	129.0	131.8	131.8	130.3	130.0	131.5	<i>133.6</i>	<i>135.6</i>
Commercial Employment (millions).....	70.9	72.9	75.7	78.4	80.7	83.4	86.1	89.1	91.4	92.0	91.4	91.7	93.3	<i>95.2</i>	<i>96.9</i>
Total Industrial Production (index, 1997=100.0).....	78.4	80.9	85.3	89.4	93.2	100.0	105.8	110.6	115.4	111.3	111.0	110.9	115.5	<i>119.5</i>	<i>122.2</i>
Housing Stock (millions).....	102.6	103.8	105.1	106.7	108.0	109.4	111.1	112.7	113.3	114.7	115.7	117.1	118.4	<i>120.3</i>	<i>121.7</i>
Weather ^a															
Heating Degree-Days															
U.S.....	4433	4671	4470	4516	4689	4525	3946	4154	4447	4193	4272	4459	4289	<i>4364</i>	<i>4528</i>
New England.....	6918	6803	6748	6632	6749	6726	5743	6013	6584	6112	6098	6847	6609	<i>6751</i>	<i>6650</i>
Middle Atlantic.....	6107	6039	6083	5967	6118	5942	4924	5495	5942	5438	5371	6097	5749	<i>5929</i>	<i>5910</i>
U.S. Gas-Weighted.....	4787	5062	4861	4905	5092	4911	4271	4510	4796	4534	4635	4828	4641	<i>4735</i>	<i>4870</i>
Cooling Degree-Days (U.S.).....	1075	1251	1254	1322	1216	1195	1438	1328	1268	1288	1392	1282	1225	<i>1307</i>	<i>1242</i>

^aPopulation-weighted degree-days. A degree-day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 2000 population.

Notes: Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Regional Short-Term Energy Model.

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA); Federal Reserve System, Statistical Release G.17; U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on Global Insight Model of the U.S. Economy, July 2005. Degree-day projections are from NOAA's Climate Prediction Center.

Table A3. U.S. Energy Supply and Demand: Base Case
(Quadrillion Btu except where noted)

	Year														
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Production															
Coal	21.63	20.25	22.11	22.03	22.68	23.21	23.94	23.19	22.62	23.53	22.70	22.36	23.19	23.52	24.14
Natural Gas.....	18.38	18.58	19.35	19.08	19.27	19.32	19.61	19.34	19.66	20.20	19.46	19.57	19.45	19.48	19.57
