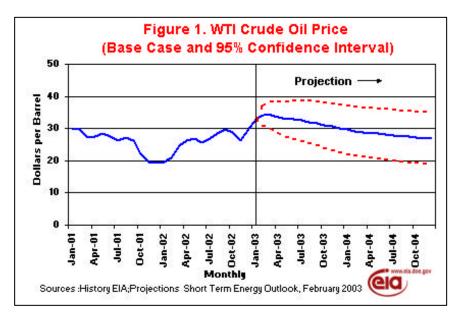


■ Short-Term Energy Outlook

February 2003

Overview



World Oil Markets. World oil markets will likely remain tight through most of 2003, as petroleum inventories global and spare production capacity continue to dwindle amid blasts of cold weather constrained output Venezuela. OPEC efforts to increase output to make up for lower Venezuela output has reduced global spare production capacity to only 2 million barrels per day, leaving little room to make up for unexpected demand supply surprises. Meanwhile, the average West Texas Intermediate (WTI) crude oil price increased by \$3.50 to \$33 per barrel

from December to January (Figure 1). For the year 2003, WTI oil prices are expected to remain over \$30 per barrel, even though Venezuelan output appears to be moving toward normal sooner than expected. Also, the uncertainty surrounding Iraq will likely render markets abnormally volatile, at least for the near-term.

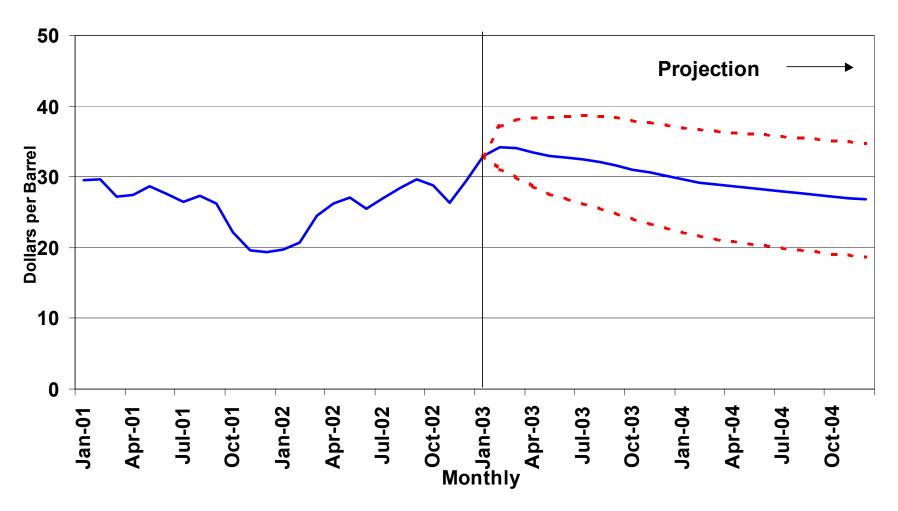
Heating Fuels Update. January was about 9 percent colder than normal for the Northeast and 32 percent colder than January 2002 in that region. Ironically, the weather for the U.S. as a whole has been a bit warmer than normal in January, though there was a period of intense cold in the middle of the month. For the month of January, home heating fuel consumption was probably lighter than average, except in the Northeast. Spot prices for fuels surged, however, as crude oil and natural gas prices rose rapidly in the face of the Venezuelan oil export cutoff and sharply falling levels of domestic natural gas in storage. Some of these commodity price changes are still working their way to the consumer level. Normal temperatures through the remainder of the heating season would imply the following increases in household heating expenditures for the winter season (October-March) compared to the 2001-2002 winter: natural gas: 28 percent; heating oil: 52 percent; propane: 24 percent; electricity: 10 percent.

U.S. Natural Gas Markets. The spot price of natural gas at the Henry Hub rose above \$6.00 per million btu on January 23 and February 4 of this year. Spot prices have been above the \$5.00 per million btu level on most trading days this year, as underground storage has been significantly reduced compared to the levels of one year ago. Considering not only the reduced cushion of natural gas in storage but also currently high world oil prices, natural gas prices will likely remain relatively high through February and possibly March unless a prolonged warm spell occurs over the next several weeks.

Details

Figure 1. WTI Crude Oil Price

(Base Case and 95% Confidence Interval)

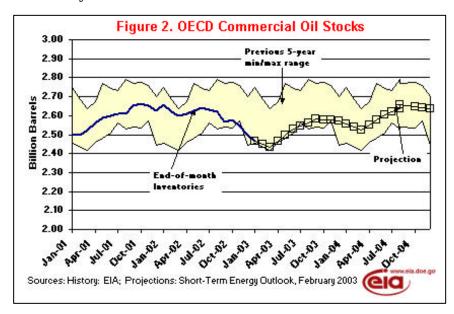




International Oil Markets. The oil market is vulnerable to a number of forces that could cause substantial price volatility over the coming months. The combination of a continued loss of much of Venezuela's oil exports, the risk of increased tensions in the Middle East and currently low commercial oil inventories could cause oil prices to spike periodically above our base case. Although the general strike in Venezuela appears to be ending, the strike against the oil sector continues. It appears that the Venezuelan government has managed to boost output to higher levels than previously expected for this time. We now expect Venezuelan crude oil production to be about 1.4 million barrels per day in February compared to our projection of less than 1 million barrels per day in last month's *Outlook*, but still below pre-crisis output of 3 million barrels per day. If the oil strike is prolonged and tensions in the Middle East continue, the chance of a price spike will remain high.

Although risks remain high for price volatility and an oil price spike, our base case employs more neutral assumptions. We assume that the oil strike in Venezuela will move toward resolution, that Iraq maintains recent export levels and that other producers step up production to keep markets stable. Given these assumptions, the WTI price would remain near current levels through February (Figure 1). Gradual movement toward pre-strike capacity output in Venezuela over the next 3 or 4 months, coupled with supplementary output from other OPEC countries, should result in a gradual return to declining prices through the forecast horizon. Even with a sizable build in oil stocks in the second quarter, price volatility is still a factor due to the low absolute level of inventories.

Crude Oil Prices. Key oil price indicators rose sharply last month, as the Brent, OPEC Basket, and West Texas Intermediate (WTI) crude oil spot prices averaged \$3-\$4 per barrel higher in January than in December, matching the increases from November-December. The WTI oil price averaged \$33.00 per barrel in response to events in Iraq and Venezuela, the first time since November 2000 that it had averaged above \$30 per barrel. The OPEC basket price also averaged above \$30 per barrel for the first time since November 2000, marking the second consecutive month that it exceeded OPEC's original target range of \$22 - \$28 per barrel. It has been above the \$22 per barrel lower end of the band since March 2002. Even with an assumed end to the turmoil in Venezuela, the monthly average OPEC basket price is projected to remain within OPEC's target range throughout the forecast period, although it may remain slightly above the range until later this year.

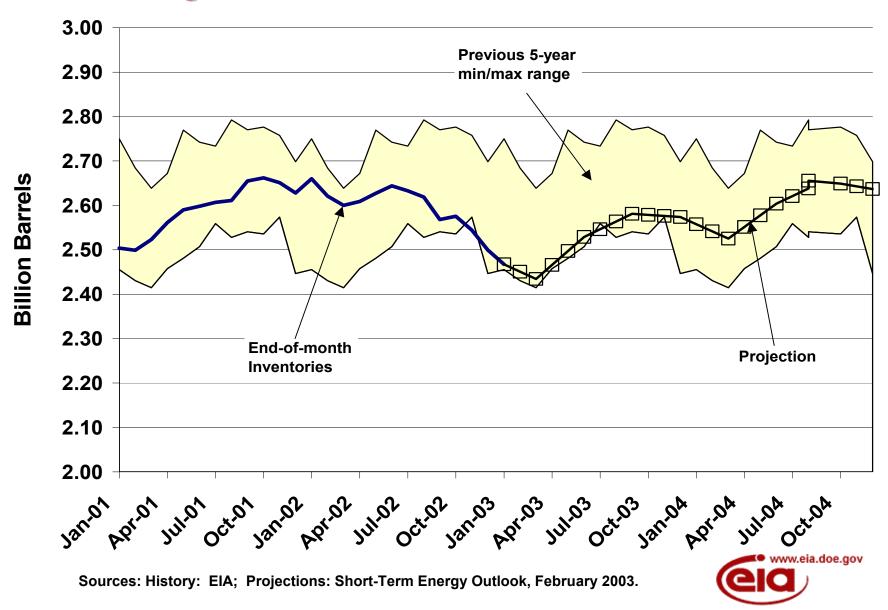


International Oil Supply. OPEC countries have begun to offset lower production from Venezuela. Venezuelan output fell from 2.9 million barrels per day in November to 1.1 in December and 0.6 in January. Total **OPEC** crude production oil December and January approximated 25.2 million barrels per day, down from 26.9 in November. Further increases of 1.5 million barrels per day from OPEC 10 countries are expected in February. This assumes Iraqi production will continue to approximate 2.3 million barrels per day. Under this situation most of the world's production capacity

will be used, leaving global surplus capacity at only about 2 million barrels per day.

Even if the situations in Venezuela and Iraq are resolved without further oil disruptions, the additional pressure on OECD commercial inventories since early December is likely to keep oil stocks near the lower end of the 5-year min/max range through most of 2003 (Figure 2). It could take several months for full

Figure 2. OECD Commercial Oil Stocks



Venezuelan production to be restored, and the OECD countries could see new 5-year lows in inventories by spring.

International Oil Demand. EIA projects that the U.S. economy will grow by 2.8 percent in 2003 (compared with 2.4 percent growth in 2002), contributing to the recovery of U.S. oil demand. Half of the 1.2 million barrels per day growth in world oil demand in 2003 is projected to come from the U.S., with China and other non-OECD countries projected to provide a total of another 0.5 million barrels per day of demand growth next year. As world economic growth accelerates in 2004, led by a projected 4.5 percent per year increase in the U.S. economy, world oil demand growth could increase by 1.4 million barrels per day (Figure 3).

U. S. Energy Prices

Average crude oil prices for West Texas Intermediate (WTI) for the month of January were more than \$13 per barrel higher than they were in January 2002. The situations in Venezuela and Iraq along with the cold weather in the Northeast contributed to higher prices. These increased crude oil costs have been or will be passed on to the end user.

Motor Gasoline: Pump prices have risen recently in response to higher crude oil prices. The national average regular gasoline price in January was \$1.46 per gallon, up 35 cents per gallon (31 percent) from January 2002. We expect prices to rise another 20 cents per gallon by late spring. As winter ends, the seasonal increase in gasoline demand is projected to pull retail gasoline prices up, although the rate of increase may be slowed if crude oil prices decline markedly. Spot prices for motor gasoline have climbed by over 15 cents per gallon in major U.S. markets since the beginning of the year. We can expect to see motor gasoline prices averaging more than \$1.60 per gallon--peaking at about \$1.66 or more in early spring-through the first half of the year even if the international supply situation improves (Figure 4). Refiner margins (the difference between the refiner price of gasoline and the refiner acquisition cost of crude oil), which were tepid this past summer, are tightening and are expected to continue to rebound over the next two years, as demand for gasoline rises and as the cost of producing gasoline increases (Figure 5).

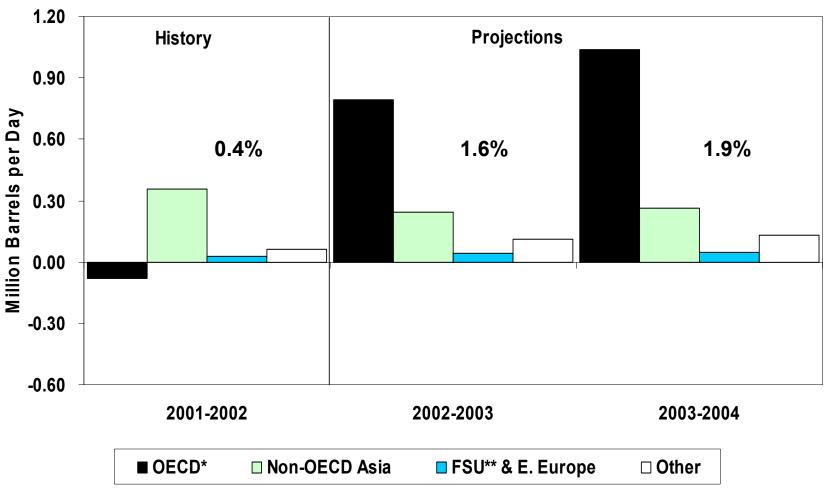
At the end of January, gasoline inventories stood at 210 million barrels, which is just below the 5-year min/max range (Figure 6), and below the year-ago level.

Given our base case crude oil price projections, 2003 pump prices are expected to reach \$1.57 per gallon, an increase of 24 cents per gallon on an annual basis. This projection is indicative of the projected rebound in refiner margins from their relatively weak levels of last year.

Distillate Fuel Oil (Heating oil and Diesel Fuel): Higher crude oil prices this heating season, along with colder weather in the Northeast relative to last year, have resulted in expectations that residential heating oil prices will post considerable gains this winter compared to last winter. The current base case projections include an increase of about 32 cents per gallon (30 percent) for residential heating oil for the first quarter of this year compared to the same period one year ago, an expectation supported not only by robust demand and higher crude oil costs, but also by low distillate fuel oil inventories compared to year-ago levels. (The projected first quarter average of \$1.42 per gallon would be the highest U.S. first quarter average for residential heating oil prices on record, in nominal terms. However, when adjusted for inflation the resulting price would be only slightly higher than the price for the first quarter 2001 and is considerably lower than the real first quarter prices recorded during the late 1970's through the mid-1980's.) Colder-thannormal weather in the Northeast for much of this winter has boosted heating oil demand. In the Northeast, which includes the New England States plus New York, New Jersey and Pennsylvania, the combined October-January period brought colder-than-normal temperatures and a level of heating degree-days over 30 percent colder than the same period one year ago and 9 percent colder than normal. At the end of

Figure 3. World Oil Demand Growth

(Change from Year Ago)



^{*} Note: OECD now defined to include the Czech Republic, Hungary, Mexico, Poland and South Korea in EIA's statistics.



