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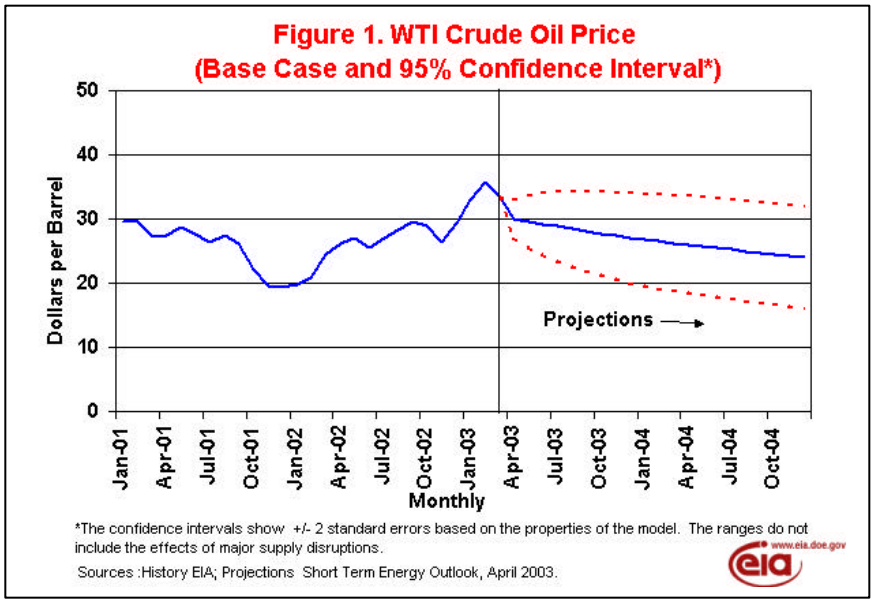
Energy Information Administration

Short-Term Energy Outlook

April 2003

Overview

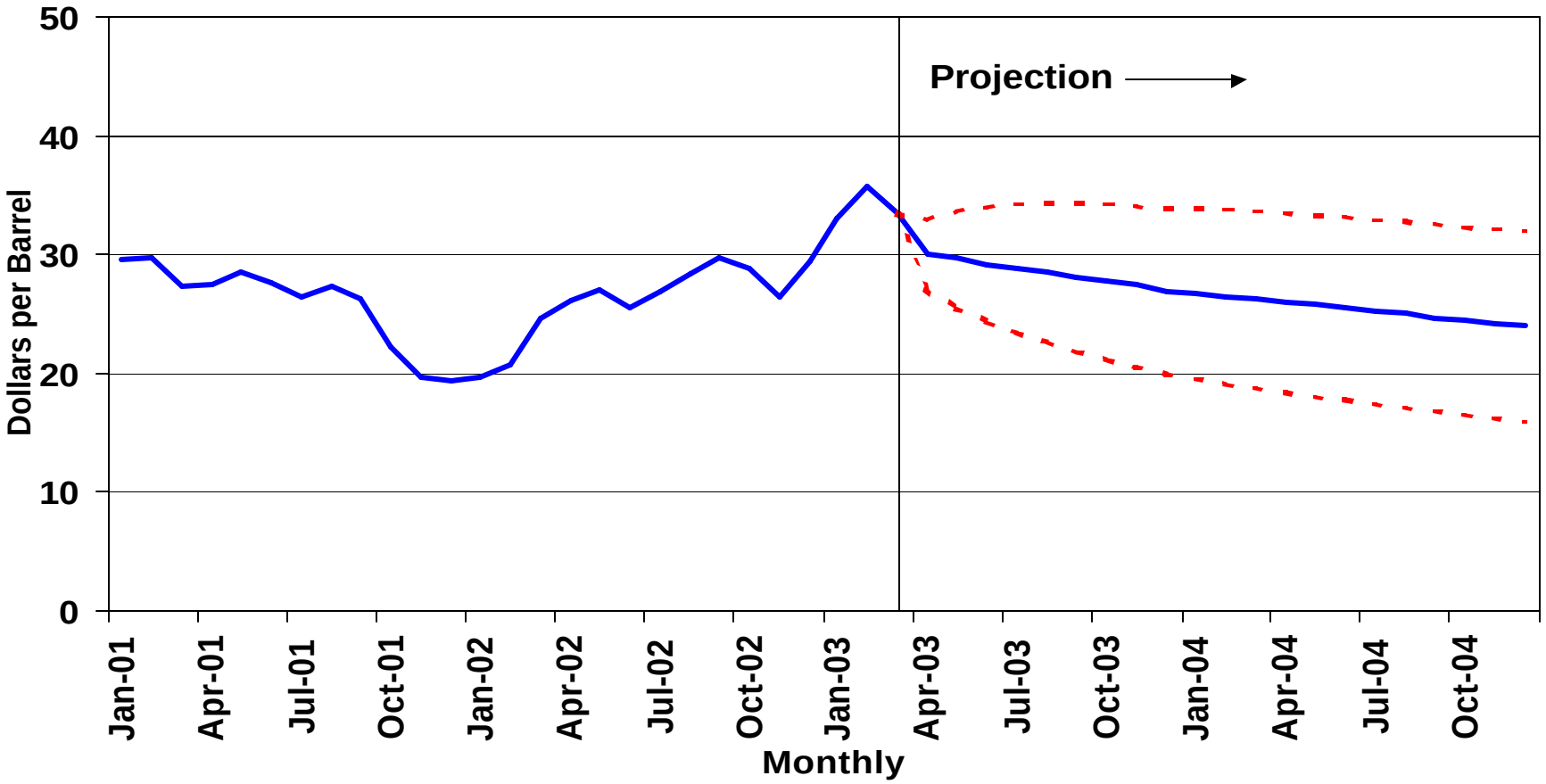


World Oil Markets. Crude oil prices fell sharply at the onset of war in Iraq, but the initial declines probably overshot levels that we consider to be generally consistent with fundamental factors in the world oil market. Thus, while near-term price averages are likely to be below our previous projections, the baseline outlook for crude oil prices (while generally lower) is not drastically different and includes an average for spot West Texas Intermediate (WTI) that is close to $30 per barrel in 2003 (Figure 1). The mix of uncertainties related to key oil production areas has changed since last month, as Venezuelan production has accelerated beyond previous estimates while Nigerian output has been reduced due to internal conflict. Meanwhile, Iraq is offline while the war continues and prospects for a return to normal production there are uncertain. As a result, if Organization of Petroleum Exporting Countries (OPEC) production remains near current levels, oil stocks are expected to remain quite low in the United States and the Organization of Economic Cooperation and Development (OECD) countries as a whole. Significant reductions in crude oil and petroleum product prices are thus not likely until late 2003 or early 2004.

U.S. Natural Gas Markets. The level of working natural gas storage is estimated at 696 billion cubic feet at the end of March, the lowest end-March level in EIA records, which stretch back to 1976. Working natural gas storage now is 42 percent below the previous 5-year average. In the Eastern and Producing regions, stocks are also at record lows. This means that between 2,200 and 2,300 billion cubic feet would have to be injected into storage between April 1 and the end of October to reach an aggregate level that is generally considered to be adequate for winter demand. That injection rate would rival the rate seen in 2001, which was the highest since at least 1976. Getting to normal storage before next winter will entail a combination of high spot prices during the spring and summer, strong natural gas drilling and development efforts and normal weather. The downside risks for storage would be a hot summer, poor natural gas drilling results, or continued tight oil markets, which would result in lower-than-normal inventories and the possibility of a new round of natural gas price spikes next winter.

Summer Motor Gasoline Outlook. For the upcoming summer season (April to September 2003), high crude oil costs, low motor gasoline inventories and growing gasoline demand are expected to yield a nominal average price for regular gasoline of $1.56 per gallon. In inflation-adjusted terms this is not a record (that honor is reserved for the summer of 1980 at $2.77 per gallon in today's dollars). Still, the projected price average for this summer would just about tie the summers of 2000 and 2001 for the highest real price since 1990. Gasoline inventories totaled 200 million barrels at the end of March, about 13 million

Figure 1. WTI Crude Oil Price
(Base Case and 95% Confidence Interval*)



**The confidence intervals show +/- 2 standard errors based on the properties of the model. The ranges do not include the effects of major supply disruptions.*

Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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barrels below year-ago and about 6 million barrels above the recent low seen in 2001. The inventory situation could worsen somewhat by the end of the current quarter as gasoline demand begins to increase. Comparatively high average gasoline refiner margins are expected to prevail through most of the driving season, adding to wholesale and retail price pressures above those stemming from high crude oil prices. Details on the summer gasoline outlook are provided in this month's special report: *Summer 2003 Motor Gasoline Outlook.*

MTBE Bans and Motor Gasoline Markets. The U.S. is beginning the summer 2003 driving season with low gasoline inventories and relatively high prices. Recovery from this tight gasoline market could be made more difficult by impending State bans on the blending of methyl tertiary butyl ether (MTBE) into gasoline that are scheduled to begin later this year.

Three impending state bans may significantly affect gasoline markets this year. The Connecticut ban takes effect on Oct. 1, 2003, while California and New York bans follow on Jan. 1, 2004. It is the California ban that presents the most immediate concern. Because the original date of the California ban was Jan. 1, 2003, several California refiners have reported plans for the early phaseout of MTBE in favor of ethanol. Once facilities and systems have switched from MTBE to ethanol it is generally not possible to quickly revert back.

The State MTBE bans contribute to a projected increase in the average price of reformulated gasoline (RFG) of 3.6 cents per gallon in 2004, with an increase in the average national motor gasoline price of 1.8 cents per gallon, compared to a reference case with no state MTBE bans (Energy Information Administration, *Renewable Motor Fuel Production Capacity Under H.R.4*, Washington, DC, September 2002, http://www.eia.doe.gov/oiaf/servicerpt/fuel/pdf/question2.pdf). Although state-level projections are not available, it is generally expected that the increase in RFG prices in California, New York and Connecticut would be significantly higher than the national average. For example, the expected RFG price increase in PADD V, which is likely to be 100 percent ethanol by the end of 2004, is 9 cents per gallon.

Unfortunately, price increases driven by temporary supply constraints could eclipse these projections. For example, the Chicago market had effectively phased MTBE out of RFG by the end of 1998. When the Federal Phase 2 RFG program, which required significant reductions in volatile organic compound (VOC) emissions and gasoline vapor pressure (Rvp), began in 2000, retail gasoline prices in the Chicago area increased by as much as 35 cents per gallon over the national average RFG price during the following summers. Because the West Coast gasoline market is so tightly balanced between supply and demand and supplemental supplies of California's unique gasoline formulation must come from distant and nontraditional sources, this market has also been prone to volatile product prices over the last few years. The MTBE ban adds another constraint to California's gasoline supply capabilities.

For a more comprehensive analysis of the scheduled state MTBE bans and their potential market effects refer to the companion report, *Motor Gasoline Outlook and State MTBE Bans* (http://www.eia.doe.gov/emeu/steo/pub/special/mtbeban.html)

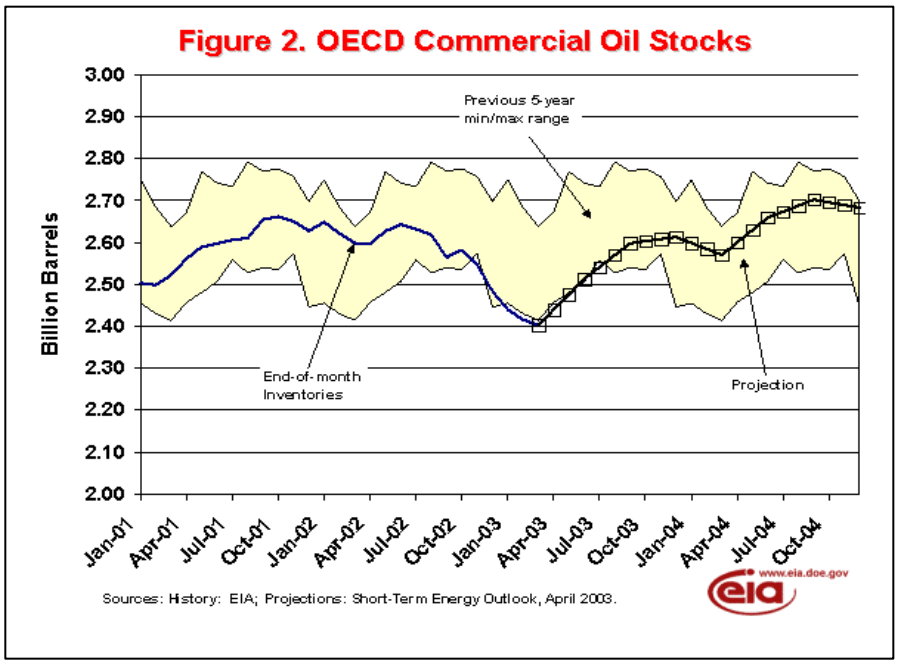
Details

International Oil Markets

Crude Oil Prices. Average crude oil prices for March fell about $2-$3 per barrel from the February average as spot prices declined at the onset of war in Iraq. West Texas Intermediate (WTI) prices averaged about $33.50 per barrel in March but oscillated around the $30 per barrel mark in late March and early April (Figure 1), reflecting shifting perceptions about the progress of the Iraq War and uncertainty about the

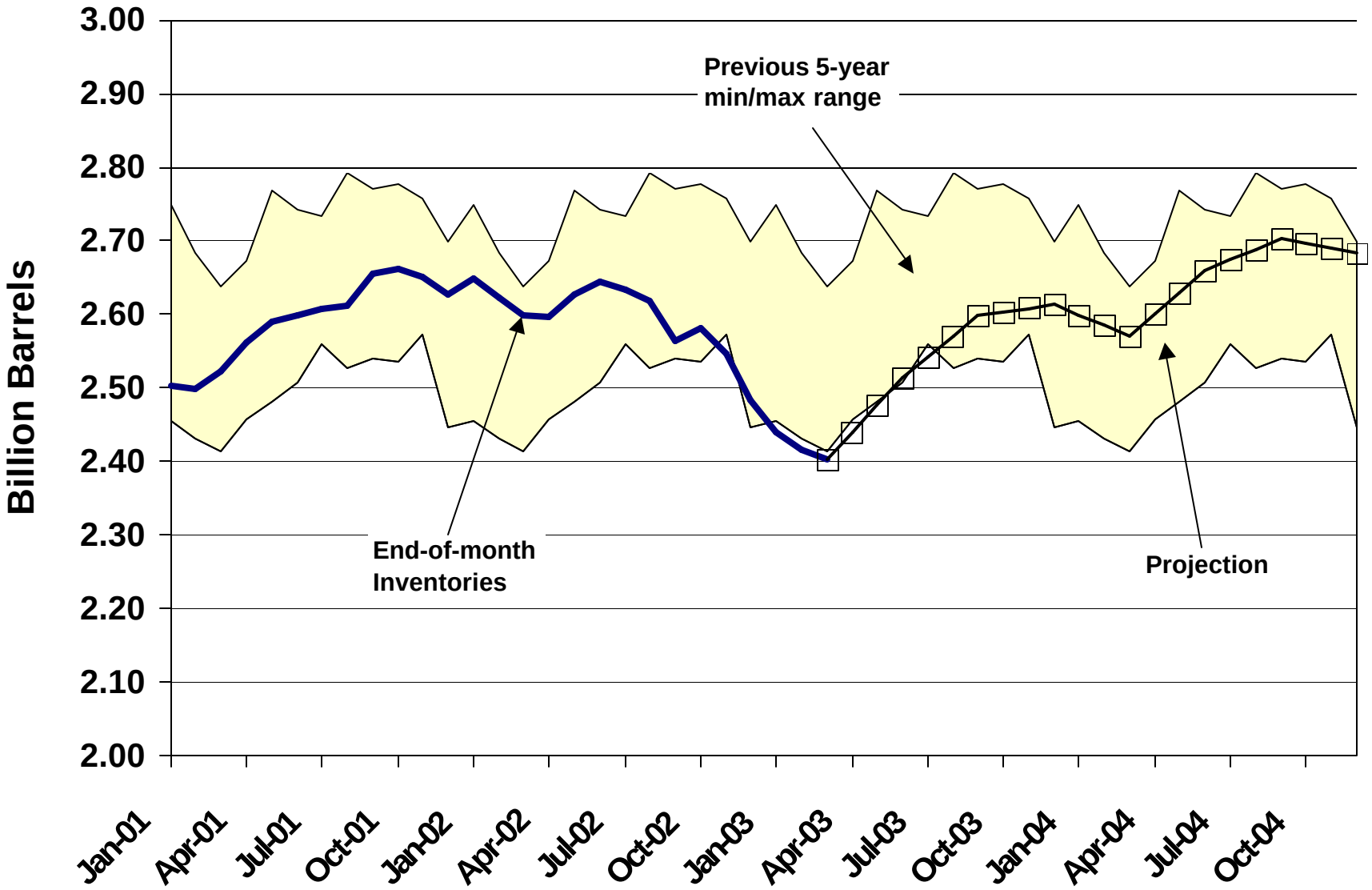
situation in Nigeria, where a substantial portion of that country's oil output (about 800,000 barrels per day) has been shut in due to ethnic conflict in the Niger Delta. Despite lower output in Iraq, Nigeria and Venezuela, other producers have raised current total OPEC crude production to 26.3 million barrels per day but left less than 1 million barrels per day in global excess capacity. A simultaneously prolonged loss of oil production from Iraq and Nigeria could present a challenge to the remaining producers to support efforts to both meet demand and rebuild stocks. Uncertainty about this issue makes the current oil market appear to be almost as tight as it did a month ago, when our baseline outlook assumed no war or loss of Iraqi crude. For the time being then, we assume that the WTI price will average about $30 per barrel in April and gradually slide toward about $27 per barrel by the end of 2003 as both the Nigerian and Iraqi situations are assumed to be resolved (Figure 1). Supply side uncertainties with regard to Iraq, Nigeria and Venezuela make projecting the price path for the remainder of 2003 highly uncertain.

International Oil Supply. OPEC crude oil production increased by about 0.56 million barrels per day (mmbd) to 27.65 mmbd in March, led by increases in Saudi (+0.7 mmbd), Kuwaiti (+0.3 mmbd) and UAE (0.15 mmbd) output, in addition to the 0.9 mmbd estimated increase in Venezuelan production. Without further increases in these countries (and they are running close to capacity now) OPEC production is expected to fall in April since a full month of little or no production from Iraq and lower average production from Nigeria is likely. However, year-over-year increases of 1.8 mmbd for OPEC crude oil production are still expected for the second quarter (albeit from low 2002 levels). That, combined with an expected aggregate increase in non-OPEC supply in 2003 of 1.2 mmbd would most likely bring steady improvement in the domestic and global oil inventory position. Our baseline projections include a total world oil supply increase in 2003 of 2.4 mmbd, which is expected to allow for a global stock build this year. In the baseline, commercial OECD stocks improve (Figure 2) from the 2.40 million barrels estimated for the end of March (near the bottom of the previous 5-year min/max range) to 2.62 million barrels at the end of December (near the middle of the previous 5-year min/max range). Until it is clear that this kind of progress is actually being made, however, a sustained easing of market prices to more normal levels is likely to be gradual.



International Oil Demand. EIA projects that the U.S. economy will grow by 2.6 percent in 2003 (compared to 2.4 percent growth in 2002) contributing to the recovery of U.S. oil demand. About 40 percent of the 1.1 million barrels per day growth in world oil demand in 2003 is projected to come from the U.S., with China and other non-OECD countries projected to provide a total of another 0.5 million barrels per day of demand growth next year. As world economic growth continues in 2004, led by a projected 4.2 percent per year increase in the U.S. economy, world oil demand growth could increase by as much as 1.4 million barrels per day (Figure 3).

