▦ Short-Term Energy Outlook   *May 2001*

Gasoline Markets

Figure 1. U.S. Average Retail Motor Gasoline Price Cases*
(Base Case and 95% Confidence Range)
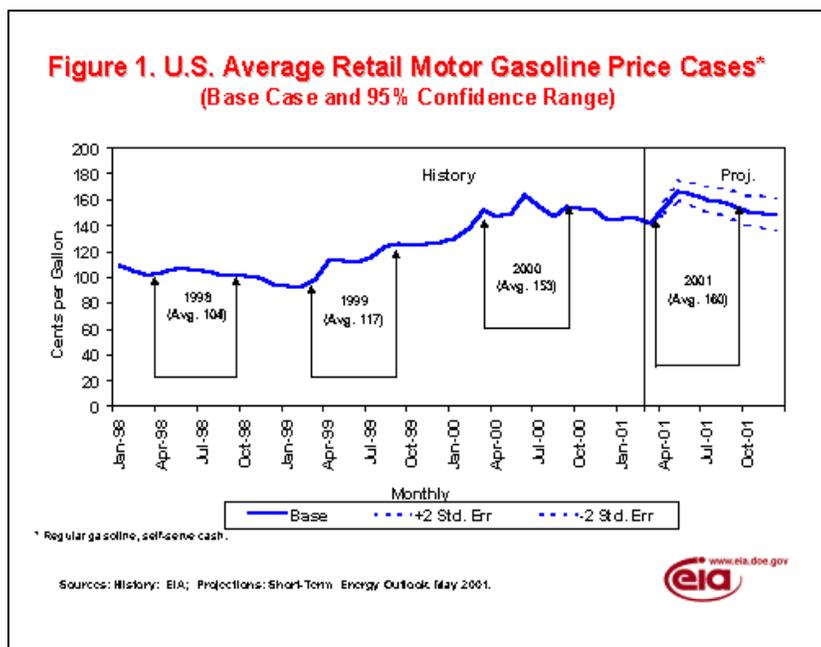
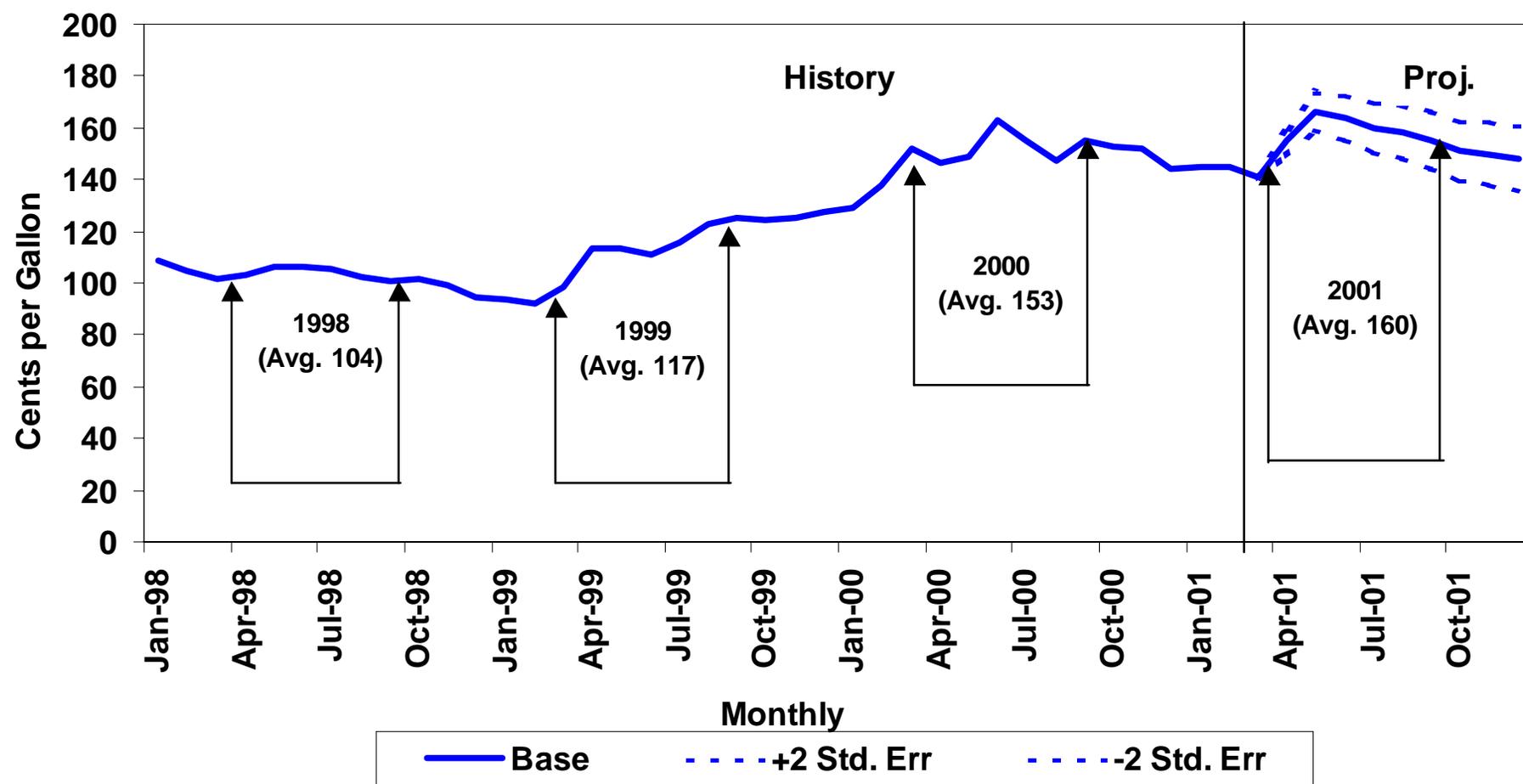We currently expect national average monthly prices for regular gasoline to range between $1.50 and $1.75 per gallon this summer (Figure 1). The mean of this range ($1.60 per gallon) for the entire summer would be about 5 percent above the record set last year. It should be emphasized that these prices are national averages and not what you should expect to pay in any particular location. Gasoline prices always vary widely by region due to differences in environmental restrictions and different levels of local taxes. For example, prices on the West Coast are typically $0.10 - $0.30 per gallon above those in the South for these reasons. Price variations between individual localities within a region can be even greater. Any unanticipated supply problems, such as the recent refinery fires in California and Illinois, will also cause wide variations in prices for short periods of time in the areas served by those facilities (Figure 2).

Rapid increases in spot and wholesale gasoline prices have been sustained over the last month to six weeks leading in turn to widespread increases in U.S. pump prices in April (Figure 3). Momentum in the wholesale market is likely to continue to spill into the retail market in the near term, making additional weekly increases in pump prices likely. It is quite possible that the rate of increase will slow from the torrid pace seen in April but a somewhat higher average monthly price in May compared to April is likely. The rapid runup in spot prices in April generated record spreads (spot price less crude oil cost (Figure 4). For example, New York Harbor spot RFG spreads (New York Harbor spot price for reformulated gasoline less West Texas Intermediate (WTI) crude oil cost) averaged 38 cents per gallon last month, well above the previous record of 30 cents set in June 2000. Such increases in spreads encourage suppliers to accelerate production to take care of existing or expected shortfalls in product availability. How quickly suppliers can improve gasoline supply will ultimately determine how quickly retail gasoline prices will end or reverse their upward trend.

It is clear that market reaction to the gasoline and gasoline blending components inventory deficits that evolved out of the events of the past winter was much more intense in the short run than was allowed for in our last Outlook. Also, revisions to EIA's petroleum data that are incorporated in this month's Outlook mean that gasoline demand levels last year and levels anticipated for this year are considerably higher than previously reported (see Petroleum Demand section below for details on the revisions). While the transition toward the driving season has brought sharp price increases early this year, supplies are expected to improve and the chances that spot and retail prices will calm down (perhaps even decline some from

Figure 1. U.S. Average Retail Motor Gasoline Price Cases*
(Base Case and 95% Confidence Range)

History

Proj.

1998
(Avg. 104)

1999
(Avg. 117)

2000
(Avg. 153)

2001
(Avg. 160)

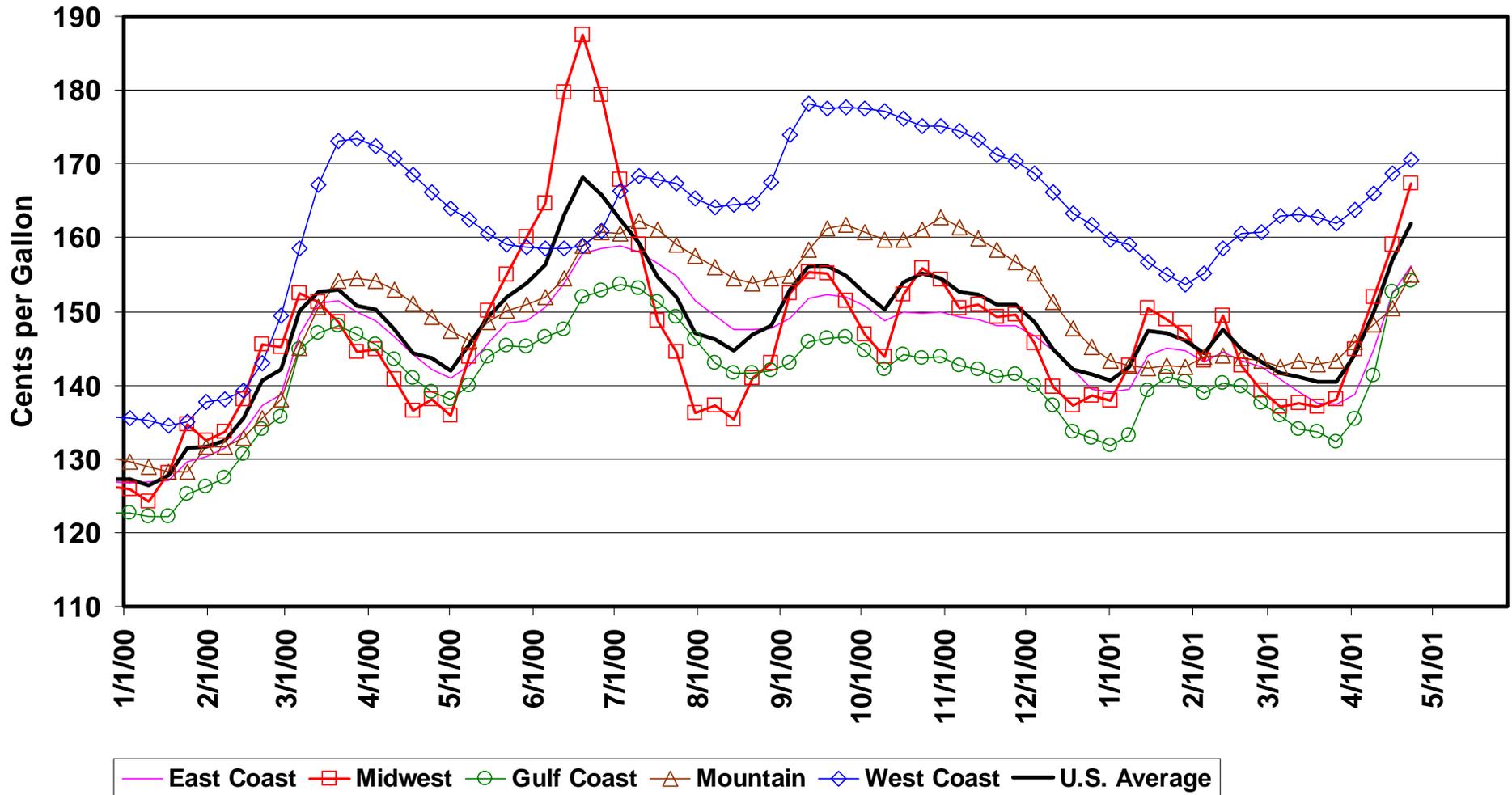Cents per Gallon

Monthly

Base   +2 Std. Err   -2 Std. Err

* Regular gasoline, self-serve cash.

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.
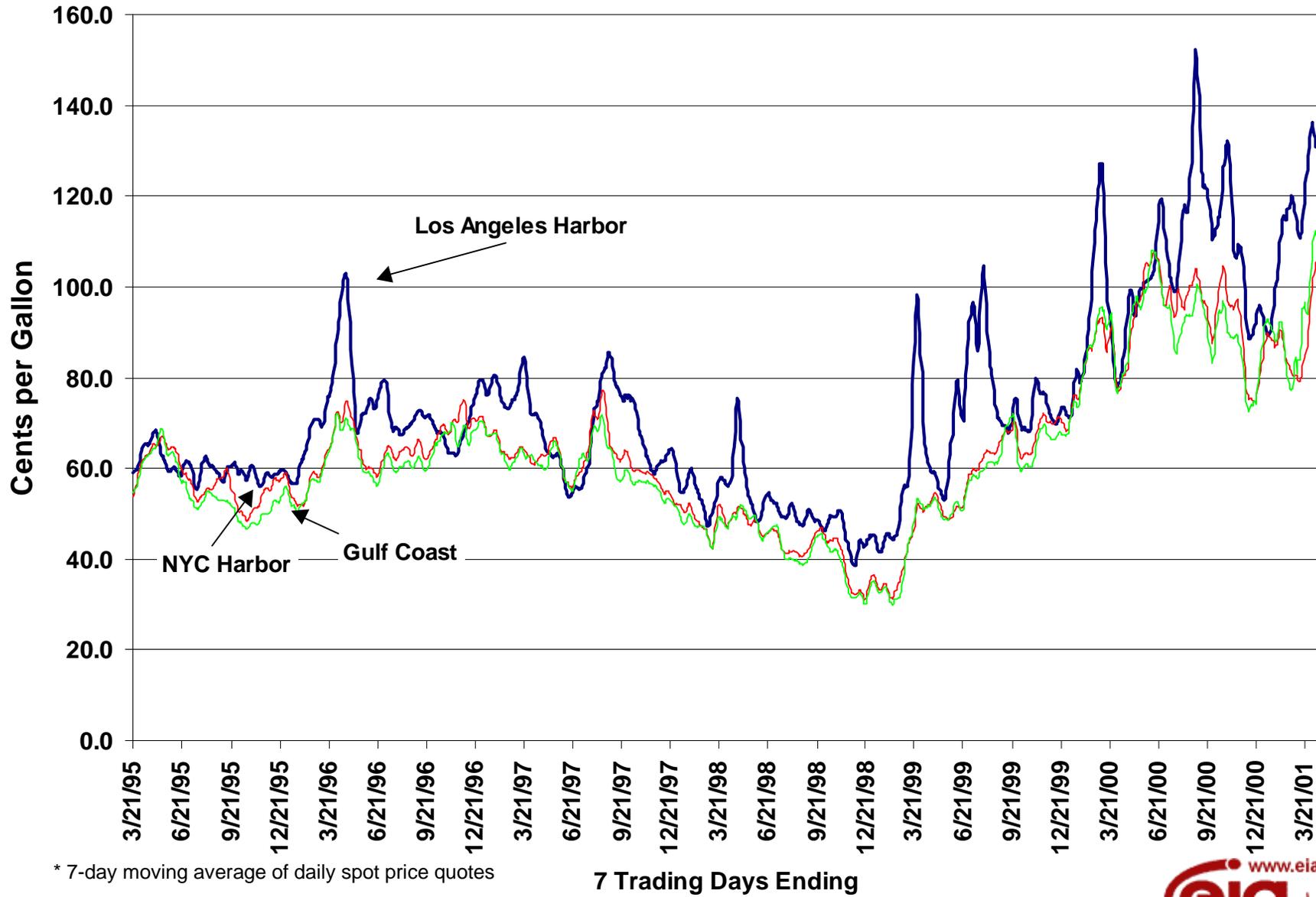
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Figure 2. Retail Gasoline Prices* by Region