^{**} FSU = Former Soviet Union

Figure 4. Gasoline Prices and Crude Oil Costs

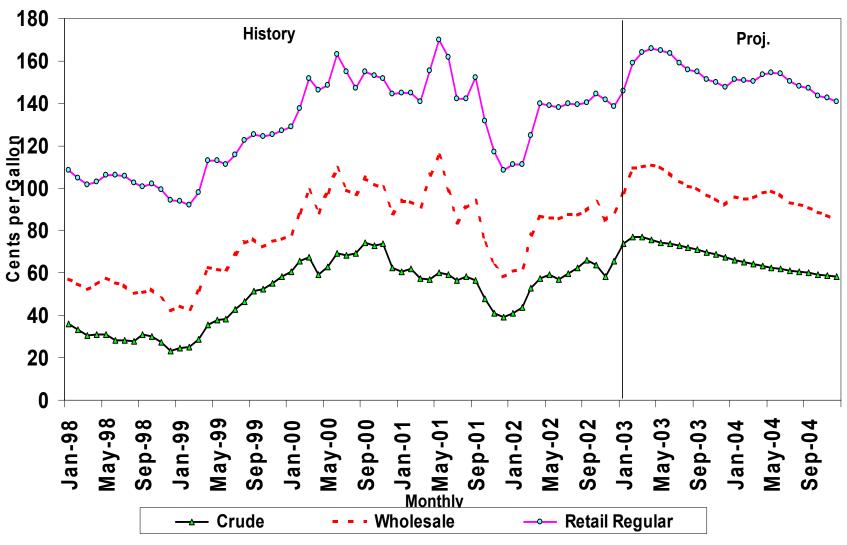




Figure 5. Motor Gasoline Spreads

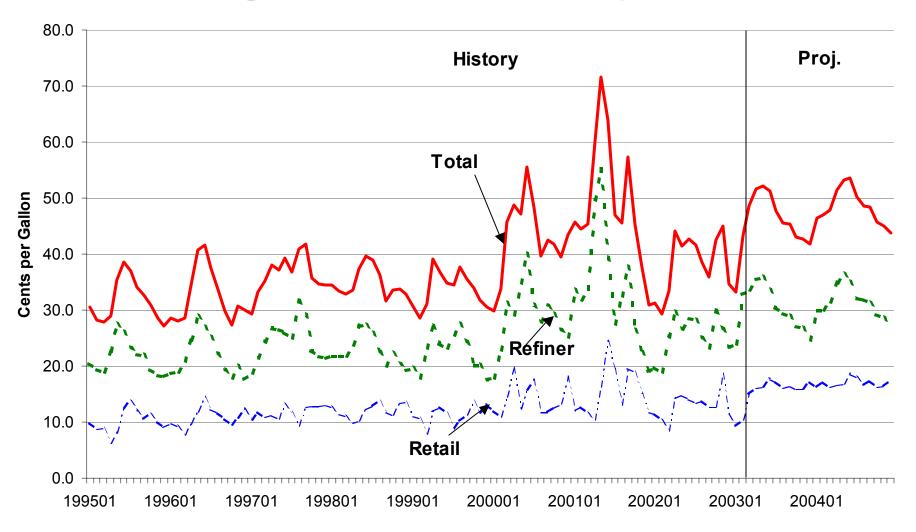
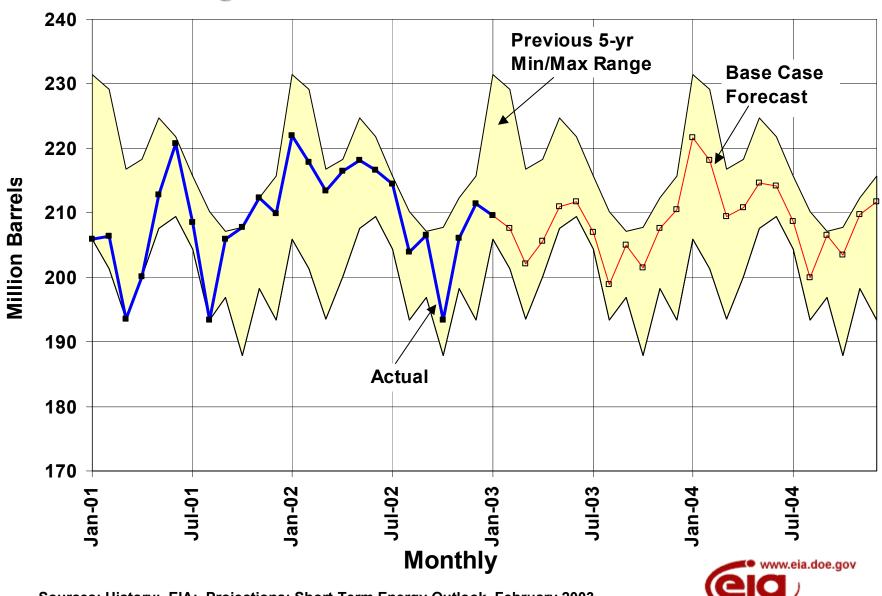




Figure 6. U.S. Gasoline Inventories



January, distillate fuel oil inventories were about 112 million barrels, which is just under the 5-year min/max range (Figure 7). With higher crude oil prices projected for 2003, together with continued economic growth, a more normal (thus higher) level of heating demand in the first quarter 2003 compared to 2002, and a somewhat lower projected level for distillate stocks, the annual average retail prices for both heating oil and diesel fuel are expected to be about 20 cents per gallon higher than the 2002 levels (Figure 8).

Natural Gas: The spot price of natural gas at the Henry Hub briefly closed above \$6.00 per million btu during the third week of January as Artic weather covered much of the nation. Prices again topped \$6 on February 4, 5 and 6 in response to another blast of cold weather. These prices have generally been well over \$5.00 per million btu thus far this year (Figure 9), as cold weather during the last several months drained underground storage levels at a much faster rate than was previously anticipated.

The winter thus far has been considerably colder than last year and colder than normal in the Northeast. As the cold weather continued through the first month of this year, downward pressure continued on natural gas storage. By the end of the January, working gas in storage was about 35 percent lower than at the end of January 2002 and 17 percent below the previous 5-year average. Considering not only the currently high world oil prices but also the low storage levels, natural gas prices are likely to remain relatively high through February and perhaps well into spring.

Assuming normal weather for the remainder of the heating season (February and March), we project that natural gas wellhead prices this winter (October through March) will average over \$4.15 per thousand cubic feet, or about \$1.75 per thousand cubic feet (67 percent) above last winter's price. In 2003, wellhead prices are projected to show an increase of over \$1.30 per thousand cubic feet over the annual 2002 average, boosting the price for the year to \$4.36 per thousand cubic feet. This projection is based on the expectation of lower volumes of underground gas in storage for all of next year compared with this year and continued increases in demand (particularly in the first quarter) over 2002 levels. In 2004, continued tightness of domestic natural gas supply is expected to keep the average wellhead price near the 2003 level.

U. S. Oil Demand

Total petroleum demand managed to eke out a small, 0.3-percent, gain in 2002 from the 2001 level (Figure 10). That slight rise belied the substantial volatility in demand for the individual fuels during the course of 2002. Warm weather during the first quarter, weakness in industrial demand throughout much of the year, a sizeable reduction in jet-fuel demand, and a substantial year-to-year decline in natural gas prices all contributed to last year's weakness. But colder-than-normal weather, especially in the Northeast, and the onset of a recovery in industrial activity in the fourth quarter contributed to a substantial increase in total petroleum demand, offsetting the year-to-year decline of the first nine months. In addition, the U.S. motor gasoline market remained strong, reflecting continued growth in personal disposable income (buoyed in part by reductions in tax rates) and preference for larger, less fuel-efficient vehicles. As a result, fleet-wide fuel efficiency continued to decline. Also, substantial increases in liquefied petroleum gas demand were recorded as extraction (i.e., from natural gas) costs fell sharply from the elevated costs seen in early 2001.

During 2003 and 2004, total petroleum demand growth is expected to average 610,000 barrels per day per year, or about 3 percent. All the major fuel categories are expected to participate in that growth. Continued acceleration in economic growth, the assumption of normal weather and continuing tightness in natural gas supplies are major contributors to this projection. Demand for motor gasoline is projected to continue to increase at an average annual rate of 2.8 percent as both the economy and real disposable income, boosted by additional tax cuts, continue to expand. Jet fuel demand is expected to continue to increase robustly as air travel continues to recover from the depressed levels seen following the events of 9/11. As a result, growth in jet fuel demand is projected to average 4 percent per year between 2002 and 2004, with demand in 2004 surpassing levels last seen in 2000. Nonetheless, the projected demand levels fall well short of

Figure 7. Distillate Fuel Inventories

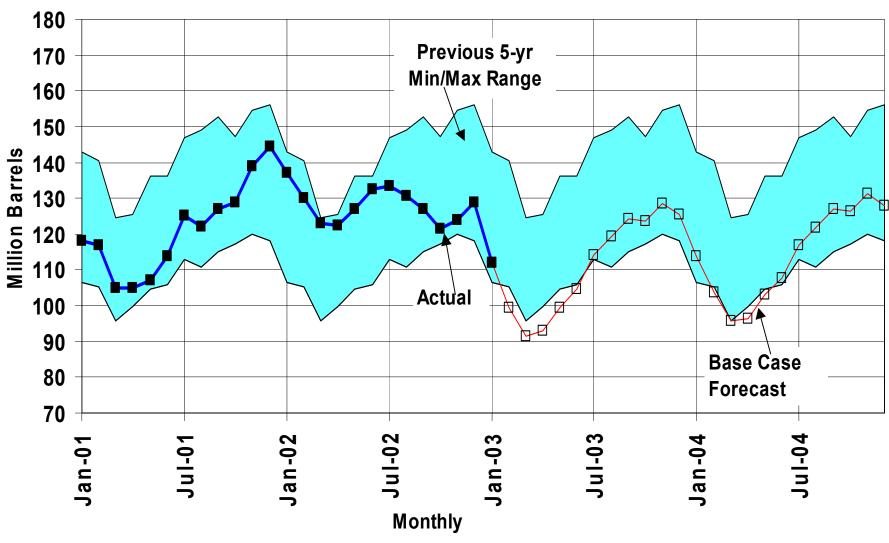




Figure 8. Distillate Fuel Prices

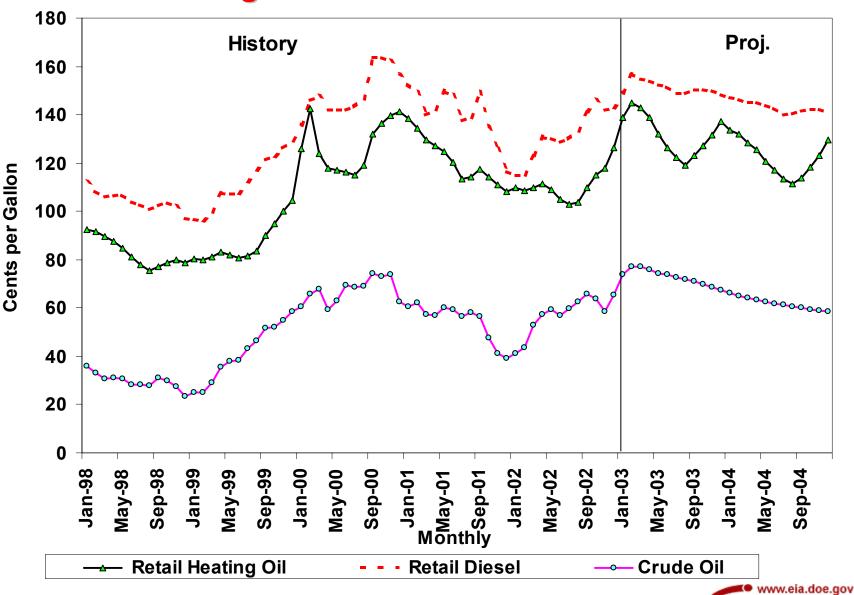




Figure 9. Natural Gas Spot Prices

(Base Case and 95% Confidence Interval)

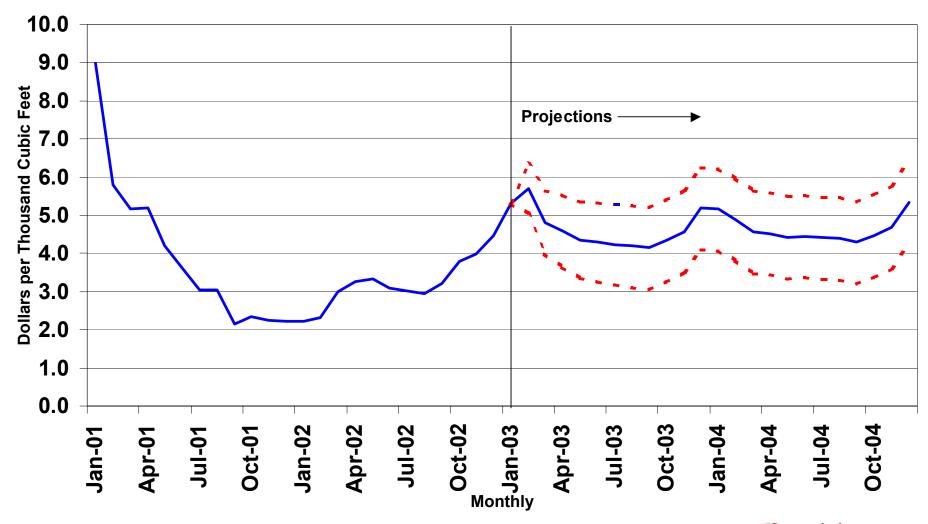
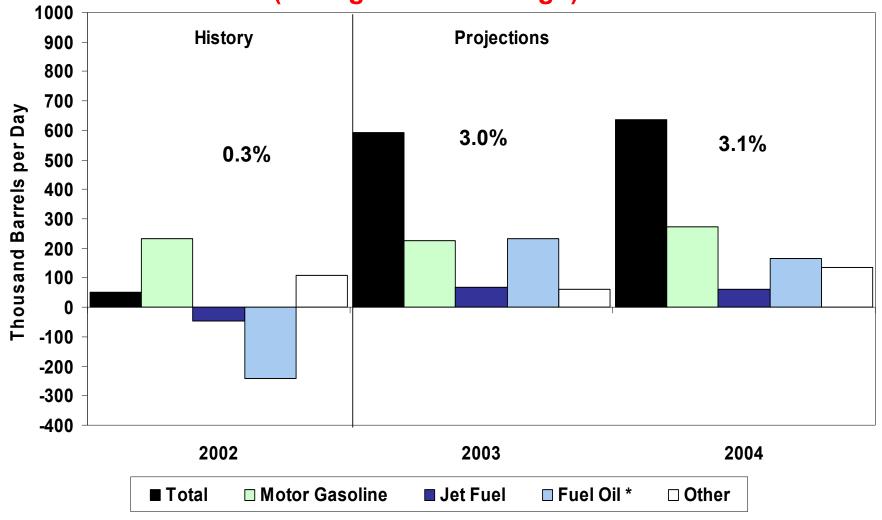




Figure 10. Petroleum Products Demand Growth

(Change from Year Ago)



^{*} Sum of distillate and residual fuel.



those that would have occurred in the absence of the terrorist attacks. Distillate fuel oil demand, boosted by the effects of normal weather patterns and continued acceleration in industrial output, is expected to increase by an average of 3.9 percent per year. Residual fuel oil demand is expected to recover to an average of 720,000 barrels per day compared to 640,000 barrels per day seen in 2002. However, that seemingly strong recovery reflects year-to-year changes in weather patterns, continued--and belated-recovery in industrial activity from the very depressed levels of the last two years, and firmness in natural gas prices resulting from the tightness in gas markets.