Figure 2. OECD Commercial Oil Stocks



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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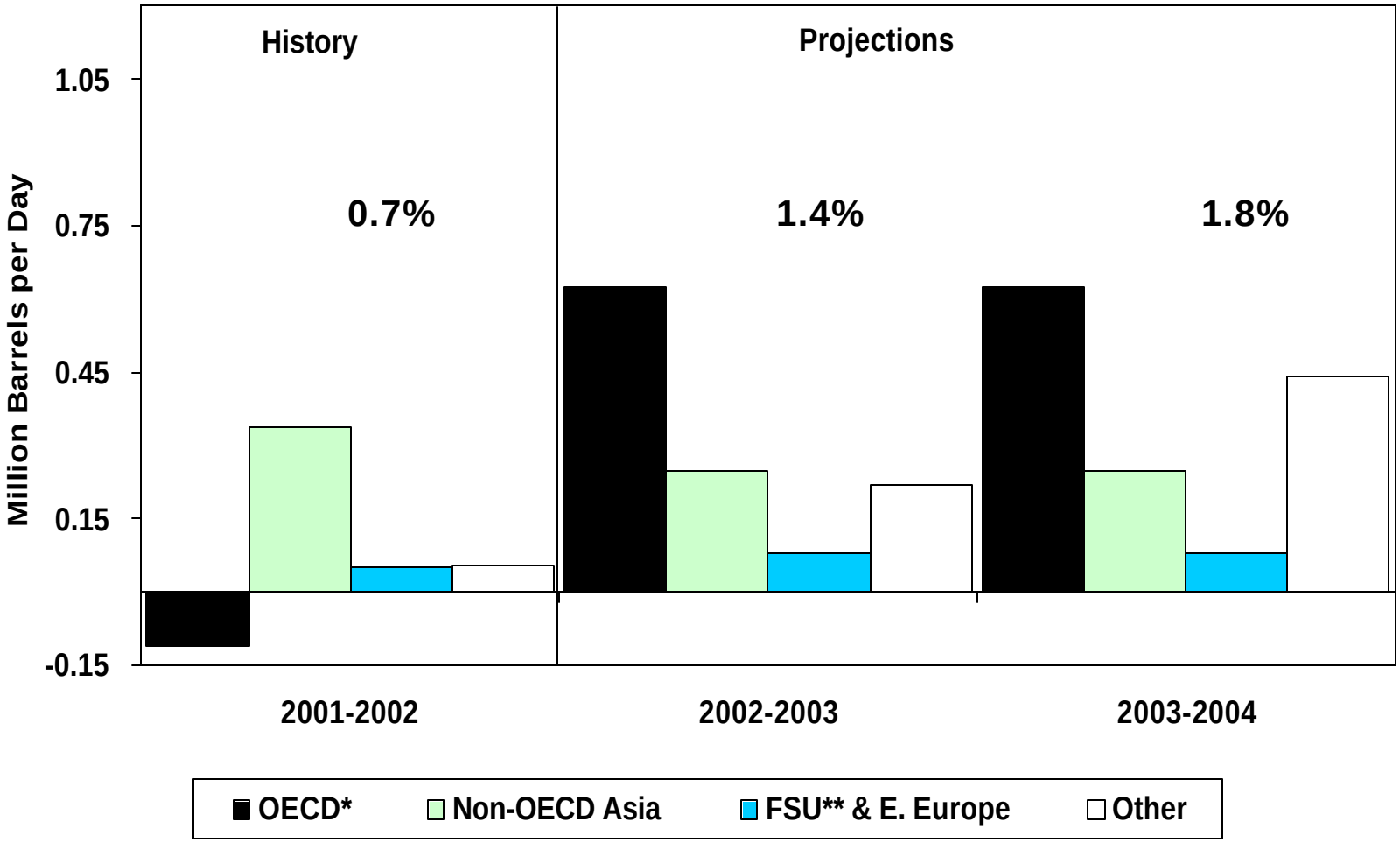
Figure 3. World Oil Demand Growth
(Change from Year Ago)



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

** FSU = Former Soviet Union

Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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U. S. Energy Prices

The average WTI crude oil price for March 2003 of $33.51 per barrel was about $10 per barrel higher than the March 2002 average price. For the first quarter of 2003, the average price was about $13-14 per barrel higher than the quarter one year ago. Much of this increase is being passed on through to the end-use products.

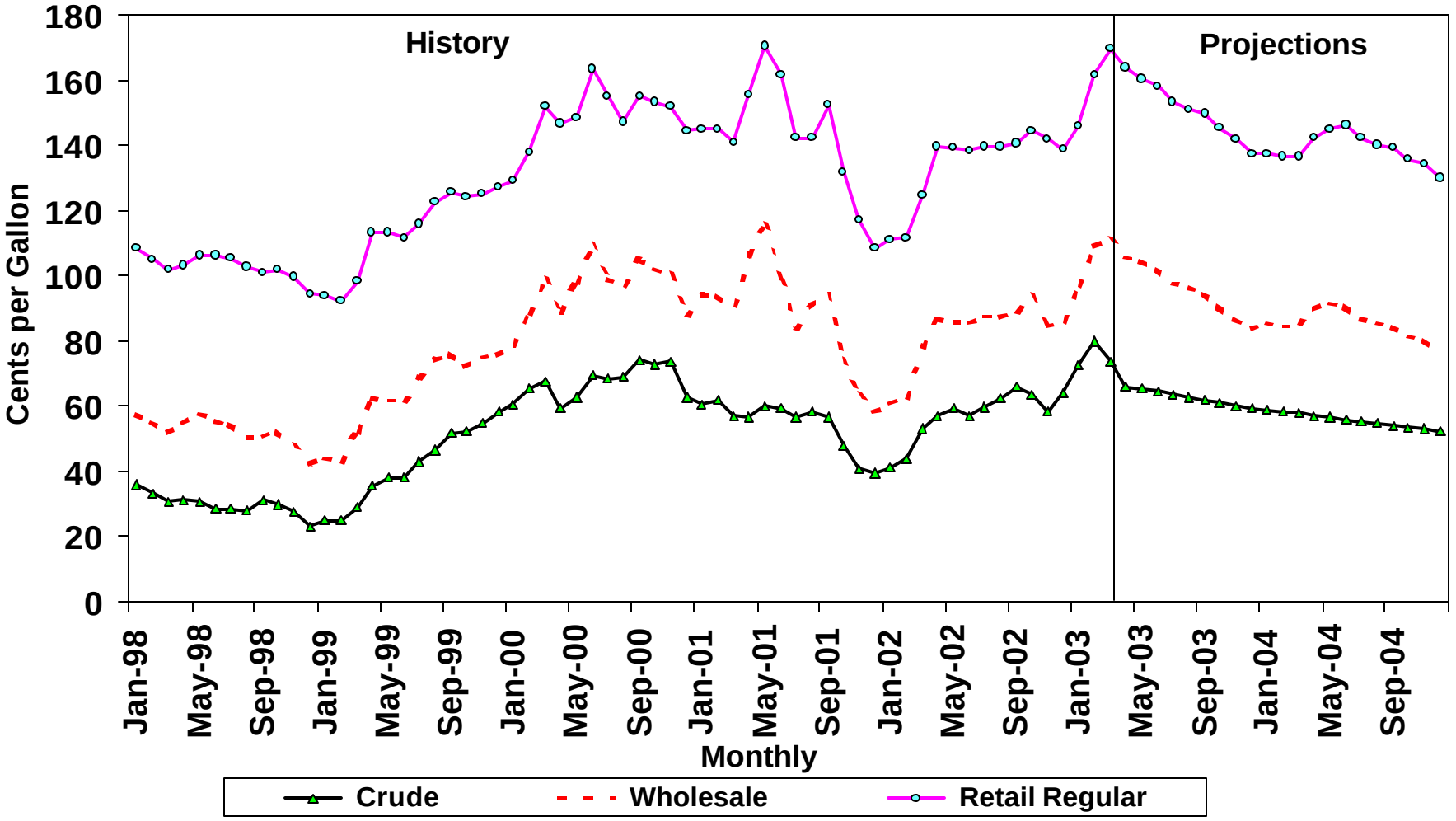
Motor Gasoline: The weekly motor gasoline price (regular, self service) reported on March 17 of $1.73 per gallon this year was the highest U.S. average weekly gasoline price on record. (It bears noting that, adjusted for inflation, this price pales compared to the all-time record March 1981 price of nearly $2.90 per gallon expressed in today's dollars). With the driving season beginning next month, pump prices would normally be expected to continue to rise. However, crude oil prices have tumbled by more than $5.00 per barrel during the second half of March. If these crude prices remain at current levels over the next several weeks, the impact should be felt at the pump. If crude oil prices continue to recede from those recent highs of February and early March, we would expect to see regular motor gasoline pump prices on their way down, averaging about $1.56 per gallon during the driving season (April through September), with monthly average prices having peaked at about $1.69 this past March (Figure 4). Refiner margins (the difference between the refiner price of gasoline and the refiner acquisition cost of crude oil), which were slim this past summer, are expected to see big gains over this next two driving seasons, as demand for gasoline rises and as the cost of producing gasoline increases (Figure 5).

At the end of March, gasoline inventories moved toward the lower end of the 5-year min/max range (Figure 6), which is one of the reasons current pump prices are high. Given our base case crude oil price projections, pump prices are expected to increase by 18 cents per gallon on an annual basis to $1.53 per gallon in 2003, compared with $1.49 in 2000 and $1.43 in 2001. This projection is partly indicative of the projected rebound in refiner margins from relatively weak levels last year. In 2004, the annual average pump price is projected to decline by about 15 cents per gallon, falling along with the expected $4.50 per barrel (10 cents per gallon) drop in crude oil prices and some easing of refiner margins, compared to the gains likely to be experienced this summer.

Particular attention should be focused on the California gasoline market. In addition to the normal market mechanisms that affect the price of gasoline, the California gasoline market will also be affected by the gradual phaseout of MTBE (methyl tertiary butyl ether). This fuel additive is being eliminated from California gasoline and being replaced with ethanol. This transition is expensive and has contributed to the price of motor gasoline in California being about 50 cents per gallon higher than the average price of gasoline for the rest of the nation. Over time, market supply adjustments and improved economies of scale in the refining and blending processes should narrow the current price differences.

Distillate Fuel Oil (Diesel Fuel and Heating Oil): Diesel fuel prices, which are tied to heating oil prices, particularly during the winter, are likely to have reached their zenith for the year in March at $1.71 per gallon. With the end of winter, both heating oil prices and diesel fuel prices have fallen and will most likely continue down, given our base case crude oil path. Interestingly, both diesel and heating oil prices peaked in March -- normally they peak during January or February, during the heart of winter. However, the elevated crude oil prices and the late-in-the-season cold weather, which depleted distillate inventories, drove all distillate fuel prices to lofty levels. In addition, fuel switching from natural gas in the electric utility and industrial sectors is suspected of contributing to strength in the No.2 fuel oil market since natural gas has been very expensive and in short supply. At the end of March, distillate fuel oil inventories were at about 97 million barrels, a figure just above the lower band (96 million barrels) of the 5-year min/max range (Figure 7). The heating oil price spike in the first quarter of 2003, a higher crude oil price path projected for the year, plus continued low levels of distillate stocks throughout the year are factored into EIA's estimate that annual average retail prices for both heating oil and diesel fuel in 2003 will be about 25 cents per gallon higher than in 2002 (Figure 8).

Figure 4. Gasoline Prices and Crude Oil Costs



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003

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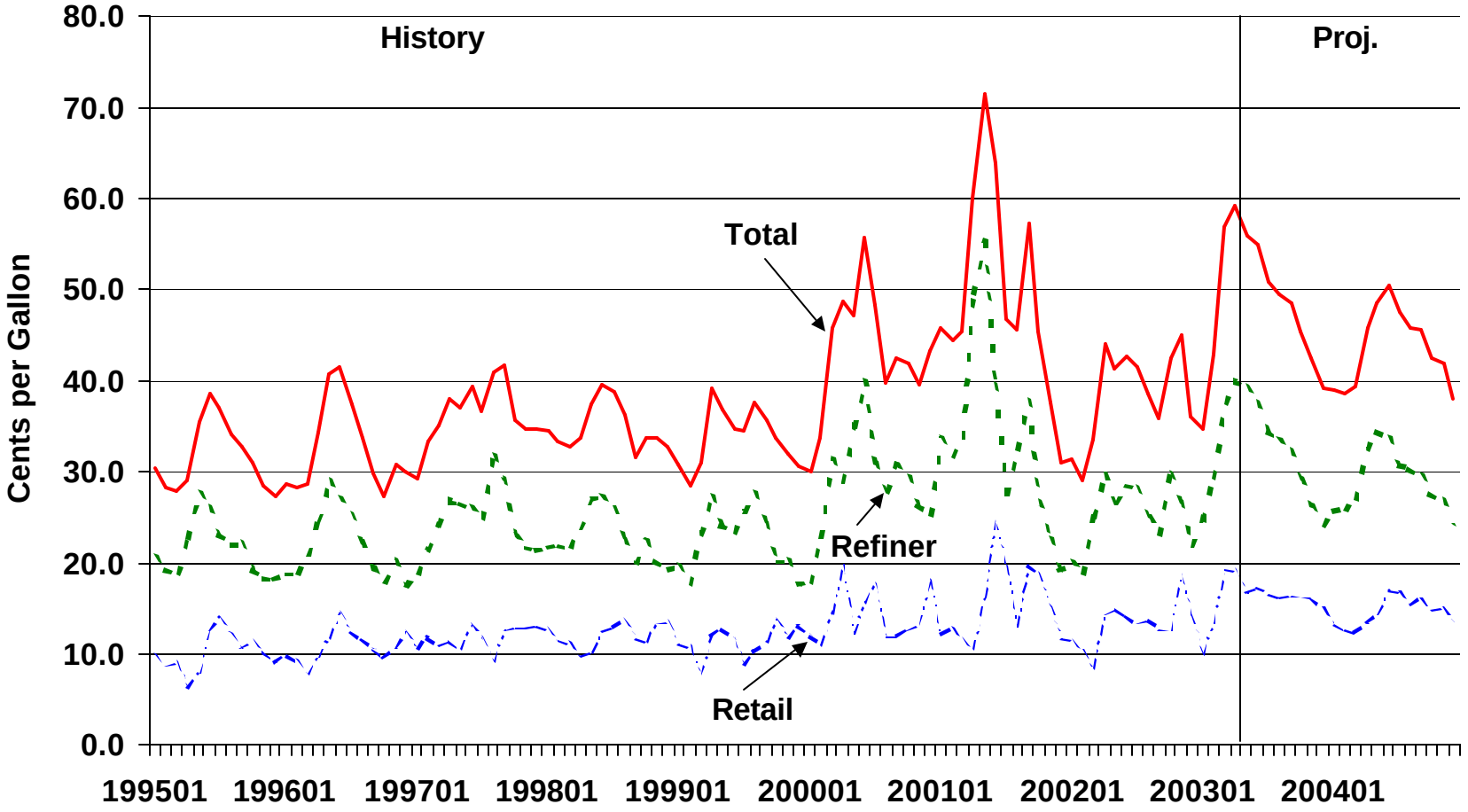
Figure 5. Motor Gasoline Spreads



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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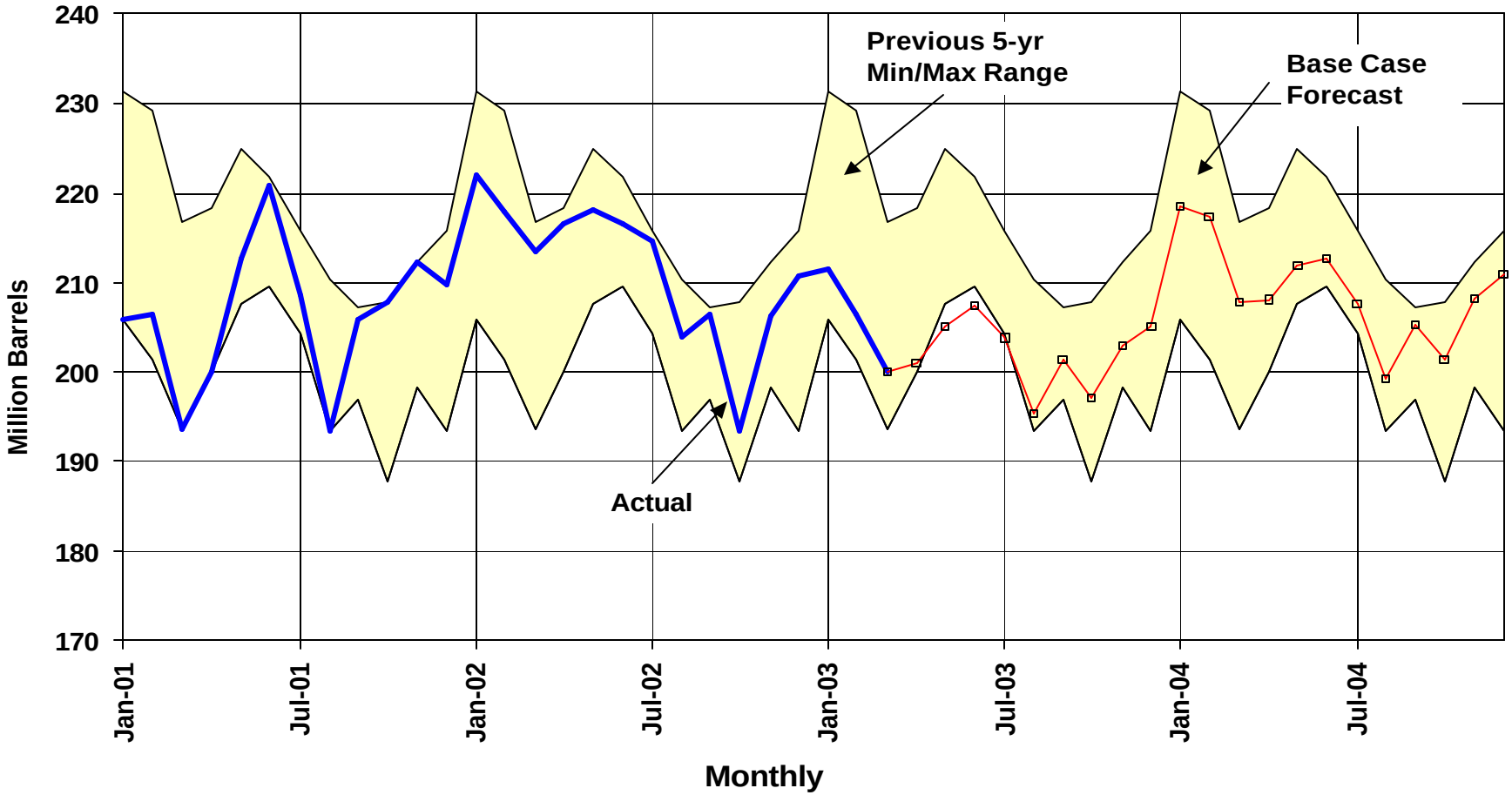
Figure 6. U.S. Gasoline Inventories