Source: EIA: Weekly Retail Gasoline Price Survey

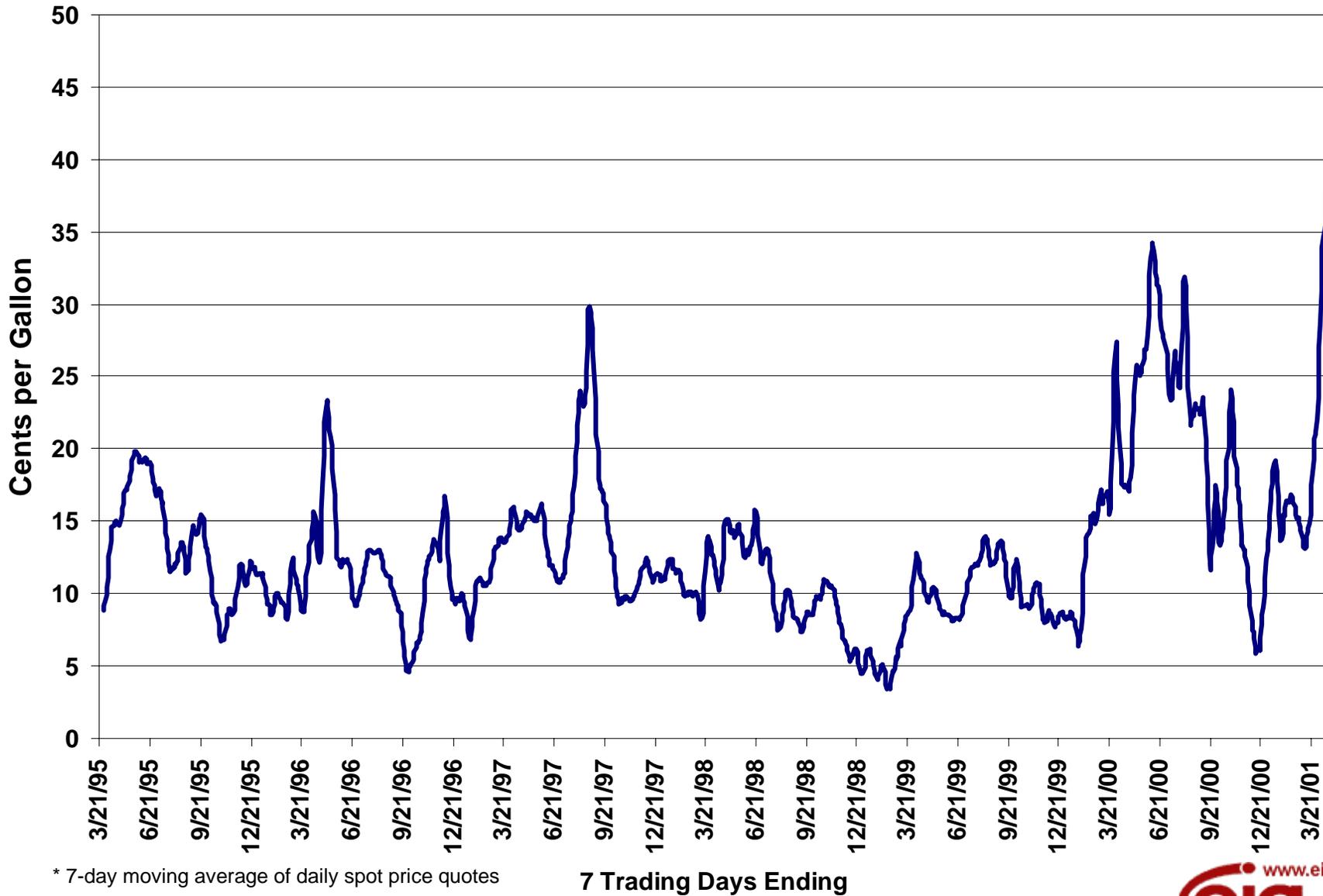www.eia.doe.gov

Figure 3. Spot Gasoline Prices*

* 7-day moving average of daily spot price quotes

7 Trading Days Ending

Source: Reuters

www.eia.doe.gov

Figure 4. Spot Gasoline Spreads*

* 7-day moving average of daily spot price quotes

7 Trading Days Ending

Source: Reuters

www.eia.doe.gov

current levels) are good. Nevertheless, the average price for this summer will most likely exceed last year's average of $1.53 per gallon and set a new record.
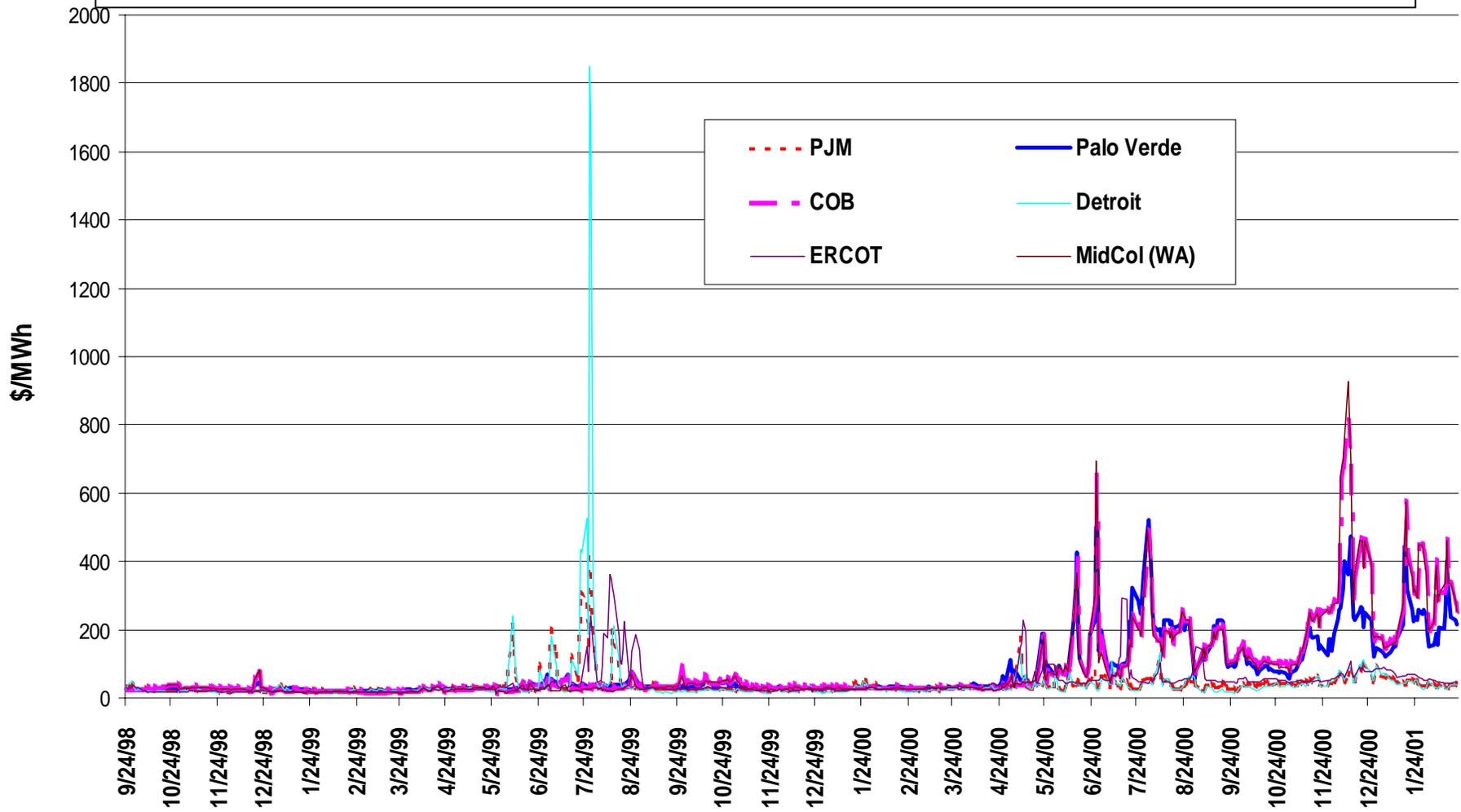
The California Energy Situation

Spot prices for electricity and natural gas remain high in California compared to the rest of the country. Spot electricity prices in the COB (California/Oregon border) market have recently been running about 4 times higher than spot prices seen in the PJM (Pennsylvania, New Jersey, Maryland) market (Figure 5). Prices in the Palo Verde market are also well above spot prices elsewhere. The Federal Energy Regulatory Commission (FERC) voted 2-1 on April 25, 2001 to regulate wholesale electricity prices whenever power reserves fall below 7.5 percent. The FERC order will be in place for a period not to exceed one year.

Reserve margins remain quite slim in the California system as a whole and unplanned outages there remain high. The California Independent System Operator (CAISO) reports that (as of April 27, 2001) 12,155 megawatts (MW), or about 26 percent, of system capacity was offline, 58 percent of which was due to unplanned outages. Although CAISO expects that nearly 2000 MW of new generating capacity will come online this summer, the new capacity will not be able to satisfy the growing demand for electricity. In its 2001 Summer Assessment, CAISO forecasts that, at peak demand, resource deficiency for June through September will range from 700 MW to over 3,600 MW. Given this forecast, the CAISO expects that load curtailments (blackouts) will occur this summer.

New California Generation Capacity for Summer of 2001			
PLANT NAME	**OWNER**	**GENERATION CAPABILITY (MW)**	**EXPECTED ON-LINE MONTH**
Los Medanos Energy Center	Calpine	540	July, 2001
Sutter Energy Center	Calpine	500	July, 2001
Sunrise Plant	Edison International	320	July, 2001
Huntington Beach 3 & 4	Williams/AES	450	July, 2001
United Golden Gate	El Paso Merchant	50	August, 2001
Proctor & Gamble Cogen	SMUD	44	June, 2001
TOTAL CAPACITY		**1,904**	
Source: California Independent System Operator.			

Spot natural gas prices in California continue to exhibit significant volatility relative to the rest of the country (Figure 6).   Southern California border prices remained high relative to other benchmark prices even as Northern California border and other Western prices subsided. In April, average spot prices into Southern California averaged about $13.30 per million Btu, approximately 2.5 times average prices seen in the South, Midwest and East, and about 50 percent above spot prices into the Northern part of the State.

Figure 5. Selected Regional Spot Electricity Prices

Legend:
- PJM
- COB
- ERCOT
- Palo Verde
- Detroit
- MidCol (WA)

Y-axis: $/MWh (0 to 2000)

X-axis dates: 9/24/98, 10/24/98, 11/24/98, 12/24/98, 1/24/99, 2/24/99, 3/24/99, 4/24/99, 5/24/99, 6/24/99, 7/24/99, 8/24/99, 9/24/99, 10/24/99, 11/24/99, 12/24/99, 1/24/00, 2/24/00, 3/24/00, 4/24/00, 5/24/00, 6/24/00, 7/24/00, 8/24/00, 9/24/00, 10/24/00, 11/24/00, 12/24/00, 1/24/01
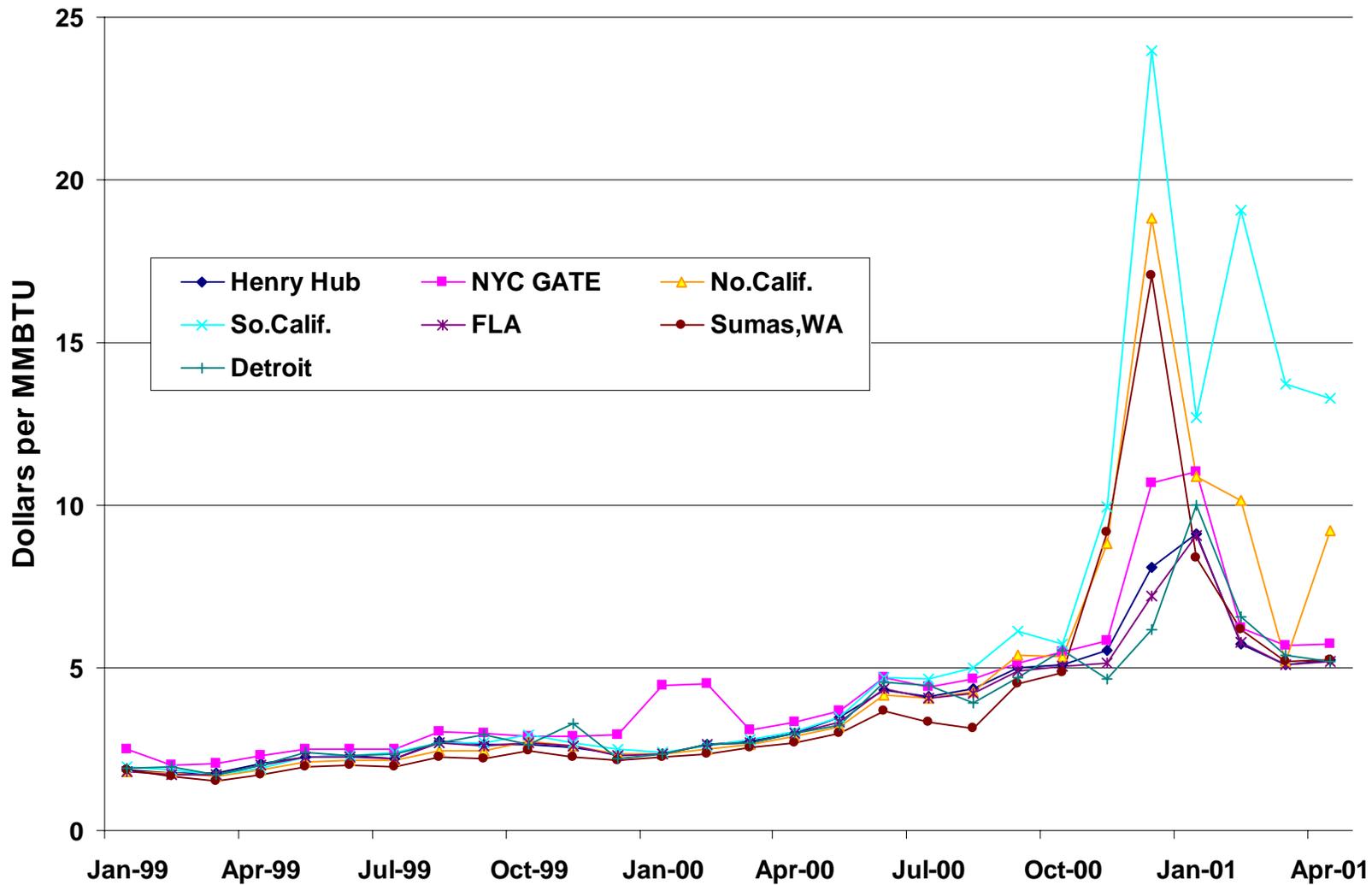
Note: Excludes a quote of $3,500 for COB and $4,000 for MidCol on 12/8/2000

Source: Reuters

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Figure 6.Comparison of Key Natural Gas Prices
Monthly Average Delivered to Pipeline Prices in 2000

Legend:
- Henry Hub
- NYC GATE
- No.Calif.
- So.Calif.
- FLA
- Sumas,WA
- Detroit

Y-axis: Dollars per MMBTU

X-axis: Jan-99, Apr-99, Jul-99, Oct-99, Jan-00, Apr-00, Jul-00, Oct-00, Jan-01, Apr-01

Source: Natural Gas Week

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Figure 7. WTI Crude Oil Price
(Base Case and 95% Confidence Interval)

Sources: History: EIA; Projections: Short-Term Energy Outlook May 2001.
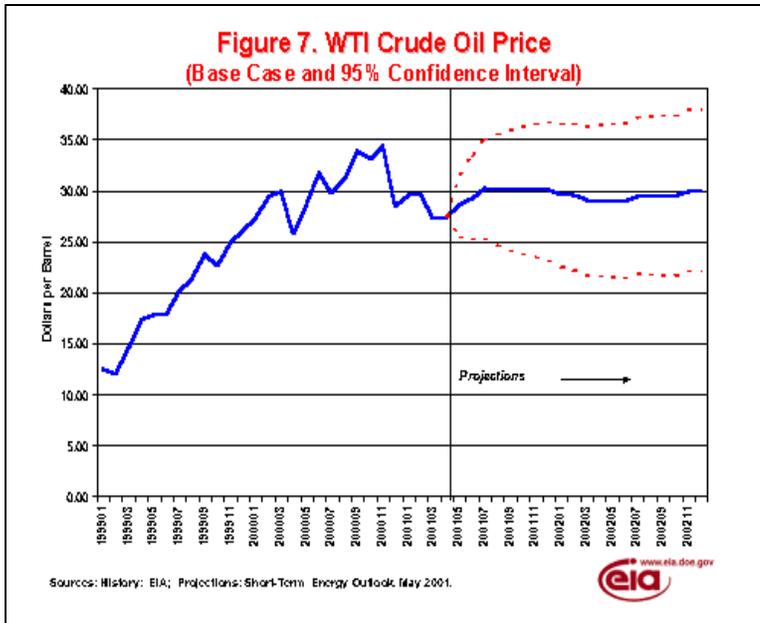
International

Crude Oil Prices   The U.S. imported crude oil price in April averaged about $24 per barrel, while U.S. benchmark West Texas Intermediate crude oil averaged over $27 per barrel (Figure 7).   The OPEC basket price tracked closely with the imported crude oil price, closing about $0.50 higher.

In general, crude oil prices began the month of April at levels lower than March averages but then rose about $3 per barrel by the end of the month, resulting in April monthly averages that are higher than March monthly averages.   The tight gasoline market helped push crude oil prices upwards, as concerns grew that the approaching summer driving season would face price instability similar to that in 2000.

Several OPEC members have announced that production quota increases are not expected during summer 2001. As a result, oil prices are projected to rise by another $3 per barrel from April levels this summer, and maintain these levels for the rest of the year assuming that OPEC continues overproducing above quotas. If OPEC discipline improves and production matches quota levels, world oil prices could rise by another $3-$5 per barrel. Unless there are major changes in OPEC behavior, world oil prices could repeat these levels in 2001.
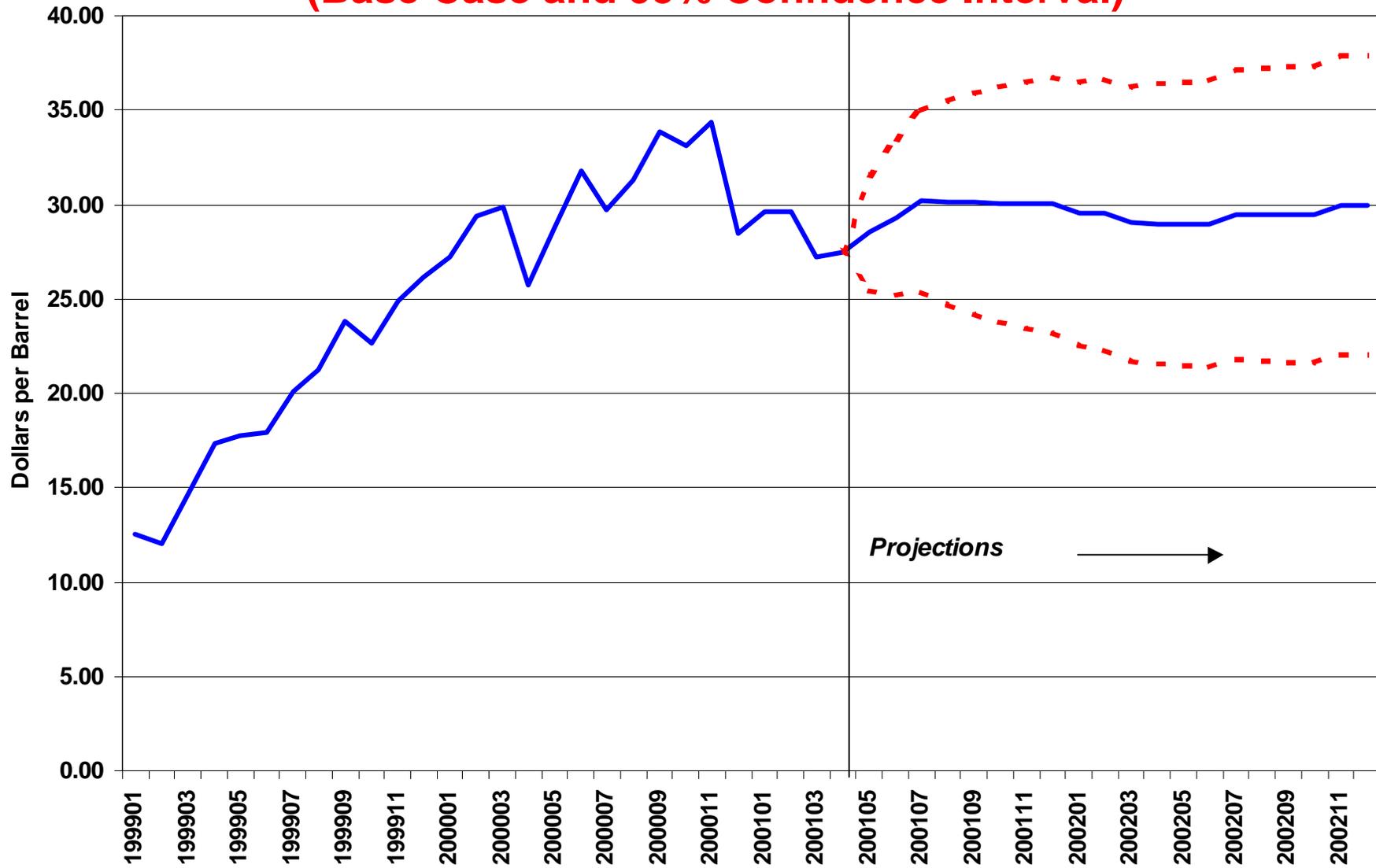
International Oil Supply

OPEC 10 (OPEC excluding Iraq) cut its oil production quotas by 1 million barrels per day effective April 1. This quota cut came on the heels of OPEC's earlier roll back of 1.5 million barrels per day, which was effective on February 1.

OPEC members are estimated to have offset recent quota cuts to a large extent by overproducing by over 600,000 barrels per day. By mid-summer EIA assumes that OPEC will be producing about 800,000 barrels per day above quota levels, effectively offsetting most of the April quota cuts (Figure 8).

EIA's analysis indicates that the net effect of the quotas, coupled with the expected continued overproduction, will be sufficient to support OPEC's desired prices for the OPEC basket. The seasonal decline in demand during the second quarter is necessary to support the seasonal stock build normally associated with this time of year. EIA expects that oil stocks, particularly in the United States, will continue to be tight compared to normal levels and will provide price support for OPEC's price targets.

Iraqi efforts to end U.N. sanctions have resulted in lowered production and exports since December 2000. Iraqi exports returned to last autumn's levels of 2 million barrels per day in March after ranging from 0.6 - 1.2 million barrels per day for 4 months. In April, production increased to over 2 million barrels per day. It is assumed that Iraqi production in 2001 will not exceed the 3 million barrels per day level reached as recently as October 2000.