U.S. Oil Supply

Average domestic oil production is expected to decrease by about 50 thousand barrels per day, or 0.8 percent, in 2003, to a level of 5.77 million barrels per day. For 2004, a 3.1 percent decrease is expected, resulting in an average production rate of 5.59 million barrels of oil per day (Figure 11).

Lower-48 States oil production in 2003 is expected to decrease by about 20 thousand barrels per day to a rate of 4.81 million barrels per day, followed by a decrease of 170 thousand barrels per day in 2004. Shell's Brutus platform has peaked its oil production at 100 thousand barrels per day in 2002. Oil production from the Mars, Mad Dog, Na Kika, Ursa and Dianna-Hoover Federal Offshore fields is expected to account for about 8.6 percent of the lower-48 oil production by the 4th quarter of 2004.

Alaska is expected to account for 17 percent of the total U.S. oil production in 2004. Alaskan oil production is expected to decrease by 2.1 percent in 2003 and decrease by 1.0 percent in 2004. The combined production rate from the two significant satellite fields, Alpine and North Star, averaged nearly 150 thousand barrels per day during November 2002. Production from the Kuparuk River field plus like production from West Sak, Tabasco, Tarn and Meltwater fields is expected to stay at an average of 215 thousand barrels per day over the 2003 and 2004 forecast periods.

Natural Gas Supply and Demand

New data provided to EIA by the Minerals Management Service on natural gas production in the Federal Offshore Area of the Gulf of Mexico has resulted in a revised view of total domestic natural gas production for 2002. We now estimate that U.S. dry natural gas production fell by 450 billion cubic feet (bcf) or 2.3 percent, in 2002 from the 2001 total. Some of the reduction is due to outages in September and October related to hurricane activity. At least moderate production increases are expected in 2003 and 2004 as high natural gas prices and strong near-term demand pressures drive drilling activity and well completions to very robust levels over the period (Figure 12). Monthly domestic oil and gas lease revenues, which averaged about \$280 million in 2002, are expected to reach the \$400 million mark in 2003 and remain near that level in 2004 (Figure 13).

Despite the revised production estimates, a large (1.5 trillion cubic feet) discrepancy remains in the 2002 supply/demand balance. Much of this remaining imbalance relates, we believe, to underestimated demand, most likely in the industrial sector. While we have provided no ad-hoc adjustments to the most recent data, we have anticipated some ultimate upward adjustment in the projections. Thus, the 2003 demand growth shown here is probably overstated.

Total natural gas demand in 2002, based on data reported through September, declined by 1.4 percent from the 2001 level (Figure 14). Overall weakness in the industrial sector, particularly in the first three quarters of the year, prevented a posting of positive growth. However, solid growth in natural gas demand is likely in 2003, especially if the industrial sector as a whole expands significantly as expected. In 2004, natural gas demand is projected to rise by an additional 2.4 percent as industrial demand continues its recovery from its 2002 lows.

Figure 11. U.S. Crude Oil Production Trends

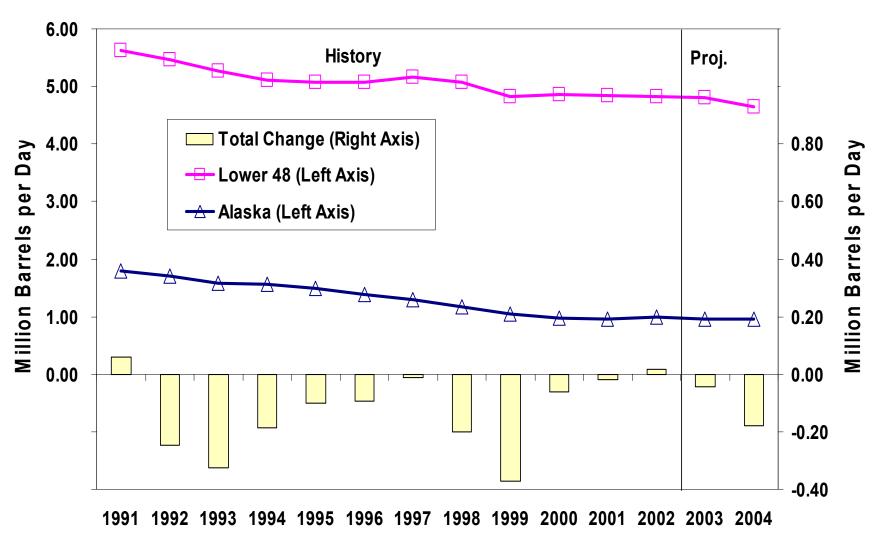




Figure 12. U.S. Natural Gas-Directed Drilling Activity

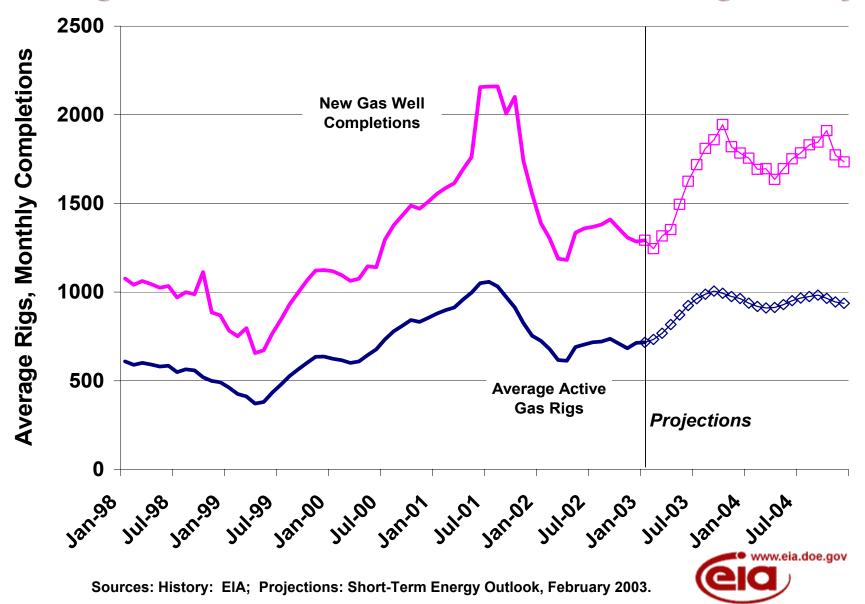
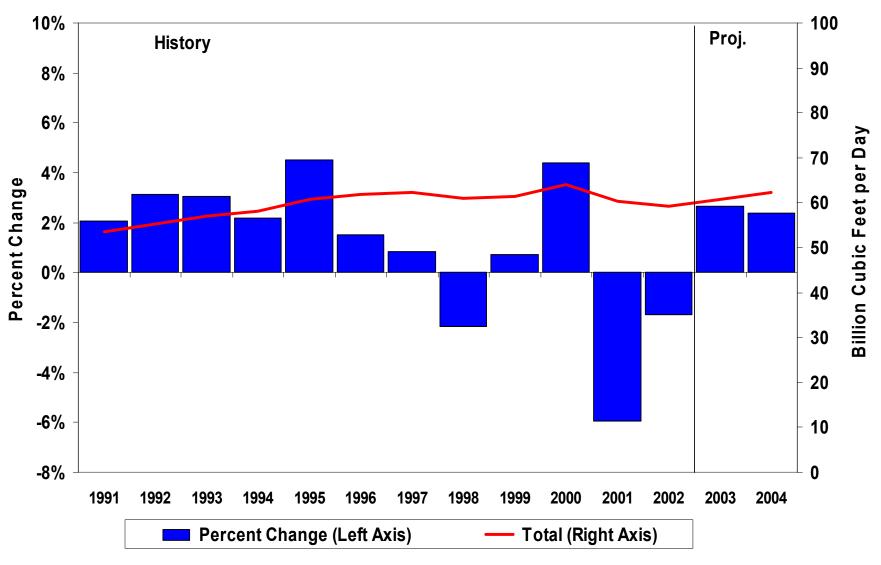


Figure 13. U.S. Oil and Gas Production Revenues





Figure 14. Total Natural Gas Demand Growth Patterns



Note: This chart replaces a previous Figure 12 because of revised data for February 2002. Sources: History: EIA; Projections: Short-Term Energy Outlook, February 2003.



Natural gas demand this winter is expected to be about 8 percent above last winter's demand, largely due to the fact that gas consumption-weighted heating degree-days for the heating season (Q4 2002 and Q1 2003) will be 11 percent above year ago levels, provided February and March post normal temperatures.

Working natural gas in storage fell to about 1.52 trillion cubic feet at the end of January, or about 17 percent below the 5-year average and 35 percent below the year-ago level (Figure 15). January 2001 is the only time since 1977 that the January natural gas working storage level has been lower than this year, although similar end-January levels were seen in 1999, 1996 and 1997. However, the current level of gas in storage is relatively low, so full replenishment of working gas stocks in 2003 will be larger than average. The industry's capability to accommodate this requirement without considerable upward price pressure may not be as robust as in earlier years because of other supply factors.

After growing by only 1.1 percent in 2002 due to high stocks and lower demand, natural gas net imports are expected to increase by 5.6 percent in 2003, which should relieve some of the potential pressure on the domestic market.

Electricity Demand and Supply

In 2002, total annual electricity demand growth (retail sales plus industrial generation for own use and other direct sales) is estimated to have grown by a total of 2.9 percent. Higher heating-related demand in the fourth quarter sharply increased electricity demand over the fourth quarter 2001 level. This followed the sharp increases seen last summer due to abnormally hot weather and high cooling demand. In 2003, while the economy is expected to continue to recover, electricity demand is expected to grow by a relatively subdued rate of about 0.5 percent (Figure 16) since little or no net weather-related demand growth would be expected under our assumption of normal temperatures. Spring and summer 2003 growth relative to comparable 2002 levels would be particularly weak under normal weather assumptions. In 2004, electricity demand is projected to grow by 3.2 percent along with the economy.

Total U.S. electricity demand is expected to increase 4.7 percent this winter compared to last winter, due to continuing growth in the economy, a cold heating season thus far and the assumption that normal temperatures will prevail for the remainder of the winter (February and March). On balance, these conditions would make this winter 10-percent colder than last winter.

Figure 15. Working Gas in Storage (Difference from Previous 5-Year Average)

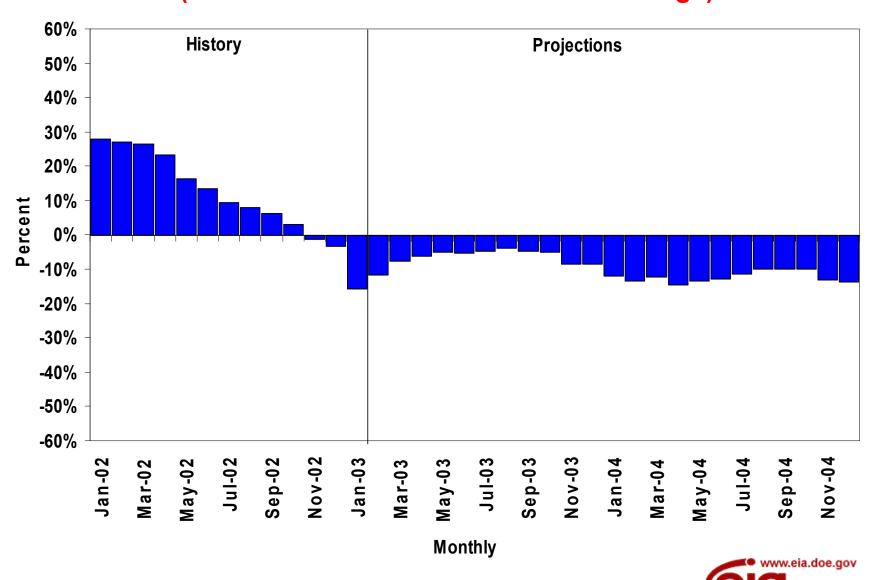


Figure 16. Total Electricity Demand Growth Patterns

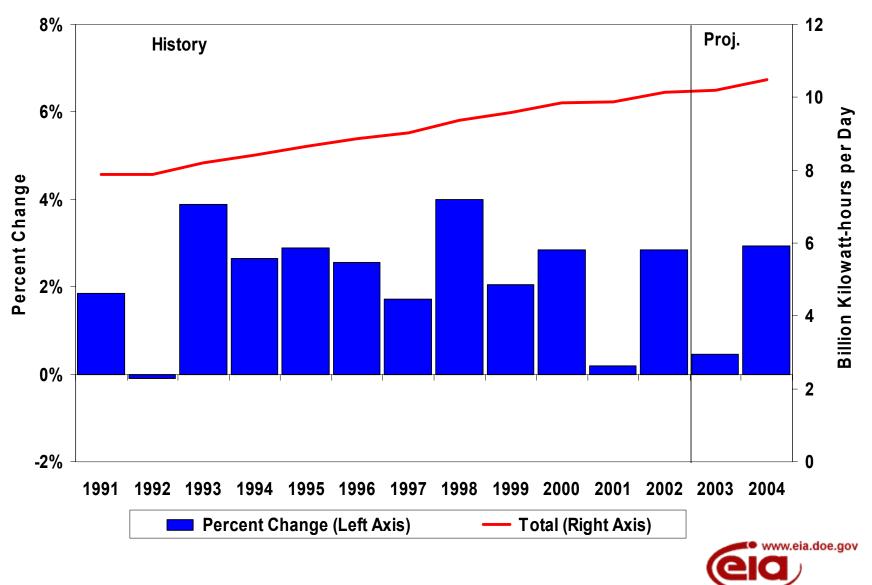


Table HL1. U.S. Energy Supply and Demand: Base Case

Table HL1. U.S. Energy Supply		Ye			Annua	percentage C	hange
	2001	2002	2003	2004	2001-2002	2002-2003	2003-2004
Real Gross Domestic Product (GDP)							
(billion chained 1996 dollars)	9215	9434	9701	10136	2.4	2.8	4.5
Imported Crude Oil Price ^a (nominal dollars per barrel)	22.00	23.70	30.02	25.39	7.7	26.7	-15.4
Petroleum Supply (million barrels per day) Crude Oil Production b	5.80	5.82	5.77	5.59	0.3	-0.8	-3.1
Total Petroleum Net Imports (including SPR)	10.90	10.51	11.18	12.01	-3.6	6.4	7.4
Energy Demand							
World Petroleum (million barrels per day)	76.0	76.4	77.6	21.0	0.4	1.6	-72.9
Petroleum (million barrels per day)	19.65	19.70	20.29	20.93	0.3	3.0	3.1
Natural Gas							
(trillion cubic feet)	21.99	21.69	22.74	23.28	-1.4	4.8	2.4
Coal ^c (million short tons)	1059	1070	1092	1120	1.1	2.0	2.6
Electricity (billion kilowatthours)							
Retail Sales d	3397	3475	3480	3589	2.3	0.1	3.1
Other Use/Sales e	205	230	242	252	12.0	5.2	4.3
Total	3602	3705	3721	3841	2.9	0.5	3.2
Total Energy Demand ^f							
(quadrillion Btu)	96.5	97.3	100.1	102.9	0.8	2.9	2.9
Total Energy Demand per Dollar of GDP							
(thousand Btu per 1996 Dollar)	10.48	10.31	10.32	10.15	-1.6	0.0	-1.6
Renewable Energy as Percent of Total ⁹	6.4	7.1	7.4	7.3			

^aRefers to the refiner acquisition cost (RAC) of imported crude oil.