Crude Oil.....	15.22	14.49	14.10	13.89	13.72	13.66	13.24	12.45	12.36	12.28	12.16	12.03	11.50	11.53	11.95
Natural Gas Liquids	2.36	2.41	2.39	2.44	2.53	2.50	2.42	2.53	2.61	2.55	2.56	2.35	2.48	2.47	2.49
Nuclear	6.48	6.41	6.69	7.08	7.09	6.60	7.07	7.61	7.86	8.03	8.14	7.97	8.23	8.11	8.27
Hydroelectric.....	2.57	2.85	2.65	3.18	3.56	3.60	3.25	3.21	2.75	2.11	2.59	2.71	2.66	2.66	2.99
Other Renewables.....	3.29	3.26	3.38	3.46	3.55	3.43	3.26	3.33	3.35	3.08	3.29	3.41	3.61	3.70	3.74
Total.....	69.94	68.26	70.68	71.16	72.40	72.31	72.79	71.65	71.22	71.79	70.90	70.40	71.12	71.46	73.16
Net Imports															
Coal	-2.59	-1.76	-1.66	-2.08	-2.17	-2.01	-1.87	-1.30	-1.21	-0.77	-0.61	-0.49	-0.56	-0.46	-0.43
Natural Gas.....	1.94	2.25	2.52	2.74	2.85	2.90	3.06	3.50	3.62	3.69	3.59	3.39	3.50	3.60	4.03
Crude Oil.....	13.29	12.51	13.06	14.91	15.34	15.37	16.51	17.67	18.65	18.71	19.91	21.06	22.01	22.24	22.33
Petroleum Products	2.01	1.71	1.90	1.49	1.91	1.52	1.72	1.97	2.28	2.47	2.46	2.74	3.29	2.91	3.15
Electricity	0.09	0.09	0.15	0.13	0.14	0.12	0.09	0.10	0.12	0.08	0.08	0.02	0.04	0.06	0.01
Coal Coke.....	0.03	0.03	0.06	0.06	0.02	0.05	0.07	0.06	0.07	0.03	0.06	0.05	0.14	0.08	0.06
Total.....	14.77	14.84	16.03	17.25	18.10	17.95	19.57	22.00	23.53	24.20	25.49	26.77	28.41	28.43	29.16
Adjustments ^a	1.24	4.48	2.54	2.81	3.73	4.46	2.79	3.12	4.16	0.38	1.64	0.99	0.52	1.56	1.08
Demand															
Coal	19.12	19.84	19.91	20.09	21.00	21.45	21.66	21.62	22.58	21.66	22.02	22.62	22.20	22.96	23.51
Natural Gas.....	20.84	21.35	21.84	22.78	23.20	23.33	22.94	23.01	23.92	22.91	23.66	22.51	22.56	22.94	23.53
Petroleum	33.53	33.84	34.67	34.55	35.76	36.27	36.93	37.96	38.40	38.33	38.30	38.94	40.47	40.67	41.40
Nuclear	6.48	6.41	6.69	7.08	7.09	6.60	7.07	7.61	7.86	8.03	8.14	7.97	8.23	8.11	8.27
Other.....	5.99	6.14	6.13	6.72	7.18	7.09	6.55	6.57	6.14	5.44	5.90	6.12	6.59	6.78	6.69
Total.....	85.95	87.58	89.25	91.22	94.22	94.73	95.15	96.77	98.91	96.38	98.03	98.16	100.05	101.45	103.40