Figure 7. WTI Crude Oil Price
(Base Case and 95% Confidence Interval)

Projections →

Dollars per Barrel

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

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Figure 8. OPEC Crude Oil Production 2000-2002

Sources: History: EIA; Projections: Short-Term Energy Outlook May 2001.

www.eia.doe.gov
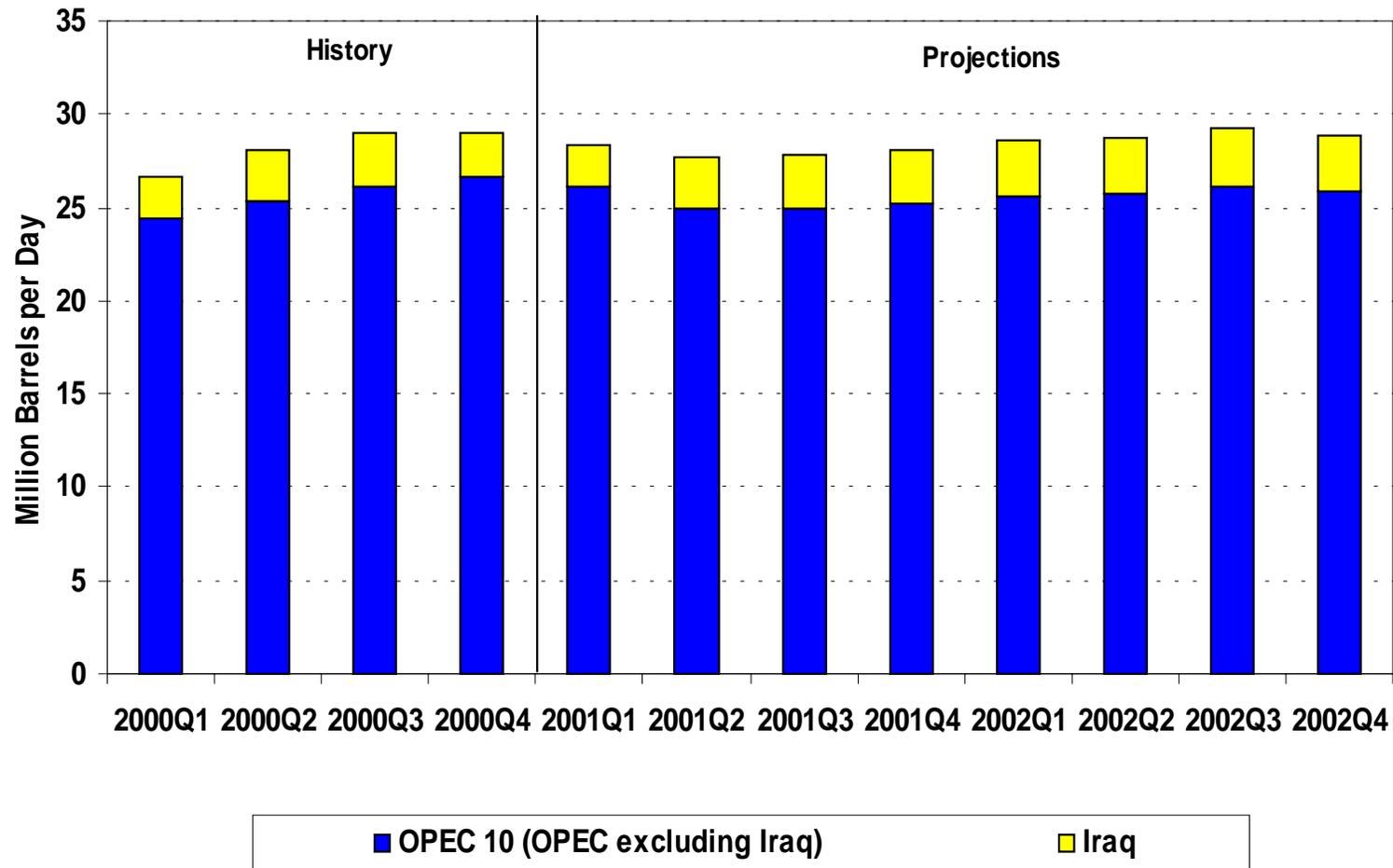
Non-OPEC production is expected to increase by another 0.6 million barrels per day in 2001, with much of this increase coming from Russia. Although the Caspian Pipeline Consortium has begun filling its new pipeline to transport oil from Kazakhstan to world markets, this is not expected to support greater Caspian production levels until end-2001.

International Oil Demand. World oil demand remains expected to grow, despite concerns over a gradual economic slowdown in the industrialized countries. EIA projects world oil demand growth of 1.4 million barrels per day in 2001 (higher than the IEA's 1.3 million barrels per day prediction), with slightly higher demand growth expected for 2002. Besides the OECD, non-OECD Asia is still expected to be the leading region for oil demand growth over the next two years, although this growth now appears to be weaker than previously assumed.

World Oil Inventories. EIA does not attempt to estimate oil inventory levels on a global basis. However, the direction in which global oil inventories are headed is discerned from EIA's world oil supply and demand estimates. Stocks are currently below "normal" levels, although not by so wide a margin as EIA previously believed, and these low inventory levels are expected to put upward pressure on prices. U.S. crude oil stocks, for example, are expected to remain below normal levels for most of 2001 and to improve in 2002 but only into the lower end of the normal range (Figure 9).

U. S. Energy Prices

Motor Gasoline. As noted above, pump prices have been soaring due to high demand and low inventories. The tightening of motor gasoline stocks, which are less plentiful now than they were this time last year and have helped push prices into new territories.

As a result, we project that the average monthly pump price for regular gasoline will range between $1.50 and $1.75 per gallon, perhaps more, during the peak months of the driving season. Last year, the high national average prices were skewed by exceedingly high pump prices in the Midwest (over $2.00 per gallon at times), which, in turn, were the result of critical regional supply problems. Although in our base case we do not necessarily project a repeat of last year, the current situation of relatively low inventories for gasoline sets the stage for potential regional imbalances in supply that could bring about significant price volatility in the U.S. gasoline market.

Distillate Fuel Oil (Diesel and Heating Oil). The recent surge in motor gasoline prices may impact the retail price of diesel fuel oil. Since there is currently a supply deficit for motor gasoline, refiners will need to emphasize gasoline production at the expense of distillate. Even though inventories of distillate fuel are adequate, supplies of this fuel may become tighter during the summer as distillate production lags, resulting in a premium for its price. As a result, retail diesel prices are expected to remain fairly high in historical terms, averaging close to $1.50 per gallon during the driving season. Moreover, consumption of distillate fuel in place of natural gas for power generation could put additional pressure on the diesel fuel market, although such a development is rather unlikely unless electricity demand surges sharply in key gas-consuming regions.

Natural Gas. Last winter (October 2000-March 2001) natural gas prices at the wellhead averaged $5.74 per thousand cubic feet, more than double the previous winter's price. Natural gas prices (Figure 10) began climbing last summer primarily in response to low levels of underground gas storage. Compared to this time last year, storage levels are still low. As a result, spot prices are currently averaging about $5.00 per thousand cubic feet. We continue to believe that, given the current state of the natural gas market, it will be a while before prices at the wellhead return to the low level of $2.00 per thousand cubic feet experienced just one year ago. About 90 percent of the planned additions to electric generating capacity over the next few years are designed to primarily use natural gas as a fuel source. For the spring and summer, average
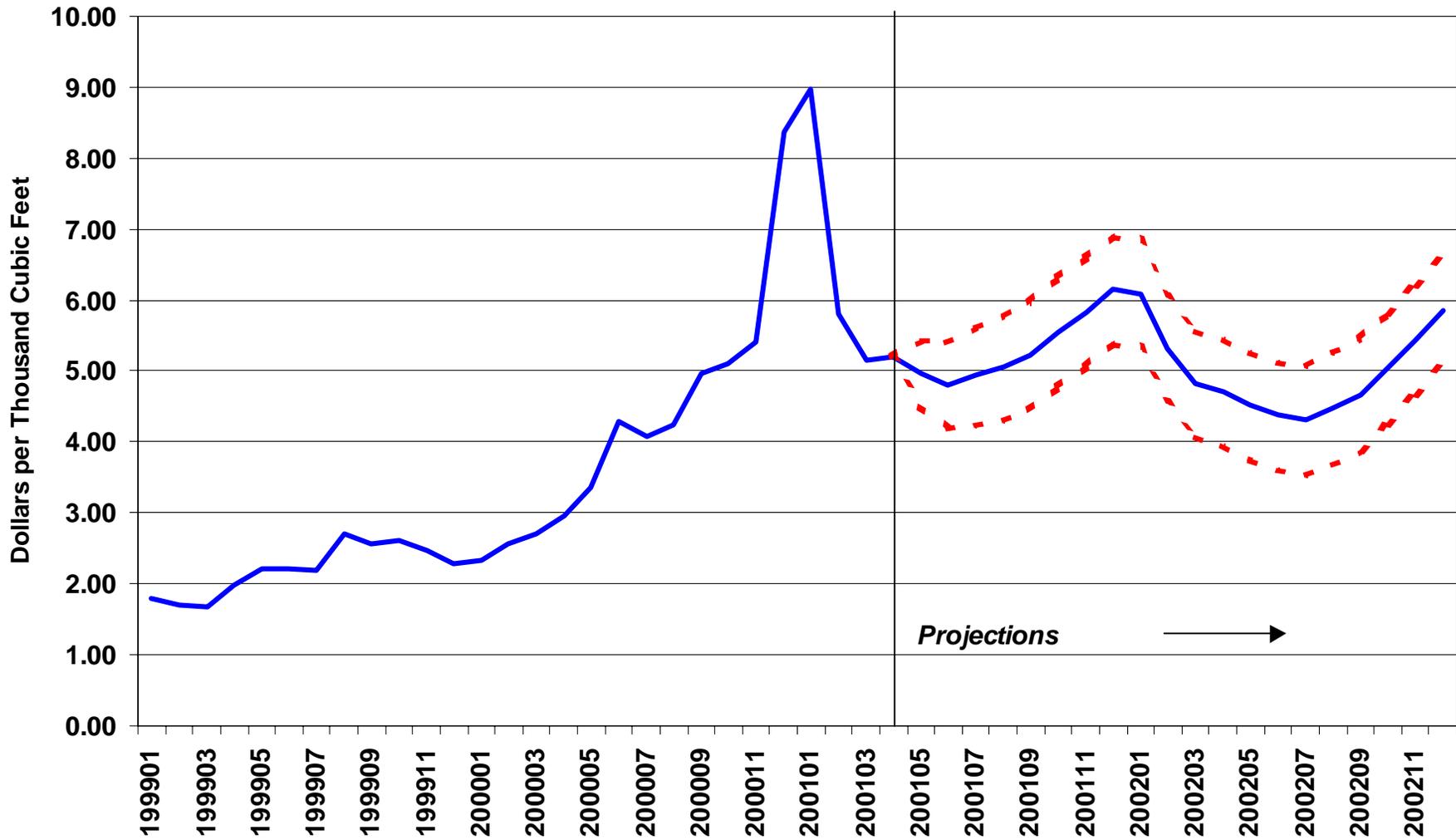
Figure 9. U.S. Crude Oil Stocks (Excl. SPR)

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

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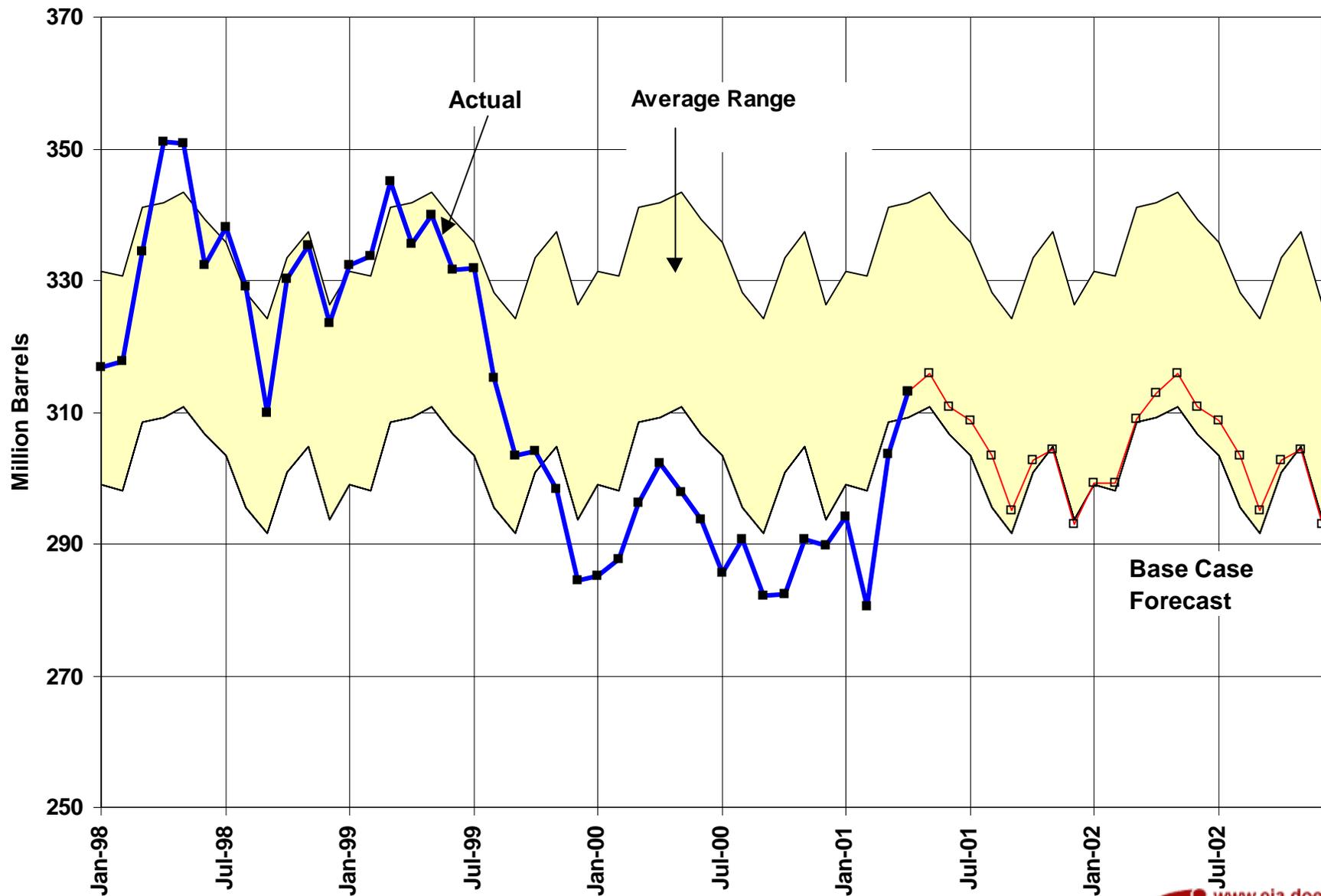
Figure 10. Natural Gas Spot Prices
(Base Case and 95% Confidence Interval)

Projections ➔

Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, May 2001.

www.eia.doe.gov

wellhead prices are projected to decline only modestly, averaging an unseasonably strong $4.65 per thousand cubic feet. One factor that should keep prices relatively high is the need for unusually large refill volumes for underground storage. The gas supply situation this injection season bears close monitoring. If the spring and summer weather is particularly hot in regions that consume large quantities of gas-fired electricity, (California and Texas for example), then injections into underground storage for the next winter would again be strained, resulting once more in sharply rising prices from already robust current levels. In 2001, the annual average wellhead price is projected to average over $5.00 per thousand cubic feet. Next year, we expect the storage situation to improve somewhat and with that, we expect a dip in the average annual wellhead price. Increases in production and imports of natural gas needed to keep pace with the rapidly growing demand for natural gas will be accompanied, for the time being, by relatively expensive supplies for gas due to rising production costs and capacity constraints on the pipelines.
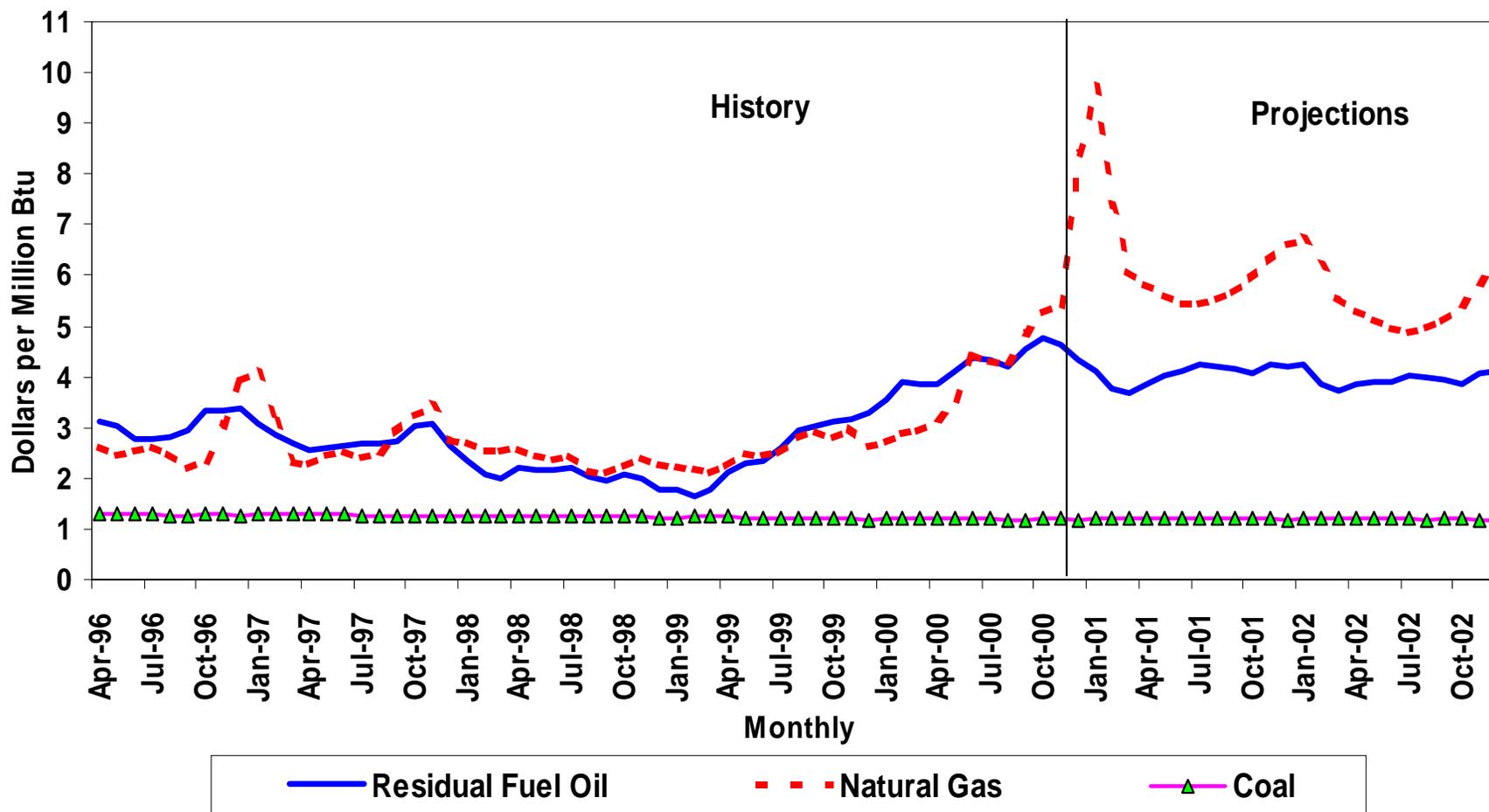
Electric Utility Fuels. The rapid rise in gas prices last summer and fall has pulled delivered gas prices above heavy fuel oil prices on a cost per Btu basis (Figure 11). As this situation is likely to persist, we anticipate some recovery in the amount of heavy fuel oil used for power generation over the very low levels seen since late 1999. In 2001, the cost of coal to electric utilities is projected to increase slightly, after years of slow but continual decline, as coal, like oil, is being used more intensively for electricity generation in lieu of expensive or unavailable natural gas. On an inflation-adjusted basis, however, coal prices should still show a decline this year.

U.S. Oil Demand

Petroleum demand data for 2000 have been revised. (The more detailed view of the revisions is provided in EIA's latest *Petroleum Supply Monthly*). Compared to previous Short-Term Energy Outlook, these revisions, brought about primarily by revisions to imports data, result in an overall 0.9-percent increase in total estimated demand in 2000 compared to the preliminary figures. As a result, total demand increased from 19.52 million barrels per day in 1999 to 19.68 million barrels per day in 2000, an increase of 0.8 percent. This contrasts with a 0.1-percent decline based on the original data. The demand revisions involved upward adjustments in most major product categories. In contrast to the 0.6-percent decline based on the original data, motor gasoline demand now exhibits a 0.5-percent growth rate from the 1999 level, a revision of 1.1 percent. The year-to-year increase in jet-fuel demand has been revised from 2.0 percent to 3.2 percent. In addition, distillate fuel and residual fuel oil demands registered increases of 3.4 and 9.4 percent, up from 3.2 and 1.8 percent based on the preliminary data. The liquefied petroleum products group also underwent an increase but the year-to-year change was still slightly negative. Other minor petroleum products generally registered downward revisions. In general, these revisions reduce the responsiveness to price change that one may reasonably attribute to the petroleum demand weakness witnessed in 2000. As it turns out, the numbers now line up somewhat better, on balance, with the sorts of results one would expect using the short-run price elasticities embedded in the model used for the Short-Term Energy Outlook. However, these elasticities have always been small in absolute value, so the change is not one that is particularly worrisome from the standpoint of consistency with accumulated experience.