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 Short-Term Integrated Forecasting System.

Sources: Historical data: Latest data available from Bureau of Economic Analysis and Energy Information Administration; latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; and Quarterly Coal Report, DOE/EIA-0121; International Petroleum Monthly DOE/EIA-0520; Weekly Petroleum Status Report, DOE/EIA-0208. Macroeconomic projections are based on Global Insight Forecast CONTROL1202.

^bIncludes lease condensate.

^cTotal Demand includes estimated Independent Power Producer (IPP) coal consumption.

^dTotal 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 for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2001 are estimates.

^eDefined 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 2001 are estimates.

^fThe conversion from physical units to Btu is calculated by using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, Monthly Energy Review (MER). Consequently, the historical data may not precisely match those published in the MER or the Annual Energy Review (AER).

^gRenewable energy includes minor components of non-marketed renewable energy, which is renewable energy that is neither bought nor sold, either directly or indirectly, as inputs to marketed energy. The Energy Information Administration does not estimate or project total consumption of non-marketed renewable energy.

SPR: Strategic Petroleum Reserve.

Table 1. U.S. Macroeconomic and Weather Assumptions: Base Case

Table 1. U.S. Macroeconom	nic a	na v	veatr	ner A	ssun	nptio	ns: B	ase	Case						
		20	002			20				2	2004			Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Macroeconomic ^a							LI Company			LI Commence of the Commence of				<u>.</u>	
Real Gross Domestic Product															
(billion chained 1996 dollars - SAAR)	0363	0303	0/8/	9498	9571	9644	9739	9848	0085	10093	10180	10278	9434	9701	10136
(billion chained 1990 dollars - 5771)	3303	3332	3404	3430	3011	3077	3133	3040	3300	10033	10103	10270	3737	3101	10130
Percentage Change from Prior Year	1.4	2.2	3.2	2.7	2.2	2.7	2.7	3.7	4.3	4.7	4.6	4.4	2.4	2.8	4.5
Annualized Percent Change															
from Prior Quarter	5.0	1.2	3.9	0.6	3.1	3.1	3.9	4.5	5.5	4.4	3.8	3.5			
nom nor quality	0.0		0.0	0.0	0.7	0.7	0.0	1.0	0.0		0.0	0.0			
GDP Implicit Price Deflator															
(Index, 1996=1.000)	1.101	1.105	1.108	1.115	1.122	1.127	1.134	1.141	1.150	1.156	1.163	1.170	1.107	1.131	1.160
,															
Percentage Change from Prior Year	1.4	1.1	8.0	1.5	1.9	2.0	2.4	2.4	2.5	2.6	2.6	2.5	1.2	2.2	2.5
Real Disposable Personal Income															
(billion chained 1996 Dollars - SAAR)	6961	7022	7073	7096	7167	7229	7284	7344	7442	7522	7569	7622	7038	7256	7539
Percentage Change from Prior Year	3.8	4.9	3.0	5.5	3.0	3.0	3.0	3.5	3.8	4.1	3.9	3.8	4.3	3.1	3.9
Manufacturing Production															
(Index, 1996=1.000)	1.176	1.187	1.196	1.191	1.201	1.215	1.236	1.258	1.282	1.303	1.325	1.345	1.188	1.228	1.314
Percentage Change from Prior Year	-3.7	-1.2	8.0	2.0	2.1	2.4	3.4	5.6	6.7	7.2	7.2	6.9	-0.6	3.4	7.0
OECD Economic Growth (percent) b													0.9	1.8	2.6
NA															
Weather ^c															
Heating Degree-Days															
,	2000	400	44	1639	2182	518	86	1622	2254	517	85	1621	4279	4400	4477
U.S New England			44 119	2396	3230	882	86 167	2236	2254 3205	-	85 167	2235	4279 6180	4408 6515	4477 6488
_							-								
Middle Atlantic U.S. Gas-Weighted			36 43	2213 1736	3002 2299	699 554	105 90	2001 1713	2919 2373	697 554	106 90	2001 1713	5383 4518	5807 4657	5723 4730
Cooling Degree-Days (U.S.)		372	882	81	27	347	783	76	33	348	784	76	1366	1232	1240

^aMacroeconomic projections from DRI/McGraw -Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the base world oil price case.

^bOECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

^cPopulation-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 1990 population.

SAAR: Seasonally-adjusted annualized rate.

Note: Historical data are printed in bold; forecasts are in italics.

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; Federal Reserve System, Statistical Release G.17 (419). Projections of OECD growth are based on Global Insight, "World Economic Outlook," Volume 1. Macroeconomic projections are based on Global Insight Forecast CONTROL1202.

Table 2. U.S. Energy Indicators: Base Case

Table 2. U.S. Energy Indi	icalo	2002	ast (Jase		2003		-		2004		ı		Year	
	1st	2002 2nd	3rd	4th	1st	2003 2nd	3rd	4th	1st	2004 2nd	3rd	4th	2002	2003	2004
Managara a	151	ZIIU	Siu	4111	151	ZIIU	Siu	4111	151	ZIIU	Siu	4111	2002	2003	2004
Macroeconomic ^a															
Real Fixed Investment	1576	4572	1572	1501	1501	1607	1606	1651	1600	1707	1770	1806	1576	1619	1748
(billion chained 1996 dollars-SAAR)	13/6	15/3	15/3	1584	1591	1607	1626	1651	1688	1727	1770	1000	1576	1019	1740
Real Exchange Rate (index)	1 102	4 4 5 4	4 407	1 117	1 120	1 105	1 000	1.062	1.053	1.046	1.040	1.034	1.142	1.093	1.043
	1.192	1.131	1.107	1.117	1.120	1.105	1.063	1.003	1.053	1.040	1.040	1.034	1.142	1.093	1.043
Business Inventory Change (billion chained 1996 dollars-SAAR)	21.0	111	-4.9	-6.6	-0.3	4.5	6.7	11.0	17.8	22.8	24.8	23.4	-14.4	5.5	22.2
Producer Price Index	-31.9	-14.1	-4.5	-0.0	-0.3	4.5	0.7	11.0	17.0	22.0	24.0	23.4	-14.4	5.5	22.2
(index, 1982=1.000)	1 202	1 308	1 313	1 32/	1 333	1 333	1 330	1 3/12	1 3/10	1.354	1 365	1 368	1.309	1.336	1.359
Consumer Price Index	1.232	1.300	1.313	1.324	1.333	1.333	1.339	1.342	1.349	1.304	1.303	1.300	1.309	1.330	1.309
(index, 1982-1984=1.000)	1 781	1 796	1 804	1 817	1 828	1 837	1 848	1 860	1 873	1.884	1 807	1 909	1.799	1.843	1.891
Petroleum Product Price Index	1701	1.750	1.004	1.017	1.020	1.007	1.040	1.000	1.073	1.004	1.001	1.505	1.755	1.043	1.001
(index, 1982=1.000)	0.656	0.808	0.788	0.858	1 016	0.980	0.910	0.917	0.970	0 904	0.840	0.848	0.777	0.956	0.891
Non-Farm Employment	0.000	0.000	000	0.000	7.070	0.000	0.070	0.017	0.070	0.007	0.070	0.0.0	0.777	0.000	0.007
(millions)	130.8	130.7	130.9	130.9	131.1	131.4	131.9	132.9	133.9	134.7	135.5	136.2	130.8	131.8	135.1
Commercial Employment															
(millions)	92.1	92.2	92.4	92.5	92.8	93.2	93.7	94.6	95.6	96.3	97.0	97.6	92.3	93.6	96.6
Total Industrial Production															
(index, 1996=1.000)	1.154	1.166	1.176	1.173	1.182	1.195	1.213	1.233	1.254	1.273	1.293	1.310	1.167	1.206	1.282
Housing Stock															
(millions)	119.3	119.5	119.8	120.1	120.4	120.7	121.0	121.3	121.6	121.9	122.2	122.5	119.7	120.9	122.0
Miscellaneous															
Gas Weighted Industrial Production															
(index, 1996=1.000)	1.069	1.076	1.083	1.081	1.088	1.095	1.109	1.123	1.136	1.148	1.160	1.171	1.077	1.104	1.154
Vehicle Miles Traveled ^b															
(million miles/day)	7266	8027	8040	7816	7420	8179	8343	7873	7600	8380	8568	8122	7790	7956	8169
Vehicle Fuel Efficiency															
(index, 1999=1.000)	0.997	1.040	1.033	1.033	0.988	1.043	1.049	1.003	0.990	1.040	1.044	0.997	1.026	1.022	1.018
Real Vehicle Fuel Cost															
(cents per mile)	3.31	3.75	3.78	3.93	4.32	4.31	4.06	4.02	4.07	3.93	3.76	3.75	3.70	4.17	3.88
Air Travel Capacity															
(mill. available ton-miles/day)	435.0	475.3	439.0	454.6	468.6	473.6	487.6	488.9	482.9	491.9	509.2	514.2	<i>4</i> 51.0	479.8	499.6
Aircraft Utilization	007.0			0545	0.40.7	070.0	004.0	007.0	004.0	000 1	007.7	0040	057.0	0000	000.5
(mill. revenue ton-miles/day)	237.6	268.7	270.6	251.5	243.5	272.0	281.9	267.0	261.9	286.4	297.7	284.0	257.2	266.2	282.5
Airline Ticket Price Index	2 247	2 277	0 004	0.005	0.000	0.405	0.544	0.507	0.500	0.000	0.004	0.000	0.040	0.470	0.040
(index, 1982-1984=1.000)	2.317	2.377	2.334	2.235	2.363	2.465	2.514	2.53/	2.589	2.608	2.621	2.630	2.316	2.470	2.612
Raw Steel Production (million tons)	22.02	25.02	25 72	22.62	21 07	22.66	2/10	22.50	25.04	2722	2727	26 1F	07 24	02 14	106 56
(1111111011 10115)	23.32	25.03	25.12	22.03	21.07	23.00	24.10	23.50	20.91	21.23	21.21	20.13	91.31	33.14	100.00

^aMacroeconomic projections from Global Insight model forecasts are seasonally adjusted at annual rates and modified as appropriate to the base world oil price case.

^bIncludes all highway travel.

SAAR: Seasonally-adjusted annualized rate.

Note: Historical data are printed in bold; forecasts are in italics

Table 3. International Petroleum Supply and Demand: Base Case

(Million Barrels per Day, Except OECD Commercial Stocks)

		2002				2003	,			2004				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Demand ^a			l .			<u> </u>		l .					<u> </u>		
OECD															
U.S. (50 States)	19.4	19.6	19.9	19.9	20.3	19.9	20.3	20.6	20.7	20.5	21.0	21.4	19.7	20.3	20.9
U.S. Territories	0.3	0.3	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4
Canada	2.0	1.9	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.2	2.2	2.0	2.0	2.1
Europe	15.2	14.6	15.2	15.6	15.4	14.5	15.1	15.8	15.7	14.7	15.3	16.0	15.2	15.2	15.4
Japan	5.7	4.6	5.0	5.8	5.9	4.8	5.0	5.5	5.9	4.8	5.0	5.5	5.3	5.3	5.3
Other OECD	5.3	4.9	5.0	5.3	5.1	5.1	5.3	5.4	5.2	5.2	5.4	5.4	5.1	5.2	5.3
Total OECD	47.9	46.1	47.5	49.0	49.1	46.6	48.3	49.6	50.0	47.6	49.4	50.8	47.6	48.4	49.5
Non-OECD															
Former Soviet Union	3.8	3.6	3.6	3.6	3.8	3.7	3.7	3.7	3.9	3.7	3.8	3.7	3.7	3.7	3.8
Europe	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
China	5.2	5.2	5.1	5.2	5.3	5.3	5.2	5.3	5.4	5.4	5.3	5.4	5.2	5.3	5.4
Other Asia	7.4	7.4	7.2	7.5	7.6	7.6	7.3	7.7	7.7	7.7	7.5	7.8	7.4	7.5	7.7
Other Non-OECD	11.7	12.0	12.0	11.9	11.8	12.1	12.1	12.1	12.0	12.2	12.3	12.2	11.9	12.0	12.1
Total Non-OECD	28.8	28.8	28.6	28.9	29.1	29.2	29.0	29.3	29.6	29.6	29.4	29.7	28.7	29.1	29.6
Total World Demand	76.7	74.9	76.0	77.8	78.3	75.8	77.2	78.9	79.6	77.2	78.8	80.5	76.4	77.6	79.0
Supply ^b															
OECD															
U.S. (50 States)	9.1	9.2	8.9	9.1	9.1	9.0	8.9	9.0	8.9	8.9	8.9	8.9	9.1	9.0	8.9
Canada	2.9	2.9	3.0	3.0	3.1	3.1	3.2	3.3	3.2	3.2	3.4	3.4	3.0	3.2	3.3
Mexico	3.6	3.6	3.6	3.6	3.8	3.8	3.8	3.7	3.9	3.9	4.0	3.9	3.6	3.8	3.9
North Sea ^c	6.3	6.4	5.9	6.4	6.4	6.1	6.1	6.5	6.3	6.0	6.1	6.4	6.2	6.3	6.2
Other OECD	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Total OECD	23.6	23.6	23.0	23.7	24.0	23.5	23.7	24.1	24.0	23.6	23.8	24.1	23.5	23.8	23.9
Non-OECD															
OPEC	27.9	27.4	28.3	29.1	28.9	29.2	29.1	29.2	29.2	29.2	29.6	29.6	28.1	29.1	29.4
Former Soviet Union	9.0	9.2	9.6	9.8	9.8	9.9	10.1	10.2	10.3	10.4	10.7	10.7	9.4	10.0	10.5
China	3.3	3.3	3.4	3.4	3.3	3.4	3.4	3.4	3.3	3.4	3.4	3.4	3.4	3.4	3.4
Other Non-OECD	11.5	11.5	11.4	11.4	11.7	11.8	12.0	12.1	12.1	12.2	12.4	12.6	11.4	11.9	12.3
Total Non-OECD	51.7	51.4	52.6	53.7	53.7	54.2	54.6	55.0	55.0	55.3	56.1	56.3	52.4	54.4	55.7
Total World Supply	75.3	75.0	75.6	77.4	77.7	77.8	78.4	79.1	78.9	78.8	79.9	80.4	75.8	78.2	79.5
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	0.2	-0.4	0.5	0.3	0.6	-0.8	-0.3	0.3	0.1	-0.7	-0.3	0.4	0.1	0.0	-0.1
Other	1.3	0.3	-0.1	0.1	-0.1	-1.2	-0.8	-0.4	0.6	-0.9	-0.8	-0.3	0.4	-0.6	-0.3
Total Stock Withdrawals	1.4	-0.1	0.4	0.4	0.5	-1.9	-1.1	-0.1	0.6	-1.6	-1.1	0.1	0.5	-0.7	-0.5
OECD Comm. Stocks, End (bill. bbls.)	2.6	2.6	2.6	2.6	2.5	2.6	2.7	2.7	2.6	2.7	2.8	2.7	2.6	2.7	2.7
Non-OPEC Supply	47.4	47.6	47.4	48.4	48.8	48.6	49.2	49.8	49.7	49.6	50.4	50.9	47.7	49.1	50.1
Net Exports from Former Soviet Union	5.2	5.5	5.9	6.2	6.0	6.2	6.4	6.5	6.4	6.7	6.9	7.0	5.7	6.3	6.8

^aDemand for petroleum by the OECD countries is synonymous with "petroleum product supplied," which is defined in the glossary of the EIA *Petroleum Supply Monthly*, DOE/EIA-0109. Demand for petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

^bIncludes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

^cIncludes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela. SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Notes: Minor discrepancies with other published EIA 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.