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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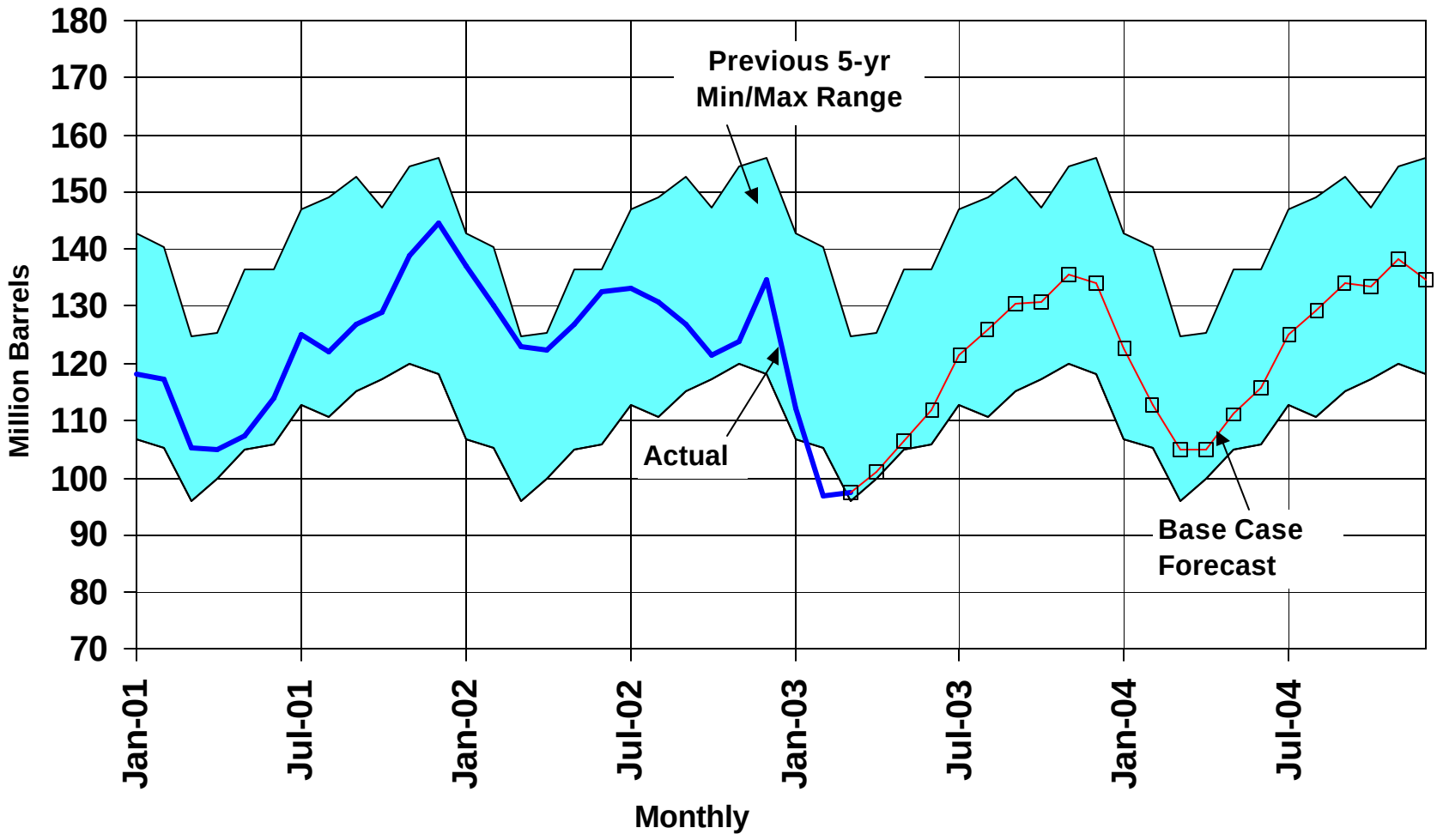
Figure 7. Distillate Fuel Inventories



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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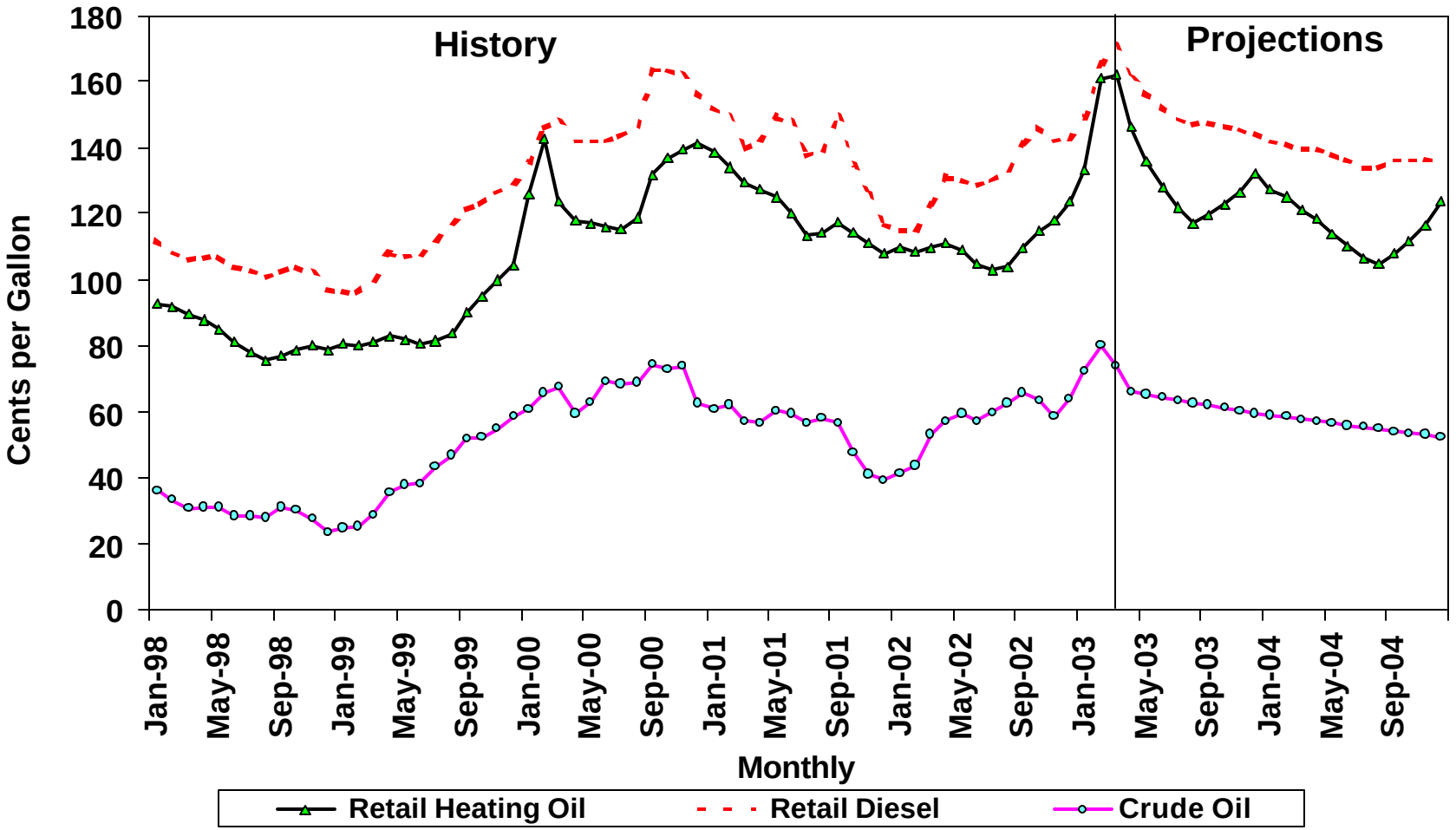
Figure 8. Distillate Fuel Prices



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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Natural Gas: Now that the heating season has ended, the spot price of natural gas at the wellhead has declined significantly from the exceptionally high levels seen in February. Nevertheless, they still remain historically and unseasonably high, hovering around $5.00 per million btu as underground natural gas storage hit new lows for the end of March. Natural gas prices will likely stay above $4.00 per million through the entire year. Cold weather during the end of the winter diminished underground storage to historically low levels for this time of the year (Figure 9). By the end of March, working natural gas in storage stood about 54 percent below end-March 2002 and 42 percent below the previous 5-year average. With the commencement of the injection season, there exists a large deficit of natural gas in storage that has to be replenished if we are to see prices below $4.00 by the next heating season. However, prices have eased recently as net injections into storage were positive during the last two weeks of March. Cool summer weather and falling crude oil prices could relieve storage pressures, but the reverse also holds. Hot summer weather, in regions of the country where electricity generation depends on natural gas, could lower needed high storage injections and prices could once again soar above $6.00 during the heating season.

This past winter, natural gas wellhead prices averaged about $4.36 per thousand cubic feet (mcf), about $1.80 above last winter's price. In 2003, wellhead prices are projected to show an increase of about $1.57 per thousand cubic feet over the 2002 annual average, boosting the price for the year to about $4.52 per thousand cubic feet. This projection is based on the expectation of lower volumes of underground natural gas in storage for all of this year compared with last year.

U. S. Oil Demand

Total annual U.S. petroleum demand is projected to increase an average of about 500,000 barrels per day, or 2.5 percent, per year between 2002 and 2004 (Figure 11). In contrast to the volatile demand patterns seen in 2002, all of the major fuel categories are expected to contribute to that growth. Continued moderate economic recovery, the assumption of normal weather patterns and increasing supply / demand tightness in natural gas markets are all expected to contribute to the rise in petroleum demand.

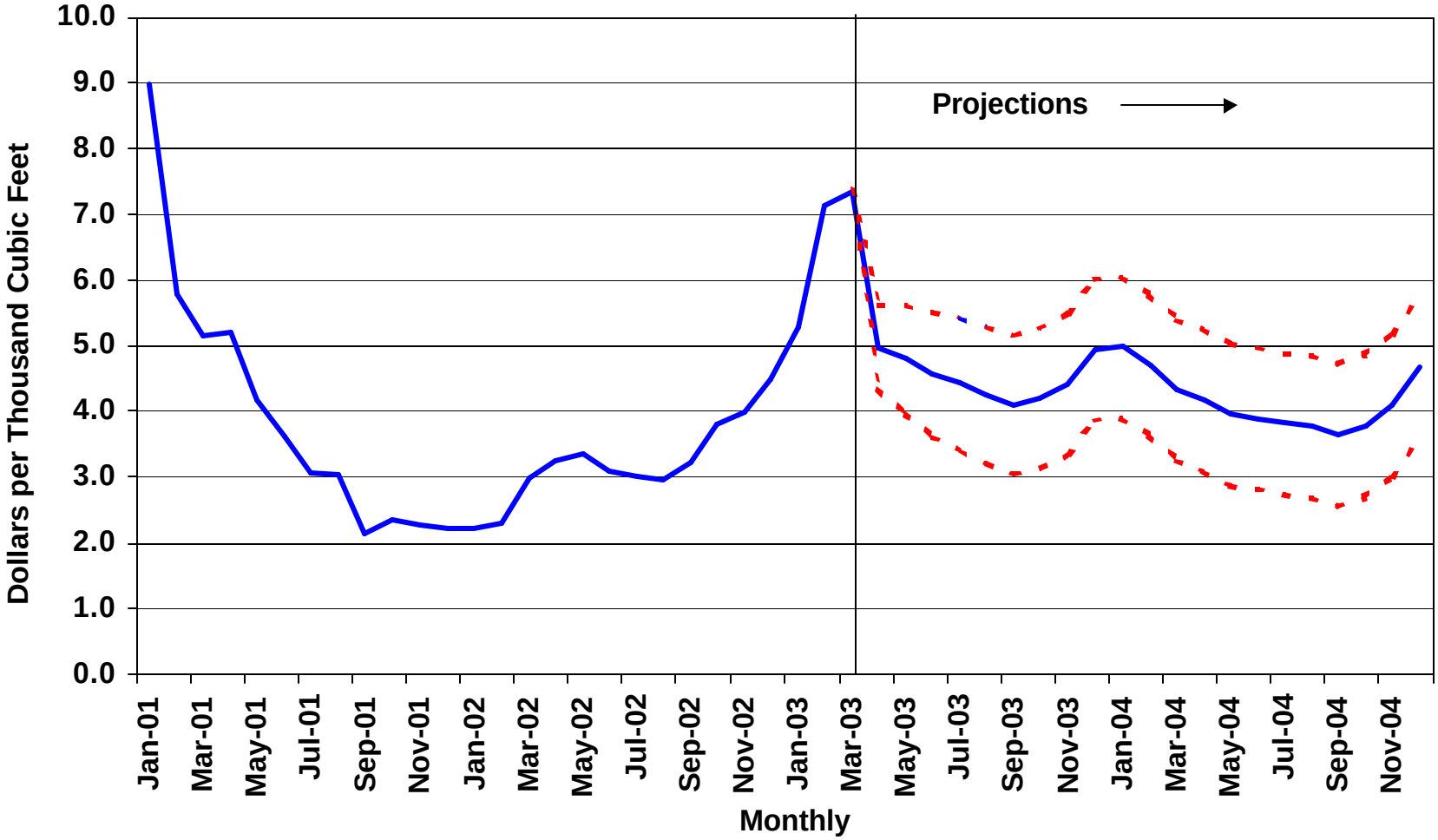
Motor gasoline demand is projected to increase at an average of 2.3 percent per year between 2002 and 2004, reflecting average growth of 1.8 percent in vehicle miles traveled and continued losses in fleetwide fuel efficiencies brought about by continued consumer preference for large vehicles. Reflecting trends over the past several years, growth in highway travel is substantially less than the 3.6-percent projected average annual growth in real disposable income. It should be noted that the almost 13-percent increase in retail prices is expected to constrain growth in motor fuel demand in the current year.

Commercial jet-fuel demand is projected to rise at an annual average of only 1.6 percent between 2002 and 2004, reflecting the current temporary curtailments of overseas flights by major carriers and continued fleet-wide fuel efficiency growth. Distillate fuel oil demand, boosted by accelerating growth in industrial output, is expected to increase at an annual average rate of 3.8 percent. It should be noted, however, that the 6-percent increase projected for the current year stems in part from the substantial declines in both weather- and transportation-related demand in 2002. Residual fuel oil deliveries are projected to grow to 715,000 barrels per day in 2003 on the strength of first quarter demand then fall slightly in 2004. Liquefied petroleum gas demand growth during the forecast interval is projected to average 2.3 percent, reflecting continued growth in petrochemical demand and the decline in feedstock prices, especially in 2004.

U.S. Oil Supply

Average domestic oil production in 2003 is expected to decrease by 66,000 barrels per day, or 1.1 percent, to a level of 5.75 million barrels of oil per day. For 2004, a 2.4 percent decrease is expected, resulting in a production rate of 5.61 million barrels of oil per day average for the year (Figure 12).

Figure 9. Natural Gas Spot Prices
(Base Case and 95% Confidence Interval*)



**The confidence intervals show +/- 2 standard errors based on the properties of the model. The ranges do not include the effects of major supply disruptions.*

Sources: History: Natural Gas Week; Projections: Short-Term Energy Outlook, April 2003.

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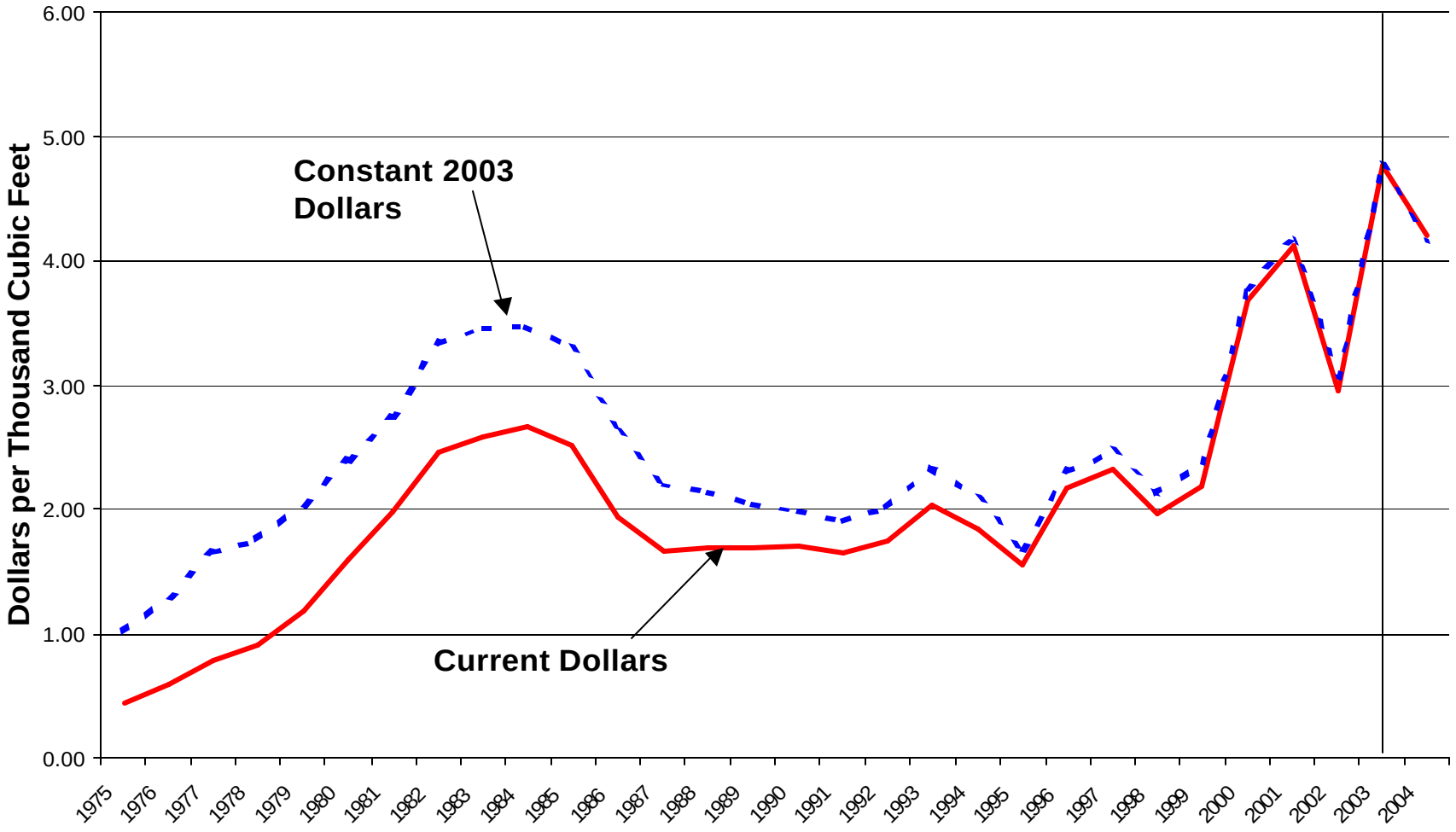
Figure 10. Annual Natural Gas Wellhead Prices: Nominal and Real



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003

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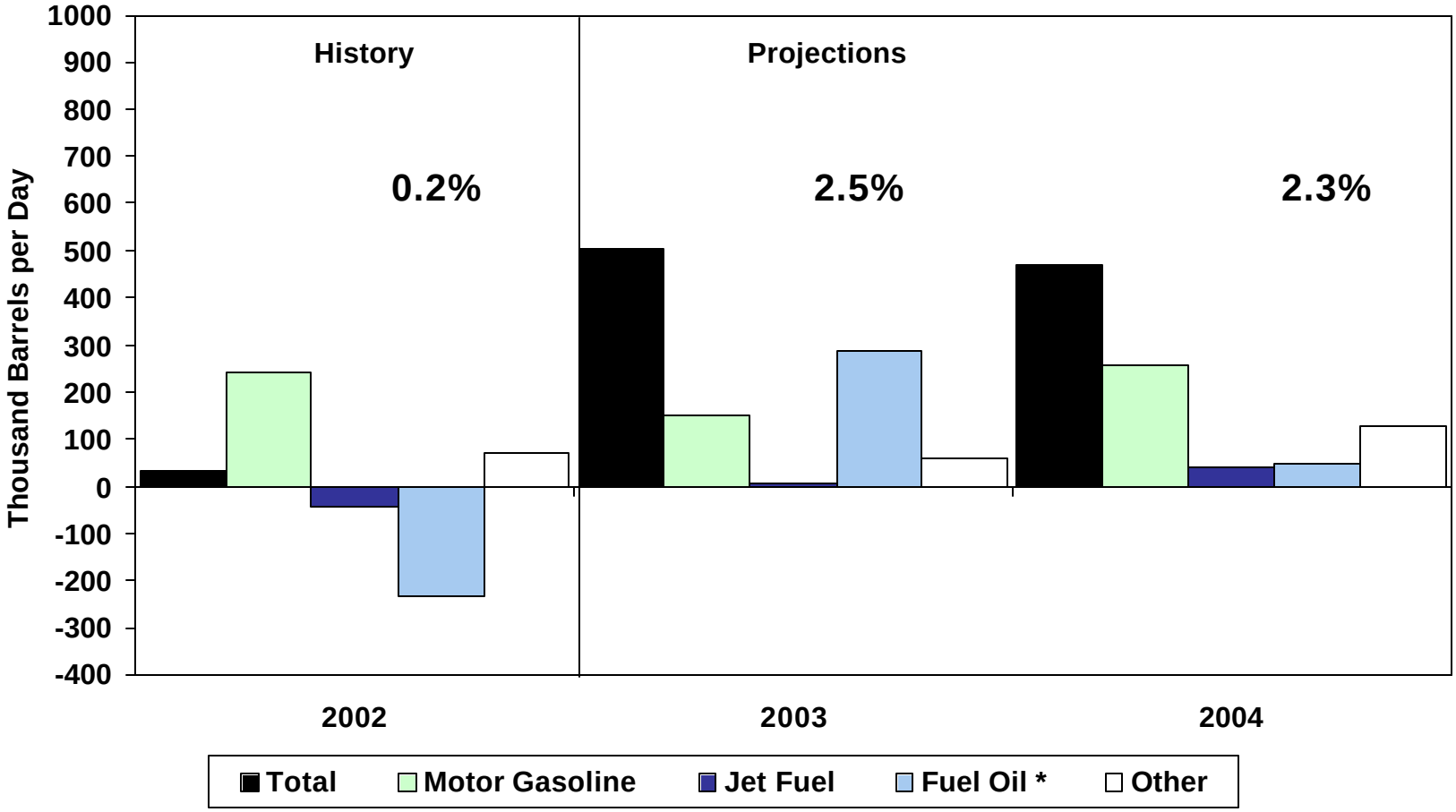
Figure 11. Petroleum Products Demand Growth
(Change from Year Ago)



* Sum of distillate and residual fuel.