^aBalancing item. Includes stock changes, losses, gains, miscellaneous blending components, and unaccounted-for supply.

Sources: Historical data: *Annual Energy Review*, DOE/EIA-0384; projections generated by simulation of the Regional Short-Term Energy Model.

Table A4. Annual Average U.S. Energy Prices: Base Case
(Nominal Dollars)

	Year															
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
Crude Oil Prices (dollars per barrel)																
Imported Average ^a	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.71	27.73	35.99	<i>47.32</i>	<i>49.85</i>	
WTI ^b Spot Average.....	20.54	18.49	17.16	18.41	22.11	20.61	14.45	19.25	30.29	25.95	26.12	31.12	41.44	<i>54.98</i>	<i>56.77</i>	
Natural Gas (dollars per thousand cubic feet)																
Average Wellhead.....	1.74	2.04	1.85	1.55	2.17	2.32	1.96	2.19	3.70	4.01	2.95	4.89	5.50	<i>6.79</i>	<i>6.56</i>	
Henry Hub Spot	1.83	2.19	1.97	1.74	2.84	2.57	2.15	2.34	4.45	4.09	3.47	5.64	6.06	<i>7.63</i>	<i>7.34</i>	
Petroleum Products																
Gasoline Retail ^c (dollars per gallon)																
All Grades	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.53	1.47	1.39	1.60	1.89	<i>2.24</i>	<i>2.34</i>	
Regular Unleaded.....	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.49	1.43	1.34	1.56	1.85	<i>2.17</i>	<i>2.21</i>	
No. 2 Diesel Oil, Retail (dollars per gallon)	1.11	1.11	1.11	1.11	1.24	1.19	1.04	1.12	1.49	1.40	1.32	1.50	1.81	<i>2.29</i>	<i>2.29</i>	
No. 2 Heating Oil, Wholesale (dollars per gallon)	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.49	0.89	0.76	0.69	0.88	1.13	<i>1.58</i>	<i>1.60</i>	
No. 2 Heating Oil, Retail (dollars per gallon)	NA	NA	NA	0.87	0.99	0.98	0.85	0.87	1.31	1.25	1.13	1.36	1.54	<i>1.98</i>	<i>2.06</i>	
No. 6 Residual Fuel Oil, Retail ^d (dollars per barrel).....	14.21	14.00	14.79	16.49	19.01	17.82	12.83	16.02	25.34	22.24	23.82	29.40	31.02	<i>41.31</i>	<i>41.92</i>	
Electric Power Sector (dollars per million Btu)																
Coal.....	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	1.20	1.23	1.25	1.27	1.35	<i>1.54</i>	<i>1.59</i>	
Heavy Fuel Oil ^e	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.27	3.73	3.67	4.77	4.86	<i>6.24</i>	<i>6.40</i>	
Natural Gas.....	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	4.34	4.44	3.55	5.37	5.94	<i>7.45</i>	<i>7.08</i>	
Other Residential																
Natural Gas																
(dollars per thousand cubic feet).....	5.89	6.17	6.41	6.06	6.35	6.95	6.83	6.69	7.77	9.63	7.90	9.51	10.74	<i>12.19</i>	<i>12.64</i>	
Electricity																
(cents per kilowatthour).....	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	8.24	8.62	8.46	8.70	8.92	<i>9.08</i>	<i>8.97</i>	