Total petroleum products demand is projected to climb an average 250,000 barrels per day, or 1.3 percent, in 2001.   Data for the first quarter of this year indicate a sizable year-to-year 510,000 barrels-per day, or 2.6-percent, increase in total petroleum demand.   But much of that increase stems from special factors. The most important is the weather, which, although only moderately colder than normal, was more than 11 percent colder in terms of heating degree-days than during the mild winter quarter of 2000.   Weather contributed to the 11-percent growth distillate fuel oil demand compared to the same quarter last year. An additional factor was the change in relative prices brought about by the unprecedented spike in natural gas prices, which, in combination with the cold weather, helped boost residual fuel oil demand by 25 percent. Another factor was the concern about the possible impact of Y2K, which boosted deliveries in December, 1999, but depressed shipments in January, 2000.

Figure 11. Fossil Fuel Prices to Electric Utilities

History

Projections

Dollars per Million Btu

Monthly

Residual Fuel Oil — — — Natural Gas —▲— Coal

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

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During the remainder of the current year, year-to-year growth in shipments is projected to be only 0.8 percent. With summer average retail pump prices averaging 8 cents higher than last summer's prices and sluggish growth in disposable income, the increase in summer motor gasoline demand is projected to be less than 0.5 percent. Demand growth, however, should accelerate after the summer season throughout the rest of the forecast interval. Total jet fuel demand growth should climb by almost 2 percent, but commercial aviation demand growth is expected to remain subdued for much of the rest of this year. Distillate fuel oil demand for the rest of the year is expected climb 2.8 percent from that of the previous year, with the transportation sector accounting for the bulk of the growth. Residual fuel oil demand is projected to increase by more than 5 percent for the year as a whole, largely because of increased power sector demand.

Demand for total petroleum products in 2002 is projected to climb by 400,000 barrels per day, or 2.0 percent, almost twice the growth rate of the current year (Figure 12). Because weather is unlikely to be a factor (under assumptions of normal weather), and because energy prices are likely to remain firm during the year, much of the growth can be attributed to that of the economy. Motor gasoline demand is expected to increase 2.3 percent during the year, buoyed by a more than 4-percent increase in real disposable income. Jet fuel demand is projected to increase 2.6-percent, fueled primarily by commercial aviation demand. Distillate fuel oil demand growth, concentrated in transportation, is projected to remain moderate on the assumption that weather patterns remain normal during the winter quarter. Residual fuel oil is projected to decline by more than 5 percent. In the power-generation sector, demand for that fuel is expected to be constrained by continuing increases in natural gas demand as well as a recovery of hydropower generation from current low levels.

U.S. Oil Supply

Some temporary gains in output from Alaska and comparatively small declines in Lower-48 output are expected to hold U.S. crude oil output steady at year 2000 levels through 2002. Average domestic oil production is expected to decrease by 3,000 barrels per day, or less than 0.1 percent in 2001, to a level of 5.83 million barrels of oil per day. For 2002, a 0.2 percent increase is expected resulting in a production rate of 5.84 million barrels of oil per day average for the year (Figure 13).

Lower-48 States oil production is expected to decrease by 42,000 barrels per day to a rate of 4.82 million barrels per day in 2001, followed by a decrease of 8,000 barrels per day in 2002. Shell started production in 1999 in their Ursa field, which will peak in production late in the year 2001. Shell's Brutus platform is expected to start production in the third quarter of 2001 with peak oil production of 100,000 barrels per day in 2002. Oil production from the Mars, Troika, Ursa, and Brutus Federal Offshore fields is expected to account for about 8.2 percent of the lower-48 oil production by the 4th quarter of 2002.

Alaska is expected to account for 17.6 percent of the total U.S. oil production in 2002. Its oil production is expected to increase by 4.2 percent in 2001 and increase again by 1.6 percent in 2002. The increase in 2001 is the result of adding two new satellite fields, Colville River (Alpine) and Prudhoe Bay (Aurora). Alpine averaged its expected peak of 80,543 barrels per day during March. Aurora peak production should occur late this year. Another satellite field, North Star, is expected to come on in early to mid 2002 and will peak at a rate of 65,000 barrels per day later that year. Production from the Kuparuk River field plus like production from West Sak, Tabasco and Tarn fields is expected to stay at an average of 214,000 barrels per day in 2001 and 222,000 in 2002.
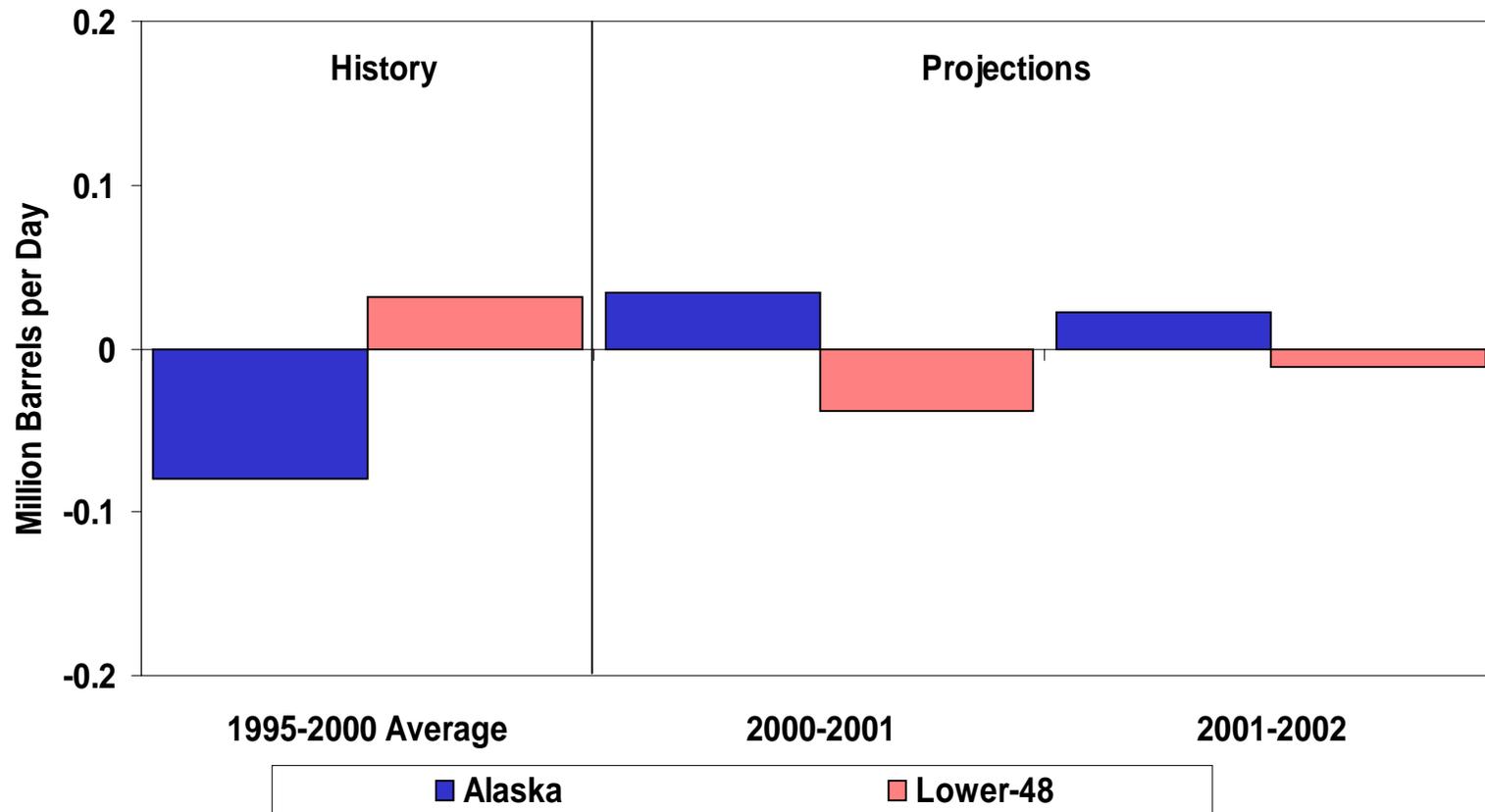
Natural Gas Demand and Supply

Figure 12. Petroleum Products Demand
(Change from Year Ago)

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

www.eia.doe.gov
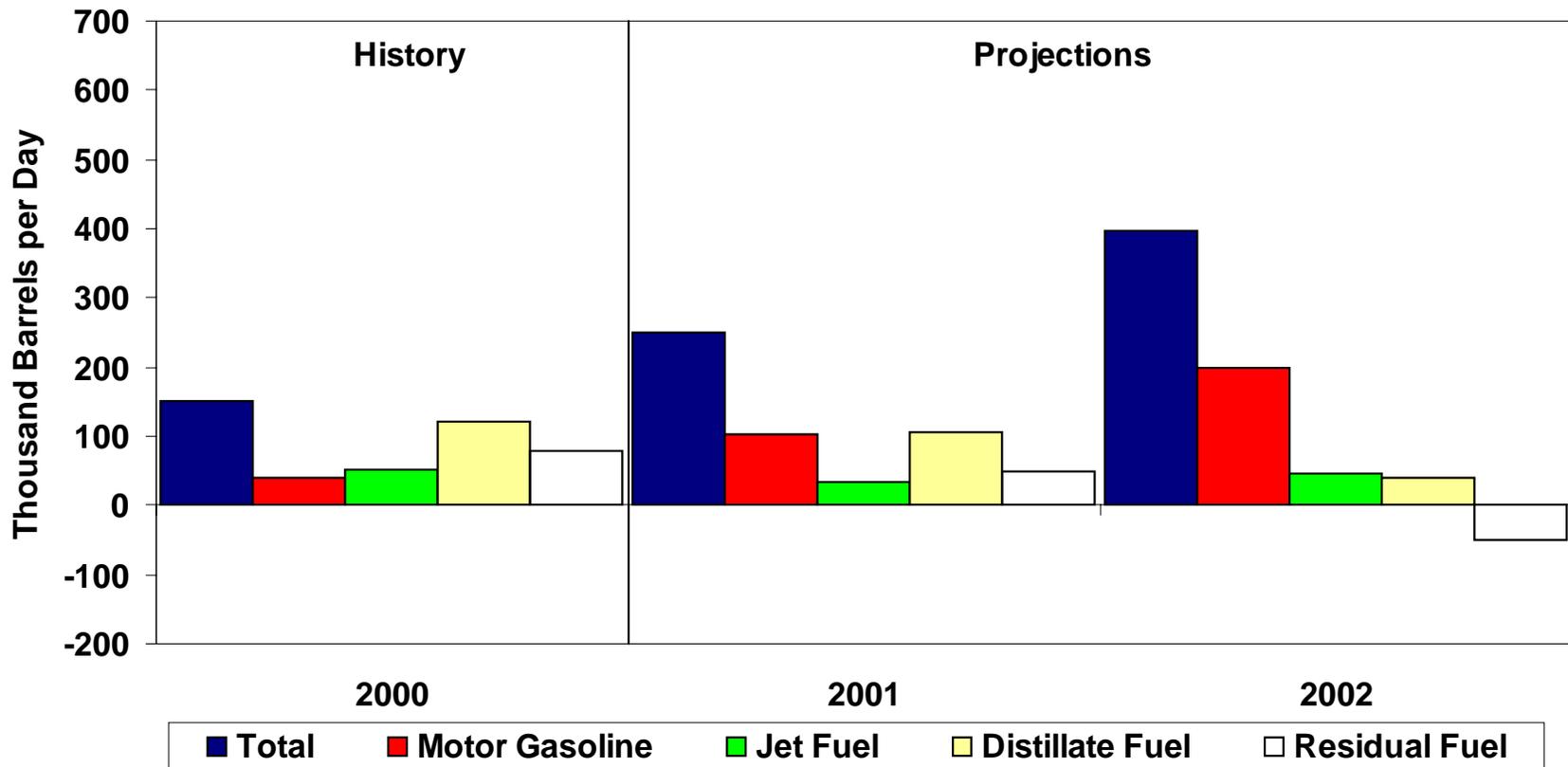
Figure 13. U.S. Crude Oil Production
(Change from Year Ago)

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

www.eia.doe.gov

U.S. natural gas demand is expected to grow at about a 1.9-percent rate this year, following the strong 4.9-percent performance in 2000 (Figure 14). A slowing economy and less rapid demand growth in the industrial and commercial sectors are the reasons. Growth in 2002 is expected to heat up to about 3.4 percent as the economy picks up again and as new gas-fired power generation requirements continue to mount.

Domestic gas production for 2001 and 2002 is expected to rise as production responds to the high rates of drilling experienced over the past year. Production is estimated to have risen by 3.7 percent in 2000 and it is forecast to continue to increase by 2.7 percent rate in 2001 and 2.5 percent in 2002.

Based on EIA survey data and recent information from the American Gas Association on early-season storage additions, we estimate that, on an EIA survey basis, working gas in storage at the end of April was 932 billion cubic feet (bcf) (Figure 15). It is a measure of the sensitivity of the gas market to developments this year concerning the progress of storage additions that recent spot prices and near futures have slipped to below $5.00 per thousand cubic feet (mcf) from recent peaks as high as $5.73 per mcf at the Henry Hub on April 11. The very large storage injections still expected for the summer may yet play a role in strengthening gas prices over the next few months, particularly if very hot temperatures and above-normal cooling demand appear in regions that use large amounts of gas for power generation and heightens the competition for gas between current and future demand sources.

Net imports of natural gas are projected to rise by about 13 percent in 2001 and by another 4 percent in 2002. For this summer, we project that natural gas imports will be 17 percent above last summer's as demand for storage refill is expected to be high.

Electricity Demand and Supply

Total annual electricity demand growth (retail sales plus industrial generation for own use) is projected at about 2.3 percent in 2001 and 2.1 percent in 2002. This is compared with estimated demand in 2000 that was 3.6 percent higher than the previous year's level. Electricity demand growth is expected to be slower in the forecast years than it was in 2000 partly because economic growth is also slowing from its higher 2000 level.

This summer's overall cooling degree-days (CDD) are projected to be normal, or about 1.0 percent below last summer's CDD total. Summer electricity demand is expected to be 2.6 percent higher than last summer based mainly on economic factors, i.e., rising GDP, albeit less rapid than last year, higher housing stocks and employment (Figure 16 and Table 10).

Hydropower generation in the crucial Pacific Northwest is expected to be down by 7.5 percent from last summer, due mainly to lower water levels. According to the National Oceanic and Atmospheric Association (NOAA), this winter was the second driest winter on record, after the 1976/77 winter. In addition, the crisis in California this winter has further drained reservoirs, depriving the region of generation resources for this spring and summer. Nuclear generation is also expected to be 5.6 percent lower than last summer mainly due to scheduled maintenance outages.

A total of 23,558 megawatts of new total electricity generating capacity was added in 2000. Based on accumulated public announcements (including wire reports, news articles and company press releases) over the past year, an estimated 40,000 to 50,000 megawatts of new capacity is planned for installation annually in 2001 and 2002. EIA's power plant surveys suggest that closer to 25,000 megawatts of new capacity will be installed annually in 2001 and in 2002. The table below shows the regional distribution of these capacity increases.

Figure 14. Natural Gas Demand by Sector
(Change from Year Ago)

History

Projections

Percent Change

- 10.0%
- -2.5%
- 4.3%
- 4.5%
- 3.5%
- -5.6%
- 4.9%
- 2.3%
- 1.1%
- 4.1%
- -0.8%
- 6.6%

2000 **2001** **2002**

■ Commercial ▨ Utility* ■ Residential □ Industrial (Incl. Nonutil. Gen.)
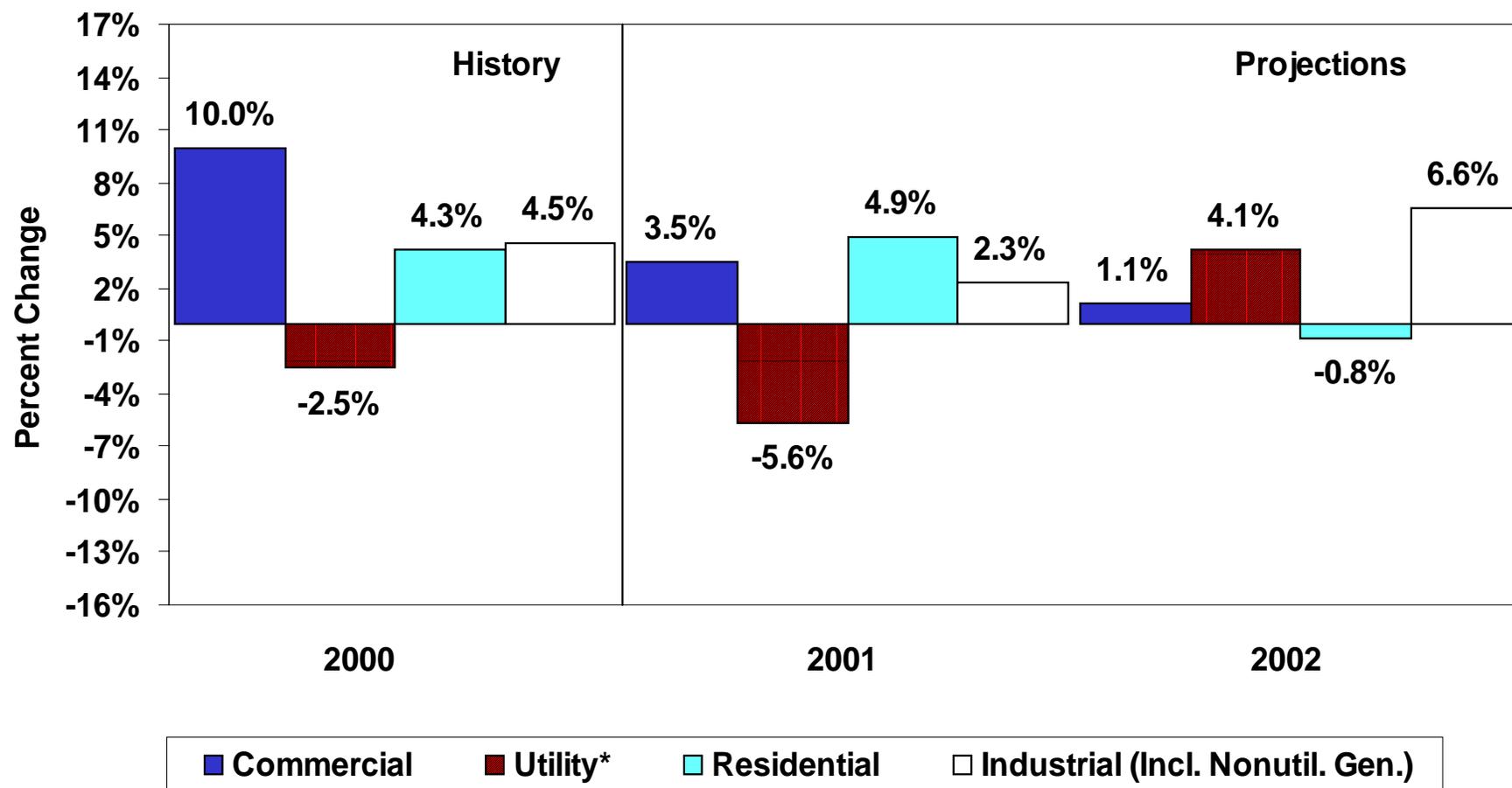
* Electric utility gas demand changes in recent years in part reflect sale of assets to the nonutility sector