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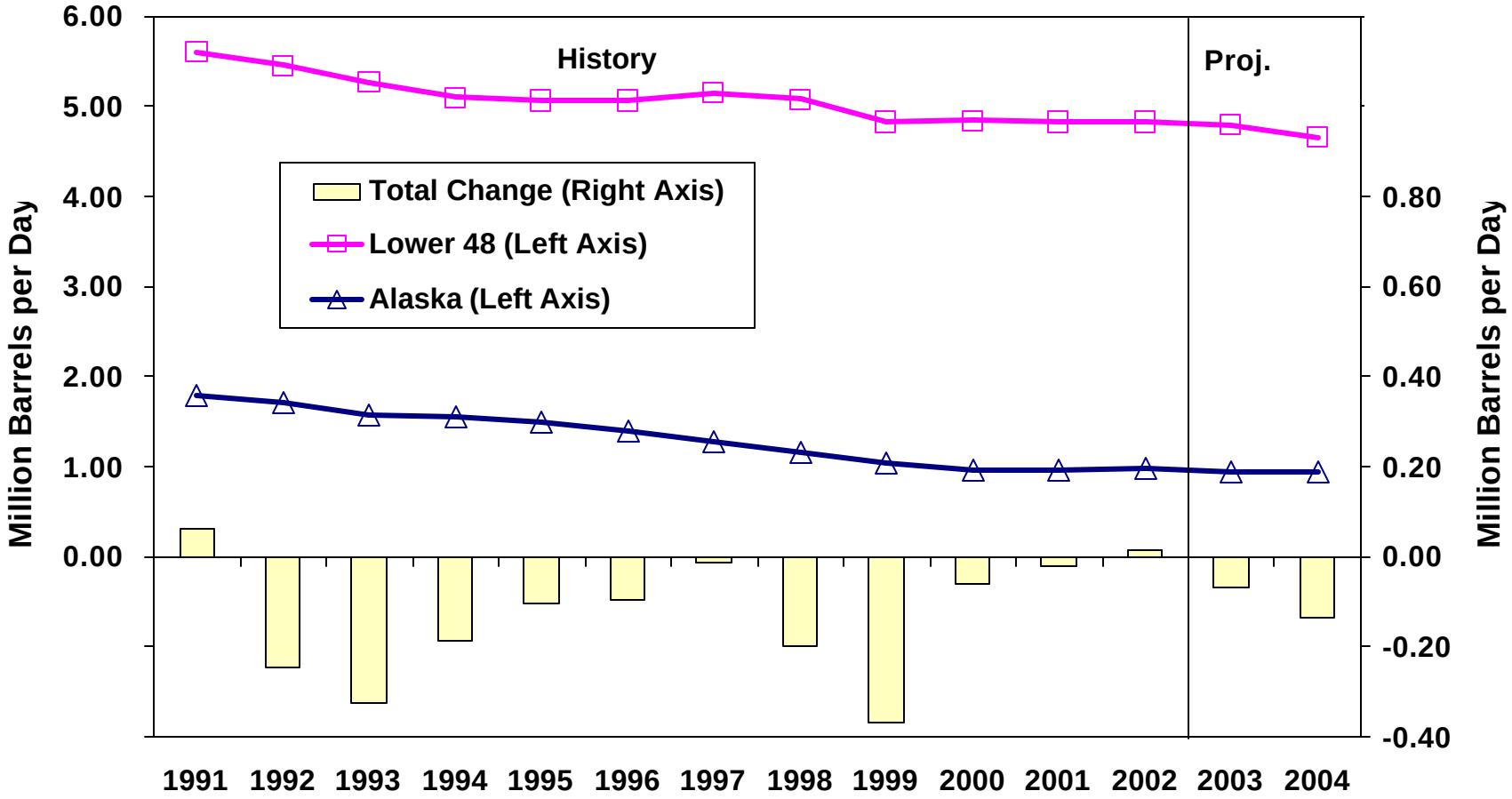
Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

Figure 12. U.S. Crude Oil Production Trends



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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Lower-48 States oil production in 2003 is expected to decrease by 37,000 barrels per day to a rate of 4.80 million barrels per day, followed by a 129,000 barrels per day decrease in 2004. Oil production from the Mars, Mad Dog, Ursa, Dianna-Hoover and Federal Offshore fields is expected to account for about 8.3 percent of lower-48 oil production by the 4th quarter of 2004. Alaska is expected to account for 16.9 percent of total U.S. oil production in 2004. Alaskan oil production is expected to decrease by 3.0 percent in 2003 and decrease by 0.7 percent in 2004.

The Baker Hughes rig count for 2001 averaged 1158, but fell to 830 in 2002. EIA expects the rig count to increase to an average of 1067 in 2003, and recover to 1157 in 2004.

Domestic oil production for the low oil price case is expected to decline by about 6.1 percent in 2003 followed by a 3.9 percent decline in 2004. In the high oil price case, domestic oil production is expected to increase by 3.3 percent in 2003 and decrease by 1.8 percent in 2004. The difference between the low and high price cases in 4th quarter oil production in 2003 is expected to be 601,000 barrels per day, and the difference between these two cases in 2004 is expected to be 730,000 barrels per day.

Natural Gas Supply and Demand

Despite high natural gas prices, growth in natural gas demand of 2.7 percent is projected in 2003, particularly if the industrial sector as a whole expands as expected (Figure 13). Sharply higher weather-related demand is already a fact for first quarter 2003 – while the economy rose by 2.2 percent, natural gas demand was up by 6.7 percent, primarily weather-related. In 2004, natural gas demand is projected to continue to rise as industrial demand continues its recovery from its 2002 lows.

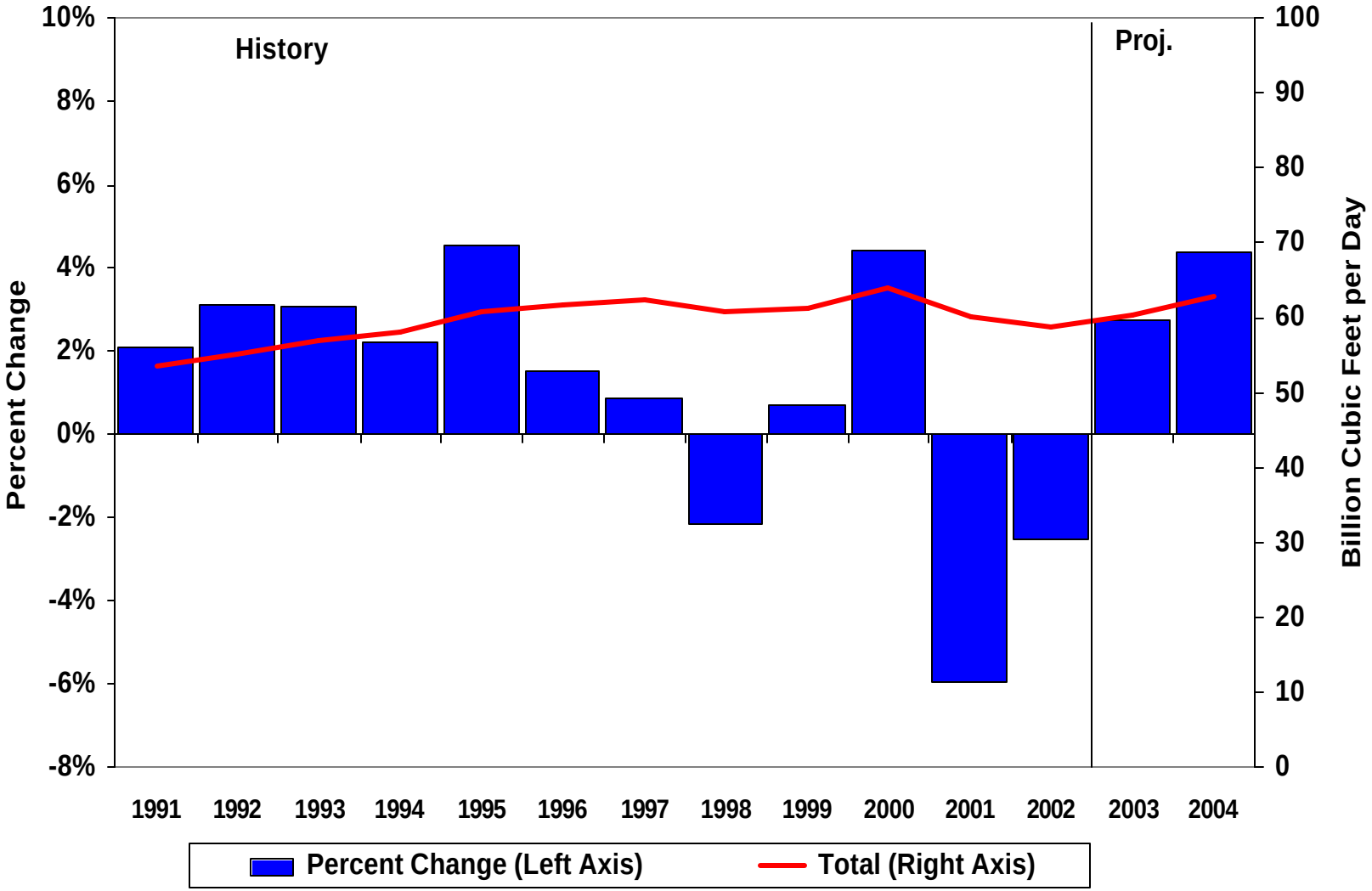
Natural gas demand this summer is expected to be about even with last summer's level. This is largely due to summer weather effects (in the power sector) offsetting growth in the industrial sector. Cooling degree-days for the season (Q2 2003 and Q3 2003) under our assumption of normal weather will be close to 10 percent below year-ago levels. In the event of a hotter than normal summer, natural gas prices would jump as cooling demand would compete with the need to build storage inventories.

Working natural gas in storage fell to about 696 billion cubic feet (bcf) at the end of March, about 54 percent below the year-ago level (Figure 14). This is the lowest aggregate inventory level for the end of March recorded by EIA. Eastern and producing regions stocks, in particular, are at record lows. Demand for natural gas to refill working gas storage in 2003 will be larger than average, which means that price volatility can be expected to continue due to tight market conditions. However, storage injections were already started by mid-March due to generally warmer temperatures. This marks the earliest start to the refill season since 1994.

The average pipeline price for natural gas going into New York City was $8.81 for the month of March, another monthly average price record, following the $9.94 seen last month. These price levels have not been seen since January 2001, when the last serious domestic natural gas crunch occurred (Figure 15).

Natural gas production, which fell by about 2.6 percent in 2002, is projected to increase by 1.5 percent this year. High natural gas prices and soaring oil and higher natural gas field revenues are expected to drive a resurgence in natural gas-directed drilling activity this year following a downturn in 2002 (Figure 16). Monthly oil and natural gas field revenues are expected to continue to be over $400 million this spring (Figure 17). A continuation of demand growth and high prices would be expected to push natural gas drilling totals even higher in 2004. Domestic production growth should continue to grow in 2004 but, given recent experience, the extra effort might result in increases of less than 2 percent. The prospects for significant reductions in natural gas wellhead prices over the forecast period from the current high levels

Figure 13. Total Natural Gas Demand Growth Patterns



Note: This chart replaces a previous Figure 12 because of revised data for April 2003.

Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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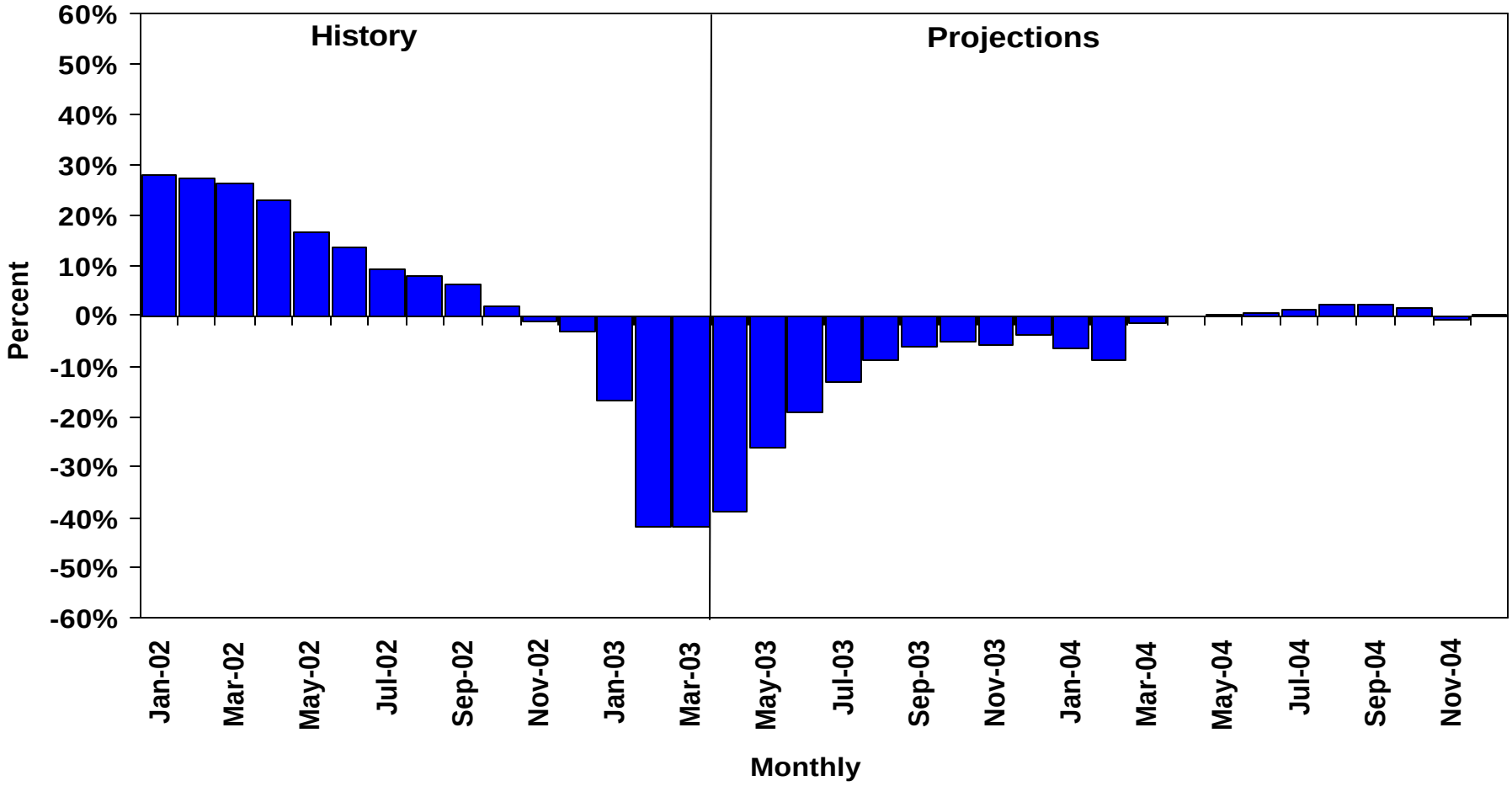
Figure 14. Working Gas in Storage
(Difference from Previous 5-Year Average)



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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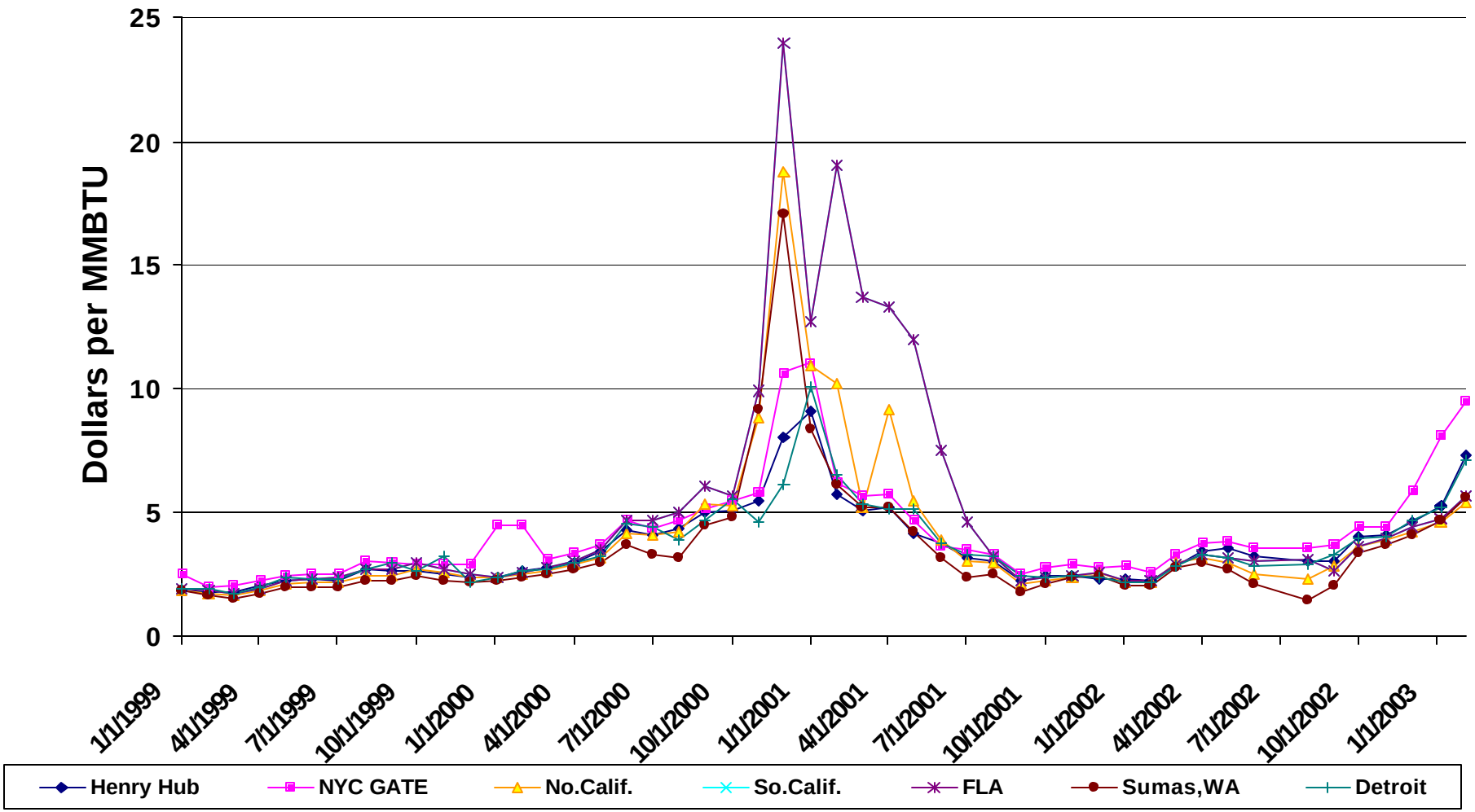
Figure 15 . Selected Natural Gas Spot Prices