Sources: Energy Information Administration: latest data available from EIA databases supporting the following reports: International Petroleum Monthly, DOE/EIA-0520; Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

Table 4. U.S. Energy Prices: Base Case

(Nominal Dollars)

(Normal Bollato)		2002				2003				2004				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Crude Oil Prices (dollars per barrel)	40.00	00.04	05.00	05.45	04.40	00.04	00.70	00.00	00.04	05.74	0404	0404	00.70	00.00	05.00
Imported Average a WTI b Spot Average	19.33	25.84	25.88	25.45	31.40	30.84	29.70	20.28	20.87	25.74	27.50	26.02	26.70	30.02	25.39
WII Spot Average	21.00	20.23	20.34	20.22	33.73	33.10	32.00	30.30	29.10	20.32	27.09	20.93	20.12	32.30	20.01
Natural Gas Wellhead															
(dollars per thousand cubic feet)	2.34	3.00	2.88	3.59	4.75	4.38	4.05	4.26	4.64	4.17	4.05	4.26	2.95	4.36	4.28
Petroleum Products															
Gasoline Retail ^c (dollars per gallon)	4 20	4 40	4 44	1 10	4.00	4.00	1.01	4.50	1 55	4.50	4 50	1 10	4 20	1.01	4.50
All GradesRegular Unleaded			1.44 1.40	1.46 1.42	1.60 1.56	1.69 1.65	1.61 1.57	1.53 1.50	1.55 1.51	1.58 1.54	1.52 1.48	1.46 1.42	1.39 1.34	1.61 1.57	1.53 1.49
Regular Officaded	1.10	1.55	1.40	1.72	1.00	1.00	1.01	1.00	1.01	1.04	1.40	1.72	1.54	1.01	1.43
No. 2 Diesel Oil, Retail															
(dollars per gallon)	1.18	1.30	1.35	1.44	1.54	1.53	1.49	1.50	1.46	1.44	1.41	1.42	1.32	1.51	1.43
No. 2 Heating Oil, Wholesale	0.00		0.70	0.77	0.00	0.05	0.00	0.07	0.07	0.00	0.70	0.04	0.00	0.00	0.00
(dollars per gallon)	0.60	0.68	0.73	0.77	0.86	0.85	0.83	0.87	0.87	0.82	0.79	0.81	0.69	0.86	0.82
No. 2 Heating Oil, Retail															
(dollars per gallon)	1.09	1.09	1.06	1.22	1.42	1.34	1.22	1.34	1.32	1.22	1.13	1.25	1.11	1.36	1.26
,															
No. 6 Residual Fuel Oil, Retail ^d															
(dollars per barrel)	19.34	24.12	25.72	26.32	27.99	26.43	26.48	26.59	25.69	23.69	23.28	23.64	23.83	26.92	24.09
Electric Utility Fuels															
Licoti io otinity i dolo															
Coal															
(dollars per million Btu)	1.22	1.21	1.22	1.22	1.23	1.24	1.22	1.22	1.22	1.22	1.19	1.18	1.22	1.23	1.20
Lie eve Creat Oil 6															
Heavy Fuel Oil ^e	2 72	2 50	3.67	4.27	4.62	4.34	4.18	4.20	4.24	2 07	3.66	3.72	3.56	4.36	3.86
(dollars per million Btu)	2.13	3.36	3.07	4.27	4.02	4.34	4.10	4.20	4.24	3.07	3.00	3.72	3.50	4.30	3.00
Natural Gas															
(dollars per million Btu)	3.22	3.71	3.48	4.20	5.56	5.01	4.65	4.96	5.41	4.78	4.64	4.96	3.65	4.98	4.88
04 B 11 #1															
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	7.13	8.18	10.10	8.25	8.51	9.93	11.05	8.93	8.94	9.85	11.07	9.06	7.87	9.05	9.27
,															
Electricity															
(cents per kilowatthour)			8.70	8.25	7.98	8.59	8.83	8.40	7.88	8.48	8.71	8.28	8.40	8.46	8.35
^a Refiner acquisition cost (RAC) of imr	onted c	rude oil													

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

Notes: Data are estimated for the fourth quarter of 2001. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: 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.

^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.

Table 5. U.S. Petroleum Supply and Demand: Base Case

(Million Barrels per Day, Except Closing Stocks)

(William Barrolo p	J. 2 a.j.	2002	7. 0.00	<u>g</u>	oono,	2003				2004				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Supply															
Crude Oil Supply															
Domestic Production a	5.93	5.89	5.66	5.79	5.91	5.76	5.66	5.76	5.71	5.61	5.53	5.52	5.82	5.77	5.59
Alaska	1.03	1.01	0.93	0.97	1.02	0.95	0.88	1.00	1.01	0.95	0.92	0.93	0.99	0.96	0.95
Lower 48	4.89	4.88	4.73	4.82	4.89	4.81	4.78	4.76	4.70	4.66	4.61	4.59	4.83	4.81	4.64
Net Commercial Imports b	8.74	9.29	9.17	9.28	8.79	9.78	9.94	9.58	9.64	10.15	10.40	10.19	9.12	9.53	10.09
Net SPR Withdrawals	-0.13	-0.11	-0.05	-0.11	0.00	-0.11	-0.11	-0.11	-0.13	0.00	0.00	0.00	-0.10	-0.08	-0.03
Net Commercial Withdrawals	-	0.19	0.50	-0.09	-0.06	-0.02	0.11	0.00	-0.24	-0.04	0.08	-0.02	0.09	0.01	-0.05
Product Supplied and Losses		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.11	0.04	-0.07	-0.10	0.08	0.21	0.18	0.13	0.17	0.20	0.17	0.12	-0.01	0.15	0.17
Total Crude Oil Supply	14.41	15.30	15.21	14.77	14.72	15.62	15.78	15.36	15.16	15.92	16.18	15.81	14.93	15.37	15.77
Other Supply															
NGL Production	1.86	1.91	1.90	1.89	1.92	1.91	1.90	1.89	1.91	1.94	1.95	1.95	1.89	1.91	1.94
Other Hydrocarbon and Alcohol Inputs	0.37	0.44	0.44	0.42	0.40	0.40	0.42	0.42	0.39	0.39	0.42	0.43	0.42	0.41	0.40
Crude Oil Product Supplied	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Processing Gain		0.95	0.94	0.95	0.92	0.93	0.94	0.96	0.92	0.94	0.97	0.99	0.95	0.94	0.96
Net Product Imports c		1.50	1.31	1.34	1.63	1.77	1.65	1.56	1.91	1.99	1.92	1.83	1.37	1.65	1.91
Product Stock Withdrawn or	0.52	-0.48	0.05	0.50	0.71	-0.66	-0.35	0.39	0.45	-0.66	-0.38	0.39	0.15	0.02	-0.05
Added (-)															
Total Supply		19.62	19.86	19.88	20.29	19.97	20.34	20.58	20.74	20.52	21.07	21.40	19.70	20.30	20.93
Demand															
Motor Gasoline		8.99	9.07	8.81	8.74	9.13	9.26	9.14	8.94	9.38	9.56	9.49	8.84	9.07	9.34
Jet Fuel		1.61	1.63	1.63	1.63	1.64	1.70	1.74	1.73	1.69	1.75	1.79	1.61	1.68	1.74
Distillate Fuel Oil		3.70	3.70	3.91	4.19	3.79	3.76	4.04	4.30	3.92	3.90	4.20	3.78	3.95	4.08
Residual Fuel Oil		0.63	0.57	0.68	0.81	0.68	0.68	0.65	0.77	0.65	0.76	0.76	0.64	0.70	0.74
Other Oils d		4.69	4.90	4.84	4.91	4.72	4.95	5.00	5.01	4.87	5.10	5.14	4.83	4.90	5.03
Total Demand	19.44	19.61	19.86	19.88	20.29	19.97	20.34	20.57	20.74	20.51	21.07	21.39	19.70	20.29	20.93
Total Petroleum Net Imports	10.10	10.80	10.48	10.64	10.42	11.55	11.59	11.14	11.55	12.13	12.32	12.02	10.51	11.18	12.01
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)		317	270	279	284	285	275	275	297	301	293	295	279	275	295
Total Motor Gasoline		217	207	211	202	212	205	210	209	214	206	212	211	210	212
Finished Motor Gasoline		169	158	164	148	161	156	161	154	162	156	161	164	161	161
Blending Components		48	48	48	54	51	49	49	55	52	50	50	48	49	50
Jet Fuel		39	41	41	38	38	40	39	37	41	43	42	41	39	42
Distillate Fuel Oil		133	127	129	92	104	124	125	96	108	127	128	129	125	128
Residual Fuel Oil	34	33	33	31	28	30	31	32	32	34	36	38	31	32	38
Other Oils ^e	265	301	310	259	248	283	299	256	249	286	306	264	259	256	264
Total Stocks (excluding SPR)	1011	1038	987	949	891	953	974	939	920	983	1011	977	949	939	977
Crude Oil in SPR		576	587	599	599	609	619	630	642	642	642	642	599	630	642
Heating Oil Reserve Total Stocks (incl SPR and HOR).	2 1574	2 1617	2 1576	2 1550	2 1492	2 1564	2 1596	2 1570	2 1563	2 1627	2 1655	2 1621	2 1550	2 1570	2 1621
alpeludes lease condensate	13/4	1017	13/6	1550	1492	1504	1596	1570	1003	1027	1005	1021	1000	1370	1021

^aIncludes lease condensate.

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, Table C1. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System model.

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

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

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

dincludes 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.

^eIncludes 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

Table 6. Approximate Energy Demand Sensitivities^a for the STIFS^b

(Percent Deviation Base Case)

		+ 10	0% Prices	+ 109	% Weather ^e
Demand Sector	+1% GDP	Crude Oil ^c	N.Gas Wellhead ^a	Fall/Winter [↑]	Spring/Summer [†]
Petroleum					
Total	0.6%	-0.3%	0.1%	1.1%	0.1%
Motor Gasoline	0.1%	-0.3%	0.0%	0.0%	0.0%
Distillate Fuel	0.8%	-0.2%	0.0%	2.7%	0.1%
Residual Fuel	1.6%	-3.4%	2.6%	2.0%	2.7%
Natural Gas					
Total	1.1%	0.3%	-0.4%	4.4%	1.0%
Residential	0.1%	0.0%	0.0%	8.2%	0.0%
Commercial	0.9%	0.0%	0.0%	7.3%	0.0%
Industrial	1.7%	0.2%	-0.5%	1.3%	0.0%
Electric Utility	1.8%	1.6%	-1.5%	1.0%	4.0%
Coal					
Total	0.7%	0.0%	0.0%	1.7%	1.7%
Electric Utility	0.6%	0.0%	0.0%	1.9%	1.9%
Electricity					
Total	0.6%	0.0%	0.0%	1.5%	1.7%
Residential	0.1%	0.0%	0.0%	3.2%	3.6%
Commercial	0.9%	0.0%	0.0%	1.0%	1.4%
Industrial	0.8%	0.0%	0.0%	0.3%	0.2%

^aPercent change in demand quantity resulting from specified percent changes in model inputs.

Table 7. Forecast Components for U.S. Crude Oil Production

(Million Barrels per Day)

	High	Low		Difference	
	Price Case	Price Case	Total	Uncertainty	Price Impact
United States	5.69	5.34	0.34	0.07	0.27
Lower 48 States	4.75	4.43	0.32	0.05	0.26
Alaska	0.95	0.92	0.03	0.02	0.01

Note: Components provided are for the fourth quarter 2004. Totals may not add to sum of components due to independent rounding. Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

^bShort-Term Integrated Forecasting System.

^cRefiner acquisitions cost of imported crude oil.

^dAverage unit value of marketed natural gas production reported by States.

eRefers to percent changes in degree-days.

^fResponse during fall/winter period(first and fourth calendar quarters) refers to change in heating degree-days. Response during the spring/summer period (second and third calendar quarters) refers to change in cooling degree-days.

Table 8. U.S. Natural Gas Supply and Demand: Base Case

(Trillion Cubic Feet)

(2002				2003				2004				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Supply						1									
Total Dry Gas Production	4.69	4.77	4.77	4.70	4.75	4.80	4.88	4.77	4.86	4.90	4.98	4.85	18.92	19.20	19.59
Net Imports	0.89	0.85	0.97	0.98	1.01	0.94	0.96	0.98	1.00	0.96	0.99	1.01	3.69	3.90	3.96
Supplemental Gaseous Fuels		0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.08	0.08	0.08
Total New Supply	5.61	5.64	5.75	5.70	5.79	5.76	5.85	5.77	5.89	5.87	5.99	5.88	22.69	23.17	23.63
Working Gas in Storage															
Opening	2.90	1.52	2.31	3.04	2.37	0.98	1.82	2.71	2.26	1.04	1.81	2.66	2.90	2.37	2.26
Closing	1.52	2.31	3.04	2.37	0.98	1.82	2.71	2.26	1.04	1.81	2.66	2.19	2.37	2.26	2.19
Net Withdrawals	1.39	-0.79	-0.73	0.67	1.39	-0.85	-0.89	0.45	1.22	-0.77	-0.85	0.47	0.54	0.11	0.06
Total Supply	6.99	4.85	5.02	6.37	7.18	4.91	4.97	6.23	7.11	5.10	5.13	6.35	23.23	23.28	23.70
Balancing Item ^a	-0.28	-0.15	-0.61	-0.50	0.11	0.08	-0.28	-0.45	0.36	-0.02	-0.31	-0.45	-1.54	-0.55	-0.41
Total Primary Supply	6.71	4.70	4.41	5.87	7.29	4.99	4.68	5.77	7.47	5.09	4.82	5.90	21.69	22.74	23.28
Demand															
Residential	2.19	0.84	0.37	1.42	2.34	0.81	0.35	1.38	2.44	0.82	0.36	1.38	4.83	4.88	5.01
Commercial	1.20	0.62	0.46	0.82	1.16	0.58	0.43	0.84	1.28	0.63	0.48	0.88	3.10	3.00	3.27
Industrial	2.01	1.86	1.66	2.28	2.45	2.10	1.96	2.38	2.46	2.11	1.95	2.36	7.81	8.89	8.89
Lease and Plant Fuel	0.29	0.29	0.29	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	1.16	1.19	1.19
Other Industrial		1.57	1.37	1.98	2.15	1.81	1.66	2.08	2.16	1.82	1.65	2.06	6.65	7.70	7.70
CHP ^b	0.34	0.34	0.35	0.35	0.34	0.35	0.36	0.37	0.36	0.37	0.38	0.38	1.38	1.42	1.48
Non-CHP		1.22	1.02	1.63	1.81	1.46	1.30	1.71	1.80	1.45	1.28	1.68	5.27	6.28	6.21
Transportation ^c	0.19	0.13	0.12	0.17	0.21	0.13	0.12	0.16	0.21	0.13	0.12	0.16	0.60	0.63	0.62
Electric Power d		1.25	1.80	1.18	1.14	1.36	1.82	1.02	1.08	1.38	1.91	1.12	5.36	5.34	5.49
Total Demand	6.71	4.70	4.41	5.87	7.29	4.99	4.68	5.77	7.47	5.09	4.82	5.90	21.69	22.74	23.28

^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.