^aRefiner acquisition cost (RAC) of imported crude oil.

^bWest Texas Intermediate.

^cAverage self-service cash prices.

^dAverage for all sulfur contents.

^eIncludes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Regional Short-Term Energy Model.

Sources: Historical data: EIA; latest data available from EIA databases supporting the following reports: *Petroleum Marketing Monthly*, DOE/EIA-0380; *Natural Gas Monthly*, DOE/EIA-0130; *Monthly Energy Review*, DOE/EIA-0035; *Electric Power Monthly*, DOE/EIA-0226.

Table A5. Annual U.S. Petroleum Supply and Demand: Base Case
(Million Barrels per Day, Except Closing Stocks)

	Year														
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Supply															
Crude Oil Supply															
Domestic Production ^a	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.75	5.68	5.42	5.45	5.64
Alaska	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.97	0.96	0.98	0.97	0.91	0.89	0.87
Lower 48	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.83	4.85	4.84	4.76	4.71	4.51	4.56	4.77
Net Commercial Imports ^b	5.98	6.67	6.95	7.14	7.40	8.12	8.60	8.60	9.01	9.30	9.12	9.65	10.06	10.19	10.23
Net SPR Withdrawals	0.01	-0.02	0.00	0.00	0.07	0.01	-0.02	0.02	0.08	-0.02	-0.12	-0.11	-0.10	-0.06	0.00
Net Commercial Withdrawals	0.00	-0.05	-0.01	0.09	0.05	-0.06	-0.05	0.11	0.00	-0.07	0.09	0.02	-0.05	-0.01	0.01
Product Supplied and Losses	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.19	0.15	0.12	0.11	0.05	0.14	0.15	0.08
Total Crude Oil Supply	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	15.07	15.13	14.95	15.30	15.48	15.72	15.97
Other Supply															
NGL Production	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.85	1.91	1.87	1.88	1.72	1.81	1.81	1.83
Other Hydrocarbon and Alcohol Inputs	0.07	0.25	0.26	0.30	0.31	0.34	0.38	0.38	0.38	0.38	0.42	0.42	0.42	0.45	0.46
Crude Oil Product Supplied	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	0.95	0.90	0.96	0.97	1.05	1.04	1.03
Net Product Imports ^c	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	1.40	1.59	1.42	1.59	2.04	1.89	1.98
Product Stock Withdrawn	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.30	0.00	-0.23	0.15	0.03	-0.06	-0.02	0.02
Total Supply	16.97	17.26	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	20.03	20.73	20.89	21.28
Demand															
Motor Gasoline ^d	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.47	8.61	8.85	8.93	9.11	9.20	9.35
Jet Fuel	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	1.73	1.66	1.61	1.58	1.63	1.66	1.71
Distillate Fuel Oil	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	3.72	3.85	3.78	3.93	4.06	4.18	4.26
Residual Fuel Oil	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	0.91	0.81	0.70	0.77	0.86	0.85	0.83
Other Oils ^e	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.73	4.82	4.82	5.07	4.99	5.13
Total Demand	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.76	20.03	20.73	20.89	21.28
Total Petroleum Net Imports	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.90	10.54	11.24	12.10	12.08	12.21
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	318	335	337	303	284	305	324	284	286	312	278	269	286	290	286
Total Motor Gasoline	216	226	215	202	195	210	216	193	196	210	209	207	218	209	208
Jet Fuel	43	40	47	40	40	44	45	41	45	42	39	39	40	40	41
Distillate Fuel Oil	141	141	145	130	127	138	156	125	118	145	134	137	126	135	132
Residual Fuel Oil	43	44	42	37	46	40	45	36	36	41	31	38	42	38	37
Other Oils ^f	263	273	275	258	250	259	291	246	247	287	257	241	257	268	263