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

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

Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

www.eia.doe.gov
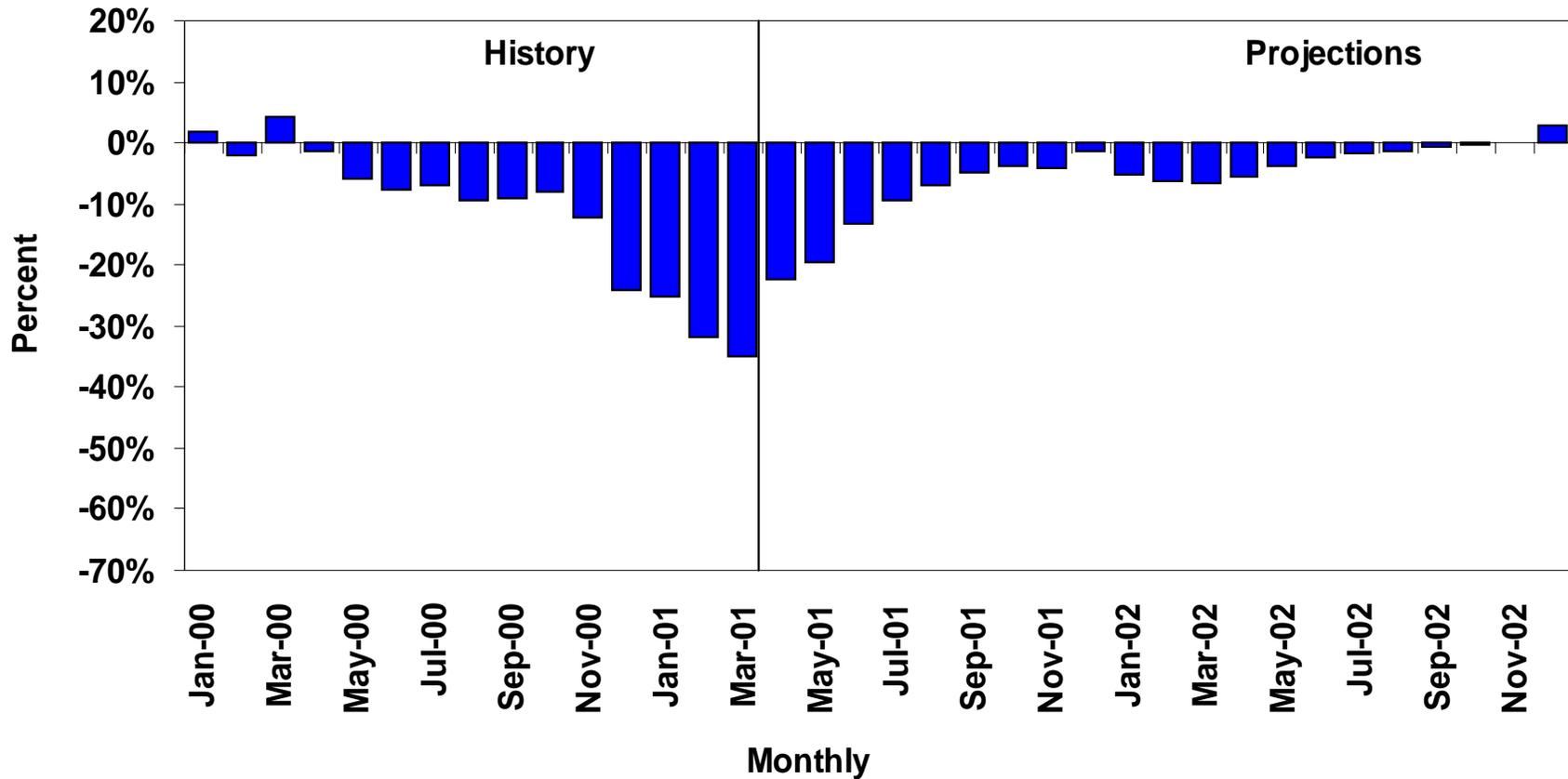
Figure 16. U.S. Electricity Demand by Sector
(Change from Year Ago)
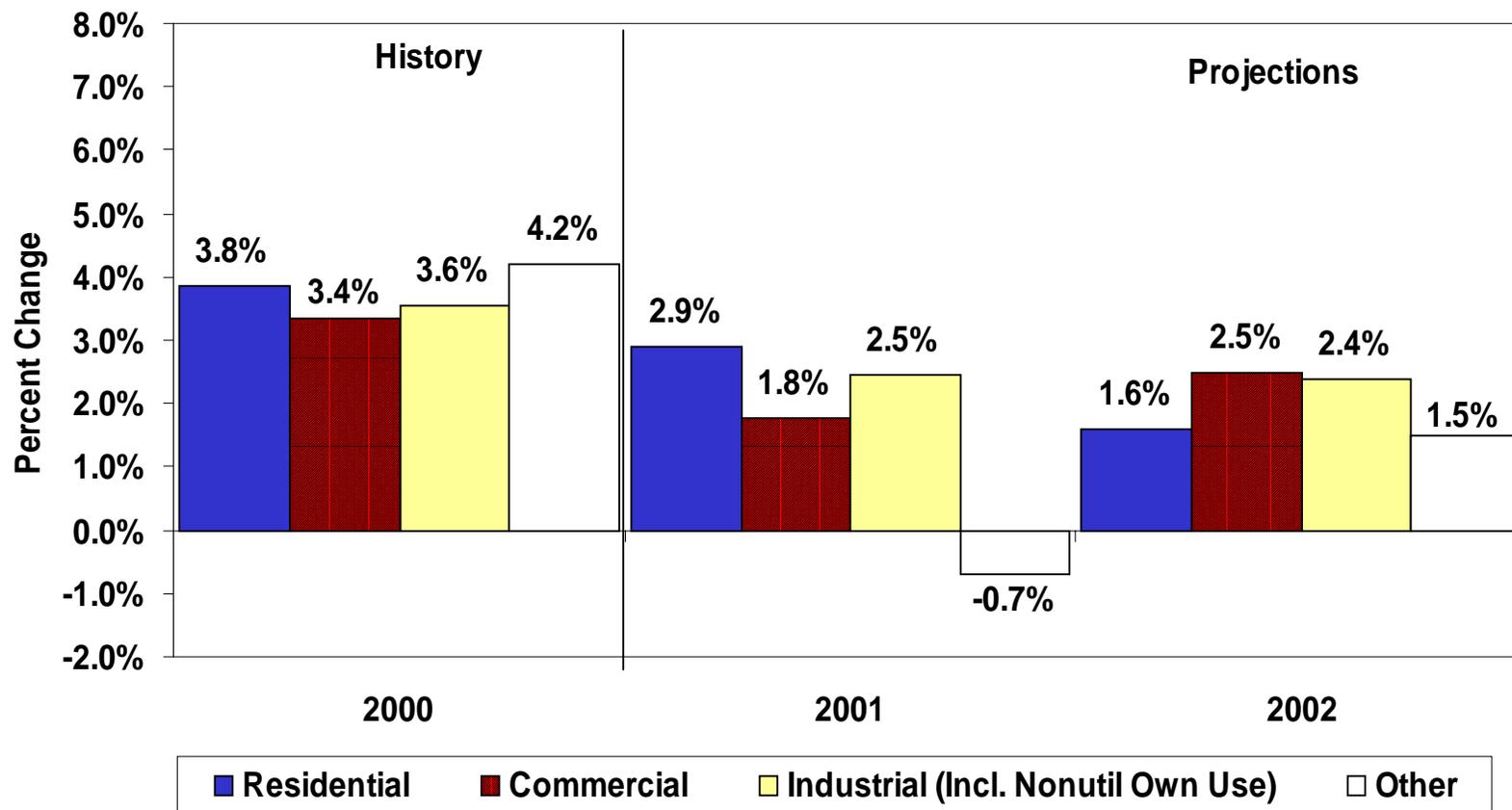
Sources: History: EIA; Projections: Short-Term Energy Outlook, May 2001.

Regional Percentages of New and Expected Electric Generating Capacity (2000-2002)

REGION	YEAR		
	2000	2001	2002
EAST[1]	9%	20%	24%
SOUTH[2]	65%	35%	28%
MIDWEST[3]	24%	27%	25%
WEST[4]	2%	17%	23%
U.S. TOTAL[5]	100%	100%	100%

[1] The EAST region is defined as Census Regions 1, 2 and the states of Delaware and Maryland.
[2] The SOUTH region is defined as Census Region 5 (excluding Delaware and Maryland), Census Region 6 and Census Region 7 (excluding Oklahoma).
[3] The MIDWEST region is defined as Census Regions 3, 4 and the state of Oklahoma.
[4] The WEST region is defined as Census Region 8 and Census Region 9.
[5] Excludes Alaska and Hawaii.
  Note: Regions may not add up to total due to rounding.

Table HL1. U. S. Energy Supply and Demand

	Year				Annual Percentage Change		
	1999	2000	2001	2002	1999-2000	2000-2001	2001-2002
Real Gross Domestic Product (GDP)							
(billion chained 1996 dollars)	**8876**	*9320*	*9494*	*9818*	*5.0*	*1.9*	*3.4*
Imported Crude Oil Price [a]							
(nominal dollars per barrel).........................	**17.22**	*27.72*	*25.91*	*26.41*	*61.0*	*-6.5*	*1.9*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**5.88**	*5.83*	*5.83*	*5.84*	*-0.9*	*0.0*	*0.2*
Total Petroleum Net Imports							
(including SPR)	**9.91**	*10.43*	*10.87*	*11.11*	*5.2*	*4.2*	*2.2*
Energy Demand							
World Petroleum							
(million barrels per day)..............................	**74.9**	*75.4*	*77.0*	*78.6*	*0.7*	*2.1*	*2.1*
Petroleum							
(million barrels per day)..............................	**19.52**	*19.67*	*19.92*	*20.31*	*0.8*	*1.3*	*2.0*
Natural Gas							
(trillion cubic feet)	**21.70**	*22.75*	*23.18*	*23.98*	*4.8*	*1.9*	*3.5*
Coal [c]							
(million short tons)	**1045**	*1079*	*1094*	*1100*	*3.3*	*1.4*	*0.5*
Electricity (billion kilowatthours)							
Retail Sales [d]	**3312**	*3415*	*3470*	*3538*	*3.1*	*1.6*	*2.0*
Nonutility Use/Sales [e]	**185**	*208*	*236*	*247*	*12.4*	*13.5*	*4.7*
Total	**3497**	*3623*	*3706*	*3785*	*3.6*	*2.3*	*2.1*
Total Energy Demand [f]							
(quadrillion Btu)...	**97.1**	*98.8*	*99.6*	*101.5*	*1.7*	*0.8*	*1.9*
Total Energy Demand per Dollar of GDP							
(thousand Btu per 1996 Dollar)	**10.94**	*10.60*	*10.49*	*10.34*	*-3.1*	*-1.0*	*-1.4*
Renewable Energy as Percent of Total [g] ...	**7.2**	*6.9*	*6.8*	*7.0*			

[a] Refers to the refiner acquisition cost (RAC) of imported crude oil.

[b] Includes lease condensate.

[c] Total Demand includes estimated Independent Power Producer (IPP) coal consumption.

[d] Total 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 2000 are estimates.

[e] Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 2000 are estimates.

[f] The 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)*.

[g] Renewable 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.

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 Statistics Report* DOE/EIA-0520; *Weekly Petroleum Status Report,* DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

Table 1. U.S. Macroeconomic and Weather Assumptions

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Macroeconomic [a]															
Real Gross Domestic Product (billion chained 1996 dollars - SAAR)	**9192**	**9319**	**9374**	*9394*	*9421*	*9461*	*9516*	*9577*	*9667*	*9764*	*9872*	*9972*	*9320*	*9494*	*9818*
Percentage Change from Prior Year	**5.3**	**6.1**	**5.3**	*3.4*	*2.5*	*1.5*	*1.5*	*1.9*	*2.6*	*3.2*	*3.7*	*4.1*	*5.0*	*1.9*	*3.4*
Annualized Percent Change from Prior Quarter	**4.7**	**5.5**	**2.3**	*0.9*	*1.2*	*1.7*	*2.3*	*2.6*	*3.7*	*4.0*	*4.4*	*4.1*			
GDP Implicit Price Deflator (Index, 1996=1.000)	**1.062**	**1.068**	**1.073**	*1.077*	*1.084*	*1.088*	*1.092*	*1.097*	*1.102*	*1.105*	*1.109*	*1.114*	*1.070*	*1.090*	*1.108*
Percentage Change from Prior Year	**1.8**	**2.1**	**2.3**	*2.3*	*2.1*	*1.8*	*1.8*	*1.8*	*1.7*	*1.6*	*1.6*	*1.6*	*2.1*	*1.9*	*1.6*
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)	**6443**	**6502**	**6541**	*6553*	*6597*	*6653*	*6701*	*6743*	*6835*	*6918*	*6990*	*7059*	*6510*	*6674*	*6950*
Percentage Change from Prior Year	**2.9**	**3.1**	**3.1**	*2.2*	*2.4*	*2.3*	*2.5*	*2.9*	*3.6*	*4.0*	*4.3*	*4.7*	*2.8*	*2.5*	*4.1*
Manufacturing Production (Index, 1996=1.000)	**1.216**	**1.239**	**1.251**	*1.267*	*1.255*	*1.253*	*1.256*	*1.261*	*1.270*	*1.284*	*1.299*	*1.313*	*1.243*	*1.256*	*1.291*
Percentage Change from Prior Year	**4.5**	**5.1**	**6.5**	*6.0*	*3.3*	*1.2*	*0.4*	*-0.4*	*1.2*	*2.5*	*3.4*	*4.1*	*5.5*	*1.1*	*2.8*
OECD Economic Growth (percent) [b]													*3.6*	*2.6*	*3.0*
Weather [c]															
Heating Degree-Days															
U.S.	**2023**	**485**	**96**	*1856*	*2279*	*519*	*86*	*1622*	*2234*	*518*	*86*	*1622*	*4460*	*4506*	*4459*
New England	**3007**	**909**	**200**	*2383*	*3231*	*885*	*167*	*2238*	*3174*	*883*	*167*	*2237*	*6499*	*6521*	*6462*
Middle Atlantic	**2713**	**692**	**126**	*2194*	*2884*	*701*	*105*	*2003*	*2891*	*700*	*105*	*2002*	*5725*	*5693*	*5698*
U.S. Gas-Weighted	**2115**	**512**	**100**	*1957*	*2401*	*555*	*90*	*1714*	*2351*	*555*	*90*	*1714*	*4684*	*4761*	*4710*
Cooling Degree-Days (U.S.)	**45**	**380**	**759**	*69*	*23*	*346*	*781*	*76*	*33*	*347*	*782*	*76*	*1253*	*1226*	*1237*

[a] Macroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case.

[b] OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

[c] Population-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 WEFA Group, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

Table 2.   U.S. Energy Indicators: Mid World Oil Price Case

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Macroeconomic [a]															
Real Fixed Investment															
(billion chained 1996 dollars-SAAR)	**1731**	**1779**	**1792**	*1785*	*1803*	*1814*	*1820*	*1832*	*1849*	*1872*	*1903*	*1933*	*1772*	*1817*	*1889*
Real Exchange Rate															
(index)	**1.163**	**1.210**	**1.247**	*1.110*	*1.100*	*1.087*	*1.080*	*1.070*	*1.053*	*1.040*	*1.033*	*1.020*	*1.183*	*1.084*	*1.037*
Business Inventory Change															
(billion chained 1996 dollars-SAAR)	**10.3**	**17.6**	**21.0**	*14.9*	*1.4*	*-0.4*	*-0.7*	*-1.2*	*-0.6*	*1.1*	*4.1*	*5.5*	*16.0*	*-0.2*	*2.5*
Producer Price Index															
(index, 1982=1.000)	**1.301**	**1.321**	**1.334**	*1.349*	*1.359*	*1.343*	*1.338*	*1.338*	*1.339*	*1.336*	*1.335*	*1.338*	*1.326*	*1.345*	*1.337*
Consumer Price Index															
(index, 1982-1984=1.000)...................	**1.702**	**1.717**	**1.730**	*1.743*	*1.754*	*1.761*	*1.769*	*1.778*	*1.786*	*1.793*	*1.800*	*1.808*	*1.723*	*1.765*	*1.797*
Petroleum Product Price Index															
(index, 1982=1.000)	**0.830**	**0.899**	**0.954**	*0.974*	*0.901*	*0.939*	*0.891*	*0.899*	*0.895*	*0.856*	*0.836*	*0.871*	*0.914*	*0.907*	*0.864*
Non-Farm Employment															
(millions)	**130.6**	**131.6**	**131.6**	*131.8*	*132.2*	*132.2*	*132.1*	*132.2*	*132.6*	*133.2*	*133.7*	*134.3*	*131.4*	*132.2*	*133.5*
Commercial Employment															
(millions)	**91.2**	**91.7**	**92.1**	*92.5*	*93.0*	*93.1*	*93.2*	*93.5*	*94.0*	*94.6*	*95.2*	*95.7*	*91.9*	*93.2*	*94.9*
Total Industrial Production															
(index, 1996=1.000)	**1.187**	**1.210**	**1.221**	*1.239*	*1.233*	*1.232*	*1.234*	*1.237*	*1.244*	*1.255*	*1.269*	*1.282*	*1.214*	*1.234*	*1.263*
Housing Stock															
(millions)	**115.7**	**115.8**	**116.2**	*116.8*	*117.1*	*117.4*	*117.7*	*118.0*	*118.3*	*118.6*	*118.9*	*119.2*	*116.1*	*117.6*	*118.7*
Miscellaneous															
Gas Weighted Industrial Production															
(index, 1996=1.000)	**1.096**	**1.096**	**1.091**	*1.108*	*1.101*	*1.109*	*1.118*	*1.130*	*1.143*	*1.156*	*1.171*	*1.185*	*1.098*	*1.115*	*1.164*
Vehicle Miles Traveled [b]															
(million miles/day).............................	**6842**	**7681**	**7687**	*7216*	*6943*	*7696*	*7855*	*7400*	*7132*	*7869*	*8064*	*7623*	*7357*	*7476*	*7674*
Vehicle Fuel Efficiency															
(index, 1999=1.000)	**0.996**	**1.010**	**0.983**	*0.983*	*0.990*	*1.012*	*0.995*	*0.989*	*0.999*	*1.003*	*1.001*	*0.998*	*0.993*	*0.997*	*1.000*
Real Vehicle Fuel Cost															
(cents per mile)................................	**4.18**	**4.29**	**4.30**	*4.36*	*4.20*	*4.42*	*4.29*	*4.24*	*4.10*	*4.00*	*3.90*	*3.97*	*4.28*	*4.29*	*3.99*
Air Travel Capacity															
(mill. available ton-miles/day)..............	**455.0**	**474.7**	**485.4**	*481.8*	*478.1*	*496.5*	*510.4*	*500.0*	*493.1*	*514.3*	*532.6*	*523.5*	*474.3*	*496.3*	*516.0*
Aircraft Utilization															
(mill. revenue ton-miles/day)...............	**256.3**	**287.1**	**291.4**	*281.5*	*267.2*	*285.4*	*300.8*	*285.5*	*283.3*	*302.8*	*317.3*	*303.6*	*279.1*	*284.8*	*301.9*
Airline Ticket Price Index															
(index, 1982-1984=1.000)...................	**2.309**	**2.419**	**2.474**	*2.375*	*2.399*	*2.387*	*2.411*	*2.442*	*2.489*	*2.505*	*2.512*	*2.533*	*2.394*	*2.410*	*2.510*
Raw Steel Production															
(millions tons)	**29.02**	**29.53**	**27.45**	*25.01*	*25.65*	*27.07*	*27.08*	*27.62*	*28.16*	*28.50*	*28.59*	*28.57*	*111.02*	*107.42*	*113.82*

[a]Macroeconomic projections from DRI/McGraw-Hill model forecasts are seasonally adjusted at annual rates and modified as appropriate to the mid world oil price case.

[b]Includes all highway travel.