^bNatural gas used for electricity generation and production of useful thermal output by combined heat and power 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 Short-Term Integrated Forecasting System.

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

Table 9. U.S. Coal Supply and Demand: Base Case

(Million Short Tons)

(IVIIIIVI) SHOIL TOIIS)														
		2002				2003				2004				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Supply			l l	l l	U U	l l			l l	U U			1.	· ·	
Production	281.1	266.8	269.2	282.8	288.9	263.5	280.0	276.1	291.0	265.8	282.5	289.6	1099.9	1108.4	1128.9
Appalachia	107.1	98.4	94.1	105.9	104.9	95.1	100.2	98.5	106.9	93.9	98.7	101.0	405.4	398.8	400.6
Interior	36.6	37.2	36.6	38.2	34.7	35.2	34.2	30.6	34.3	33.9	32.8	30.3	148.6	134.8	131.2
Western	137.5	131.2	138.5	142.8	140.7	133.2	145.6	146.9	149.9	138.0	151.0	158.3	549.9	566.3	597.2
Primary Stock Levels ^a															
Opening	33.9	44.5	39.5	33.1	32.5	32.8	31.6	33.0	32.7	31.1	31.3	29.6	33.9	32.5	32.7
Closing		39.5	33.1	32.5	32.8	31.6	33.0	32.7	31.1	31.3	29.6	32.0	32.5	32.7	32.0
Net Withdrawals	-10.6	4.9	6.4	0.6	-0.2	1.1	-1.4	0.3	1.6	-0.2	1.6	-2.4	1.4	-0.2	0.7
Imports	4.0	3.9	4.5	4.2	4.5	4.5	4.5	4.6	4.7	4.7	4.7	4.7	16.6	18.1	18.8
Exports	9.3	11.0	9.3	10.9	10.0	10.2	10.4	10.4	10.4	10.5	10.6	10.6	40.5	41.0	42.1
Total Net Domestic Supply	265.3	264.5	270.8	276.8	283.2	258.9	272.8	270.6	287.0	259.8	278.2	281.3	1077.4	1085.4	1106.3
Secondary Stock Levels b															
Opening	145.6	149.8	152.5	137.0	137.5	141.9	152.1	138.9	142.7	145.7	155.1	140.8	145.6	137.5	142.7
Closing						152.1	138.9	142.7			140.8	143.7	137.5	142.7	143.7
Net Withdrawals		-2.7	15.4	-0.4	-4.4	-10.2	13.2	-3.8	-3.0	-9.4	14.3	-3.0	8.1	-5.2	-1.1
Waste Coal Supplied to IPPs c	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.9	3.7	3.7	3.7	3.7	11.1	11.6	14.8
Total Supply	263.9	264.6	289.1	279.1	281.6	251.6	288.9	269.7	287.7	254.1	296.1	282.0	1096.6	1091.8	1120.0
Demand															
Coke Plants	5.5	5.6	5.6	6.4	6.4	6.1	6.3	5.8	6.0	5.9	6.2	5.6	23.1	24.5	23.8
Electric Power Sector d	233.6	230.2	265.0	252.3	257.9	230.4	267.7	246.4	264.2	233.3	275.2	259.1	981.2	1002.3	1031.8
Retail and General Industry	17.1	15.5	15.6	17.8	17.3	15.1	15.0	17.6	17.4	14.9	14.8	17.4	66.0	64.9	64.4
Total Demand ^e	256.2	251.3	286.2	276.5	281.6	251.6	288.9	269.7	287.7	254.1	296.1	282.0	1070.2	1091.8	1120.0
Discrepancy ^f	7.7	13.3	2.8	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	26.5	0.0	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.

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

eTotal Demand includes estimated IPP consumption.

The discrepancy reflects an unaccounted-for shipper and receiver reporting difference, assumed to be zero in the forecast period.

Notes: Rows and columns may not add due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

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

Table 10. U.S. Electricity Supply and Demand: Base Case

(Billion Kilowatt-hours)

		2002				2003				2004				Year	
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Net Electricity Generation		1	1		I.	L			L		L	L	1		l.
Electric Power Sector ^a															
Coal	444.8	451.0	517.0	491.2	492.0	439.6	511.7	470.7	514.3	454.3	535.7	504.4	1904.0	1914.0	2008.7
Petroleum	18.4	21.4	25.1	21.3	32.9	21.2	28.9	16.3	28.5	21.2	34.8	24.6	86.2	99.5	109.1
Natural Gas	118.5	130.8	189.5	124.3	119.5	142.7	191.0	107.7	113.2	145.4	201.2	117.5	563.1	560.8	577.3
Nuclear	195.0	187.8	205.7	191.5	194.5	190.6	205.1	190.3	195.1	191.4	206.2	191.5	780.0	780.5	784.2
Hydroelectric	60.0	75.4	61.2	64.0	74.5	80.5	67.5	64.6	76.7	79.7	66.6	65.0	260.5	287.0	288.0
Geothermal and Other b	13.2	11.7	14.1	13.0	13.7	13.6	15.5	14.2	14.9	14.5	16.3	15.0	52.0	57.1	60.6
Subtotal	849.8	878.3	1012.5	905.2	927.1	888.3	1019.7	863.8	942.6	906.5	1060.7	918.0	3645.9	3699.0	3827.9
Other Sectorsc	43.8	50.7	58.8	51.0	44.7	51.6	60.1	52.9	47.1	54.1	62.9	55.1	204.3	209.3	219.2
Total Generation	893.6	929.0	1071.3	956.2	971.7	940.0	1079.9	916.7	989.8	960.6	1123.6	973.2	3850.1	3908.3	4047.1
Net Imports ^d	4.9	8.5	6.3	5.6	6.1	7.7	11.1	6.6	3.7	5.3	8.6	4.1	25.3	31.4	21.7
Total Supply	898.5	937.5	1077.6	961.8	977.8	947.7	1090.9	923.3	993.4	965.9	1132.2	977.3	3875.4	3939.7	4068.8
Losses and Unaccounted for e	22.1	51.7	20.8	76.0	66.4	71.9	42.4	37.7	47.1	65.4	49.6	65.4	170.8	218.3	227.4
Demand															
Retail Sales ^f															
Residential	312.0	280.4	384.3	293.2	330.9	271.8	382.6	287.6	344.7	278.8	395.3	295.3	1269.8	1272.9	1314.1
Commercial	255.8	279.5	320.8	267.9	263.0	276.4	319.0	269.9	271.6	283.2	328.5	277.2	1124.0	1128.3	1160.5
Industrial	227.5	243.2	258.2	241.5	230.4	240.8	251.5	241.6	239.5	249.0	259.9	249.3	970.4	964.3	997.8
Other	25.6	26.5	30.9	27.8	27.4	27.6	31.2	28.0	28.3	28.2	32.0	28.6	110.8	114.3	117.1
Subtotal	820.9	829.6	994.1	830.5	851.8	816.7	984.2	827.1	884.1	839.3	1015.7	850.5	3475.0	3479.9	3589.4
Other Use/Sales ^g	55.5	56.1	62.7	55.3	59.6	59.1	64.3	58.5	62.3	61.3	67.0	61.4	229.6	241.5	251.9
Total Demand	876.4	885.7	1056.8	885.8	911.4	875.8	1048.5	885.6	946.3	900.5	1082.6	911.8	3704.6	3721.4	3841.3

^aElectric Utilities and independent power producers.

⁹Defined 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 2001 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.

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

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

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

^dData for 2001 are estimates.

^eBalancing item, mainly transmission and distribution losses.

¹Total 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 2001 are estimated.

Table A1. Annual U.S. Energy Supply and Demand: Base Case

							Year							
1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
. 6708	6676	6880	7063	7348	7544	7813	8159	8509	8859	9191	9215	9434	9701	10136
. 21.79	18.74	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.70	30.02	25.39
7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.82	5.77	5.59
. 7.16	6.42	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.90	10.51	11.18	12.01
. 66.0	66.6	66.8	67.0	68.3	69.9	71.4	72.9	73.6	75.0	76.0	76.0	76.4	77.6	21.0
17.04	16 77	17 10	17 24	17 72	17 72	18 31	18 62	18 02	10.52	10.70	10.65	10.70	20.20	20.93
. 17.04	10.77	17.10	17.24	17.72	17.72	10.51	10.02	10.32	13.32	13.70	13.03	19.70	20.29	20.93
. 19.16	19.56	20.23	20.79	21.24	22.20	22.60	22.73	22.24	22.39	23.44	21.99	21.69	22.74	23.28
004	900	000	044	051	062	1006	1020	1027	1020	1001	1050	1071	1002	1120
. 304	033	300	344	331	302	1000	1030	1037	1039	1004	1033	1071	1092	1120
. 2713	2762	2763	2861	2935	3013	3101	3146	3264	3312	3421	3397	3475	3480	3589
115	_			134				161	183	_				252
	_		_	_		-	_	-						3841
								JJ				0.00	0.27	
. 84.6	84.6	86.1	87.8	89.6	91.5	94.5	95.0	95.3	97.0	99.3	96.5	97.3	100.1	102.9
	JJ											00		. 52.0
. 12.61	12.68	12.51	12.43	12.19	12.13	12.10	11.66	11.20	10.95	10.81	10.48	10.31	10.32	10.15
	6708 21.79 7.36 7.16 66.0 17.04 19.16 904 2713 115 2828 84.6	6708 6676 21.79 18.74 7.36 7.42 7.16 6.42 66.0 66.6 17.04 16.77 19.16 19.56 904 899 2713 2762 115 118 2828 2880 84.6 84.6	6708 6676 6880 21.79 18.74 18.20 7.36 7.42 7.17 7.16 6.42 6.94 66.0 66.6 66.8 17.04 16.77 17.10 19.16 19.56 20.23 904 899 908 2713 2762 2763 115 118 122 2828 2880 2885 84.6 84.6 86.1	6708 6676 6880 7063 21.79 18.74 18.20 16.13 7.36 7.42 7.17 6.85 7.16 6.42 6.94 7.62 66.0 66.6 66.8 67.0 17.04 16.77 17.10 17.24 19.16 19.56 20.23 20.79 904 899 908 944 2713 2762 2763 2861 115 118 122 128 2828 2880 2885 2989 84.6 84.6 86.1 87.8	6708 6676 6880 7063 7348 21.79 18.74 18.20 16.13 15.53 7.36 7.42 7.17 6.85 6.66 7.16 6.42 6.94 7.62 8.05 66.0 66.6 66.8 67.0 68.3 17.04 16.77 17.10 17.24 17.72 19.16 19.56 20.23 20.79 21.24 904 899 908 944 951 2713 2762 2763 2861 2935 115 118 122 128 134 2828 2880 2885 2989 3069 84.6 84.6 86.1 87.8 89.6	6708 6676 6880 7063 7348 7544 21.79 18.74 18.20 16.13 15.53 17.14 7.36 7.42 7.17 6.85 6.66 6.56 7.16 6.42 6.94 7.62 8.05 7.89 17.04 16.77 17.10 17.24 17.72 17.72 19.16 19.56 20.23 20.79 21.24 22.20 904 899 908 944 951 962 2713 2762 2763 2861 2935 3013 115 118 122 128 134 144 2828 2880 2885 2989 3069 3157 84.6 84.6 86.1 87.8 89.6 91.5	6708 6676 6880 7063 7348 7544 7813 21.79 18.74 18.20 16.13 15.53 17.14 20.62 7.36 7.42 7.17 6.85 6.66 6.56 6.46 7.16 6.42 6.94 7.62 8.05 7.89 8.50 66.0 66.6 66.8 67.0 68.3 69.9 71.4 17.04 16.77 17.10 17.24 17.72 17.72 18.31 19.16 19.56 20.23 20.79 21.24 22.20 22.60 904 899 908 944 951 962 1006 2713 2762 2763 2861 2935 3013 3101 115 118 122 128 134 144 146 2828 2880 2885 2989 3069 3157 3247 84.6 84.6 86.1 87.8 89.6 91.5 94.5	1990 1991 1992 1993 1994 1995 1996 1997 6708 6676 6880 7063 7348 7544 7813 8159 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 904 899 908 944 951 962 1006 1030 2713 2762 2763 2861 2935 3013 3101 3146 115 118 122 <t< td=""><td>1990 1991 1992 1993 1994 1995 1996 1997 1998 6708 6676 6880 7063 7348 7544 7813 8159 8509 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 12.07 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 6.25 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 9.76 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 18.92 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 22.24 904 899 908 944 951 962 1006 1030 1037 2713 2762 2763 2861 2935</td><td>1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 6708 6676 6880 7063 7348 7544 7813 8159 8509 8859 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 12.07 17.26 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 6.25 5.88 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 9.76 9.91 66.0 66.6 66.8 67.0 68.3 69.9 71.4 72.9 73.6 75.0 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 18.92 19.52 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 <td< td=""><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 </td><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 </td><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 </td><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 6708 6676 6880 7063 7348 7544 7813 8159 8509 8859 9191 9215 9434 9701 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 12.07 17.26 27.72 22.00 23.70 30.02 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 6.25 5.88 5.82 5.80 5.82 5.77 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 9.76 9.91 10.42 10.90 10.51 11.18 66.0 66.6 66.8 67.0 68.3 69.9 71.4 72.9 73.6 75.0 76.0 76.0 76.4 77.6 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 18.92 19.52 19.70 19.65 19.70 20.29 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 22.24 22.39 23.44 21.99 21.69 22.74 904 899 908 944 951 962 1006 1030 1037 1039 1084 1059 1071 1092 2713 2762 2763 2861 2935 3013 3101 3146 3364 3312 3421 3421 3397 3475 3480 115 118 122 128 134 144 146 148 161 183 183 205 230 242 2828 2880 2885 2989 3069 3157 3247 3294 3425 3495 3604 3602 3705 3721 3721 384.6 84.6 84.6 84.6 86.1 87.8 89.6 91.5 94.5 95.0 95.3 97.0 99.3 96.5 97.3 100.1</td></td<></td></t<>	1990 1991 1992 1993 1994 1995 1996 1997 1998 6708 6676 6880 7063 7348 7544 7813 8159 8509 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 12.07 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 6.25 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 9.76 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 18.92 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 22.24 904 899 908 944 951 962 1006 1030 1037 2713 2762 2763 2861 2935	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 6708 6676 6880 7063 7348 7544 7813 8159 8509 8859 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 12.07 17.26 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 6.25 5.88 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 9.76 9.91 66.0 66.6 66.8 67.0 68.3 69.9 71.4 72.9 73.6 75.0 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 18.92 19.52 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 <td< td=""><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 </td><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 </td><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 </td><td> 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 6708 6676 6880 7063 7348 7544 7813 8159 8509 8859 9191 9215 9434 9701 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 12.07 17.26 27.72 22.00 23.70 30.02 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 6.25 5.88 5.82 5.80 5.82 5.77 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 9.76 9.91 10.42 10.90 10.51 11.18 66.0 66.6 66.8 67.0 68.3 69.9 71.4 72.9 73.6 75.0 76.0 76.0 76.4 77.6 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 18.92 19.52 19.70 19.65 19.70 20.29 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 22.24 22.39 23.44 21.99 21.69 22.74 904 899 908 944 951 962 1006 1030 1037 1039 1084 1059 1071 1092 2713 2762 2763 2861 2935 3013 3101 3146 3364 3312 3421 3421 3397 3475 3480 115 118 122 128 134 144 146 148 161 183 183 205 230 242 2828 2880 2885 2989 3069 3157 3247 3294 3425 3495 3604 3602 3705 3721 3721 384.6 84.6 84.6 84.6 86.1 87.8 89.6 91.5 94.5 95.0 95.3 97.0 99.3 96.5 97.3 100.1</td></td<>	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002	1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 6708 6676 6880 7063 7348 7544 7813 8159 8509 8859 9191 9215 9434 9701 21.79 18.74 18.20 16.13 15.53 17.14 20.62 18.49 12.07 17.26 27.72 22.00 23.70 30.02 7.36 7.42 7.17 6.85 6.66 6.56 6.46 6.45 6.25 5.88 5.82 5.80 5.82 5.77 7.16 6.42 6.94 7.62 8.05 7.89 8.50 9.16 9.76 9.91 10.42 10.90 10.51 11.18 66.0 66.6 66.8 67.0 68.3 69.9 71.4 72.9 73.6 75.0 76.0 76.0 76.4 77.6 17.04 16.77 17.10 17.24 17.72 17.72 18.31 18.62 18.92 19.52 19.70 19.65 19.70 20.29 19.16 19.56 20.23 20.79 21.24 22.20 22.60 22.73 22.24 22.39 23.44 21.99 21.69 22.74 904 899 908 944 951 962 1006 1030 1037 1039 1084 1059 1071 1092 2713 2762 2763 2861 2935 3013 3101 3146 3364 3312 3421 3421 3397 3475 3480 115 118 122 128 134 144 146 148 161 183 183 205 230 242 2828 2880 2885 2989 3069 3157 3247 3294 3425 3495 3604 3602 3705 3721 3721 384.6 84.6 84.6 84.6 86.1 87.8 89.6 91.5 94.5 95.0 95.3 97.0 99.3 96.5 97.3 100.1