^aIncludes lease condensate.

^bNet imports equals gross imports plus SPR imports minus exports.

^cIncludes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

^dFor years prior to 1993, motor gasoline includes an estimate of fuel ethanol blended into gasoline and certain product reclassifications, not reported elsewhere in EIA. See Appendix B in EIA, *Short-Term Energy Outlook*, EIA/DOE-0202(93/3Q), for details on this adjustment.

^eIncludes crude oil product supplied, natural gas liquids, liquefied refinery gas, other liquids, and all finished petroleum products except motor gasoline, jet fuel, distillate, and residual fuel oil.

^fIncludes stocks of all other oils, such as aviation gasoline, kerosene, natural gas liquids (including ethane), aviation gasoline blending components, naphtha and other oils for petrochemical feedstock use, special naphthas, lube oils, wax, coke, asphalt, road oil, and miscellaneous oils.

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

Notes: Minor discrepancies with other EIA published historical data are due to rounding, with the following exception: recent petroleum demand and supply data displayed here reflect the incorporation of resubmissions of the data as reported in EIA's *Petroleum Supply Monthly*, TableC1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Regional Short-Term Energy Model.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109, and *Weekly Petroleum Status Report*, DOE/EIA-0208.

Table A6. Annual U.S. Natural Gas Supply and Demand: Base Case
(Trillion Cubic Feet)

	Year														
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Supply															
Total Dry Gas Production	17.84	18.10	18.82	18.60	18.78	18.83	19.02	18.83	19.18	19.62	18.93	19.04	18.92	<i>18.95</i>	<i>19.04</i>
Gross Imports	2.14	2.35	2.62	2.84	2.94	2.99	3.15	3.59	3.78	3.98	4.02	4.00	4.26	<i>4.21</i>	<i>4.59</i>
Gross Exports	0.22	0.14	0.16	0.15	0.15	0.16	0.16	0.16	0.24	0.37	0.52	0.69	0.85	<i>0.71</i>	<i>0.65</i>
Net Imports	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	3.54	3.60	3.50	3.30	3.40	<i>3.51</i>	<i>3.93</i>
Supplemental Gaseous Fuels.....	0.12	0.12	0.11	0.11	0.11	0.08	0.08	0.08	0.09	0.09	0.07	0.07	0.06	<i>0.06</i>	<i>0.07</i>
Total New Supply.....	19.88	20.42	21.39	21.40	21.68	21.74	22.10	22.34	22.81	23.31	22.49	22.41	22.38	<i>22.52</i>	<i>23.04</i>
Working Gas in Storage															
Opening	3.07	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	2.38	2.56	<i>2.70</i>	<i>2.60</i>
Closing	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	2.38	2.56	2.70	<i>2.60</i>	<i>2.49</i>
Net Withdrawals.....	0.47	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.21	0.80	-1.18	0.53	-0.19	-0.13	<i>0.09</i>	<i>0.12</i>
Total Supply.....	20.35	20.70	21.11	21.85	21.66	21.74	21.54	22.54	23.61	22.12	23.02	22.22	22.25	<i>22.61</i>	<i>23.15</i>
Balancing Item ^a	-0.12	0.09	0.14	0.36	0.95	0.99	0.70	-0.14	-0.16	0.12	-0.02	0.15	0.18	<i>0.24</i>	<i>0.25</i>
Total Primary Supply	20.23	20.79	21.25	22.21	22.60	22.73	22.25	22.41	23.45	22.24	23.01	22.38	22.43	<i>22.84</i>	<i>23.40</i>
Demand															
Residential.....	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	5.00	4.77	4.89	5.08	4.88	<i>4.95</i>	<i>5.15</i>
Commercial.....	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	3.18	3.02	3.14	3.22	2.99	<i>3.07</i>	<i>3.10</i>
Industrial	8.70	8.87	8.91	9.38	9.68	9.71	9.49	9.16	9.40	8.46	8.62	8.26	8.52	<i>8.28</i>	<i>8.52</i>
Lease and Plant Fuel.....	1.17	1.17	1.12	1.22	1.25	1.20	1.17	1.08	1.15	1.12	1.11	1.12	1.12	<i>1.11</i>	<i>1.11</i>
Other Industrial	7.53	7.70	7.79	8.16	8.44	8.51	8.32	8.08	8.25	7.34	7.51	7.14	7.41	<i>7.17</i>	<i>7.41</i>
CHP ^b	1.11	1.12	1.18	1.26	1.29	1.28	1.35	1.40	1.39	1.31	1.24	1.14	1.16	<i>1.13</i>	<i>1.13</i>
Non-CHP	6.42	6.58	6.61	6.90	7.15	7.23	6.97	6.68	6.87	6.03	6.27	6.00	6.25	<i>6.04</i>	<i>6.28</i>
Transportation ^c	0.59	0.63	0.69	0.70	0.72	0.76	0.64	0.66	0.66	0.64	0.68	0.68	0.69	<i>0.74</i>	<i>0.72</i>
Electric Power ^d	3.45	3.47	3.90	4.24	3.81	4.06	4.59	4.82	5.21	5.34	5.67	5.14	5.35	<i>5.81</i>	<i>5.91</i>
Total Demand	20.23	20.79	21.25	22.21	22.60	22.73	22.25	22.41	23.45	22.24	23.01	22.38	22.43	<i>22.84</i>	<i>23.40</i>