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003

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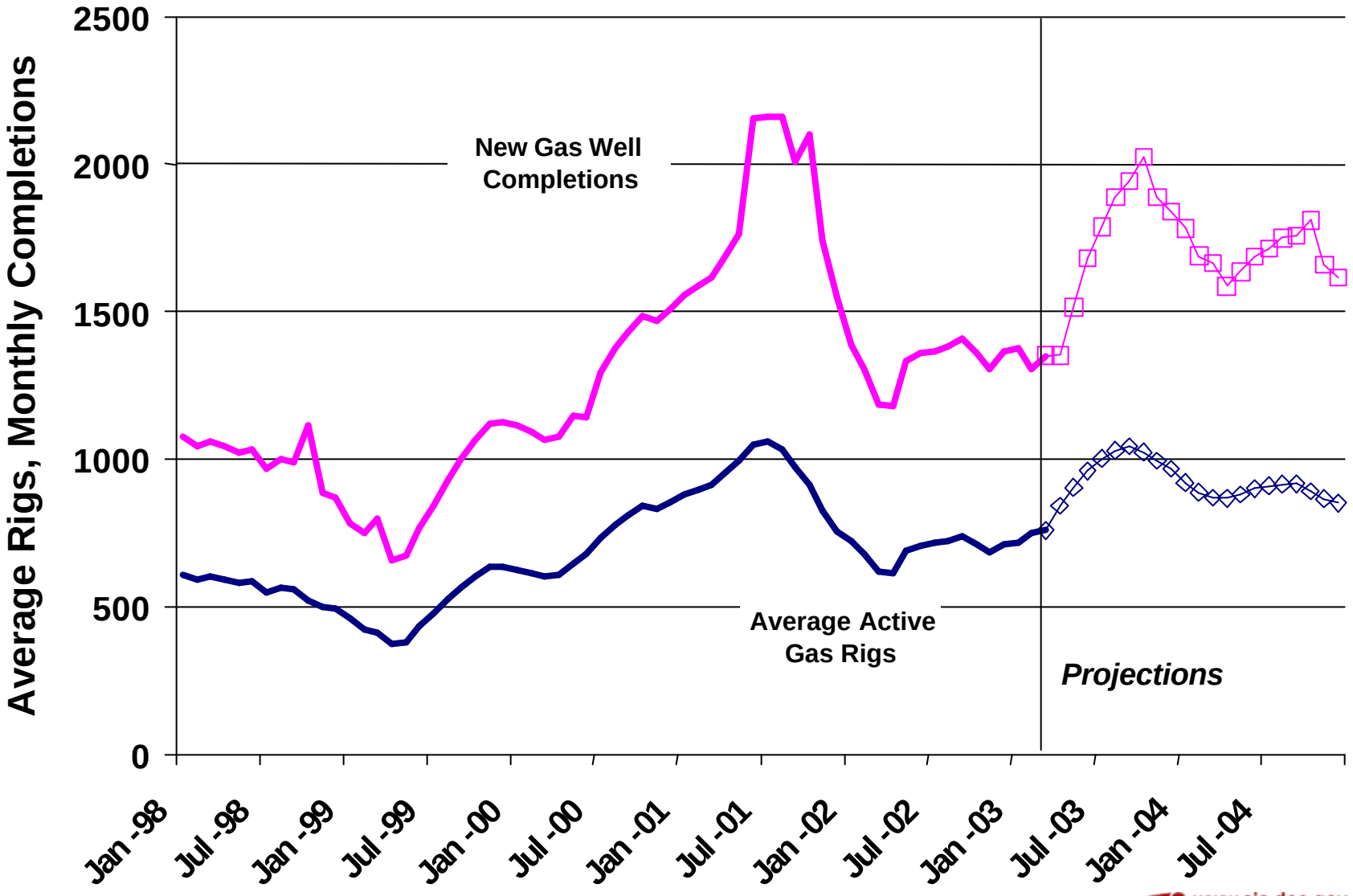
Figure 16. U.S. Natural Gas-Directed Drilling Activity



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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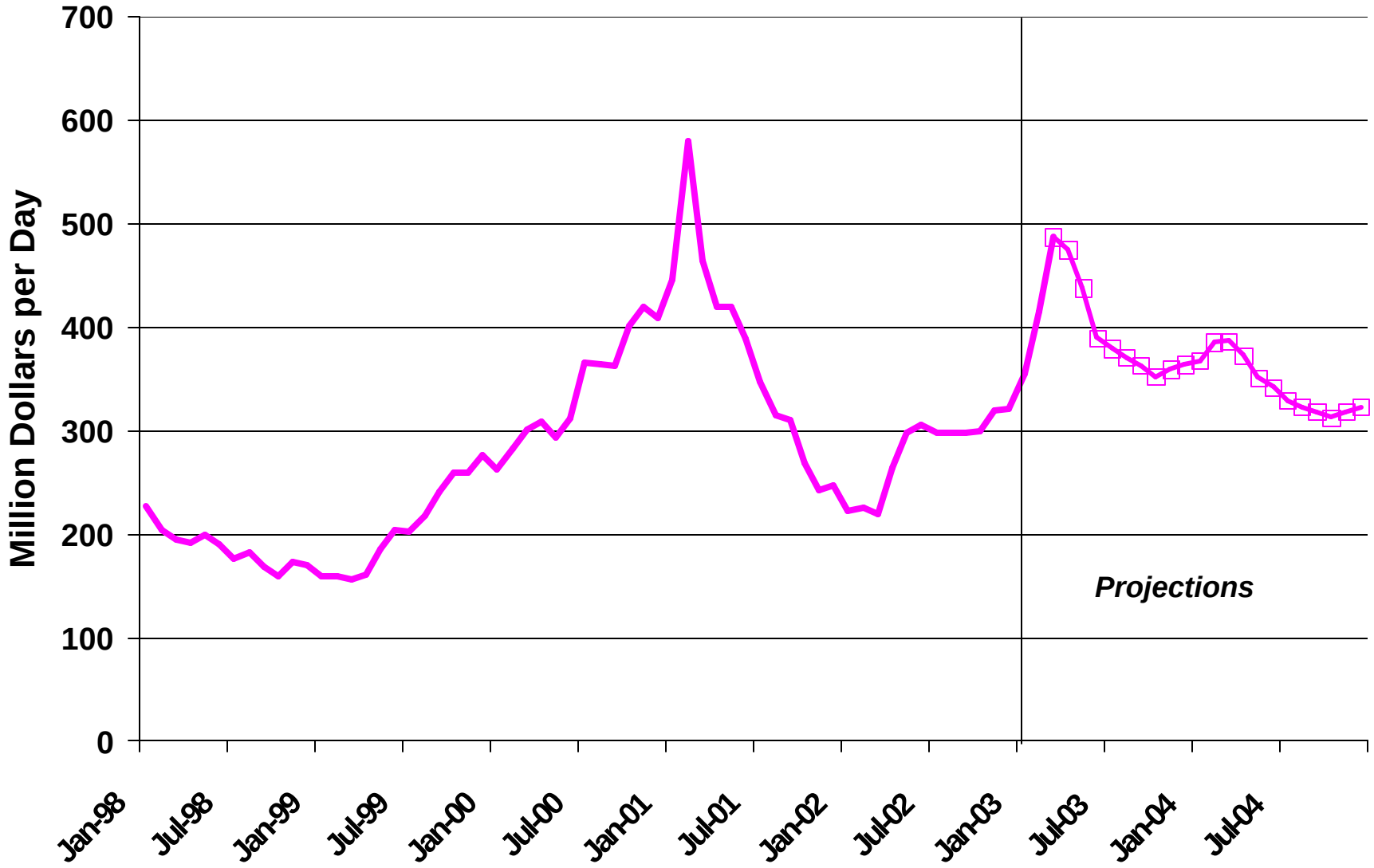
Figure 17. U.S. Oil and Gas Production Revenues



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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could hinge on the productivity of the expected upsurge in drilling in terms of expected output. With demand expected to outpace production growth, natural gas imports are expected to rise.

Electricity Demand and Supply

With the 2003 economy expected to continue to recover, electricity demand is expected to increase less than 1 percent (Figure 18). Little or no net weather-related demand growth would be expected under our assumption of normal temperatures for the remainder of the year. This reflects the contrast between the assumed normal summer temperatures this year and the hot conditions of 2002. Demand growth of 2.9 percent in 2002 was based on both weather-related and economic-related factors. In 2004, annual electricity demand is projected to grow by 2.6 percent as the economy expands.

Under normal weather assumptions, this summer's cooling degree-days would be well below those of last summer, which was 9.7 percent hotter than normal. Thus, summer 2003 electricity demand is expected to be about 1.0 percent lower than comparable 2002 levels.

Natural gas-generated electricity production is expected to drop 7.5 percent in 2003, largely due to the high natural gas prices seen so far and expected through the year. Hydroelectric generation, while down in the Pacific Northwest, is up in other parts of the country due to high water levels and is expected to increase by 12 percent overall in 2003.

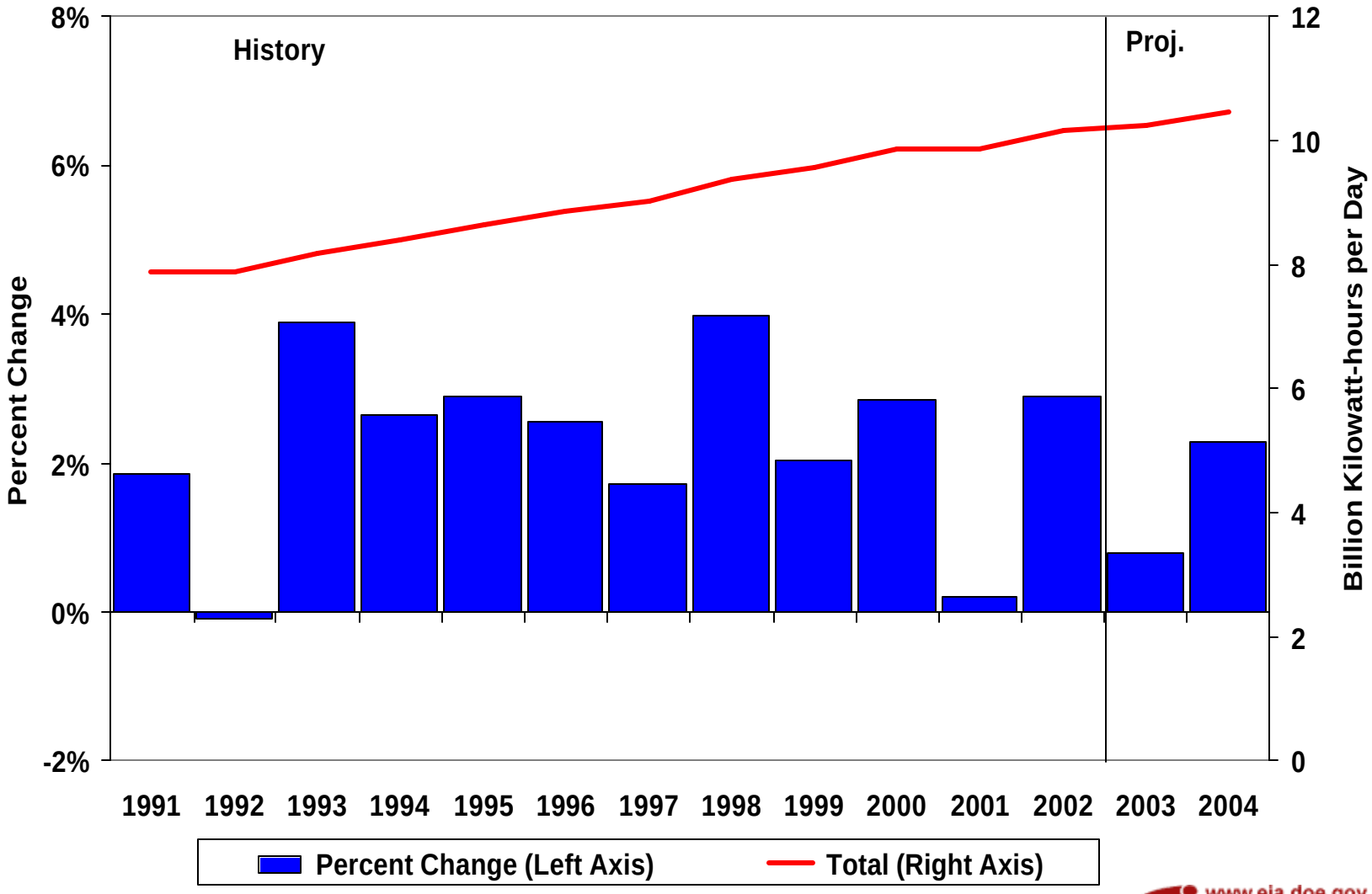
Representation of Uncertainty in STEO Using the STIFS Model

The Short-Term Integrated Forecasting System (STIFS) model is a monthly model of U.S. national-level energy demands and prices used to generate the projections used in EIA's monthly *Short-Term Energy Outlook* (STEO). The model consists of approximately 920 endogenous variables, 216 of which are stochastic (i.e. have error distributions associated with them).

Confidence intervals presented in STEO for a selected STIFS variable, such as the crude oil price, gasoline price, and natural gas spot price, are calculated analytically using information about the error distribution of the modeled variable and the error distributions of any endogenous variables that are determinants of the variable of interest. These confidence intervals, based on +/- 2 standard errors within the STIFS model, do not include the effects of major supply disruptions and other phenomena that are not represented in that model.

To the extent that the possibility of supply disruptions in world oil markets or other phenomena not included in the STIFS model is a significant factor affecting market developments, the 95% confidence intervals presented in STEO will likely be narrower than intervals which would be expected to contain the future value of the selected STEO variables with 95% confidence taking account of all relevant uncertainty drivers.

Figure 18. Total Electricity Demand Growth Patterns



Sources: History: EIA; Projections: Short-Term Energy Outlook, April 2003.

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

	Year				Annual Percentage Change		
	2001	2002	2003	2004	2001-2002	2002-2003	2003-2004
Real Gross Domestic Product (GDP)							
(billion chained 1996 dollars)	**9215**	**9440**	*9690*	*10098*	*2.4*	*2.6*	*4.2*
Imported Crude Oil Price [a]							
(nominal dollars per barrel)	**22.00**	**23.68**	*27.10*	*22.86*	*7.6*	*14.5*	*-15.6*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**5.80**	**5.82**	*5.75*	*5.61*	*0.3*	*-1.1*	*-2.4*
Total Petroleum Net Imports							
(including SPR)	**10.90**	**10.49**	*11.14*	*11.72*	*-3.8*	*6.2*	*5.3*
Energy Demand							
World Petroleum							
(million barrels per day)	**76.9**	**77.5**	*78.6*	*80.0*	*0.7*	*1.5*	*1.8*
Petroleum							
(million barrels per day)	**19.65**	**19.68**	*20.18*	*20.66*	*0.2*	*2.5*	*2.3*
Natural Gas							
(trillion cubic feet)	**21.99**	**21.43**	*22.02*	*23.05*	*-2.5*	*2.7*	*4.7*
Coal [c]							
(million short tons)	**1059**	**1060**	*1081*	*1116*	*0.1*	*2.0*	*3.2*
Electricity (billion kilowatthours)							
Retail Sales [d]	**3397**	**3476**	*3486*	*3574*	*2.3*	*0.3*	*2.5*
Other Use/Sales [e]	**205**	**231**	*250*	*257*	*12.4*	*8.4*	*3.0*
Total	**3602**	**3706**	*3736*	*3832*	*2.9*	*0.8*	*2.6*
Total Energy Demand [f]							
(quadrillion Btu)	**96.4**	**97.9**	*98.9*	*101.9*	*1.6*	*1.0*	*3.1*
Total Energy Demand per Dollar of GDP							
(thousand Btu per 1996 Dollar)	**10.46**	**10.37**	*10.20*	*10.09*	*-0.8*	*-1.6*	*-1.1*
Renewable Energy as Percent of Total [g]	**5.9**	**6.6**	*7.1*	*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 2001 are estimates.

[e]Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2001 are estimates.

[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 Monthly DOE/EIA-0520; Weekly Petroleum Status Report, DOE/EIA-0208. Macroeconomic projections are based on Global Insight Forecast CONTROL0303.