^aRefers to the imported cost of crude oil to U.S. refiners.

^bIncludes lease condensate.

[&]quot;Total of retail electric vales 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 for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C.

^dDefined 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 2001 are estimates.

e"Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, Annual Energy Review, 2001, DOE/EIA-0384(01) (AER), Table 1.1. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, Monthly Energy Review (MER). Consequently, the historical data may not precisely match those published in the MER or the AER.

Notes: SPR: Strategic Petroleum Reserve. 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 Short-Term Integrated Forecasting System.

Sources: Historical data: Latest data available from Bureau of Economic Analysis; Energy Information Administration; latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; Quarterly Coal Report, DOE/EIA-0121; International Petroleum Monthly DOE/EIA-520, and Weekly Petroleum Status Report DOE/EIA-0208. Macroeconomic projections are based on Global Insight Forecast CONTROL1202.

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

								Year							
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Macroeconomic															
Real Gross Domestic Product															
(billion chained 1996 dollars)	6708	6676	6880	7063	7348	7544	7813	8159	8509	8859	9191	9215	9434	9701	10136
GDP Implicit Price Deflator															
(Index, 1996=1.000)	0.865	0.897	0.918	0.941	0.960	0.981	1.000	1.019	1.032	1.047	1.069	1.094	1.107	1.131	1.160
Real Disposable Personal Income															
(billion chained 1996 Dollars)	5014	5033	5189	5261	5397	5539	5678	5854	6169	6328	6630	6748	7038	7256	7539
Manufacturing Production															
(Index, 1996=1.000)	0.811	0.791	0.823	0.853	0.905	0.953	1.000	1.079	1.142	1.191	1.247	1.194	1.188	1.228	1.314
Real Fixed Investment															
(billion chained 1996 dollars)	895	833	886	958	1046	1109	1213	1329	1480	1595	1692	1627	1576	1619	1748
Real Exchange Rate															
(Index, 1996=1.000)	0.918	0.920	0.926	0.956	0.933	0.869	0.918	0.992	1.044	1.047	1.083	1.141	1.142	1.093	1.043
Business Inventory Change															
(billion chained 1996 dollars)	8.9	-6.8	-4.7	3.6	11.9	13.8	9.9	14.8	27.1	14.4	17.5	-36.2	-14.4	5.5	22.2
Producer Price Index															
(index, 1982=1.000)	1.163	1.165	1.172	1.189	1.205	1.247	1.277	1.276	1.244	1.255	1.327	1.342	1.309	1.336	1.359
Consumer Price Index															
(index, 1982-1984=1.000)	1.307	1.362	1.403	1.445	1.482	1.524	1.569	1.605	1.630	1.666	1.722	1.771	1.799	1.843	1.891
Petroleum Product Price Index															
(index, 1982=1.000)	0.748	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.609	0.913	0.853	0.777	0.956	0.891
Non-Farm Employment															
(millions)	109.4	108.3	108.6	110.7	114.1	117.2	119.6	122.7	125.9	128.9	131.7	131.9	130.8	131.8	135.1
Commercial Employment															
(millions)	71.3	70.8	71.2	73.2	76.1	78.8	81.1	83.9	86.6	89.6	92.0	92.7	92.3	93.6	96.6
Total Industrial Production															
(index, 1996=1.000)	0.827	0.810	0.836	0.865	0.912	0.956	1.000	1.069	1.124	1.165	1.218	1.173	1.167	1.206	1.282
Housing Stock															
(millions)	103.4	104.4	105.4	106.7	108.0	109.6	110.9	112.3	114.1	115.7	116.2	118.0	119.7	120.9	122.0
Weather ^a															
Heating Degree-Days															
U.S	4016	4200	4441	4700	4483	4531	4713	4542	3951	4169	4460	4223	4279	4408	4477
New England	5848	5960	6844	6728	6672	6559	6679	6662	5680	5952	6489	6059	6180	6515	6488
Middle Atlantic	4998	5177	5964	5948	5934	5831	5986	5809	4812	5351	5774	5297	5383	5807	5723
U.S. Gas-Weighted	4139	4337	4458	4754	4659	4707	4980	4802	4183	4399	4680	4451	4518	4657	4730
Cooling Degree-Days (U.S.)	1260	1331	1040	1218	1220	1293	1180	1156	1410	1297	1229	1256	1366	1232	1240

^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 1990 population.

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; Federal Reserve System, Statistical Release G.17(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on Global Insight Forecast CONTROL1202.

Notes: Historical data are printed in bold; forecasts are in italics.

Table A3. Annual International Petroleum Supply and Demand Balance: Base Case

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Demand ^a OECD										<u> </u>					
U.S. (50 States)	17.0 13.3 5.1 5.4 40.8	16.7 13.3 5.3 5.6 41.6	17.0 14.0 5.4 5.9 42.6	17.2 14.2 5.4 6.2 43.0	17.7 14.1 5.7 6.6 44.2	17.7 14.2 5.7 6.8 45.0	18.3 14.8 5.9 6.9 46.1	18.6 15.0 5.7 7.3 46.6	18.9 15.3 5.5 7.1 46.9	19.5 15.2 5.6 7.4 47.7	19.7 15.1 5.5 7.5 47.9	19.6 15.3 5.4 7.4 47.7	19.7 15.2 5.3 7.5 47.6	20.3 15.2 5.3 7.6 48.4	20.9 15.4 5.3 7.8 49.5
Non-OECD Former Soviet Union Europe China Other Asia Other Non-OECD Total Non-OECD Total World Demand	8.4 1.0 2.3 4.3 8.9 24.9 65.7	8.4 0.8 2.5 4.5 8.9 25.0 66.6	6.8 0.7 2.7 4.7 9.3 24.2 66.8	5.6 0.7 3.0 5.1 9.7 24.0 67.0	4.8 0.6 3.2 5.5 10.0 24.1 68.3	4.6 0.7 3.4 5.9 10.4 24.9 69.9	4.0 0.7 3.6 6.3 10.7 25.3 71.4	3.9 0.7 3.9 6.6 11.1 26.2 72.9	3.8 0.7 4.1 6.7 11.4 26.7 73.6	3.7 0.7 4.3 6.9 11.6 27.3 75.0	3.7 0.6 4.8 7.3 11.7 28.1 76.0	3.6 0.6 4.9 7.3 11.8 28.3 76.0	3.7 0.6 5.2 7.4 11.9 28.7 76.4	3.7 0.6 5.3 7.5 12.0 29.1 77.6	3.8 0.6 5.4 7.7 12.1 29.6 79.0
Supply ° OECD U.S. (50 States) Canada Mexico North Sea ° Other OECD	9.7 2.0 3.0 3.9 1.5 20.2	9.9 2.0 3.2 4.1 1.5 20.8	9.8 2.1 3.2 4.5 1.5 21.1	9.6 2.2 3.2 4.8 1.4 21.2	9.4 2.3 3.2 5.5 1.5 21.9	9.4 2.4 3.1 5.9 1.5 22.4	9.4 2.5 3.3 6.3 1.5 22.7	9.5 2.6 3.4 5.8 1.8 23.1	9.3 2.7 3.5 5.9 2.1 23.6	9.0 2.6 3.4 6.0 1.9 22.9	9.1 2.7 3.5 6.0 2.1 23.4	9.0 2.8 3.6 6.3 1.6 23.2	9.1 3.0 3.6 6.2 1.6 23.5	9.0 3.2 3.8 6.3 1.6 23.8	8.9 3.3 3.9 6.2 1.6 23.9
Non-OECD OPEC. Former Soviet Union China Other Non-OECD. Total Non-OECD. Total World Supply.	24.5 11.4 2.8 7.9 46.6 66.8	24.6 10.4 2.8 8.1 45.9 66.7	25.8 8.9 2.8 8.3 45.9 67.0	26.6 8.0 2.9 8.7 46.2 67.4	27.0 7.3 2.9 9.1 46.3 68.2	27.6 7.1 3.0 9.8 47.5 69.9	28.3 7.1 3.1 10.2 48.7 71.4	29.9 7.1 3.2 10.4 50.6 73.7	30.4 7.2 3.2 10.7 51.6 75.2	29.3 7.6 3.2 11.2 51.3 74.2	30.9 8.1 3.2 11.2 53.4 76.8	30.1 8.8 3.3 11.2 53.4 76.7	28.1 9.4 3.4 11.4 52.4 75.8	29.1 10.0 3.4 11.9 54.4 78.2	29.4 10.5 3.4 12.3 55.7 79.5
Total Stock Withdrawals	-0.8	-0.1	-0.3	-0.4	0.0	0.0	-0.4	-1.2	-1.3	8.0	-0.8	-0.7	0.5	-0.7	-0.5
OECD Comm. Stocks, End (bill. bbls.)	2.7	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.8	2.4	2.5	2.7	2.6	2.7	2.7
Net Exports from Former Soviet Union	3.0	2.1	2.1	2.3	2.4	2.6	3.0	3.3	3.5	3.9	4.5	5.2	5.7	6.3	6.8

^aDemand for petroleum by the OECD countries is synonymous with "petroleum product supplied," which is defined in the glossary of the EIA Petroleum Supply Monthly, DOE/EIA-0109. Demand for petroleum by the non-OECD countries is "apparent consumption," which includes internal consumption, refinery fuel and loss, and bunkering.

^bOECD Europe includes the former East Germany.

^CIncludes production of crude oil (including lease condensates), natural gas plant liquids, other hydrogen and hydrocarbons for refinery feedstocks, refinery gains, alcohol, and liquids produced from coal and other sources.

^dIncludes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

OPEC: Organization of Petroleum Exporting Countries: Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

SPR: Strategic Petroleum Reserve

Former Soviet Union: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Russia, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Notes: Minor discrepancies with other published EIA 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.

Sources: Énergy Information Administration: latest data available from EIA databases supporting the following reports: International Petroleum Monthly, DOE/EIA-0520, and Organization for Economic Cooperation and Development. Annual and Monthly Oil Statistics Database.