^aThe balancing item represents the difference between the sum of the components of natural gas supply and the sum of components of natural gas demand.

^b Natural gas used for electricity generation and production of useful thermal output by combined heat and power (CHP) plants at industrial facilities. Includes a small amount of natural gas consumption at electricity-only plants in the industrial sector.

^cPipeline fuel use plus natural gas used as vehicle fuel.

^dNatural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Regional Short-Term Energy Model.

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; Projections: EIA, Short-Term Integrated Forecasting System database, and Office of Oil and Gas, Reserves and Production Division.

Table A7. Annual U.S. Coal Supply and Demand: Base Case
(Million Short Tons)

	Year														
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Supply															
Production.....	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1100.4	1073.6	1127.7	1094.3	1071.8	1111.5	1127.4	1157.3
Appalachia.....	456.6	409.7	445.4	434.9	451.9	467.8	460.4	425.6	419.4	432.8	397.0	376.8	390.1	385.8	390.9
Interior.....	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	143.5	147.0	146.9	146.3	146.2	146.8	149.8
Western.....	345.3	368.5	408.3	429.6	439.1	451.3	488.8	512.3	510.7	547.9	550.4	548.7	575.2	594.8	616.7
Primary Stock Levels ^a															
Opening.....	29.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	35.9	43.3	38.3	34.4	34.6
Closing.....	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	35.9	43.3	38.3	34.4	34.6	35.1
Net Withdrawals.....	-5.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	-2.9	7.6	-4.0	-7.4	5.0	3.9	-0.2	-0.5
Imports.....	3.8	8.2	8.9	9.5	8.1	7.5	8.7	9.1	12.5	19.8	16.9	25.0	27.3	32.8	36.1
Exports.....	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	58.5	48.7	39.6	43.0	48.0	49.3	51.3
Total Net Domestic Supply.....	893.8	887.8	963.1	952.7	987.3	1008.5	1045.7	1048.1	1035.2	1094.8	1064.2	1058.8	1094.7	1110.7	1141.6
Secondary Stock Levels ^b															
Opening.....	170.2	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	146.0	148.9	127.2	112.9	103.0
Closing.....	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	146.0	148.9	127.2	112.9	103.0	112.5
Net Withdrawals.....	3.3	43.8	-16.5	1.5	12.0	17.2	-22.8	-17.5	40.7	-37.6	-2.9	21.7	14.3	9.9	-9.5
Waste Coal Supplied to IPPs ^c	6.0	6.4	7.9	8.5	8.8	8.1	9.0	9.6	10.1	10.6	11.1	11.6	12.5	15.1	15.1
Total Supply.....	903.2	937.9	954.5	962.7	1008.1	1033.9	1031.8	1040.2	1086.0	1067.9	1072.4	1092.0	1121.5	1135.7	1147.2
Demand															
Coke Plants.....	32.4	31.3	31.7	33.0	31.7	30.2	28.2	28.1	28.9	26.1	23.7	24.2	23.7	25.2	26.1
Electric Power Sector ^d	795.1	831.6	838.4	850.2	896.9	921.4	936.6	940.9	985.8	964.4	977.5	1005.1	1015.1	1030.4	1052.2
Retail and General Industry.....	80.2	81.1	81.2	78.9	77.7	78.0	72.3	69.6	69.3	69.6	65.2	65.5	65.5	68.9	69.0
Residential and Commercial.....	6.2	6.2	6.0	5.8	6.0	6.5	4.9	4.9	4.1	4.4	4.4	4.2	4.2	4.6	4.2
Industrial.....	74.0	74.9	75.2	73.1	71.7	71.5	67.4	64.7	65.2	65.3	60.7	61.3	61.2	64.3	64.7
CHP ^e	28.2	28.9	29.7	29.4	29.4	29.9	28.6	27.8	28.0	25.8	26.2	24.8	28.0	26.7	26.7
Non-CHP.....	45.8	46.0	45.5	43.7	42.3	41.7	38.9	37.0	37.2	39.5	34.5	36.4	33.2	37.6	38.0
Total Demand ^f	907.7	944.1	951.3	962.1	1006.3	1029.5	1037.1	1038.6	1084.1	1060.1	1066.4	1094.9	1104.3	1124.4	1147.2
Discrepancy ^g	-4.5	-6.1	3.2	0.6	1.7	4.3	-5.3	1.6	1.9	7.7	6.1	-2.8	17.2	11.3	0.0

^aPrimary stocks are held at the mines, preparation plants, and distribution points.

^bSecondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

^cEstimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

^dEstimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, EIA.

^eCoal used for electricity generation and production of useful thermal output by combined heat and power (CHP) plants at industrial facilities. Includes a small amount of coal consumption at electricity-only plants in the industrial sector.

^fTotal Demand includes estimated IPP consumption.

^gThe discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period. Prior to 1994, discrepancy may include some waste coal supplied to IPPs that has not been specifically identified.

Notes: Rows and columns may not add due to independent rounding. Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System or by EIA's office of Coal, Nuclear, Electric and Alternate Fuels (coal production).

Sources: Historical data: EIA: latest data available from EIA databases supporting the following reports: *Quarterly Coal Report*, DOE/EIA-0121, and *Electric Power Monthly*, DOE/EIA-0226. Projections: EIA, Regional Short-Term Energy Model database, and Office of Coal, Nuclear, Electric and Alternate Fuels.

Table A8. Annual U.S. Electricity Supply and Demand: Base Case
(Billion Kilowatt-hours)