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

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Macroeconomic [a]															
Real Gross Domestic Product (billion chained 1996 dollars - SAAR)	**9363**	**9392**	**9486**	*9519*	*9573*	*9641*	*9726*	*9820*	*9952*	*10061*	*10149*	*10228*	**9440**	*9690*	*10098*
Percentage Change from Prior Year	**1.4**	**2.2**	**3.3**	*2.9*	*2.2*	*2.6*	*2.5*	*3.2*	*4.0*	*4.4*	*4.3*	*4.2*	**2.4**	*2.6*	*4.2*
Annualized Percent Change from Prior Quarter	**5.0**	**1.2**	**4.0**	*1.4*	*2.3*	*2.8*	*3.5*	*3.9*	*5.4*	*4.4*	*3.5*	*3.1*			
GDP Implicit Price Deflator (Index, 1996=1.000)	**1.101**	**1.105**	**1.108**	*1.112*	*1.116*	*1.120*	*1.126*	*1.133*	*1.138*	*1.142*	*1.149*	*1.156*	**1.106**	*1.124*	*1.146*
Percentage Change from Prior Year	**1.4**	**1.1**	**0.8**	*1.3*	*1.3*	*1.4*	*1.7*	*1.9*	*1.9*	*1.9*	*2.0*	*2.0*	**1.1**	*1.6*	*2.0*
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)	**6961**	**7027**	**7082**	*7129*	*7151*	*7202*	*7318*	*7346*	*7523*	*7562*	*7578*	*7623*	**7050**	*7254*	*7571*
Percentage Change from Prior Year	**3.8**	**5.0**	**3.2**	*5.9*	*2.7*	*2.5*	*3.3*	*3.0*	*5.2*	*5.0*	*3.6*	*3.8*	**4.5**	*2.9*	*4.4*
Manufacturing Production (Index, 1997=100.0)	**110.8**	**111.8**	**112.6**	*111.7*	*112.0*	*112.5*	*114.1*	*115.9*	*118.0*	*120.9*	*124.0*	*126.7*	**111.7**	*113.6*	*122.4*
Percentage Change from Prior Year	**-4.0**	**-1.5**	**0.5**	*1.3*	*1.1*	*0.6*	*1.3*	*3.7*	*5.4*	*7.4*	*8.6*	*9.4*	**-0.9**	*1.7*	*7.7*
OECD Economic Growth (percent) [b]													*1***.8**	**2***.5*	*3.1*
Weather [c]															
Heating Degree-Days															
U.S.	**2098**	**498**	**44**	*1639*	*2155*	*518*	*86*	*1622*	*2254*	*517*	*85*	*1621*	**4279**	*4380*	*4477*
New England	**2796**	**869**	**119**	*2396*	*3292*	*882*	*167*	*2236*	*3205*	*880*	*167*	*2235*	**6180**	*6577*	*6488*
Middle Atlantic	**2481**	**653**	**36**	*2213*	*3122*	*699*	*105*	*2001*	*2919*	*697*	*106*	*2001*	**5383**	*5927*	*5723*
U.S. Gas-Weighted	**2181**	**558**	**43**	*1736*	*2304*	*554*	*90*	*1713*	*2373*	*554*	*90*	*1713*	**4518**	*4662*	*4729*
Cooling Degree-Days (U.S.)	**31**	**372**	**882**	*81*	*33*	*347*	*783*	*76*	*33*	*347*	*784*	*76*	**1366**	*1239*	*1240*

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

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

[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 Global Insight, "World Economic Outlook," Volume 1. Macroeconomic projections are based on Global Insight Forecast CONTROL0303.

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

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Macroeconomic [a]															
Real Fixed Investment (billion chained 1996 dollars-SAAR)	**1576**	**1573**	**1572**	*1589*	*1595*	*1608*	*1620*	*1633*	*1662*	*1698*	*1738*	*1769*	*1577*	*1614*	*1717*
Real Exchange Rate (index)	**1.194**	**1.153**	**1.106**	*1.103*	*1.051*	*1.037*	*1.057*	*1.047*	*1.039*	*1.031*	*1.023*	*1.015*	*1.139*	*1.048*	*1.027*
Business Inventory Change (billion chained 1996 dollars-SAAR)	**-31.9**	**-14.1**	**-2.6**	*0.2*	*-3.3*	*2.6*	*2.8*	*5.6*	*14.0*	*21.2*	*24.6*	*24.0*	*-12.1*	*1.9*	*21.0*
Producer Price Index (index, 1982=1.000)	**1.292**	**1.308**	**1.313**	*1.332*	*1.356*	*1.363*	*1.365*	*1.365*	*1.366*	*1.365*	*1.375*	*1.381*	*1.311*	*1.362*	*1.372*
Consumer Price Index (index, 1982-1984=1.000)	**1.780**	**1.795**	**1.805**	*1.814*	*1.828*	*1.838*	*1.846*	*1.855*	*1.862*	*1.869*	*1.880*	*1.892*	*1.799*	*1.842*	*1.876*
Petroleum Product Price Index (index, 1982=1.000)	**0.656**	**0.810**	**0.839**	*0.877*	*1.013*	*0.964*	*0.895*	*0.867*	*0.874*	*0.851*	*0.798*	*0.792*	*0.795*	*0.935*	*0.829*
Non-Farm Employment (millions)	**130.8**	**130.7**	**130.8**	*130.8*	*130.7*	*130.8*	*131.0*	*131.6*	*132.4*	*133.0*	*133.8*	*134.5*	*130.8*	*131.0*	*133.4*
Commercial Employment (millions)	**92.1**	**92.2**	**92.3**	*92.4*	*92.4*	*92.6*	*93.1*	*93.8*	*94.6*	*95.3*	*95.9*	*96.4*	*92.3*	*93.0*	*95.5*
Total Industrial Production (index, 1997=100.0)	**109.3**	**110.5**	**111.4**	*110.6*	*111.2*	*111.5*	*112.8*	*114.2*	*116.1*	*118.5*	*121.0*	*123.3*	*110.4*	*112.4*	*119.7*
Housing Stock (millions)	**119.2**	**119.5**	**119.8**	*120.5*	*121.0*	*121.3*	*121.6*	*121.9*	*122.2*	*122.5*	*122.7*	*123.0*	*119.8*	*121.4*	*122.6*
Miscellaneous															
Gas Weighted Industrial Production (index, 1997=100.0)	**100.4**	**101.0**	**101.6**	*101.1*	*101.5*	*102.2*	*103.4*	*104.2*	*105.2*	*106.6*	*107.9*	*109.0*	*101.0*	*102.8*	*107.2*
Vehicle Miles Traveled [b] (million miles/day)	**7266**	**8027**	**8052**	*7641*	*7295*	*8009*	*8279*	*7794*	*7470*	*8259*	*8427*	*7986*	*7748*	*7847*	*8037*
Vehicle Fuel Efficiency (index, 1999=1.000)	**0.997**	**1.040**	**1.034**	*1.005*	*0.994*	*1.029*	*1.039*	*0.996*	*0.973*	*1.032*	*1.039*	*0.996*	*1.019*	*1.015*	*1.011*
Real Vehicle Fuel Cost (cents per mile)	**3.31**	**3.75**	**3.77**	*3.91*	*4.31*	*4.23*	*3.93*	*3.83*	*3.82*	*3.76*	*3.62*	*3.58*	*3.69*	*4.07*	*3.69*
Air Travel Capacity (mill. available ton-miles/day)	**435.0**	**475.3**	**438.4**	*452.1*	*460.4*	*462.0*	*463.2*	*464.5*	*465.0*	*474.1*	*485.0*	*490.0*	*450.2*	*462.5*	*478.6*
Aircraft Utilization (mill. revenue ton-miles/day)	**237.6**	**268.7**	**270.6**	*255.2*	*247.2*	*260.7*	*275.7*	*259.3*	*258.5*	*282.4*	*292.3*	*278.6*	*258.1*	*260.8*	*278.0*
Airline Ticket Price Index (index, 1982-1984=1.000)	**2.317**	**2.377**	**2.334**	*2.235*	*2.299*	*2.432*	*2.500*	*2.531*	*2.586*	*2.607*	*2.621*	*2.629*	*2.316*	*2.440*	*2.611*
Raw Steel Production (million tons)	**23.92**	**25.03**	**26.34**	*25.68*	*24.72*	*24.02*	*24.57*	*23.70*	*25.94*	*26.74*	*27.22*	*26.08*	*100.98*	*97.01*	*105.98*

[a] Macroeconomic projections from Global Insight model forecasts are seasonally adjusted at annual rates and modified as appropriate to the base 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

Table 3. International Petroleum Supply and Demand: Base Case

(Million Barrels per Day, Except OECD Commercial Stocks)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Demand [a]															
OECD															
U.S. (50 States)	**19.4**	**19.6**	**19.8**	*19.8*	*20.1*	*19.9*	*20.3*	*20.4*	*20.7*	*20.2*	*20.7*	*21.0*	*19.7*	*20.2*	*20.7*
U.S. Territories	**0.3**	**0.3**	**0.3**	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*	*0.3*
Canada	**2.0**	**1.9**	**2.0**	*2.0*	*2.0*	*1.9*	*2.1*	*2.1*	*2.1*	*2.0*	*2.2*	*2.1*	*2.0*	*2.0*	*2.1*
Europe	**15.2**	**14.6**	**15.2**	*15.4*	*15.4*	*14.5*	*15.0*	*15.7*	*15.6*	*14.6*	*15.2*	*15.9*	*15.1*	*15.2*	*15.3*
Japan	**5.7**	**4.6**	**5.0**	*5.9*	*5.9*	*4.8*	*5.1*	*5.5*	*5.9*	*4.9*	*5.1*	*5.5*	*5.3*	*5.3*	*5.3*
Other OECD	**5.3**	**4.9**	**5.0**	*5.3*	*5.1*	*5.0*	*5.3*	*5.3*	*5.1*	*5.1*	*5.4*	*5.4*	*5.1*	*5.2*	*5.2*
Total OECD	**47.9**	**46.1**	**47.4**	*48.8*	*48.8*	*46.4*	*48.1*	*49.3*	*49.7*	*47.1*	*48.9*	*50.2*	*47.5*	*48.1*	*48.9*
Non-OECD															
Former Soviet Union	**4.0**	**3.9**	**3.9**	*3.9*	*4.1*	*3.9*	*4.0*	*4.0*	*4.2*	*4.0*	*4.0*	*4.0*	*3.9*	*4.0*	*4.1*
Europe	**0.7**	**0.7**	**0.7**	*0.7*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.8*	*0.7*	*0.8*	*0.8*
China	**5.3**	**5.3**	**5.2**	*5.3*	*5.4*	*5.4*	*5.3*	*5.4*	*5.5*	*5.5*	*5.4*	*5.5*	*5.3*	*5.4*	*5.5*
Other Asia	**7.7**	**7.7**	**7.5**	*7.9*	*7.9*	*7.9*	*7.6*	*8.0*	*8.0*	*8.0*	*7.8*	*8.1*	*7.7*	*7.8*	*8.0*
Other Non-OECD	**12.1**	**12.3**	**12.4**	*12.3*	*12.3*	*12.6*	*12.6*	*12.5*	*12.6*	*12.8*	*12.9*	*12.8*	*12.3*	*12.5*	*12.8*
Total Non-OECD	**30.0**	**30.0**	**29.7**	*30.1*	*30.5*	*30.5*	*30.3*	*30.6*	*31.1*	*31.1*	*30.9*	*31.2*	*29.9*	*30.5*	*31.1*
Total World Demand	**77.8**	**76.0**	**77.1**	*78.8*	*79.3*	*76.9*	*78.3*	*80.0*	*80.7*	*78.2*	*79.8*	*81.4*	*77.5*	*78.6*	*80.0*
Supply [b]															
OECD															
U.S. (50 States)	**9.1**	**9.2**	**8.9**	*9.0*	*9.1*	*9.0*	*9.0*	*9.1*	*9.0*	*8.9*	*8.9*	*8.9*	*9.1*	*9.0*	*8.9*
Canada	**2.9**	**2.9**	**2.9**	*3.0*	*3.1*	*3.1*	*3.2*	*3.3*	*3.2*	*3.2*	*3.4*	*3.4*	*2.9*	*3.2*	*3.3*
Mexico	**3.6**	**3.6**	**3.6**	*3.6*	*3.8*	*3.8*	*3.8*	*3.7*	*3.9*	*3.9*	*4.0*	*3.9*	*3.6*	*3.8*	*3.9*
North Sea [c]	**6.3**	**6.3**	**5.8**	*6.4*	*6.3*	*6.0*	*6.1*	*6.4*	*6.3*	*6.0*	*6.1*	*6.4*	*6.2*	*6.2*	*6.2*
Other OECD	**1.6**	**1.6**	**1.6**	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*	*1.6*
Total OECD	**23.6**	**23.6**	**22.9**	*23.7*	*23.8*	*23.6*	*23.8*	*24.1*	*24.1*	*23.6*	*23.9*	*24.2*	*23.5*	*23.8*	*23.9*
Non-OECD															
OPEC	**28.4**	**27.9**	**28.8**	*29.6*	*30.2*	*29.8*	*30.1*	*29.9*	*29.7*	*29.7*	*29.6*	*29.6*	*28.7*	*30.0*	*29.6*
Former Soviet Union	**9.0**	**9.2**	**9.6**	*9.8*	*9.8*	*9.9*	*10.1*	*10.2*	*10.3*	*10.4*	*10.7*	*10.7*	*9.4*	*10.0*	*10.5*
China	**3.3**	**3.4**	**3.4**	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*	*3.4*
Other Non-OECD	**11.5**	**11.5**	**11.4**	*11.4*	*10.8*	*11.8*	*12.0*	*12.1*	*12.1*	*12.2*	*12.4*	*12.6*	*11.4*	*11.7*	*12.3*
Total Non-OECD	**52.3**	**51.9**	**53.2**	*54.1*	*54.1*	*54.8*	*55.6*	*55.6*	*55.4*	*55.7*	*56.1*	*56.3*	*52.9*	*55.0*	*55.9*
Total World Supply	**75.9**	**75.6**	**76.1**	*77.8*	*77.9*	*78.4*	*79.4*	*79.8*	*79.5*	*79.3*	*80.0*	*80.5*	*76.4*	*78.9*	*79.8*
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**0.2**	**-0.5**	**0.4**	*0.3*	*0.8*	*-0.9*	*-0.4*	*0.1*	*0.0*	*-0.7*	*-0.2*	*0.3*	*0.1*	*-0.1*	*-0.1*
Other	**1.3**	**0.4**	**0.0**	*0.2*	*0.1*	*-1.1*	*-1.1*	*-0.4*	*0.8*	*-1.0*	*-0.6*	*0.0*	*0.5*	*-0.6*	*-0.2*
Total Stock Withdrawals	**1.4**	**0.0**	**0.5**	*0.5*	*0.8*	*-2.0*	*-1.5*	*-0.3*	*0.8*	*-1.6*	*-0.8*	*0.3*	*0.6*	*-0.7*	*-0.3*
OECD Comm. Stocks, End (bill. bbls.)	**2.5**	**2.5**	**2.5**	*2.5*	*2.4*	*2.5*	*2.6*	*2.6*	*2.6*	*2.7*	*2.7*	*2.7*	*2.5*	*2.6*	*2.7*
Non-OPEC Supply	**47.4**	**47.7**	**47.4**	*48.2*	*47.8*	*48.6*	*49.3*	*49.9*	*49.8*	*49.7*	*50.4*	*50.9*	*47.7*	*48.9*	*50.2*
Net Exports from Former Soviet Union	**4.9**	**5.3**	**5.7**	*5.9*	*5.7*	*6.0*	*6.2*	*6.2*	*6.1*	*6.4*	*6.6*	*6.7*	*5.5*	*6.0*	*6.5*

[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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico , the Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

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

SPR: Strategic Petroleum Reserve

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

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

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

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

(Nominal Dollars)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Crude Oil Prices (dollars per barrel)															
Imported Average [a]	**19.33**	**23.84**	**25.88**	*25.39*	*31.34*	*26.91*	*25.88*	*24.82*	*24.00*	*23.25*	*22.50*	*21.75*	*23.68*	*27.10*	*22.86*
WTI [b] Spot Average	**21.66**	**26.25**	**28.34**	*28.22*	*34.10*	*29.63*	*28.50*	*27.38*	*26.50*	*25.75*	*25.00*	*24.25*	*26.12*	*29.90*	*25.38*
Natural Gas Wellhead (dollars per thousand cubic feet)	**2.34**	**3.00**	**2.88**	*3.60*	*5.12*	*4.70*	*4.09*	*4.16*	*4.50*	*3.88*	*3.60*	*3.82*	*2.95*	*4.52*	*3.95*
Petroleum Products															
Gasoline Retail [c] (dollars per gallon)															
All Grades	**1.20**	**1.43**	**1.44**	*1.46*	*1.63*	*1.63*	*1.54*	*1.45*	*1.41*	*1.48*	*1.45*	*1.38*	*1.39*	*1.56*	*1.43*
Regular Unleaded	**1.16**	**1.39**	**1.40**	*1.42*	*1.59*	*1.61*	*1.51*	*1.42*	*1.37*	*1.44*	*1.40*	*1.33*	*1.34*	*1.53*	*1.39*
No. 2 Diesel Oil, Retail (dollars per gallon)	**1.18**	**1.30**	**1.35**	*1.44*	*1.62*	*1.57*	*1.48*	*1.46*	*1.41*	*1.38*	*1.35*	*1.36*	*1.32*	*1.53*	*1.38*
No. 2 Heating Oil, Wholesale (dollars per gallon)	**0.60**	**0.68**	**0.73**	*0.79*	*0.97*	*0.83*	*0.78*	*0.81*	*0.79*	*0.75*	*0.73*	*0.75*	*0.69*	*0.86*	*0.76*
No. 2 Heating Oil, Retail (dollars per gallon)	**1.09**	**1.09**	**1.06**	*1.19*	*1.49*	*1.40*	*1.19*	*1.29*	*1.25*	*1.16*	*1.07*	*1.19*	*1.11*	*1.38*	*1.20*
No. 6 Residual Fuel Oil, Retail [d] (dollars per barrel)	**19.35**	**24.11**	**25.70**	*26.20*	*32.98*	*29.97*	*27.70*	*27.42*	*26.51*	*23.49*	*23.02*	*23.20*	*23.81*	*29.77*	*24.14*
Electric Utility Fuels															
Coal (dollars per million Btu)	**1.22**	**1.21**	**1.22**	*1.21*	*1.23*	*1.25*	*1.23*	*1.21*	*1.21*	*1.21*	*1.19*	*1.17*	*1.22*	*1.23*	*1.19*
Heavy Fuel Oil [e] (dollars per million Btu)	**2.73**	**3.58**	**3.67**	*4.14*	*4.90*	*5.06*	*4.44*	*4.23*	*4.22*	*3.96*	*3.68*	*3.58*	*3.56*	*4.65*	*3.85*
Natural Gas (dollars per million Btu)	**3.22**	**3.71**	**3.48**	*4.43*	*5.62*	*5.06*	*4.63*	*4.83*	*5.25*	*4.47*	*4.17*	*4.49*	*3.67*	*4.97*	*4.50*
Other Residential															
Natural Gas (dollars per thousand cubic feet)	**7.13**	**8.18**	**10.10**	*8.10*	*8.42*	*10.18*	*11.27*	*8.88*	*8.70*	*9.69*	*10.84*	*8.63*	*7.83*	*9.04*	*9.00*
Electricity (cents per kilowatthour)	**8.08**	**8.52**	**8.70**	*8.27*	*8.06*	*8.66*	*8.88*	*8.43*	*7.95*	*8.52*	*8.73*	*8.26*	*8.41*	*8.52*	*8.37*

[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 2002. 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: Base Case