Table A4. Annual Average U.S. Energy Prices: Base Case

(Nominal Dollars)

(Nominal Dollars)								Year							
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Crude Oil Prices (dollars per barrel)															
Imported Average a	21.79	18.74	18.20	16.13	15.53	17.14	20.62	18.49	12.07	17.26	27.72	22.00	23.70	30.02	25.39
WTI ^b Spot Average	24.48	21.60	20.54	18.49	17.16	18.41	22.11	20.61	14.45	19.25	30.29	25.95	26.12	32.36	28.01
Natural Gas Wellhead															
(dollars per thousand cubic feet)	1.71	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.96	2.19	3.69	4.12	2.95	4.36	4.28
Petroleum Products															
Gasoline Retail ^b (dollars per gallon)															
All Grades	1.17	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	1.53	1.47	1.39	1.61	1.53
Regular Unleaded No. 2 Diesel Oil, Retail	1.13	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	1.49	1.43	1.34	1.57	1.49
(dollars per gallon)	1.17	1.13	1.11	1.11	1.11	1.11	1.24	1.19	1.04	1.12	1.49	1.40	1.32	1.51	1.43
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.70	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.49	0.89	0.76	0.69	0.86	0.82
No. 2 Heating Oil, Retail															
(dollars per gallon)	1.04	0.98	0.93	0.90	0.87	0.86	0.98	0.97	0.84	0.87	1.29	1.23	1.11	1.36	1.26
No. 6 Residual Fuel Oil, Retail ^c															
(dollars per barrel)	18.66	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.83	16.02	25.34	22.24	23.83	26.92	24.09
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.45	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	1.20	1.23	1.22	1.23	1.20
Heavy Fuel Oil ^d															
(dollars per million Btu) Natural Gas	3.22	2.48	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.38	4.27	3.71	3.56	4.36	3.86
(dollars per million Btu)	2.32	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	4.33	4.43	3.65	4.98	4.88
Other Residential															
Natural Gas															
(dollars per thousand cubic feet) Electricity	5.80	5.82	5.89	6.17	6.41	6.06	6.35	6.95	6.83	6.69	7.77	9.63	7.87	9.05	9.27
(cents per kilowatthour)	7.85	8.05	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	8.24	8.48	8.40	8.46	8.35

^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. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: 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							
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Supply			•		•			•	•		•	•			
Crude Oil Supply															
Domestic Production a	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	5.82	5.80	5.82	5.77	5.59
Alaska		1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	0.97	0.96	0.99	0.96	0.95
Lower 48		5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.83	4.85	4.84	4.83	4.81	4.64
Net Commercial Imports b	5.76	5.67	5.98	6.67	6.95	7.14	7.40	8.12	8.60	8.60	9.01	9.30	9.12	9.53	10.09
Net SPR Withdrawals		0.05	-0.01	-0.02	0.00	0.00	0.07	0.01	-0.02	0.02	0.08	-0.02	-0.10	-0.08	-0.03
Net Commercial Withdrawals	0.00	-0.01	0.02	-0.05	-0.01	0.09	0.05	-0.06	-0.05	0.11	0.00	-0.07	0.09	0.01	-0.05
Product Supplied and Losses		-0.02	-0.01	-0.03	-0.01	-0.03	-0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Unaccounted-for Crude Oil	0.26	0.20	0.26	0.17	0.27	0.19	0.22	0.00	0.00	0.00	0.00	0.00	-0.01	0.00	0.00
Onaccountector Crude Oil	0.20	0.20	0.20	0.17	0.27	0.19	0.22	0.14	0.11	0.19	0.15	0.12	-0.01	0.15	0.17
Total Crude Oil Supply	13.41	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	15.07	15.13	14.93	15.37	15.77
Other Supply															
NGL Production	1.56	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.85	1.91	1.87	1.89	1.91	1.94
Other Hydrocarbon and Alcohol Inputs	0.13	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.38	0.38	0.38	0.42	0.41	0.40
Crude Oil Product Supplied		0.02	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
Processing Gain		0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	0.95	0.90	0.95	0.94	0.96
Net Product Imports ^c	1.38	0.76	0.77	0.77	1.09	0.77	1.10	1.04	1.17	1.30	1.40	1.59	1.37	1.65	1.91
Product Stock Withdrawn	-0.14	-0.04	0.94	-0.95	0.00	0.75	0.03	-0.09	-0.17	0.30	0.00	-0.23	0.15	0.02	-0.05
Product Stock Withdrawn	-0.14	-0.04	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.30	0.00	-0.23	0.15	0.02	-0.05
Total Supply	17.04	16.56	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.70	20.30	20.93
Demand															
Motor Gasoline d	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	8.47	8.61	8.84	9.07	9.34
Jet Fuel		1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	1.73	1.66	1.61	1.68	1.74
Distillate Fuel Oil	3.02	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	3.72	3.85	3.78	3.95	4.08
Residual Fuel Oil	1.23	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	0.91	0.81	0.64	0.70	0.74
Other Oils ^e		3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	4.87	4.73	4.83	4.90	5.03
Outor One	0.50	0.00	7.20	7.17	7.71	4.00	4.00	4	4.00	0.01	4.01	4.10	7.00	7.00	0.00
Total Demand	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	19.70	19.65	19.70	20.29	20.93
Total Petroleum Net Imports	7.16	6.42	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	10.42	10.90	10.51	11.18	12.01
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	323	325	318	335	337	303	284	305	324	284	286	312	279	275	295
Total Motor Gasoline		219	216	226	215	202	195	210	216	193	196	210	211	210	212
Jet Fuel		49	43	40	47	40	40	44	45	41	45	42	41	39	42
Distillate Fuel Oil		144	141	141	145	130	127	138	156	125	118	145	129	125	128
Residual Fuel Oil		50	43	44	42	37	46	40	45	36	36	41	31	32	38
Other Oils f		251	292	237	274	348	280	204	212	396	246	178	345	267	225
alpoludos losso condensato	221	201	232	231	214	340	200	204	Z 1 Z	390	240	170	340	207	

^aIncludes lease condensate.

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

clncludes 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 Energy Information Administration, Short-Term Energy Outlook, EIA/DOE-0202(93/3Q), for details on this adjustment.

elncludes 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.

^{&#}x27;Includes 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 Short-Term Integrated Forecasting System.

Sources: Historical data: Energy Information Administration: 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							
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Supply															
Total Dry Gas Production	17.81	17.70	17.84	18.10	18.82	18.60	18.85	18.90	19.02	18.83	18.99	19.37	18.92	19.20	19.59
Net Imports	1.45	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	3.54	3.65	3.69	3.90	3.96
Supplemental Gaseous Fuels	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	0.09	0.08	0.08	0.08	0.08
Total New Supply	19.38	19.45	19.88	20.42	21.39	21.40	21.75	21.84	22.12	22.35	22.61	23.10	22.69	23.17	23.63
Working Gas in Storage															
Opening	2.85	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	2.37	2.26
Closing	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.52	1.72	2.90	2.37	2.26	2.19
Net Withdrawals	-0.22	0.24	0.23	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.21	0.80	-1.18	0.54	0.11	0.06
Tot Williamanaio	0.22	0.2.	0.20	0.20	0.20	01.10	0.02	0.00	0.00	0.2.	0.00		0.07	0.77	0.00
Total Supply	19.16	19.70	20.11	20.70	21.11	21.85	21.73	21.84	21.56	22.56	23.41	21.91	23.23	23.28	23.70
Balancing Item ^a	0.00	-0.14	0.12	0.09	0.13	0.35	0.87	0.89	0.67	-0.17	0.03	80.0	-1.54	-0.55	-0.41
Total Primary Supply	19.16	19.56	20.23	20.79	21.24	22.20	22.60	22.73	22.24	22.39	23.44	21.99	21.69	22.74	23.28
Demand															
Residential	4.39	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	4.99	4.81	4.83	4.88	5.01
Commercial	2.62	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	3.22	3.04	3.10	3.00	3.27
Industrial	8.24	8.36	8.70	8.87	8.91	9.38	9.69	9.71	9.49	9.16	9.38	8.26	7.81	8.89	8.89
Lease and Plant Fuel	1.24	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.17	1.08	1.13	1.15	1.16	1.19	1.19
Other Industrial	7.01	7.23	7.53	7.70	7.79	8.16	8.44	8.51	8.32	8.08	8.25	7.10	6.65	7.70	7.70
CHP ^b	1.06	1.06	1.11	1.12	1.18	1.26	1.29	1.28	1.36	1.40	1.39	1.37	1.38	1.42	1.48
Non-CHP	5.95	6.17	6.42	6.58	6.61	6.90	7.15	7.23	6.97	6.68	6.87	5.73	5.27	6.28	6.21
Transportation ^c	0.66	0.60	0.59	0.63	0.69	0.70	0.71	0.76	0.64	0.65	0.65	0.61	0.60	0.63	0.62
Electric Power d	3.24	3.32	3.45	3.47	3.90	4.24	3.81	4.06	4.59	4.82	5.21	5.29	5.36	5.34	5.49
Total Demand	19.16	19.56	20.23	20.79	21.24	22.20	22.60	22.73	22.24	22.39	23.44	21.99	21.69	22.74	23.28

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

Natural gas used for electricity generation and production of useful thermal output by combined heat and power 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 Short-Term Integrated Forecasting System.

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

Table A7. Annual U.S. Coal Supply and Demand: Base Case

(Million Short Tons)

,	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Supply		•	•												
Production	1029.1	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1100.4	1073.6	1127.7	1099.9	1108.4	1128.9
Appalachia	489.0	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	425.6	419.4	432.8	405.4	398.8	400.6
Interior	205.8	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	143.5	147.0	148.6	134.8	131.2
Western	334.3	342.8	345.3	368.5	408.3	429.6	439.1	451.3	488.8	512.3	510.7	547.9	549.9	566.3	597.2
Primary Stock Levels ^a															
Opening	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	33.9	32.5	32.7
Closing	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	31.9	33.9	32.5	32.7	32.0
Net Withdrawals	-4.4	0.4	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	-2.9	7.6	-2.0	1.4	-0.2	0.7
Imports	2.7	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.1	12.5	19.8	16.6	18.1	18.8
Exports		109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	58.5	48.7	40.5	41.0	42.1
Total Net Domestic Supply	921.6	890.9	897.8	886.9	961.8	950.4	986.3	1008.5	1045.7	1048.1	1035.2	1096.8	1077.4	1085.4	1106.3
Secondary Stock Levels ^b															
Opening	147.1	170.1	170.2	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	145.6	137.5	142.7
Closing	170.1	170.2	166.8	123.1	139.6	138.0	126.0	108.8	131.6	149.1	108.5	145.6	137.5	142.7	143.7
Net Withdrawals	-23.0	-0.1	3.3	43.8	-16.5	1.5	12.0	17.2	-22.8	-17.5	40.7	-37.1	8.1	-5.2	-1.1
Waste Coal Supplied to IPPs °	0.0	0.0	6.0	6.4	7.9	8.5	8.8	8.1	9.0	9.6	10.1	10.6	11.1	11.6	14.8
Total Supply	898.5	890.8	907.2	937.1	953.2	960.4	1007.1	1033.9	1031.8	1040.2	1086.0	1070.3	1096.6	1091.8	1120.0
Demand															
Coke Plants	38.9	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	28.1	28.9	26.1	23.1	24.5	23.8
Electric Power Sector d	782.6	783.9	795.1	831.6	838.4	850.2	896.9	921.4	936.6	940.9	985.8	965.1	981.2	1002.3	1031.8
Retail and General Industry	83.1	81.5	80.2	81.1	81.2	78.9	77.7	78.0	72.3	69.6	69.3	67.5	66.0	64.9	64.4
Residential and Commercial	6.7	6.1	6.2	6.2	6.0	5.8	6.0	6.5	4.9	4.9	4.1	4.1	4.3	4.0	3.8
Industrial	76.3	75.4	74.0	74.9	75.2	73.1	71.7	71.5	67.4	64.7	65.2	63.4	61.7	61.0	60.6
CHP ^e	27.8	27.0	28.2	28.9	29.7	29.4	29.4	29.8	28.5	27.8	28.0	26.4	26.5	27.1	28.1
Non-CHP	48.5	48.4	45.8	46.0	45.5	43.7	42.3	41.7	38.9	37.0	37.2	36.9	35.1	33.9	32.5
Total Demand ^f	904.5	899.2	907.7	944.1	951.3	962.1	1006.3	1029.5	1037.1	1038.6	1084.1	1058.6	1070.2	1091.8	1120.0
Discrepancy ^g	-6.0	-8.5	-0.5	-7.0	1.9	-1.7	0.8	4.3	-5.3	1.6	1.9	11.6	26.5	0.0	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.

Estimated 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, Energy Information Administration (EIA). Quarterly coal consumption estimates for 2001 and projections for 2002 and 2003 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

ECoal used for electricity generation and production of useful thermal output by combined heat and power plants at industrial facilities. Includes a small amount of coal consumption at electricity –only plants ie the industrial sector.

^dCoal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers. ¹Total Demand includes estimated IPP consumption.

⁹The discrepancy reflects an unaccounted for shipper and receiv er 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. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System. Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following reports: Quarterly Coal Report, DOE/EIA-0121, and Electric Power Monthly, DOE/EIA-0226. Projections: Energy Information Administration, Short-Term Integrated Forecasting System 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							
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Net Electricity Generation						l .	l .	l .		l .		<u> </u>	<u> </u>	<u> </u>	
Electric Power Sector ^a															
Coal	1572.1	1568.8	1597.7	1665.5	1666.3	1686.1	1772.0	1820.8	1850.2	1858.6	1943.1	1881.7	1904.0	1914.0	2008.7
Petroleum	118.9	112.8	92.2	105.4	98.7	68.1	74.8	86.5	122.2	111.5	105.2	121.2	86.2	99.5	109.1
Natural Gas	309.5	317.8	334.3	342.2	385.7	419.2	378.8	399.6	449.3	473.0	518.0	545.9	563.1	560.8	577.3
Nuclear	577.0	612.6	618.8	610.4	640.5	673.4	674.7	628.6	673.7	728.3	753.9	768.8	780.0	780.5	784.2
Hydroelectric	286.2	281.5	245.8	273.5	250.6	302.7	338.1	346.6	313.4	308.6	265.8	204.5	260.5	287.0	288.0
Geothermal and Other b	37.1	41.4	44.3	46.0	45.9	42.8	44.5	45.8	46.3	48.4	49.5	48.0	52.0	57.1	60.6
Subtotal	2900.8	2934.9	2933.2	3043.0	3087.7	3192.3	3282.8	3327.8	3455.1	3528.4	3635.5	3570.2	3645.9	3699.0	3827.9
Other Sectors ^c	136.9	138.7	149.4	153.4	160.8	161.0	161.4	162.4	168.6	166.4	166.6	163.3	204.3	209.3	219.2
Total	3037.7	3073.7	3082.6	3196.4	3248.5	3353.3	3444.2	3490.2	3623.7	3694.8	3802.1	3733.5	3850.1	3908.3	4047.1
Net Imports ^d	2.3	19.6	25.4	27.8	44.8	39.2	38.0	36.6	27.6	30.6	34.0	20.3	25.3	31.4	21.7
Total Supply	3040.1	3093.3	3108.1	3224.2	3293.3	3392.5	3482.2	3526.8	3651.3	3725.4	3836.2	3753.8	3875.4	3939.7	4068.8
Losses and Unaccounted for e	212.5	213.2	222.7	234.7	224.7	235.2	235.0	233.1	225.9	230.2	231.7	152.0	170.8	218.3	227.4
Demand															
Retail Sales ^f															
Residential	924.0	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.9	1130.1	1144.9	1192.4	1201.0	1269.8	1272.9	1314.1
Commercial	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.6	979.4	1002.0	1055.2	1085.0	1124.0	1128.3	1160.5
Industrial	945.5	946.6	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	1064.2	994.1	970.4	964.3	997.8
Other	92.0	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	107.0	109.5	116.7	110.8	114.3	117.1
Subtotal	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	3421.4	3396.8	3475.0	3479.9	3589.4
Other Use/Sales g	115.0	118.0	122.0	128.0	134.0	144.1	146.0	148.1	161.1	183.1	183.0	205.1	229.6	241.5	251.9
Total Demand	2827.6	2880.1	2885.4	2989.5	3068.6	3157.3	3247.2	3293.7	3425.3	3495.2	3604.4	3601.8	3704.6	3721.4	3841.3

Electric Utilities and independent power producers.

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

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

^dData for 2001 are estimates.

^eBalancing item, mainly transmission and distribution losses.

^fTotal 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 2001 are estimated.

^gDefined 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 2001 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.

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