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); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

Table 3. International Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except OECD Commercial Stocks)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Demand [a]															
OECD															
U.S. (50 States)	19.3	19.5	20.0	19.9	19.8	19.6	20.1	20.2	20.1	20.1	20.5	20.5	19.7	19.9	20.3
U.S. Territories	0.4	0.3	0.3	0.4	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	2.0	2.0	2.1	2.0	2.0	2.1	2.1	2.1	2.0	2.2	2.2	2.0	2.1	2.1
Europe	14.6	14.0	14.4	14.6	14.8	13.9	14.4	15.1	15.0	14.0	14.6	15.2	14.4	14.5	14.7
Japan	6.0	5.0	5.4	5.6	6.1	5.0	5.2	5.7	6.1	5.0	5.2	5.7	5.5	5.5	5.5
Australia and New Zealand	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.1	1.0	1.1	1.0	1.0	1.0
Total OECD	43.1	41.7	43.1	43.6	44.1	41.8	43.2	44.5	44.8	42.6	43.9	45.1	42.9	43.4	44.1
Non-OECD															
Former Soviet Union	3.9	3.7	3.7	3.7	3.8	3.7	3.7	3.7	3.9	3.7	3.7	3.7	3.7	3.7	3.8
Europe	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.5	1.6	1.6
China	4.6	4.6	4.6	4.6	4.8	4.8	4.7	4.8	5.0	5.0	4.9	5.0	4.6	4.8	5.0
Other Asia	8.9	9.0	8.8	9.1	9.3	9.3	9.0	9.4	9.6	9.6	9.3	9.7	9.0	9.2	9.6
Other Non-OECD	13.7	13.9	14.0	14.0	14.0	14.3	14.4	14.5	14.3	14.6	14.7	14.6	13.9	14.3	14.6
Total Non-OECD	32.7	32.8	32.6	32.9	33.5	33.6	33.3	34.0	34.4	34.5	34.2	34.7	32.7	33.6	34.5
Total World Demand	75.8	74.4	75.7	76.5	77.7	75.4	76.5	78.5	79.2	77.1	78.1	79.8	75.6	77.0	78.6
Supply [b]															
OECD															
U.S. (50 States)	9.1	9.1	9.1	9.0	8.8	9.1	9.0	9.1	9.1	9.1	9.1	9.1	9.1	9.0	9.1
Canada	2.7	2.7	2.7	2.8	2.8	2.7	2.8	2.9	2.8	2.8	2.9	3.0	2.7	2.8	2.9
North Sea [c]	6.6	6.2	6.2	6.4	6.4	5.8	5.9	6.4	6.0	5.8	5.9	6.3	6.4	6.1	6.0
Other OECD	1.7	1.7	1.6	1.6	1.6	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.5	1.5
Total OECD	20.2	19.6	19.6	19.8	19.6	19.1	19.2	19.8	19.3	19.2	19.3	19.8	19.8	19.4	19.4
Non-OECD															
OPEC	29.3	30.8	31.6	31.7	31.1	30.5	30.5	30.8	31.4	31.5	32.0	31.7	30.9	30.7	31.6
Former Soviet Union	7.9	8.0	8.2	8.5	8.6	8.6	8.8	8.8	8.7	8.8	9.0	9.0	8.1	8.7	8.9
China	3.3	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.2	3.2	3.1
Mexico	3.5	3.5	3.5	3.4	3.6	3.7	3.7	3.6	4.0	4.0	4.0	3.9	3.5	3.7	4.0
Other Non-OECD	11.2	11.2	11.4	11.6	11.5	11.5	11.7	11.8	11.8	11.9	12.1	12.2	11.3	11.6	12.0
Total Non-OECD	55.1	56.7	58.0	58.4	58.0	57.5	58.0	58.3	58.9	59.3	60.2	60.0	57.0	58.0	59.6
Total World Supply	75.3	76.3	77.6	78.2	77.5	76.6	77.2	78.1	78.2	78.5	79.6	79.8	76.9	77.4	79.0
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	0.2	-0.6	0.0	0.6	0.0	-0.7	-0.2	0.3	0.2	-0.6	-0.3	0.3	0.1	-0.2	-0.1
Other	0.3	-1.3	-1.8	-2.4	0.1	-0.4	-0.4	0.0	0.8	-0.7	-1.2	-0.3	-1.3	-0.2	-0.3
Total Stock Withdrawals	0.5	-1.9	-1.9	-1.7	0.1	-1.1	-0.7	0.3	1.0	-1.3	-1.4	0.0	-1.3	-0.3	-0.5
OECD Comm. Stocks, End (bill. bbls.)	2.4	2.5	2.6	2.6	2.5	2.6	2.6	2.5	2.5	2.5	2.6	2.6	2.6	2.5	2.6
Non-OPEC Supply	45.9	45.6	45.9	46.5	46.4	46.2	46.7	47.4	46.8	47.0	47.6	48.1	46.0	46.7	47.4
Net Exports from Former Soviet Union	4.0	4.3	4.5	4.8	4.8	4.9	5.1	5.1	4.8	5.1	5.3	5.3	4.4	5.0	5.1

[a]Demand 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.

[b]Includes 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.

[c]Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

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.

Table 4. U. S. Energy Prices

(Nominal Dollars)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Crude Oil Prices															
Imported Average[a]	26.84	26.55	29.12	28.25	24.57	25.00	27.00	27.00	26.33	26.00	26.50	26.83	27.72	25.91	26.41
WTI[b] Spot Average..............................	28.82	28.78	31.61	31.96	28.82	28.44	30.14	30.04	29.34	29.00	29.50	29.83	30.29	29.36	29.42
Natural Gas Wellhead															
(dollars per thousand cubic feet)...........	2.26	3.06	3.87	5.22	6.27	4.57	4.73	5.52	5.38	4.48	4.36	5.19	3.62	5.27	4.86
Petroleum Products															
Gasoline Retail [c] (dollars per gallon)															
All Grades	1.44	1.57	1.56	1.54	1.47	1.66	1.61	1.53	1.48	1.51	1.50	1.47	1.53	1.57	1.49
Regular Unleaded................................	1.40	1.53	1.52	1.50	1.43	1.62	1.58	1.50	1.44	1.48	1.47	1.44	1.49	1.53	1.46
No. 2 Diesel Oil, Retail															
(dollars per gallon)	1.42	1.41	1.50	1.58	1.47	1.47	1.48	1.49	1.45	1.43	1.43	1.46	1.48	1.48	1.44
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.85	0.78	0.91	0.97	0.83	0.75	0.80	0.86	0.84	0.76	0.77	0.85	0.88	0.82	0.81
No. 2 Heating Oil, Retail															
(dollars per gallon)	1.31	1.17	1.23	1.40	1.35	1.19	1.15	1.28	1.29	1.18	1.12	1.26	1.31	1.28	1.25
No. 6 Residual Fuel Oil, Retail [d]															
(dollars per barrel)	23.62	24.57	25.10	27.41	24.99	24.52	25.22	26.27	25.57	23.83	23.90	25.24	25.34	25.26	24.64
Electric Utility Fuels															
Coal															
(dollars per million Btu).........................	1.21	1.21	1.18	1.20	1.21	1.23	1.21	1.20	1.21	1.22	1.19	1.18	1.20	1.21	1.20
Heavy Fuel Oil [e]															
(dollars per million Btu).........................	3.74	4.18	4.34	4.52	3.90	4.02	4.20	4.18	3.97	3.91	3.98	4.03	4.27	4.05	3.97
Natural Gas															
(dollars per million Btu).........................	2.85	3.78	4.46	6.33	7.61	5.62	5.56	6.24	6.14	5.11	4.97	5.81	4.33	6.03	5.33
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)..........	6.53	7.77	10.09	8.68	9.91	10.59	11.12	9.26	9.58	10.20	11.08	9.39	7.69	9.93	9.73
Electricity															
(cents per kilowatthour)........................	7.76	8.35	8.57	8.26	8.10	8.79	9.00	8.50	8.11	8.63	8.87	8.38	8.25	8.61	8.51

[a] Refiner acquisition cost (RAC) of imported crude oil.
[b] West Texas Intermediate.
[c] Average self-service cash prices.
[d] Average for all sulfur contents.
[e] Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the fourth quarter of 2000. 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 5. U.S. Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Crude Oil Supply															
Domestic Production [a]	5.86	5.84	5.79	5.84	5.85	5.85	5.76	5.86	5.84	5.86	5.84	5.82	5.83	5.83	5.84
Alaska	1.02	0.97	0.91	0.99	0.99	0.98	0.97	1.08	1.03	1.03	1.02	1.02	0.97	1.00	1.03
Lower 48	4.84	4.87	4.88	4.85	4.86	4.87	4.80	4.78	4.80	4.83	4.82	4.80	4.86	4.82	4.81
Net Imports (including SPR) [b]	8.20	9.27	9.59	9.05	8.93	9.52	9.63	9.19	9.15	9.92	9.91	9.45	9.03	9.32	9.61
Other SPR Supply	0.02	0.00	0.02	0.00	0.02	0.01	0.05	0.09	0.00	0.10	0.10	0.13	0.01	0.04	0.08
SPR Stock Withdrawn or Added (-)	-0.02	0.01	-0.02	0.32	-0.02	0.00	-0.05	-0.09	0.00	-0.10	-0.10	-0.13	0.07	-0.04	-0.08
Other Stock Withdrawn or Added (-)	-0.13	0.03	0.13	-0.08	-0.15	-0.08	0.17	0.02	-0.18	-0.02	0.17	0.02	-0.01	-0.01	0.00
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	0.00
Unaccounted-for Crude Oil	0.21	0.27	0.12	0.31	0.21	0.27	0.22	0.21	0.21	0.22	0.22	0.22	0.23	0.23	0.22
Total Crude Oil Supply	14.14	15.40	15.63	15.10	14.80	15.56	15.73	15.19	15.02	15.88	16.04	15.38	15.07	15.32	15.58
Other Supply															
NGL Production	1.97	1.94	1.93	1.79	1.63	1.89	1.88	1.94	1.96	1.95	1.92	1.97	1.91	1.83	1.95
Other Inputs	0.36	0.38	0.39	0.37	0.37	0.37	0.37	0.40	0.37	0.38	0.37	0.40	0.38	0.38	0.38
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	0.95	0.94	0.96	0.95	0.95	0.95	0.92	0.91	0.95	0.95	0.92	0.95	0.94	0.93
Net Product Imports [c]	1.51	1.43	1.29	1.36	1.90	1.43	1.48	1.42	1.49	1.48	1.54	1.48	1.40	1.56	1.50
Product Stock Withdrawn or Added (-)	0.33	-0.62	-0.14	0.41	0.13	-0.61	-0.36	0.38	0.38	-0.52	-0.34	0.39	0.00	-0.12	-0.03
Total Supply	19.27	19.49	20.04	19.99	19.77	19.59	20.06	20.24	20.12	20.10	20.48	20.55	19.70	19.92	20.31
Demand															
Motor Gasoline	8.08	8.61	8.70	8.49	8.25	8.61	8.78	8.65	8.40	8.89	8.97	8.84	8.47	8.58	8.77
Jet Fuel	1.65	1.69	1.79	1.77	1.75	1.69	1.78	1.80	1.79	1.76	1.83	1.84	1.73	1.76	1.80
Distillate Fuel Oil	3.77	3.56	3.62	3.82	4.19	3.63	3.56	3.82	4.05	3.72	3.67	3.92	3.69	3.80	3.84
Residual Fuel Oil	0.79	0.81	0.98	1.05	0.99	0.91	0.96	0.97	0.99	0.89	0.94	0.81	0.91	0.96	0.91
Other Oils [d]	4.99	4.81	4.94	4.75	4.59	4.74	4.97	5.01	4.90	4.84	5.08	5.13	4.87	4.83	4.99
Total Demand	19.27	19.48	20.03	19.88	19.78	19.59	20.06	20.24	20.12	20.10	20.48	20.55	19.67	19.92	20.31
Total Petroleum Net Imports	9.71	10.70	10.88	10.40	10.83	10.95	11.11	10.61	10.64	11.40	11.45	10.94	10.43	10.87	11.11
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	296	294	282	290	304	311	295	293	309	311	295	293	290	293	293
Total Motor Gasoline	204	210	197	196	193	201	197	204	209	208	202	207	196	204	207
Finished Motor Gasoline	157	165	154	153	144	155	154	160	160	165	159	164	153	160	164
Blending Components	47	45	43	43	50	46	43	43	48	44	43	43	43	43	43
Jet Fuel	40	44	42	45	40	43	44	45	42	43	44	45	45	45	45
Distillate Fuel Oil	96	106	115	118	104	113	132	134	105	117	136	138	118	134	138
Residual Fuel Oil	36	37	38	36	40	41	43	43	40	41	42	43	36	43	43
Other Oils [e]	234	271	288	248	254	290	303	259	255	290	304	261	248	259	261
Total Stocks (excluding SPR)	907	961	962	932	935	997	1015	978	960	1009	1025	987	932	978	987
Crude Oil in SPR	569	569	570	541	542	543	547	556	556	565	575	587	541	556	587
Heating Oil Reserve	0	0	0	2	2	2	2	2	2	2	2	2	2	2	2
Total Stocks (including SPR)	1476	1530	1532	1473	1477	1540	1562	1534	1516	1575	1599	1574	1473	1534	1574

[a] Includes lease condensate.

[b] Net imports equals gross imports plus SPR imports minus exports.

[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.

[d] Includes 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.

[e] 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*, 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.

Table 6. Approximate Energy Demand Sensitivities[a] for the STIFS[b] Model
(Percent Deviation Base Case)

Demand Sector	+1% GDP	+ 10% Prices		+ 10% Weather [e]	
		Crude Oil [c]	N.Gas Wellhead [d]	Fall/Winter [f]	Spring/Summer [f]
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%

[a] Percent change in demand quantity resulting from specified percent changes in model inputs.

[b] Short-Term Integrated Forecasting System.

[c] Refiner acquisitions cost of imported crude oil.

[d] Average unit value of marketed natural gas production reported by States.

[e] Refers to percent changes in degree-days.

[f] Response 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 7. Forecast Components for U.S. Crude Oil Production
(Million Barrels per Day)

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	6.14	5.50	0.64	0.08	0.56
Lower 48 States	5.10	4.50	0.60	0.07	0.53
Alaska	1.04	1.00	0.04	0.02	0.02

Note: Components provided are for the fourth quarter 2002. 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.

(Energy Information Administration/Short-Term Energy Outlook -- May 2001)

Table 8. U.S. Natural Gas Supply and Demand: Mid world Oil Price Case
(Trillion Cubic Feet)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Total Dry Gas Production	4.77	4.77	4.84	4.94	4.89	4.88	4.95	5.12	5.07	5.04	5.05	5.17	19.32	19.85	20.34
Net Imports	0.87	0.82	0.88	0.98	0.98	0.97	1.04	1.04	1.03	1.02	1.07	1.06	3.56	4.02	4.18
Supplemental Gaseous Fuels..................	0.03	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.04	0.03	0.03	0.03	0.10	0.12	0.12
Total New Supply	5.67	5.62	5.75	5.94	5.91	5.87	6.01	6.19	6.14	6.09	6.15	6.27	22.98	23.99	24.64
Working Gas in Storage															
Opening...	2.51	1.15	1.71	2.47	1.72	0.72	1.61	2.59	2.23	1.03	1.80	2.70	2.51	1.72	2.23
Closing...	1.15	1.71	2.47	1.72	0.72	1.61	2.59	2.23	1.03	1.80	2.70	2.33	1.72	2.23	2.33
Net Withdrawals.................................	1.36	-0.56	-0.77	0.75	1.00	-0.89	-0.99	0.36	1.20	-0.77	-0.90	0.37	0.79	-0.51	-0.10
Total Supply......................................	7.03	5.06	4.98	6.70	6.91	4.99	5.03	6.56	7.34	5.31	5.25	6.64	23.77	23.48	24.54
Balancing Item [a]	-0.08	-0.06	-0.25	-0.62	0.43	0.09	-0.18	-0.64	0.06	-0.02	-0.06	-0.55	-1.02	-0.30	-0.57
Total Primary Supply.................................	6.95	5.00	4.72	6.08	7.34	5.08	4.85	5.92	7.41	5.29	5.19	6.09	22.75	23.18	23.98
Demand															
Lease and Plant Fuel...............................	0.31	0.31	0.32	0.32	0.31	0.31	0.32	0.33	0.33	0.33	0.33	0.34	1.26	1.28	1.32
Pipeline Use..	0.24	0.17	0.16	0.21	0.24	0.17	0.16	0.20	0.24	0.17	0.17	0.20	0.77	0.78	0.78
Residential..	2.20	0.77	0.39	1.57	2.52	0.85	0.36	1.43	2.45	0.85	0.36	1.46	4.93	5.17	5.13
Commercial..	1.29	0.62	0.48	0.96	1.44	0.65	0.45	0.93	1.44	0.66	0.46	0.95	3.35	3.47	3.50
Industrial (Incl. Nonutility Use)	2.35	2.30	2.31	2.44	2.37	2.32	2.49	2.45	2.50	2.47	2.68	2.61	9.41	9.63	10.26
Electric Utilities.......................................	0.56	0.83	1.06	0.58	0.45	0.77	1.07	0.57	0.45	0.82	1.19	0.52	3.04	2.86	2.98
Total Demand..	6.95	5.00	4.72	6.08	7.34	5.08	4.85	5.92	7.41	5.29	5.19	6.09	22.75	23.18	23.98

[a]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.

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: Mid World Oil Price Case
(Million Short Tons)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Production..	274.0	262.2	271.0	268.8	287.6	275.1	278.3	283.7	289.6	280.5	289.6	281.0	1076.0	1124.7	1140.7
Appalachia	109.5	107.0	101.8	102.8	108.4	110.2	101.9	106.0	111.8	110.2	103.6	102.7	421.1	426.5	428.3
Interior	36.1	35.2	37.6	35.9	38.0	35.3	36.9	36.1	34.5	34.3	36.6	33.9	144.8	146.3	139.3
Western...	128.5	120.0	131.5	130.2	141.2	129.6	139.4	141.6	143.4	136.0	149.4	144.4	510.1	551.8	573.1
Primary Stock Levels [a]															
Opening...	39.5	44.4	40.4	37.1	34.2	46.9	42.1	34.6	31.3	37.0	37.0	36.2	39.5	34.2	31.3
Closing..	44.4	40.4	37.1	34.2	46.9	42.1	34.6	31.3	37.0	37.0	36.2	35.2	34.2	31.3	35.2
Net Withdrawals............................	-4.9	4.0	3.3	2.9	-12.7	4.8	7.5	3.3	-5.8	(S)	0.8	1.0	5.3	2.9	-4.0
Imports..	2.8	2.7	3.6	3.4	3.6	3.2	3.2	3.2	3.4	3.4	3.4	3.5	12.5	13.3	13.7
Exports	13.6	14.4	15.8	14.7	13.9	15.0	15.2	15.1	14.9	15.1	15.4	15.3	58.5	59.2	60.7
Total Net Domestic Supply............	258.3	254.5	262.0	260.4	264.6	268.2	273.7	275.2	272.3	268.8	278.5	270.2	1035.3	1081.7	1089.8
Secondary Stock Levels [b]															
Opening...	143.5	139.9	136.5	119.3	108.4	104.1	118.4	102.7	107.6	107.2	118.8	102.6	143.5	108.4	107.6
Closing..	139.9	136.5	119.3	108.4	104.1	118.4	102.7	107.6	107.2	118.8	102.6	108.7	108.4	107.6	108.7
Net Withdrawals............................	3.6	3.4	17.2	10.9	4.3	-14.3	15.8	-5.0	0.4	-11.5	16.2	-6.2	35.1	0.8	-1.1
Waste Coal Supplied to IPPs [c]	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.8	2.8	2.8	2.8	10.1	10.6	11.1
Total Supply..	264.4	260.5	281.7	273.9	271.5	256.6	292.1	272.8	275.5	260.0	297.5	266.8	1080.5	1093.0	1099.8
Demand															
Coke Plants..	7.3	7.4	7.5	6.2	6.6	6.8	7.1	6.7	7.1	7.0	7.3	6.8	28.4	27.2	28.3
Electricity Production															
Electric Utilities.................................	214.1	202.1	227.3	214.2	211.1	198.6	228.4	209.0	213.1	201.3	232.8	202.2	857.6	847.0	849.5
Nonutilities (Excl. Cogen.) [d]	25.6	27.6	35.1	35.0	36.2	34.3	39.7	37.4	36.9	34.9	40.5	38.1	123.3	147.6	150.4
Retail and General Industry................	18.2	16.3	16.3	19.3	18.4	16.9	17.0	19.7	18.4	16.8	16.9	19.6	70.1	72.0	71.6
Total Demand [e]	265.2	253.4	286.1	274.7	272.4	256.6	292.1	272.8	275.5	260.0	297.5	266.8	1079.4	1093.9	1099.8
Discrepancy [f]	-0.7	7.1	-4.4	-0.8	-0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	-0.8	0.0

[a] Primary stocks are held at the mines, preparation plants, and distribution points.