	Year														
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Net Electricity Generation															
Electric Power Sector ^a															
Coal	1597.7	1665.5	1666.3	1686.1	1772.0	1820.8	1850.2	1858.6	1943.1	1882.8	1910.6	1952.7	1954.0	1976.3	2018.1
Petroleum	92.2	105.4	98.7	68.1	74.8	86.5	122.2	111.5	105.2	119.1	89.7	113.7	112.5	123.0	128.3
Natural Gas	334.3	342.2	385.7	419.2	378.8	399.6	449.3	473.0	518.0	554.9	607.7	567.3	618.6	677.4	687.9
Nuclear	618.8	610.3	640.4	673.4	674.7	628.6	673.7	728.3	753.9	768.8	780.1	763.7	788.5	776.7	792.1
Hydroelectric	245.8	273.5	250.6	302.7	338.1	346.6	313.4	308.6	265.8	204.9	251.7	260.6	256.6	256.8	289.8
Other ^b	45.5	47.0	47.0	44.8	45.8	47.3	48.6	50.0	51.6	49.4	58.6	63.1	63.5	75.5	82.0
Subtotal	2934.4	3043.9	3088.7	3194.2	3284.1	3329.4	3457.4	3530.0	3637.5	3580.1	3698.5	3721.2	3793.6	3885.6	3998.2
Other Sectors ^c	149.5	153.3	158.8	159.3	160.0	162.8	162.9	164.8	164.6	156.6	160.0	162.0	159.8	162.9	164.7
Total	3083.9	3197.2	3247.5	3353.5	3444.2	3492.2	3620.3	3694.8	3802.1	3736.6	3858.5	3883.2	3953.4	4048.5	4162.9
Net Imports	25.4	27.8	44.8	39.2	40.2	34.1	25.9	29.0	33.8	22.0	22.8	6.4	11.3	18.1	4.1
Total Supply	3109.3	3225.0	3292.3	3392.7	3484.4	3526.2	3646.2	3723.8	3835.9	3758.7	3881.3	3889.6	3964.7	4066.5	4167.0
Losses and Unaccounted for ^d	223.7	236.0	223.7	235.4	237.4	232.2	221.0	229.2	233.0	216.1	242.1	222.5	237.8	237.7	243.3
Demand															
Retail Sales ^e															
Residential	935.9	994.8	1008.5	1042.5	1082.5	1075.9	1130.1	1144.9	1192.4	1202.6	1267.0	1273.5	1293.4	1342.1	1381.9
Commercial ^f	850.0	884.7	913.1	953.1	980.1	1026.6	1078.0	1103.8	1159.3	1197.4	1217.9	1199.7	1228.5	1267.4	1297.1
Industrial	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	1064.2	964.2	972.2	1008.0	1020.9	1031.1	1053.8
Transportation ^g	4.7	4.8	5.0	5.0	4.9	4.9	5.0	5.1	5.4	5.5	5.5	7.0	7.7	8.5	9.2
Subtotal	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	3421.4	3369.8	3462.5	3488.2	3550.5	3649.0	3742.0
Other Use/Sales ^h	122.3	127.5	134.1	144.1	145.9	148.4	160.9	182.5	181.5	172.8	176.6	178.9	176.4	179.8	181.8
Total Demand	2885.6	2989.0	3068.7	3157.3	3247.0	3294.0	3425.1	3494.6	3602.9	3542.6	3639.1	3667.1	3726.9	3828.8	3923.7

^aElectric Utilities and independent power producers.

^b"Other" includes generation from other gaseous fuels, geothermal, wind, wood, waste, and solar sources.

^cElectricity generation from combined heat and power facilities and electricity-only plants in the industrial and commercial sectors.

^dBalancing item, mainly transmission and distribution losses.

^eTotal of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA'S *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales are reported annually in Appendix C of EIA's *Electric Sales and Revenue*. Quarterly data for power marketers (and thus retail sales totals) are imputed. Data for 2003 are estimated.

^fCommercial sector, including public street and highway lighting, interdepartmental sales and other sales to public authorities. These items, along with transportation sector; electricity were formerly included in an "other" category, which is no longer provided. (See EIA 's Monthly Energy Review, Table 7.5, for a comparison of "Old Basis" and "New Basis" electricity retail sales.) Through 2003, data are estimated as the sum of "Old Basis Commercial" and approximately 95 percent of "Old Basis Other"; beginning in 2004, data are actual survey data.

^gTransportation sector, including sales to railroads and railways. Through 2003, data are estimated as approximately 5 percent of "Old Basis Other"; beginning in 2004, data are actual survey data.

^hDefined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review* (MER). Data for 2003 are estimates.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System and by EIA's office of Coal, Nuclear, Electric and Alternate Fuels (hydroelectric and nuclear).

Sources: Historical data: EIA: latest data available from EIA databases supporting the following report: *Electric Power Monthly*, DOE/EIA-0226. Projections: EIA, Regional Short-Term Energy Model database, and Office of Coal, Nuclear, Electric and Alternate Fuels.