(Million Barrels per Day, Except Closing Stocks)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Supply															
Crude Oil Supply															
Domestic Production [a]	**5.93**	**5.89**	**5.66**	*5.79*	*5.87*	*5.73*	*5.65*	*5.75*	*5.72*	*5.62*	*5.56*	*5.56*	*5.82*	*5.75*	*5.61*
Alaska	**1.03**	**1.01**	**0.93**	*0.97*	*1.00*	*0.93*	*0.89*	*1.00*	*1.00*	*0.95*	*0.91*	*0.93*	*0.98*	*0.95*	*0.95*
Lower 48	**4.89**	**4.88**	**4.73**	*4.82*	*4.87*	*4.80*	*4.77*	*4.75*	*4.71*	*4.68*	*4.64*	*4.63*	*4.83*	*4.80*	*4.67*
Net Commercial Imports [b]	**8.74**	**9.29**	**9.17**	*9.19*	*8.64*	*9.89*	*9.99*	*9.51*	*9.66*	*10.00*	*10.18*	*9.94*	*9.10*	*9.51*	*9.94*
Net SPR Withdrawals	**-0.13**	**-0.16**	**-0.12**	*-0.11*	*0.00*	*-0.11*	*-0.11*	*-0.11*	*-0.13*	*0.00*	*0.00*	*0.00*	*-0.13*	*-0.08*	*-0.03*
Net Commercial Withdrawals	**-0.24**	**0.19**	**0.50**	*-0.08*	*-0.04*	*-0.09*	*0.09*	*-0.06*	*-0.26*	*-0.06*	*0.13*	*-0.04*	*0.09*	*-0.03*	*-0.06*
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	**0.11**	**0.09**	**-0.04**	*-0.01*	*0.00*	*0.20*	*0.17*	*0.12*	*0.17*	*0.19*	*0.17*	*0.12*	*0.04*	*0.12*	*0.16*
Total Crude Oil Supply	**14.41**	**15.30**	**15.18**	*14.77*	*14.47*	*15.61*	*15.79*	*15.21*	*15.15*	*15.76*	*16.03*	*15.57*	*14.92*	*15.28*	*15.63*
Other Supply															
NGL Production	**1.86**	**1.91**	**1.89**	*1.84*	*1.88*	*1.96*	*1.95*	*1.96*	*1.96*	*1.96*	*1.95*	*1.97*	*1.88*	*1.94*	*1.96*
Other Hydrocarbon and Alcohol Inputs	**0.37**	**0.44**	**0.45**	*0.43*	*0.41*	*0.40*	*0.42*	*0.41*	*0.38*	*0.38*	*0.40*	*0.41*	*0.43*	*0.41*	*0.40*
Crude Oil Product Supplied	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*
Processing Gain	**0.95**	**0.95**	**0.93**	*0.97*	*0.92*	*0.94*	*0.95*	*0.95*	*0.94*	*0.93*	*0.97*	*0.98*	*0.95*	*0.94*	*0.95*
Net Product Imports [c]	**1.34**	**1.51**	**1.33**	*1.34*	*1.64*	*1.68*	*1.56*	*1.61*	*1.85*	*1.78*	*1.74*	*1.74*	*1.38*	*1.62*	*1.78*
Product Stock Withdrawn or Added (-)	**0.52**	**-0.48**	**0.06**	*0.49*	*0.80*	*-0.73*	*-0.38*	*0.30*	*0.38*	*-0.61*	*-0.34*	*0.34*	*0.15*	*-0.01*	*-0.06*
Total Supply	**19.45**	**19.63**	**19.84**	*19.84*	*20.12*	*19.86*	*20.29*	*20.44*	*20.66*	*20.21*	*20.75*	*21.01*	*19.69*	*20.18*	*20.66*
Demand															
Motor Gasoline	**8.49**	**8.99**	**9.07**	*8.85*	*8.54*	*9.07*	*9.28*	*9.11*	*8.94*	*9.32*	*9.44*	*9.34*	*8.85*	*9.00*	*9.26*
Jet Fuel	**1.57**	**1.61**	**1.63**	*1.64*	*1.56*	*1.60*	*1.64*	*1.67*	*1.64*	*1.62*	*1.67*	*1.71*	*1.61*	*1.62*	*1.66*
Distillate Fuel Oil	**3.79**	**3.70**	**3.71**	*3.88*	*4.27*	*3.80*	*3.85*	*4.06*	*4.32*	*3.87*	*3.87*	*4.17*	*3.77*	*4.00*	*4.06*
Residual Fuel Oil	**0.68**	**0.65**	**0.57**	*0.72*	*0.87*	*0.70*	*0.59*	*0.70*	*0.78*	*0.57*	*0.71*	*0.72*	*0.65*	*0.71*	*0.70*
Other Oils [d]	**4.91**	**4.68**	**4.87**	*4.72*	*4.90*	*4.69*	*4.93*	*4.90*	*4.97*	*4.83*	*5.05*	*5.07*	*4.80*	*4.85*	*4.98*
Total Demand	**19.45**	**19.63**	**19.84**	*19.81*	*20.15*	*19.86*	*20.29*	*20.44*	*20.66*	*20.20*	*20.75*	*21.01*	*19.68*	*20.18*	*20.66*
Total Petroleum Net Imports	**10.10**	**10.82**	**10.49**	*10.53*	*10.28*	*11.57*	*11.56*	*11.12*	*11.50*	*11.79*	*11.92*	*11.68*	*10.49*	*11.14*	*11.72*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**333**	**316**	**270**	*278*	*281*	*290*	*282*	*287*	*311*	*316*	*304*	*308*	*278*	*287*	*308*
Total Motor Gasoline	**213**	**217**	**206**	*211*	*200*	*207*	*201*	*205*	*208*	*213*	*205*	*211*	*211*	*205*	*211*
Finished Motor Gasoline	**160**	**168**	**158**	*164*	*145*	*156*	*152*	*155*	*153*	*161*	*155*	*160*	*164*	*155*	*160*
Blending Components	**53**	**48**	**48**	*47*	*55*	*52*	*50*	*50*	*55*	*52*	*50*	*51*	*47*	*50*	*51*
Jet Fuel	**42**	**39**	**41**	*40*	*36*	*37*	*39*	*40*	*39*	*40*	*41*	*42*	*40*	*40*	*42*
Distillate Fuel Oil	**123**	**133**	**127**	*134*	*97*	*112*	*130*	*134*	*105*	*116*	*134*	*135*	*134*	*134*	*135*
Residual Fuel Oil	**34**	**33**	**33**	*31*	*30*	*32*	*34*	*36*	*34*	*35*	*37*	*38*	*31*	*36*	*38*
Other Oils [e]	**265**	**301**	**309**	*255*	*236*	*277*	*295*	*258*	*253*	*291*	*309*	*269*	*255*	*258*	*269*
Total Stocks (excluding SPR)	**1011**	**1038**	**986**	*949*	*880*	*955*	*982*	*961*	*949*	*1010*	*1030*	*1002*	*949*	*961*	*1002*
Crude Oil in SPR	**561**	**576**	**587**	*599*	*599*	*609*	*619*	*630*	*642*	*642*	*642*	*642*	*599*	*630*	*642*
Heating Oil Reserve	**2**	**2**	**2**	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*	*2*
Total Stocks (incl SPR and HOR)	**1574**	**1616**	**1575**	*1550*	*1482*	*1567*	*1604*	*1592*	*1593*	*1654*	*1673*	*1646*	*1550*	*1592*	*1646*

[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 model.

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

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

(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	*5.69*	*5.34*	*0.34*	*0.07*	*0.27*
Lower 48 States	*4.75*	*4.43*	*0.32*	*0.05*	*0.26*
Alaska	*0.95*	*0.92*	*0.03*	*0.02*	*0.01*

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

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

(Trillion Cubic Feet)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Supply															
Total Dry Gas Production	**4.69**	**4.77**	**4.78**	*4.63*	*4.78*	*4.75*	*4.79*	*4.83*	*4.88*	*4.86*	*4.86*	*4.85*	*18.87*	*19.15*	*19.46*
Net Imports	**0.88**	**0.84**	**0.95**	*0.84*	*0.88*	*0.92*	*0.92*	*0.91*	*0.97*	*0.91*	*0.94*	*0.93*	*3.51*	*3.64*	*3.75*
Supplemental Gaseous Fuels	**0.02**	**0.02**	**0.02**	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.02*	*0.08*	*0.08*	*0.08*
Total New Supply	**5.59**	**5.62**	**5.75**	*5.49*	*5.68*	*5.68*	*5.73*	*5.77*	*5.88*	*5.79*	*5.82*	*5.80*	*22.45*	*22.87*	*23.29*
Working Gas in Storage															
Opening	**2.90**	**1.52**	**2.31**	*3.04*	*2.38*	*0.70*	*1.65*	*2.69*	*2.36*	*1.18*	*2.05*	*2.94*	*2.90*	*2.38*	*2.36*
Closing	**1.52**	**2.31**	**3.04**	*2.38*	*0.70*	*1.65*	*2.69*	*2.36*	*1.18*	*2.05*	*2.94*	*2.46*	*2.38*	*2.36*	*2.46*
Net Withdrawals	**1.39**	**-0.79**	**-0.73**	*0.67*	*1.68*	*-0.95*	*-1.04*	*0.33*	*1.18*	*-0.87*	*-0.89*	*0.47*	*0.53*	*0.01*	*-0.10*
Total Supply	**6.97**	**4.83**	**5.02**	*6.16*	*7.36*	*4.73*	*4.69*	*6.10*	*7.05*	*4.92*	*4.94*	*6.27*	*22.98*	*22.88*	*23.19*
Balancing Item [a]	**-0.27**	**-0.15**	**-0.64**	*-0.49*	*-0.21*	*-0.21*	*-0.12*	*-0.33*	*0.31*	*0.08*	*-0.12*	*-0.41*	*-1.55*	*-0.86*	*-0.14*
Total Primary Supply	**6.71**	**4.69**	**4.38**	*5.66*	*7.16*	*4.52*	*4.57*	*5.77*	*7.36*	*5.00*	*4.81*	*5.87*	*21.43*	*22.02*	*23.05*
Demand															
Residential	**2.19**	**0.84**	**0.37**	*1.45*	*2.35*	*0.78*	*0.35*	*1.37*	*2.44*	*0.83*	*0.36*	*1.38*	*4.85*	*4.85*	*5.01*
Commercial	**1.20**	**0.61**	**0.43**	*0.89*	*1.24*	*0.58*	*0.41*	*0.85*	*1.29*	*0.62*	*0.45*	*0.89*	*3.13*	*3.08*	*3.25*
Industrial	**2.00**	**1.85**	**1.66**	*2.08*	*2.35*	*2.06*	*1.94*	*2.35*	*2.42*	*2.09*	*1.95*	*2.34*	*7.59*	*8.70*	*8.80*
Lease and Plant Fuel	**0.28**	**0.28**	**0.28**	*0.27*	*0.29*	*0.30*	*0.30*	*0.30*	*0.30*	*0.29*	*0.29*	*0.30*	*1.12*	*1.18*	*1.18*
Other Industrial	**1.72**	**1.57**	**1.37**	*1.81*	*2.06*	*1.76*	*1.65*	*2.05*	*2.12*	*1.79*	*1.66*	*2.04*	*6.47*	*7.52*	*7.62*
CHP[b]	**0.33**	**0.34**	**0.35**	*0.35*	*0.34*	*0.35*	*0.35*	*0.36*	*0.35*	*0.36*	*0.37*	*0.37*	*1.37*	*1.40*	*1.46*
Non-CHP	**1.39**	**1.22**	**1.02**	*1.46*	*1.72*	*1.42*	*1.29*	*1.69*	*1.77*	*1.43*	*1.29*	*1.67*	*5.10*	*6.12*	*6.16*
Transportation [c]	**0.19**	**0.13**	**0.12**	*0.15*	*0.16*	0.10	0.11	0.15	0.20	0.13	0.12	0.15	0.59	0.53	0.59
Electric Power [d]	**1.12**	**1.25**	**1.81**	*1.10*	*1.05*	1.01	1.76	1.05	1.00	1.34	1.93	1.10	5.28	4.87	5.38
Total Demand	**6.71**	**4.69**	**4.38**	*5.66*	*7.16*	*4.52*	*4.57*	*5.77*	*7.36*	*5.00*	*4.81*	*5.87*	*21.43*	*22.02*	*23.05*

[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.

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

[c]Pipeline fuel use plus natural gas used as vehicle fuel.

[d]Natural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

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

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

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

(Million Short Tons)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Supply															
Production	**281.1**	**266.8**	**269.2**	*282.8*	*277.3*	*257.9*	*280.0*	*292.3*	*286.5*	*268.7*	*288.4*	*290.2*	*1099.9*	*1107.5*	*1133.9*
Appalachia	**107.1**	**98.4**	**94.1**	*105.9*	*102.4*	*93.1*	*100.2*	*104.3*	*105.3*	*95.0*	*100.7*	*101.3*	*405.4*	*400.0*	*402.3*
Interior	**36.6**	**37.2**	**36.6**	*38.2*	*35.2*	*34.4*	*34.2*	*32.4*	*33.7*	*34.3*	*33.5*	*30.3*	*148.6*	*136.3*	*131.8*
Western	**137.5**	**131.2**	**138.5**	*142.8*	*139.7*	*130.4*	*145.6*	*155.6*	*147.5*	*139.5*	*154.2*	*158.6*	*549.9*	*571.3*	*599.8*
Primary Stock Levels [a]															
Opening	**35.9**	**40.3**	**41.3**	*35.7*	*32.0*	*31.3*	*31.1*	*29.7*	*32.0*	*31.2*	*31.6*	*29.5*	*35.9*	*32.0*	*32.0*
Closing	**40.3**	**41.3**	**35.7**	*32.0*	*31.3*	*31.1*	*29.7*	*32.0*	*31.2*	*31.6*	*29.5*	*32.2*	*32.0*	*32.0*	*32.2*
Net Withdrawals	**-4.4**	**-1.0**	**5.6**	*3.7*	*0.7*	*0.2*	*1.4*	*-2.3*	*0.8*	*-0.4*	*2.0*	*-2.7*	*3.9*	*(S)*	*-0.2*
Imports	**4.0**	**3.9**	**4.7**	*4.4*	*4.1*	*4.5*	*4.5*	*4.5*	*4.6*	*4.5*	*4.5*	*4.6*	*16.9*	*17.6*	*18.3*
Exports	**9.3**	**11.0**	**9.3**	*10.0*	*10.0*	*10.0*	*10.1*	*10.2*	*10.2*	*10.2*	*10.4*	*10.4*	*39.6*	*40.3*	*41.2*
Total Net Domestic Supply	**271.5**	**258.6**	**270.2**	*280.8*	*272.0*	*252.6*	*275.7*	*284.4*	*281.7*	*262.7*	*284.5*	*281.7*	*1081.1*	*1084.8*	*1110.7*
Secondary Stock Levels [b]															
Opening	**145.6**	**149.8**	**152.5**	*137.0*	*147.8*	*155.7*	*167.9*	*159.8*	*177.1*	*181.6*	*192.0*	*179.2*	*145.6*	*147.8*	*177.1*
Closing	**149.8**	**152.5**	**137.0**	*147.8*	*155.7*	*167.9*	*159.8*	*177.1*	*181.6*	*192.0*	*179.2*	*186.0*	*147.8*	*177.1*	*186.0*
Net Withdrawals	**-4.2**	**-2.7**	**15.4**	*-10.8*	*-7.9*	*-12.2*	*8.1*	*-17.3*	*-4.6*	*-10.3*	*12.8*	*-6.8*	*-2.2*	*-29.3*	*-8.9*
Waste Coal Supplied to IPPs [c]	**2.8**	**2.8**	**2.8**	*2.8*	*2.9*	*2.9*	*2.9*	*2.9*	*3.7*	*3.7*	*3.7*	*3.7*	*11.1*	*11.6*	*14.8*
Total Supply	**270.1**	**258.6**	**288.4**	*272.8*	*267.0*	*243.3*	*286.8*	*270.0*	*280.9*	*256.0*	*301.0*	*278.6*	*1090.0*	*1067.1*	*1116.5*
Demand															
Coke Plants	**5.5**	**5.6**	**5.6**	*6.7*	*6.8*	*6.4*	*6.5*	*5.8*	*6.0*	*5.8*	*6.2*	*5.5*	*23.4*	*25.5*	*23.6*
Electric Power Sector [d]	**233.6**	**230.2**	**265.0**	*242.3*	*258.3*	*222.8*	*266.0*	*247.7*	*258.6*	*236.4*	*280.8*	*256.8*	*971.2*	*994.8*	*1032.7*
Retail and General Industry	**17.1**	**15.5**	**15.6**	*17.2*	*16.3*	*14.0*	*14.3*	*16.5*	*16.2*	*13.7*	*14.0*	*16.2*	*65.4*	*61.2*	*60.2*
Total Demand [e]	**256.2**	**251.3**	**286.2**	*266.2*	*281.4*	*243.3*	*286.8*	*270.0*	*280.9*	*256.0*	*301.0*	*278.6*	*1060.0*	*1081.5*	*1116.5*
Discrepancy [f]	**13.9**	**7.3**	**2.2**	*6.6*	*-14.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*30.0*	*-14.4*	*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] Coal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

[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: Base Case

(Billion Kilowatt-hours)

	2002				2003				2004				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2002	2003	2004
Net Electricity Generation															
Electric Power Sector [a]															
Coal	**444.8**	**451.1**	**517.0**	*477.0*	*490.7*	*432.9*	*509.4*	*474.4*	*490.6*	*450.1*	*535.4*	*489.3*	*1889.9*	*1907.3*	*1965.4*
Petroleum	**18.4**	**21.5**	**25.1**	*22.0*	*27.4*	*28.5*	*30.7*	*23.7*	*31.9*	*16.0*	*32.7*	*24.3*	*87.0*	*110.3*	*104.9*
Natural Gas	**118.6**	**131.1**	**189.7**	*117.2*	*111.1*	*106.3*	*186.1*	*111.6*	*106.1*	*142.1*	*204.2*	*116.8*	*556.7*	*515.0*	*569.2*
Nuclear	**195.7**	**187.8**	**205.7**	*191.0*	*194.6*	*190.8*	*205.3*	*190.4*	*195.1*	*191.4*	*206.2*	*191.5*	*780.2*	*781.1*	*784.2*
Hydroelectric	**60.0**	**75.4**	**61.2**	*57.1*	*72.5*	*79.7*	*67.5*	*64.6*	*76.7*	*79.7*	*66.6*	*65.0*	*253.6*	*284.3*	*288.0*
Geothermal and Other [b]	**12.6**	**11.7**	**14.1**	*12.4*	*13.6*	*13.6*	*15.1*	*13.5*	*14.0*	*14.0*	*15.6*	*14.0*	*50.9*	*55.9*	*57.6*
Subtotal	**850.1**	**878.5**	**1012.9**	*876.7*	*909.9*	*851.8*	*1014.1*	*878.2*	*914.4*	*893.3*	*1060.7*	*900.9*	*3618.2*	*3654.0*	*3769.3*
Other Sectors [c]	**43.5**	**50.5**	**58.4**	*51.8*	*44.0*	*51.1*	*59.4*	*53.4*	*46.2*	*53.3*	*62.1*	*55.9*	*204.2*	*207.8*	*217.6*
Total Generation	**893.6**	**929.0**	**1071.3**	*928.5*	*953.9*	*902.9*	*1073.5*	*931.5*	*960.6*	*946.6*	*1122.9*	*956.8*	*3822.4*	*3861.8*	*3986.9*
Net Imports [d]	**4.9**	**8.5**	**6.3**	*5.6*	*6.1*	*7.7*	*11.1*	*6.6*	*3.7*	*5.3*	*8.6*	*4.1*	*25.3*	*31.4*	*21.7*
Total Supply	**898.5**	**937.5**	**1077.6**	*934.1*	*960.0*	*910.6*	*1084.6*	*938.1*	*964.2*	*951.9*	*1131.5*	*960.9*	*3847.7*	*3893.3*	*4008.6*
Losses and Unaccounted for [e]	**22.1**	**51.7**	**24.6**	*43.1*	*28.4*	*34.0*	*41.3*	*54.0*	*20.8*	*57.4*	*52.5*	*46.0*	*141.6*	*157.6*	*176.7*
Demand															
Retail Sales [f]															
Residential	**312.0**	**280.4**	**382.4**	*292.4*	*341.8*	*271.9*	*380.8*	*285.9*	*342.2*	*274.4*	*393.1*	*293.9*	*1267.2*	*1280.5*	*1303.6*
Commercial	**255.8**	**279.5**	**318.0**	*270.7*	*271.1*	*276.4*	*314.8*	*268.9*	*270.1*	*279.7*	*323.2*	*276.5*	*1124.0*	*1131.3*	*1149.4*
Industrial	**227.5**	**243.2**	**259.0**	*244.1*	*231.0*	*239.8*	*250.7*	*241.4*	*239.7*	*250.5*	*263.2*	*254.0*	*973.7*	*962.9*	*1007.4*
Other	**25.6**	**26.5**	**31.0**	*27.6*	*26.9*	*26.7*	*30.3*	*27.3*	*27.6*	*27.4*	*31.1*	*28.0*	*110.6*	*111.2*	*114.1*
Subtotal	**820.9**	**829.6**	**990.3**	*834.7*	*870.7*	*814.8*	*976.7*	*823.5*	*879.6*	*831.9*	*1010.6*	*852.3*	*3475.5*	*3485.8*	*3574.5*
Other Use/Sales [g]	**55.5**	**56.1**	**62.7**	*56.3*	*60.9*	*61.8*	*66.6*	*60.5*	*63.8*	*62.6*	*68.3*	*62.6*	*230.6*	*249.8*	*257.4*
Total Demand	**876.4**	**885.7**	**1053.0**	*891.0*	*931.6*	*876.7*	*1043.3*	*884.1*	*943.5*	*894.5*	*1078.9*	*914.9*	*3706.1*	*3735.7*	*3831.9*

[a] Electric Utilities and independent power producers.