[b] Secondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

[c] Estimated independent power producers' (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

[d] Estimates 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 2000 and projections for 2001 and 2002 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999 and 2000, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

[e] Total Demand includes estimated IPP consumption.

[f] 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: Mid World Oil Price Case

(Billion Kilowatt-hours)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Net Utility Generation															
Coal...	425.7	401.2	445.9	419.5	428.7	409.8	467.8	416.5	426.6	423.5	490.0	391.1	1692.3	1722.9	1731.2
Petroleum.................................	11.0	16.4	23.3	21.9	34.3	23.0	26.7	18.5	19.3	18.9	26.8	11.0	72.6	102.5	76.0
Natural Gas..............................	54.4	79.1	100.5	55.8	42.7	73.3	101.3	54.5	42.5	77.9	113.1	49.7	289.8	271.9	283.1
Nuclear	185.0	177.4	182.0	161.1	170.6	164.3	175.0	160.5	167.2	156.0	177.9	163.2	705.4	670.4	664.3
Hydroelectric	66.9	73.0	57.4	50.2	60.3	70.1	58.6	59.3	69.7	74.4	62.5	61.6	247.5	248.3	268.1
Geothermal and Other [a]	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.6	2.2	2.2	2.2
Subtotal.................................	743.4	747.6	809.6	709.1	737.1	741.1	830.1	709.9	725.8	751.3	870.8	677.1	3009.8	3018.2	3025.0
Nonutility Generation [b]															
Coal...	52.7	56.4	80.3	81.0	75.9	76.0	88.9	75.7	86.5	87.4	87.4	101.1	270.4	316.5	362.4
Petroleum...............................	8.6	6.8	9.4	14.0	9.7	9.7	11.3	9.6	10.0	10.1	10.1	11.7	38.7	40.4	41.8
Natural Gas..............................	67.6	74.2	93.6	80.8	73.0	83.5	114.4	90.1	84.1	83.5	95.2	128.9	316.2	361.1	391.7
Other Gaseous Fuels [c]	2.5	2.7	3.4	3.0	2.1	2.1	2.1	2.2	2.3	2.2	2.2	2.2	11.6	8.5	8.9
Nuclear	5.2	5.0	16.7	21.6	21.1	20.3	21.7	19.9	20.7	19.3	22.0	20.2	48.5	82.9	82.2
Hydroelectric	5.6	5.9	5.8	4.9	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	22.1	18.0	18.0
Geothermal and Other [d]	20.9	20.8	21.5	21.5	22.1	22.0	22.3	22.7	22.1	22.0	22.3	22.7	84.7	89.1	89.1
Subtotal.................................	163.0	171.8	230.7	226.7	208.4	218.2	265.2	224.7	230.1	228.9	243.6	291.2	792.2	916.4	993.9
Total Generation	906.5	919.4	1040.2	935.8	945.5	959.2	1095.3	934.6	956.0	980.2	1114.4	968.3	3801.9	3934.6	4018.9
Net Imports [e]	9.2	8.7	13.1	4.6	7.7	8.8	12.0	7.6	7.3	8.3	11.7	8.6	35.6	36.2	35.9
Total Supply	915.7	928.1	1053.3	940.4	953.2	968.1	1107.3	942.2	963.3	988.5	1126.2	976.9	3837.5	3970.8	4054.9
Losses and Unaccounted for [f] ...	57.7	68.6	34.4	53.9	54.3	81.9	65.2	63.5	54.6	83.8	66.9	64.9	214.5	264.9	270.2
Demand															
Retail Sales [g]															
Residential	292.5	264.2	352.8	279.4	312.4	275.1	361.7	274.2	312.7	280.8	370.1	279.6	1188.9	1223.5	1243.2
Commercial	236.2	254.3	294.4	250.7	246.7	257.6	300.5	249.3	248.9	264.5	311.0	255.8	1035.6	1054.0	1080.1
Industrial	260.0	268.5	280.5	269.7	259.2	270.3	281.6	271.0	263.1	275.3	287.1	276.7	1078.7	1082.1	1102.2
Other.......................................	26.4	27.4	30.6	27.1	26.7	26.9	30.0	27.1	26.9	27.2	30.6	27.6	111.5	110.7	112.3
Subtotal.................................	815.1	814.3	958.2	826.9	845.0	829.9	973.8	821.6	851.5	847.8	998.8	839.7	3414.6	3470.2	3537.8
Nonutility Use/Sales [h]	42.9	45.2	60.7	59.6	53.9	56.3	68.3	57.2	57.1	56.8	60.5	72.3	208.4	235.7	246.8
Total Demand.........................	858.0	859.5	1018.9	886.6	898.9	886.2	1042.1	878.7	908.6	904.7	1059.3	912.0	3623.0	3705.9	3784.6
Memo:															
Nonutility Sales to															
Electric Utilities [b]	120.1	126.6	170.0	167.0	154.4	161.9	196.9	167.5	173.0	172.1	183.1	218.9	583.8	680.7	747.1

[a] "Other" includes generation from wind, wood, waste, and solar sources.

[b] Electricity(net Generation) from nonutility sources, including cogenerators and small power producers.

[c] Includes refinery still gas and other process or waste gases and liquefied petroleum gases.

[d] Includes geothermal, solar, wind, wood, waste, hydrogen, sulfur, batteries, chemicals and spent sulfite liquor.

[e] Data for 2000 are estimates.

[f] Balancing item, mainly transmission and distribution losses.

[g] Total 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 2000 are estimated.

[h] Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA 860B, "Annual Electric Generator Report - Nonutility(1998 and 1999) and EIA-867, "Annual Nonutility Power Producer Report,"(prior to 1998). Data for 2000 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.

Table 11. U.S. Renewable Energy Use by Sector: Mid World Oil Price Case

(Quadrillion Btu)

	Year				Annual Percentage Change		
	1999	2000	2001	2002	1999-2000	2000-2001	2001-2002
Electric Utilities							
Hydroelectric Power [a]	**3.079**	2.593	2.601	2.809	-15.8	0.3	8.0
Geothermal, Solar and Wind Energy [b]	**0.036**	0.003	0.004	0.004	-91.7	33.3	0.0
Biofuels [c]	**0.021**	0.020	0.021	0.021	-4.8	5.0	0.0
Total	**3.136**	2.617	2.625	2.834	-16.5	0.3	8.0
Nonutility Power Generators							
Hydroelectric Power [a]	**0.149**	0.229	0.186	0.186	53.7	-18.8	0.0
Geothermal, Solar and Wind Energy [b]	**0.373**	0.345	0.333	0.333	-7.5	-3.5	0.0
Biofuels [c]	**0.523**	0.675	0.729	0.729	29.1	8.0	0.0
Total...	**1.045**	1.248	1.249	1.249	19.4	0.1	0.0
Total Power Generation..............................	**4.180**	3.865	3.874	4.082	-7.5	0.2	5.4
Other Sectors [d]							
Residential and Commercial [e]	**0.553**	0.576	0.547	0.577	4.2	-5.0	5.5
Industrial [f]	**1.942**	2.003	2.008	2.058	3.1	0.2	2.5
Transportation [g]	**0.100**	0.114	0.114	0.117	14.0	0.0	2.6
Total...	**2.595**	2.693	2.669	2.751	3.8	-0.9	3.1
Net Imported Electricity [h]	**0.219**	0.255	0.259	0.258	16.4	1.6	-0.4
Total Renewable Energy Demand	**6.994**	6.813	6.802	7.091	-2.6	-0.2	4.2

[a]Conventional hydroelectric power only. Hydroelectricity generated by pumped storage is not included in renewable energy.

[b]Also includes photovoltaic and solar thermal energy. Sharp declines since 1998 in the electric utility sector and corresponding increases in the nonutility sector for this category mostly reflect sale of geothermal facilities to the nonutility sector.

[c]Biofuels are fuelwood, wood byproducts, waste wood, municipal solid waste, manufacturing process waste, and alcohol fuels.

[d]Renewable 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.

[e]Includes biofuels and solar energy consumed in the residential and commercial sectors.

[f]Consists primarily of biofuels for use other than in electricity cogeneration.

[g]Ethanol blended into gasoline.

[h]Represents 69.3 percent of total electricity net imports, which is the proportion of total 1999 net imported electricity (0.300 quadrillion Btu) attributable to renewable sources (0.208 quadrillion Btu). See *EIA's Monthly Energy Review*, Table 1.5

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.

Table A1. Annual U.S. Energy Supply and Demand

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Real Gross Domestic Product (GDP)															
(billion chained 1996 dollars)	6368	6592	6708	6676	6880	7063	7348	7544	7813	8159	8516	8876	*9320*	*9494*	*9818*
Imported Crude Oil Price [a]															
(nominal dollars per barrel)	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	*27.72*	*25.91*	*26.41*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	*5.83*	*5.83*	*5.84*
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	*10.43*	*10.87*	*11.11*
Energy Demand															
World Petroleum															
(million barrels per day)	64.8	65.9	65.7	66.6	66.8	67.0	68.3	69.9	71.4	73.0	73.6	74.9	*75.4*	*77.0*	*78.6*
U.S. Petroleum															
(million barrels per day)	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	*19.67*	*19.92*	*20.31*
Natural Gas															
(trillion cubic feet)	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.70	*22.75*	*23.18*	*23.98*
Coal															
(million short tons)..	877	895	903	899	907	943	950	962	1006	1030	1038	1045	*1079*	*1094*	*1100*
Electricity (billion kilowatthours)															
Retail Sales [c]	2578	2647	2713	2762	2763	2861	2935	3013	3101	3146	3264	3312	*3415*	*3470*	*3538*
Nonutility Own Use [d]	NA	93	95	102	108	127	138	145	145	148	156	185	*208*	*236*	*247*
Total	NA	2740	2807	2864	2871	2988	3073	3159	3246	3294	3420	3497	*3623*	*3706*	*3785*
Total Energy Demand [e]															
(quadrillion Btu)	NA	84.2	84.2	84.5	85.6	87.4	89.2	90.9	93.9	94.2	95.2	97.1	*98.8*	*99.6*	*101.5*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1996 Dollar)...................................	NA	12.77	12.55	12.66	12.44	12.37	12.14	12.07	12.02	11.54	11.18	10.94	*10.60*	*10.49*	*10.34*

[a] Refers to the imported cost of crude oil to U.S. refiners.

[b] Includes lease condensate.

[c] Total 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 2000 are estimates.

[d] Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA-867, "Annual Nonutility Power Producer Report." Data for 2000 are estimates.

[e] "Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, *Annual Energy Review*, 1999, DOE/EIA-0384(97) (AER), Table 1.1. Prior to 1990, some components of renewable energy consumption, particularly relating to consumption at nonutility electric generating facilities, were not available. For those years, a less compehensive measure of total energy demand can be found in EIA's *AER*. 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.

Table A2. Annual U.S. Macroeconomic and Weather Indicators

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Macroeconomic															
Real Gross Domestic Product (billion chained 1996 dollars)	6368	6592	6708	6676	6880	7063	7348	7544	7813	8159	8516	8876	*9320*	*9494*	*9818*
GDP Implicit Price Deflator (Index, 1996=1.000)	0.802	0.833	0.865	0.897	0.919	0.941	0.960	0.981	1.000	1.020	1.032	1.048	*1.070*	*1.090*	*1.108*
Real Disposable Personal Income (billion chained 1996 Dollars)	4784	4907	5014	5033	5189	5261	5397	5539	5678	5854	6134	6331	*6510*	*6674*	*6950*
Manufacturing Production (Index, 1996=1.000)	0.801	0.816	0.812	0.793	0.825	0.855	0.907	0.955	1.000	1.070	1.123	1.178	*1.243*	*1.256*	*1.291*
Real Fixed Investment (billion chained 1996 dollars)	887	911	895	833	886	958	1046	1109	1213	1329	1485	1621	*1772*	*1817*	*1889*
Real Exchange Rate (Index, 1996=1.000)	NA	NA	0.963	0.966	0.960	1.001	0.981	0.927	1.000	1.102	1.122	1.083	*1.183*	*1.084*	*1.037*
Business Inventory Change (billion chained 1996 dollars)	17.0	14.2	8.9	-6.8	-4.7	3.6	12.1	14.1	10.1	15.2	25.6	0.1	*16.0*	*-0.2*	*2.5*
Producer Price Index (index, 1982=1.000)	1.069	1.122	1.163	1.165	1.172	1.189	1.205	1.247	1.277	1.275	1.244	1.255	*1.326*	*1.345*	*1.337*
Consumer Price Index (index, 1982-1984=1.000)	1.184	1.240	1.308	1.363	1.404	1.446	1.483	1.525	1.570	1.606	1.631	1.666	*1.723*	*1.765*	*1.797*
Petroleum Product Price Index (index, 1982=1.000)	0.539	0.612	0.748	0.671	0.647	0.620	0.591	0.608	0.701	0.680	0.513	0.609	*0.914*	*0.907*	*0.864*
Non-Farm Employment (millions)	105.2	107.9	109.4	108.3	108.6	110.7	114.1	117.2	119.6	122.7	125.8	128.8	*131.4*	*132.2*	*133.5*
Commercial Employment (millions)	67.8	70.0	71.3	70.8	71.2	73.2	76.1	78.8	81.1	83.9	86.6	89.5	*91.9*	*93.2*	*94.9*
Total Industrial Production (index, 1996=1.000)	0.8	0.8	0.8	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.1	1.2	*1.2*	*1.2*	*1.3*
Housing Stock (millions)	101.6	102.9	103.5	104.5	105.5	106.8	108.2	109.6	111.0	112.5	114.1	115.7	*116.1*	*117.6*	*118.7*
Weather [a]															
Heating Degree-Days															
U.S.	4653	4726	4016	4200	4441	4700	4483	4531	4713	4542	3951	4169	*4460*	*4506*	*4459*
New England	6715	6887	5848	5960	6844	6728	6672	6559	6679	6662	5680	5952	*6499*	*6521*	*6462*
Middle Atlantic	6088	6134	4998	5177	5964	5948	5934	5831	5986	5809	4812	5351	*5725*	*5693*	*5698*
U.S. Gas-Weighted	4804	4856	4139	4337	4458	4754	4659	4707	4980	4802	4183	4399	*4684*	*4761*	*4710*
Cooling Degree-Days (U.S.)	1283.0	1156.0	1260.0	1331.0	1040.0	1218.0	1220.0	1293.0	1180.0	1156.0	1410.0	1297.0	*1253.0*	*1225.5*	*1236.7*

[a]Population-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.

Notes: 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); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast CONTROL0301.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Demand [a]															
OECD															
U.S. (50 States)	17.3	17.3	17.0	16.7	17.0	17.2	17.7	17.7	18.3	18.6	18.9	19.5	*19.7*	*19.9*	*20.3*
Europe [b]	12.4	12.5	12.6	13.4	13.6	13.5	13.6	14.1	14.3	14.4	14.7	14.5	*14.4*	*14.5*	*14.7*
Japan..	4.8	5.0	5.1	5.3	5.4	5.4	5.7	5.7	5.9	5.7	5.5	5.6	*5.5*	*5.5*	*5.5*
Other OECD	2.6	2.7	2.7	2.7	2.7	2.8	2.9	3.0	3.0	3.1	3.1	3.3	*3.3*	*3.4*	*3.6*
Total OECD	37.1	37.6	37.5	38.1	38.8	39.0	39.9	40.6	41.4	41.8	42.3	42.9	*42.9*	*43.4*	*44.1*
Non-OECD															
Former Soviet Union..................................	8.9	8.7	8.4	8.4	6.8	5.6	4.8	4.6	4.0	3.9	3.8	3.7	*3.7*	*3.7*	*3.8*
Europe	2.2	2.1	1.7	1.4	1.3	1.3	1.3	1.3	1.4	1.5	1.5	1.5	*1.5*	*1.6*	*1.6*
China..	2.3	2.4	2.3	2.5	2.7	3.0	3.2	3.4	3.6	3.9	4.1	4.3	*4.6*	*4.8*	*5.0*
Other Asia	4.4	4.9	5.3	5.7	6.2	6.8	7.3	7.9	8.5	9.0	8.7	9.0	*9.0*	*9.2*	*9.6*
Other Non-OECD.......................................	10.0	10.3	10.5	10.6	11.0	11.4	11.8	12.1	12.4	12.9	13.3	13.6	*13.9*	*14.3*	*14.6*
Total Non-OECD.....................................	27.7	28.3	28.2	28.5	28.0	28.0	28.4	29.3	30.0	31.2	31.4	32.1	*32.7*	*33.6*	*34.5*
Total World Demand................................	64.8	65.9	65.7	66.6	66.8	67.0	68.3	69.9	71.4	73.0	73.6	74.9	*75.6*	*77.0*	*78.6*
Supply [c]															
OECD															
U.S. (50 States)	10.5	9.9	9.7	9.9	9.8	9.6	9.4	9.4	9.4	9.5	9.3	9.0	*9.1*	*9.0*	*9.1*
Canada	2.0	2.0	2.0	2.0	2.1	2.2	2.3	2.4	2.5	2.6	2.7	2.6	*2.7*	*2.8*	*2.9*
North Sea [d]	3.8	3.7	3.9	4.1	4.5	4.8	5.5	5.9	6.3	6.2	6.2	6.3	*6.4*	*6.1*	*6.0*
Other OECD	1.5	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.5	*1.6*	*1.5*	*1.5*
Total OECD	17.8	17.1	17.1	17.5	17.9	18.0	18.7	19.2	19.7	19.9	19.7	19.4	*19.8*	*19.4*	*19.4*
Non-OECD															
OPEC	21.5	23.3	24.5	24.6	25.8	26.6	27.0	27.6	28.3	29.9	30.4	29.3	*30.9*	*30.7*	*31.6*
Former Soviet Union..................................	12.5	12.1	11.4	10.4	8.9	8.0	7.3	7.1	7.1	7.1	7.2	7.6	*8.1*	*8.7*	*8.9*
China..	2.7	2.8	2.8	2.8	2.8	2.9	2.9	3.0	3.1	3.2	3.2	3.2	*3.2*	*3.2*	*3.1*
Mexico..	2.9	2.9	3.0	3.2	3.2	3.2	3.2	3.1	3.3	3.4	3.5	3.4	*3.5*	*3.7*	*4.0*
Other Non-OECD.......................................	7.3	12.0	8.0	8.1	8.4	8.7	9.2	9.9	10.2	10.5	10.8	11.3	*11.3*	*11.6*	*12.0*
Total Non-OECD.....................................	47.0	48.9	49.7	49.1	49.1	49.4	49.6	50.7	52.0	54.2	55.2	54.8	*57.0*	*58.0*	*59.6*
Total World Supply..............................	64.8	65.9	66.8	66.7	67.0	67.4	68.3	69.9	71.8	74.1	74.9	74.2	*76.9*	*77.4*	*79.0*
Total Stock Withdrawals................................	0.1	0.0	-1.1	-0.1	-0.3	-0.4	0.0	0.0	-0.4	-1.1	-1.3	0.8	*-1.3*	*-0.3*	*-0.5*
OECD Comm. Stocks, End (bill. bbls.)	2.6	2.6	2.7	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.8	2.5	*2.6*	*2.5*	*2.6*
Net Exports from Former Soviet Union..............	3.6	3.4	3.0	2.1	2.1	2.3	2.4	2.6	3.0	3.3	3.5	3.9	*4.4*	*5.0*	*5.1*

[a] Demand 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.

[b] OECD Europe includes the former East Germany.

[c] Includes 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.

[d] Includes offshore supply from Denmark, Germany, the Netherlands, Norway, and the United Kingdom.

OECD: Organization for Economic Cooperation and Development: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. The Czech Republic, Hungary, Mexico, Poland, and South Korea are all members of OECD, but are not yet included in our OECD estimates.

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 Statistics Report*, DOE/EIA-0520, and Organization for Economic Cooperation and Development, Annual and Monthly Oil Statistics Database.

Table A4. Annual Average U. S. Energy Prices

(Nominal Dollars)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Crude Oil Prices															
Imported Average[a]	14.57	18.08	21.75	18.70	18.20	16.14	15.52	17.14	20.61	18.50	12.08	17.22	*27.72*	*25.91*	*26.41*
WTI[b] Spot Average	15.98	19.78	24.48	21.60	20.54	18.49	17.16	18.41	22.11	20.61	14.45	19.25	*30.29*	*29.36*	*29.42*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	1.69	1.69	1.71	1.64	1.74	2.04	1.85	1.55	2.17	2.32	1.95	2.17	*3.62*	*5.27*	*4.86*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	0.92	1.02	1.17	1.15	1.14	1.13	1.13	1.16	1.25	1.24	1.07	1.18	*1.53*	*1.57*	*1.49*
Regular Unleaded	0.91	0.99	1.13	1.10	1.09	1.07	1.08	1.11	1.20	1.20	1.03	1.14	*1.49*	*1.53*	*1.46*
No. 2 Diesel Oil, Retail															
(dollars per gallon)	0.91	0.99	1.16	1.12	1.10	1.11	1.11	1.10	1.22	1.19	1.04	1.12	*1.48*	*1.48*	*1.44*
No. 2 Heating Oil, Wholesale															
(dollars per gallon)	0.47	0.56	0.70	0.62	0.58	0.54	0.51	0.51	0.64	0.59	0.42	0.51	*0.88*	*0.82*	*0.81*
No. 2 Heating Oil, Retail															
(dollars per gallon)	0.81	0.90	1.06	1.02	0.93	0.91	0.88	0.87	0.99	0.99	0.85	0.88	*1.31*	*1.28*	*1.25*
No. 6 Residual Fuel Oil, Retail [c]															
(dollars per barrel)	14.04	16.20	18.66	14.32	14.21	14.00	14.79	16.49	19.01	17.82	12.83	16.02	*25.34*	*25.26*	*24.64*
Electric Utility Fuels															
Coal															
(dollars per million Btu)	1.47	1.44	1.45	1.45	1.41	1.38	1.36	1.32	1.29	1.27	1.25	1.22	*1.20*	*1.21*	*1.20*
Heavy Fuel Oil [d]															
(dollars per million Btu)	2.41	2.85	3.22	2.49	2.46	2.36	2.40	2.60	3.01	2.79	2.07	2.39	*4.27*	*4.05*	*3.97*
Natural Gas															
(dollars per million Btu)	2.26	2.36	2.32	2.15	2.33	2.56	2.23	1.98	2.64	2.76	2.38	2.57	*4.33*	*6.03*	*5.33*
Other Residential															
Natural Gas															
(dollars per thousand cubic feet)	5.47	5.64	5.80	5.82	5.89	6.17	6.41	6.06	6.35	6.95	6.83	6.69	*7.69*	*9.93*	*9.73*
Electricity															
(cents per kilowatthour)	7.49	7.64	7.85	8.05	8.23	8.34	8.40	8.40	8.36	8.43	8.26	8.16	*8.25*	*8.61*	*8.51*

[a]Refiner acquisition cost (RAC) of imported crude oil.
[b]West Texas Intermediate.
[c]Average self-service cash prices.
[d]Average for all sulfur contents.
[e]Includes 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
(Million Barrels per Day, Except Closing Stocks)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Crude Oil Supply															
Domestic Production [a]	8.14	7.61	7.36	7.42	7.17	6.85	6.66	6.56	6.46	6.45	6.25	5.88	*5.83*	*5.83*	*5.84*
Alaska	2.02	1.87	1.77	1.80	1.71	1.58	1.56	1.48	1.39	1.30	1.17	1.05	*0.97*	*1.00*	*1.03*
Lower 48	6.12	5.74	5.58	5.62	5.46	5.26	5.10	5.08	5.07	5.16	5.08	4.83	*4.86*	*4.82*	*4.81*
Net Imports (including SPR) [b]	4.95	5.70	5.79	5.67	5.99	6.69	6.96	7.14	7.40	8.12	8.60	8.61	*9.03*	*9.32*	*9.61*
Other SPR Supply	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.02	0.01	*0.01*	*0.04*	*0.08*
Stock Draw (Including SPR)	0.00	-0.09	0.02	-0.01	0.00	-0.08	-0.02	0.09	0.05	-0.06	-0.07	0.09	*-0.02*	*-0.01*	*0.00*
Product Supplied and Losses	-0.04	-0.03	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	0.00	0.00	0.00	*0.00*	*0.00*	*0.00*
Unaccounted-for Crude Oil	0.20	0.20	0.26	0.20	0.26	0.17	0.27	0.19	0.22	0.14	0.11	0.19	*0.23*	*0.23*	*0.22*
Total Crude Oil Supply	13.25	13.40	13.41	13.30	13.41	13.61	13.87	13.97	14.19	14.66	14.89	14.80	*15.07*	*15.32*	*15.58*
Other Supply															
NGL Production	1.62	1.55	1.56	1.66	1.70	1.74	1.73	1.76	1.83	1.82	1.76	1.85	*1.91*	*1.83*	*1.95*
Other Inputs	0.11	0.11	0.13	0.15	0.20	0.25	0.26	0.30	0.31	0.34	0.38	0.38	*0.38*	*0.38*	*0.38*
Crude Oil Product Supplied	0.04	0.03	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00	*0.00*	*0.00*	*0.00*
Processing Gain	0.66	0.66	0.68	0.71	0.77	0.77	0.77	0.77	0.84	0.85	0.89	0.89	*0.95*	*0.94*	*0.93*
Net Product Imports [c]	1.63	1.50	1.38	0.96	0.94	0.93	1.09	0.75	1.10	1.04	1.17	1.30	*1.40*	*1.56*	*1.50*
Product Stock Withdrawn	0.03	0.13	-0.14	-0.04	0.06	-0.05	0.00	0.15	0.03	-0.09	-0.17	0.30	*0.00*	*-0.12*	*-0.03*
Total Supply	17.33	17.37	17.04	16.76	17.10	17.26	17.72	17.72	18.31	18.62	18.92	19.52	*19.70*	*19.92*	*20.31*
Demand															
Motor Gasoline [d]	7.36	7.40	7.31	7.23	7.38	7.48	7.60	7.79	7.89	8.02	8.25	8.43	*8.47*	*8.58*	*8.77*
Jet Fuel	1.45	1.49	1.52	1.47	1.45	1.47	1.53	1.51	1.58	1.60	1.62	1.67	*1.73*	*1.76*	*1.80*
Distillate Fuel Oil	3.12	3.16	3.02	2.92	2.98	3.04	3.16	3.21	3.37	3.44	3.46	3.57	*3.69*	*3.80*	*3.84*
Residual Fuel Oil	1.38	1.37	1.23	1.16	1.09	1.08	1.02	0.85	0.85	0.80	0.89	0.83	*0.91*	*0.96*	*0.91*
Other Oils [e]	4.03	3.95	3.95	3.99	4.20	4.17	4.41	4.36	4.63	4.77	4.69	5.01	*4.87*	*4.83*	*4.99*
Total Demand	17.34	17.37	17.04	16.77	17.10	17.24	17.72	17.72	18.31	18.62	18.92	19.52	*19.67*	*19.92*	*20.31*
Total Petroleum Net Imports	6.59	7.20	7.16	6.63	6.94	7.62	8.05	7.89	8.50	9.16	9.76	9.91	*10.43*	*10.87*	*11.11*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	330	341	323	325	318	335	337	303	284	305	324	284	*290*	*293*	*293*
Total Motor Gasoline	228	213	220	219	216	226	215	202	195	210	216	193	*196*	*204*	*207*
Jet Fuel	44	41	52	49	43	40	47	40	40	44	45	41	*45*	*45*	*45*
Distillate Fuel Oil	124	106	132	144	141	141	145	130	127	138	156	125	*118*	*134*	*138*
Residual Fuel Oil	45	44	49	50	43	44	42	37	46	40	45	36	*36*	*43*	*43*
Other Oils [f]	267	257	261	267	263	273	275	258	250	259	291	246	*248*	*259*	*261*

[a] Includes lease condensate.
[b] Net imports equals gross imports plus SPR imports minus exports.
[c] Includes finished petroleum products, unfinished oils, gasoline blending components, and natural gas plant liquids for processing.
[d] For 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.
[e] Includes 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.
[f] 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

(Trillion Cubic Feet)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Total Dry Gas Production	17.10	17.31	17.81	17.70	17.84	18.10	18.82	18.60	18.85	18.90	18.71	18.62	*19.32*	*19.85*	*20.34*
Net Imports	1.22	1.27	1.45	1.64	1.92	2.21	2.46	2.69	2.78	2.84	2.99	3.42	*3.56*	*4.02*	*4.18*
Supplemental Gaseous Fuels...............	0.10	0.11	0.12	0.11	0.12	0.12	0.11	0.11	0.11	0.10	0.10	0.10	*0.10*	*0.12*	*0.12*
Total New Supply	18.42	18.69	19.38	19.45	19.88	20.42	21.39	21.40	21.75	21.84	21.80	22.14	*22.98*	*23.99*	*24.64*
Working Gas in Storage															
Opening...	2.76	2.85	2.51	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	*2.51*	*1.72*	*2.23*
Closing...	2.85	2.51	3.07	2.82	2.60	2.32	2.61	2.15	2.17	2.17	2.73	2.51	*1.72*	*2.23*	*2.33*
Net Withdrawals...............................	-0.09	0.34	-0.56	0.24	0.23	0.28	-0.28	0.45	-0.02	0.00	-0.56	0.22	*0.79*	*-0.51*	*-0.10*
Total Supply..	18.33	19.03	18.82	19.70	20.11	20.70	21.11	21.85	21.73	21.84	21.25	22.36	*23.77*	*23.48*	*24.54*
Balancing Item [a]	-0.30	-0.23	-0.11	-0.66	-0.56	-0.42	-0.40	-0.27	0.24	0.11	0.01	-0.67	*-1.02*	*-0.30*	*-0.57*
Total Primary Supply................................	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.70	*22.75*	*23.18*	*23.98*
Demand															
Lease and Plant Fuel............................	1.10	1.07	1.24	1.13	1.17	1.17	1.12	1.22	1.25	1.20	1.16	1.08	*1.26*	*1.28*	*1.32*
Pipeline Use...	0.61	0.63	0.66	0.60	0.59	0.62	0.69	0.70	0.71	0.75	0.64	0.74	*0.77*	*0.78*	*0.78*
Residential...	4.63	4.78	4.39	4.56	4.69	4.96	4.85	4.85	5.24	4.98	4.52	4.73	*4.93*	*5.17*	*5.13*
Commercial..	2.67	2.72	2.62	2.73	2.80	2.86	2.90	3.03	3.16	3.21	3.00	3.04	*3.35*	*3.47*	*3.50*
Industrial (Incl. Nonutilities)....................	6.38	6.82	7.02	7.23	7.53	7.98	8.17	8.58	8.87	8.83	8.69	9.00	*9.41*	*9.63*	*10.26*
Electric Utilities.....................................	2.64	2.79	2.79	2.79	2.77	2.68	2.99	3.20	2.73	2.97	3.26	3.11	*3.04*	*2.86*	*2.98*
Total Demand......................................	18.03	18.80	18.72	19.03	19.54	20.28	20.71	21.58	21.96	21.95	21.26	21.70	*22.75*	*23.18*	*23.98*

[a] 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.

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
(Million Short Tons)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Production...	950.3	980.7	1029.1	996.0	997.5	945.4	1033.5	1033.0	1063.9	1089.9	1117.5	1100.4	*1076.0*	*1124.7*	*1140.7*
Appalachia...	NA	464.8	489.0	457.8	456.6	409.7	445.4	434.9	451.9	467.8	460.4	425.6	*421.1*	*426.5*	*428.3*
Interior..	NA	198.1	205.8	195.4	195.7	167.2	179.9	168.5	172.8	170.9	168.4	162.5	*144.8*	*146.3*	*139.3*
Western	NA	317.9	334.3	342.8	345.3	368.5	408.3	429.6	439.1	451.3	488.8	512.3	*510.1*	*551.8*	*573.1*
Primary Stock Levels [a]															
Opening..	28.3	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	*39.5*	*34.2*	*31.3*
Closing	30.4	29.0	33.4	33.0	34.0	25.3	33.2	34.4	28.6	34.0	36.5	39.5	*34.2*	*31.3*	*35.2*
Net Withdrawals	-2.1	1.4	-4.4	0.4	-1.0	8.7	-7.9	-1.2	5.8	-5.3	-2.6	-2.9	*5.3*	*2.9*	*-4.0*
Imports	2.1	2.9	2.7	3.4	3.8	7.3	7.6	7.2	7.1	7.5	8.7	9.1	*12.5*	*13.3*	*13.7*
Exports	95.0	100.8	105.8	109.0	102.5	74.5	71.4	88.5	90.5	83.5	78.0	58.5	*58.5*	*59.2*	*60.7*
Total Net Domestic Supply	855.3	884.2	921.6	890.9	897.8	886.9	961.8	950.4	986.3	1008.5	1045.7	1048.1	*1035.3*	*1081.7*	*1089.8*
Secondary Stock Levels [b]															
Opening..	185.5	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	*143.5*	*108.4*	*107.6*
Closing	158.4	146.1	168.2	167.7	163.7	120.5	136.1	134.6	123.0	106.4	129.4	143.5	*108.4*	*107.6*	*108.7*
Net Withdrawals	27.0	12.3	-22.1	0.5	4.0	43.2	-15.7	1.5	11.7	16.6	-23.0	-14.1	*35.1*	*0.8*	*-1.1*
Waste Coal Supplied to IPPs [c]	0.0	0.0	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*
Total Supply	882.3	896.5	899.4	891.4	907.8	936.5	954.0	960.4	1006.7	1033.2	1031.6	1043.6	*1080.5*	*1093.0*	*1099.8*
Demand															
Coke Plants	41.9	40.5	38.9	33.9	32.4	31.3	31.7	33.0	31.7	30.2	28.2	28.1	*28.4*	*27.2*	*28.3*
Electricity Production															
Electric Utilities	758.4	766.9	773.5	772.3	779.9	813.5	817.3	829.0	874.7	900.4	910.9	894.1	*857.6*	*847.0*	*849.5*
Nonutilities (Excl. Cogen.) [d]	NA	5.7	7.4	11.4	15.0	17.5	19.9	21.2	22.2	21.6	26.9	52.7	*123.3*	*147.6*	*150.4*
Retail and General Industry.....................	76.3	82.3	83.1	81.5	80.2	81.1	81.2	78.9	77.7	78.0	72.3	70.4	*70.1*	*72.0*	*71.6*
Total Demand [e]	876.5	895.4	902.9	899.1	907.4	943.5	950.1	962.0	1006.3	1030.1	1038.3	1045.3	*1079.4*	*1093.9*	*1099.8*
Discrepancy [f]	5.8	1.1	-3.5	-7.7	0.5	-7.0	3.9	-1.6	0.4	3.1	-6.7	-1.7	*1.1*	*-0.8*	*0.0*

[a] Primary stocks are held at the mines, preparation plants, and distribution points.

[b] Secondary stocks are held by users. It includes an estimate of stocks held at utility plants sold to nonutility generators.

[c] Estimated independent power producers (IPPs) consumption of waste coal. This item includes waste coal and coal slurry reprocessed into briquettes.

[d] Estimates 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 2000 and projections for 2001 and 2002 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).

[e] Total Demand includes estimated IPP consumption.

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

Notes: Rows and columns may not add due to independent rounding. 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
(Billion Kilowatt-hours)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Net Utility Generation															
Coal……………………………	1540.7	1553.7	1559.6	1551.2	1575.9	1639.2	1635.5	1652.9	1737.5	1787.8	1807.5	1767.7	*1692.3*	*1722.9*	*1731.2*
Petroleum ……………………	148.9	158.3	117.0	111.5	88.9	99.5	91.0	60.8	67.3	77.8	110.2	86.9	*72.6*	*102.5*	*76.0*
Natural Gas…………………	252.8	266.6	264.1	264.2	263.9	258.9	291.1	307.3	262.7	283.6	309.2	296.4	*289.8*	*271.9*	*283.1*
Nuclear………………………	527.0	529.4	576.9	612.6	618.8	610.3	640.4	673.4	674.7	628.6	673.7	725.0	*705.4*	*670.4*	*664.3*
Hydroelectric…………………	222.9	265.1	279.9	275.5	239.6	265.1	243.7	293.7	328.0	337.2	304.4	293.9	*247.5*	*248.3*	*268.1*
Geothermal and Other [a] ………………	12.0	11.3	10.7	10.1	10.2	9.6	8.9	6.4	7.2	7.5	7.2	3.7	*2.2*	*2.2*	*2.2*
Subtotal……………………	2704.3	2784.3	2808.2	2825.0	2797.2	2882.5	2910.7	2994.5	3077.4	3122.5	3212.2	3173.7	*3009.8*	*3018.2*	*3025.0*
Nonutility Generation [b] …………………	NA	187.6	216.7	246.3	286.1	314.4	343.1	363.3	369.6	371.7	405.7	554.7	*792.2*	*916.4*	*993.9*
Total Generation………………………	2704.3	2971.9	3024.9	3071.3	3083.4	3196.9	3253.8	3357.8	3447.0	3494.2	3617.9	3728.4	*3801.9*	*3934.6*	*4018.9*
Net Imports [c] ……………………………	31.8	11.0	2.3	19.6	25.4	27.8	44.8	39.2	38.0	36.6	27.6	30.6	*35.6*	*36.2*	*35.9*
Total Supply ……………………………	2736.0	2982.8	3027.2	3091.0	3108.8	3224.7	3298.6	3397.1	3485.0	3530.8	3645.5	3759.0	*3837.5*	*3970.8*	*4054.9*
Losses and Unaccounted for [d] ………………	NA	243.2	207.3	215.0	223.6	236.4	225.7	238.4	239.0	237.0	225.0	261.5	*214.5*	*264.9*	*270.2*
Demand															
Retail Sales [e]															
Residential…………………………	892.9	905.5	924.0	955.4	935.9	994.8	1008.5	1042.5	1082.5	1075.9	1130.1	1144.9	*1188.9*	*1223.5*	*1243.2*
Commercial…………………………	699.1	725.9	751.0	765.7	761.3	794.6	820.3	862.7	887.4	928.6	979.4	1002.0	*1035.6*	*1054.0*	*1080.1*
Industrial…………………………	896.5	925.7	945.5	946.6	972.7	977.2	1008.0	1012.7	1033.6	1038.2	1051.2	1058.2	*1078.7*	*1082.1*	*1102.2*
Other………………………………	89.6	89.8	92.0	94.3	93.4	94.9	97.8	95.4	97.5	102.9	103.5	107.0	*111.5*	*110.7*	*112.3*
Subtotal………………………	2578.1	2646.8	2712.6	2762.0	2763.4	2861.5	2934.6	3013.3	3101.1	3145.6	3264.2	3312.1	*3414.6*	*3470.2*	*3537.8*
Nonutility Use/Sales [f] …………………	NA	92.9	107.3	113.9	121.8	126.9	138.4	145.4	144.9	148.2	156.2	185.3	*208.4*	*235.7*	*246.8*
Total Demand………………………	NA	2739.7	2819.9	2875.9	2885.2	2988.4	3073.0	3158.7	3246.0	3293.8	3420.5	3497.4	*3623.0*	*3705.9*	*3784.6*
Memo:															
Nonutility Sales															
to Electric Utilities ………………………	NA	94.7	109.4	132.4	164.4	187.5	204.7	217.9	224.7	223.5	249.5	369.4	*583.8*	*680.7*	*747.1*

[a]Other includes generation from wind, wood, waste, and solar sources.

[b]Net generation.

[c]Data for 2000 are estimates.

[d]Balancing item, mainly transmission and distribution losses.

[e]Total 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 2000 are estimates.

[f]Defined as the difference between total nonutility electricity generation and sales to electric utilities by nonutility generators, reported on Form EIA 860B, "Annual Electric Generator Report - Nonutility"(1998 and 1999) and EIA-867, "Annual Nonutility Power Producer Report,"(prior to 1998). Data for 2000 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.

Sources: Historical data: Energy Information Administration: latest data available from EIA databases supporting the following report: *Electric Power Monthly*, DOE/EIA-0226 and Electric Power Annual,DOE/EIA-0348.
Projections: Energy Information Administration, Short-Term Integrated Forecasting System database, and Office of Coal, Nuclear, Electric and Alternate Fuels.