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

[c] Electricity generation from combined heat and power facilities and electricity-only plants in the industrial and commercial sectors.

[d] Data for 2001 are estimates.

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

[f] 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 2001 are estimated.

[g] Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2001 are estimates.

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

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

Table 11. U.S. Renewable Energy Use by Sector: Base Case

(Quadrillion Btu)

	Year				Annual Percentage Change		
	2001	2002	2003	2004	2001-2002	2002-2003	2003-2004
Electricity Sector							
Hydroelectric Power [a]	**2.091**	**2.781**	*3.118*	*3.159*	**33.0**	*12.1*	*1.3*
Geothermal, Solar and Wind Energy [b]	**0.354**	**0.370**	*0.394*	*0.405*	**4.5**	*6.5*	*2.8*
Biofuels [c]	**0.451**	**0.423**	*0.493*	*0.534*	**-6.2**	*16.5*	*8.3*
Total	**2.897**	**3.574**	*4.005*	*4.098*	**23.4**	*12.1*	*2.3*
Other Sectors [d]							
Residential and Commercial [e]	**0.574**	**0.600**	*0.626*	*0.660*	**4.5**	*4.3*	*5.4*
Residential	**0.475**	**0.496**	*0.517*	*0.539*	**4.4**	*4.2*	*4.3*
Commercial	**0.098**	**0.105**	*0.109*	*0.121*	**7.1**	*3.8*	*11.0*
Industrial [f]	**1.816**	**1.871**	*1.909*	*1.963*	**3.0**	*2.0*	*2.8*
Transportation [g]	**0.147**	**0.168**	*0.201*	*0.205*	**14.3**	*19.6*	*2.0*
Total	**2.537**	**2.639**	*2.735*	*2.828*	**4.0**	*3.6*	*3.4*
Net Imported Electricity	**0.159**	**0.197**	*0.245*	*0.169*	**23.9**	*24.4*	*-31.0*
Total Renewable Energy Demand	**5.593**	**6.410**	*6.985*	*7.095*	**14.6**	*9.0*	*1.6*

[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.

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: Base Case

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Real Gross Domestic Product (GDP)															
(billion chained 1996 dollars)	**6708**	**6676**	**6880**	**7063**	**7348**	**7544**	**7813**	**8159**	**8509**	**8859**	**9191**	**9215**	*9440*	*9690*	*10098*
Imported Crude Oil Price [a]															
(nominal dollars per barrel)	**21.79**	**18.74**	**18.20**	**16.13**	**15.53**	**17.14**	**20.62**	**18.49**	**12.07**	**17.26**	**27.72**	**22.00**	*23.68*	*27.10*	*22.86*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	**5.88**	**5.82**	**5.80**	*5.82*	*5.75*	*5.61*
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	**7.16**	**6.42**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	**9.76**	**9.91**	**10.42**	**10.90**	*10.49*	*11.14*	*11.72*
Energy Demand															
World Petroleum															
(million barrels per day)	**66.0**	**63.3**	**63.1**	**63.1**	**64.1**	**65.7**	**67.0**	**73.1**	**73.9**	**75.7**	**76.9**	**77.1**	*77.5*	*78.6*	*80.0*
U.S. Petroleum															
(million barrels per day)	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	**19.65**	*19.68*	*20.18*	*20.66*
Natural Gas															
(trillion cubic feet)	**19.16**	**19.56**	**20.23**	**20.79**	**21.24**	**22.20**	**22.60**	**22.73**	**22.24**	**22.39**	**23.44**	**21.99**	*21.43*	*22.02*	*23.05*
Coal															
(million short tons)	**904**	**899**	**908**	**944**	**951**	**962**	**1006**	**1030**	**1037**	**1039**	**1084**	**1059**	*1060*	*1081*	*1116*
Electricity (billion kilowatthours)															
Retail Sales [c]	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3101**	**3146**	**3264**	**3312**	**3421**	**3397**	*3476*	*3486*	*3574*
Other Use/Sales [d]	**115**	**118**	**122**	**128**	**134**	**144**	**146**	**148**	**161**	**183**	**183**	**205**	*231*	*250*	*257*
Total	**2828**	**2880**	**2885**	**2989**	**3069**	**3157**	**3247**	**3294**	**3425**	**3495**	**3604**	**3602**	*3706*	*3736*	*3832*
Total Energy Demand [e]															
(quadrillion Btu)	**84.6**	**84.6**	**86.1**	**87.8**	**89.6**	**91.5**	**94.5**	**95.0**	**95.3**	**97.0**	**99.3**	**96.4**	*97.9*	*98.9*	*101.9*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1996 Dollar)	**12.61**	**12.68**	**12.51**	**12.43**	**12.19**	**12.13**	**12.10**	**11.66**	**11.20**	**10.95**	**10.81**	**10.46**	*10.37*	*10.20*	*10.09*

[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.
[d] Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2001 are estimates.
[e] "Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, Annual Energy Review, 2001, DOE/EIA-0384(01) (AER), Table 1.1. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, Monthly Energy Review (MER). Consequently, the historical data may not precisely match those published in the MER or the AER.
Notes: SPR: Strategic Petroleum Reserve. Minor discrepancies with other published EIA historical data are due to independent rounding. Historical data are printed in bold; forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.
Sources: Historical data: Latest data available from Bureau of Economic Analysis; Energy Information Administration; latest data available from EIA databases supporting the following reports: Petroleum Supply Monthly, DOE/EIA-0109; Petroleum Supply Annual, DOE/EIA-0340/2; Natural Gas Monthly, DOE/EIA-0130; Electric Power Monthly, DOE/EIA-0226; Quarterly Coal Report, DOE/EIA-0121; International Petroleum Monthly DOE/EIA-520, and Weekly Petroleum Status Report DOE/EIA-0208. Macroeconomic projections are based on Global Insight Forecast CONTROL0303.

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

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Macroeconomic															
Real Gross Domestic Product (billion chained 1996 dollars)	**6708**	**6676**	**6880**	**7063**	**7348**	**7544**	**7813**	**8159**	**8509**	**8859**	**9191**	**9215**	*9440*	*9690*	*10098*
GDP Implicit Price Deflator (Index, 1996=1.000)	**0.865**	**0.897**	**0.918**	**0.941**	**0.960**	**0.981**	**1.000**	**1.019**	**1.032**	**1.047**	**1.069**	**1.094**	*1.106*	*1.124*	*1.146*
Real Disposable Personal Income (billion chained 1996 Dollars)	**5014**	**5033**	**5189**	**5261**	**5397**	**5539**	**5678**	**5854**	**6169**	**6328**	**6630**	**6748**	*7050*	*7254*	*7571*
Manufacturing Production (Index, 1996=1.000)	**74.156**	**72.721**	**75.516**	**78.214**	**83.212**	**87.846**	**92.157**	**100.000**	**106.518**	**111.872**	**117.672**	**112.800**	*111.737*	*113.615*	*122.392*
Real Fixed Investment (billion chained 1996 dollars)	**895**	**833**	**886**	**958**	**1046**	**1109**	**1213**	**1329**	**1480**	**1595**	**1692**	**1627**	*1577*	*1614*	*1717*
Real Exchange Rate (Index, 1996=1.000)	**0.918**	**0.920**	**0.926**	**0.956**	**0.933**	**0.869**	**0.918**	**0.992**	**1.044**	**1.047**	**1.083**	**1.141**	*1.139*	*1.048*	*1.027*
Business Inventory Change (billion chained 1996 dollars)	**8.7**	**-6.6**	**-4.6**	**3.6**	**11.9**	**13.8**	**9.9**	**14.8**	**27.1**	**14.4**	**17.4**	**-36.2**	*-12.1*	*1.9*	*21.0*
Producer Price Index (index, 1982=1.000)	**1.163**	**1.165**	**1.172**	**1.189**	**1.205**	**1.247**	**1.277**	**1.276**	**1.244**	**1.255**	**1.327**	**1.342**	*1.311*	*1.362*	*1.372*
Consumer Price Index (index, 1982-1984=1.000)	**1.307**	**1.362**	**1.403**	**1.445**	**1.482**	**1.524**	**1.569**	**1.605**	**1.630**	**1.666**	**1.722**	**1.771**	*1.799*	*1.842*	*1.876*
Petroleum Product Price Index (index, 1982=1.000)	**0.748**	**0.671**	**0.647**	**0.620**	**0.591**	**0.608**	**0.701**	**0.680**	**0.513**	**0.609**	**0.913**	**0.853**	*0.795*	*0.935*	*0.829*
Non-Farm Employment (millions)	**109.4**	**108.3**	**108.6**	**110.7**	**114.1**	**117.2**	**119.6**	**122.7**	**125.9**	**128.9**	**131.7**	**131.9**	*130.8*	*131.0*	*133.4*
Commercial Employment (millions)	**71.3**	**70.8**	**71.2**	**73.2**	**76.1**	**78.8**	**81.1**	**83.9**	**86.6**	**89.6**	**92.0**	**92.7**	*92.3*	*93.0*	*95.5*
Total Industrial Production (index, 1997=100.0)	**77.6**	**76.3**	**78.3**	**80.9**	**85.2**	**89.3**	**93.2**	**100.0**	**105.6**	**110.1**	**115.3**	**111.2**	*110.4*	*112.4*	*119.7*
Housing Stock (millions)	**103.4**	**104.4**	**105.4**	**106.7**	**108.0**	**109.6**	**110.9**	**112.3**	**114.1**	**115.7**	**116.2**	**118.0**	*119.8*	*121.4*	*122.6*
Weather [a]															
Heating Degree-Days															
U.S.	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4542**	**3951**	**4169**	**4460**	**4223**	*4279*	*4380*	*4477*
New England	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6662**	**5680**	**5952**	**6489**	**6059**	*6180*	*6577*	*6488*
Middle Atlantic	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5809**	**4812**	**5351**	**5774**	**5297**	*5383*	*5927*	*5723*
U.S. Gas-Weighted	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**4980**	**4802**	**4183**	**4399**	**4680**	**4451**	*4518*	*4662*	*4729*
Cooling Degree-Days (U.S.)	**1260**	**1331**	**1040**	**1218**	**1220**	**1293**	**1180**	**1156**	**1410**	**1297**	**1229**	**1256**	*1366*	*1239*	*1240*

[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 Global Insight Forecast CONTROL0303.

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

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Demand [a]															
OECD															
U.S. (50 States)	**17.0**	**16.7**	**17.0**	**17.2**	**17.7**	**17.7**	**18.3**	**18.6**	**18.9**	**19.5**	**19.7**	**19.6**	*19.7*	*20.2*	*20.7*
Europe [b]	**13.3**	**13.3**	**14.0**	**14.2**	**14.1**	**14.2**	**14.8**	**15.0**	**15.3**	**15.2**	**15.1**	**15.3**	*15.1*	*15.2*	*15.3*
Japan	**5.1**	**5.3**	**5.4**	**5.4**	**5.7**	**5.7**	**5.9**	**5.7**	**5.5**	**5.6**	**5.5**	**5.4**	*5.3*	*5.3*	*5.3*
Other OECD	**5.4**	**5.6**	**5.9**	**6.2**	**6.6**	**6.8**	**6.9**	**7.3**	**7.1**	**7.4**	**7.5**	**7.3**	*7.4*	*7.5*	*7.6*
Total OECD	**40.8**	**41.6**	**42.6**	**43.0**	**44.2**	**45.0**	**46.1**	**46.6**	**46.9**	**47.7**	**47.9**	**47.6**	*47.5*	*48.1*	*48.9*
Non-OECD															
Former Soviet Union	**8.4**	**8.4**	**6.8**	**5.6**	**4.8**	**4.6**	**4.0**	**3.9**	**3.8**	**3.9**	**3.8**	**3.9**	*3.9*	*4.0*	*4.1*
Europe	**1.0**	**0.8**	**0.7**	**0.7**	**0.6**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	**0.7**	*0.7*	*0.8*	*0.8*
China	**2.3**	**2.5**	**2.7**	**3.0**	**3.2**	**3.4**	**3.6**	**3.9**	**4.1**	**4.4**	**4.8**	**5.0**	*5.3*	*5.4*	*5.5*
Other Asia	**4.3**	**4.5**	**4.7**	**5.1**	**5.5**	**5.9**	**6.3**	**6.7**	**6.8**	**7.3**	**7.6**	**7.7**	*7.7*	*7.8*	*8.0*
Other Non-OECD	**8.9**	**8.9**	**9.3**	**9.7**	**10.0**	**10.4**	**10.7**	**11.3**	**11.5**	**11.8**	**12.1**	**12.2**	*12.3*	*12.5*	*12.8*
Total Non-OECD	**24.9**	**25.0**	**24.2**	**24.0**	**24.1**	**24.9**	**25.3**	**26.5**	**27.0**	**28.0**	**29.0**	**29.5**	*29.9*	*30.5*	*31.1*
Total World Demand	**65.7**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.4**	**73.1**	**73.9**	**75.7**	**76.9**	**77.1**	*77.5*	*78.6*	*80.0*
Supply [c]															
OECD															
U.S. (50 States)	**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*	*9.0*	*8.9*
Canada	**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*	*3.2*	*3.3*
Mexico	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**3.1**	**3.3**	**3.4**	**3.5**	**3.4**	**3.5**	**3.6**	*3.6*	*3.8*	*3.9*
North Sea [d]	**3.9**	**4.1**	**4.5**	**4.8**	**5.5**	**5.9**	**6.3**	**5.8**	**5.9**	**6.0**	**6.0**	**6.3**	*6.2*	*6.2*	*6.2*
Other OECD	**1.5**	**1.5**	**1.5**	**1.4**	**1.5**	**1.5**	**1.5**	**1.8**	**2.1**	**1.9**	**2.1**	**1.6**	*1.6*	*1.6*	*1.6*
Total OECD	**20.2**	**20.8**	**21.1**	**21.2**	**21.9**	**22.4**	**22.7**	**23.1**	**23.6**	**22.9**	**23.4**	**23.3**	*23.5*	*23.8*	*23.9*
Non-OECD															
OPEC	**24.5**	**24.6**	**25.8**	**26.6**	**27.0**	**27.6**	**28.3**	**29.9**	**30.4**	**29.3**	**30.9**	**30.3**	*28.7*	*30.0*	*29.6*
Former Soviet Union	**11.4**	**10.4**	**8.9**	**8.0**	**7.3**	**7.1**	**7.1**	**7.1**	**7.2**	**7.6**	**8.1**	**8.8**	*9.4*	*10.0*	*10.5*
China	**2.8**	**2.8**	**2.8**	**2.9**	**2.9**	**3.0**	**3.1**	**3.2**	**3.2**	**3.2**	**3.2**	**3.3**	*3.4*	*3.4*	*3.4*
Other Non-OECD	**7.9**	**8.1**	**8.3**	**8.7**	**9.1**	**9.8**	**10.2**	**10.4**	**10.7**	**11.2**	**11.2**	**11.2**	*11.4*	*11.7*	*12.3*
Total Non-OECD	**46.6**	**45.9**	**45.9**	**46.2**	**46.3**	**47.5**	**48.7**	**50.6**	**51.6**	**51.3**	**53.4**	**53.7**	*52.9*	*55.0*	*55.9*
Total World Supply	**66.8**	**66.7**	**67.0**	**67.4**	**68.2**	**69.9**	**71.4**	**73.7**	**75.2**	**74.2**	**76.8**	**77.0**	*76.4*	*78.9*	*79.8*
Total Stock Withdrawals	**-0.8**	**-3.4**	**-4.0**	**-4.3**	**-4.1**	**-4.2**	**-4.8**	**-1.0**	**-1.0**	**1.5**	**0.1**	**0.1**	*0.6*	*-0.7*	*-0.3*
OECD Comm. Stocks, End (bill. bbls.)	**2.7**	**2.7**	**2.7**	**2.8**	**2.8**	**2.7**	**2.7**	**2.7**	**2.8**	**2.4**	**2.5**	**2.6**	*2.5*	*2.6*	*2.7*
Net Exports from Former Soviet Union	**3.0**	**2.1**	**2.1**	**2.3**	**2.4**	**2.5**	**3.0**	**3.2**	**3.4**	**3.8**	**4.3**	**4.9**	*5.5*	*6.0*	*6.5*

[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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

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

SPR: Strategic Petroleum Reserve

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

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

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

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

(Nominal Dollars)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Crude Oil Prices (dollars per barrel)															
Imported Average [a]	**21.79**	**18.74**	**18.20**	**16.13**	**15.53**	**17.14**	**20.62**	**18.49**	**12.07**	**17.26**	**27.72**	**22.00**	*23.68*	*27.10*	*22.86*
WTI [b] Spot Average	**24.48**	**21.60**	**20.54**	**18.49**	**17.16**	**18.41**	**22.11**	**20.61**	**14.45**	**19.25**	**30.29**	**25.95**	*26.12*	*29.90*	*25.38*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**1.71**	**1.64**	**1.74**	**2.04**	**1.85**	**1.55**	**2.17**	**2.32**	**1.96**	**2.19**	**3.69**	**4.12**	*2.95*	*4.52*	*3.95*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**1.17**	**1.15**	**1.14**	**1.13**	**1.13**	**1.16**	**1.25**	**1.24**	**1.07**	**1.18**	**1.53**	**1.47**	*1.39*	*1.56*	*1.43*
Regular Unleaded	**1.13**	**1.10**	**1.09**	**1.07**	**1.08**	**1.11**	**1.20**	**1.20**	**1.03**	**1.14**	**1.49**	**1.43**	*1.34*	*1.53*	*1.39*
No. 2 Diesel Oil, Retail (dollars per gallon)	**1.17**	**1.13**	**1.11**	**1.11**	**1.11**	**1.11**	**1.24**	**1.19**	**1.04**	**1.12**	**1.49**	**1.40**	*1.32*	*1.53*	*1.38*
No. 2 Heating Oil, Wholesale (dollars per gallon)	**0.70**	**0.62**	**0.58**	**0.54**	**0.51**	**0.51**	**0.64**	**0.59**	**0.42**	**0.49**	**0.89**	**0.76**	*0.69*	*0.86*	*0.76*
No. 2 Heating Oil, Retail (dollars per gallon)	**1.04**	**0.98**	**0.93**	**0.90**	**0.87**	**0.86**	**0.98**	**0.97**	**0.84**	**0.87**	**1.29**	**1.23**	*1.11*	*1.38*	*1.20*
No. 6 Residual Fuel Oil, Retail [c] (dollars per barrel)	**18.66**	**14.32**	**14.21**	**14.00**	**14.79**	**16.49**	**19.01**	**17.82**	**12.83**	**16.02**	**25.34**	**22.24**	*23.81*	*29.77*	*24.14*
Electric Utility Fuels															
Coal (dollars per million Btu)	**1.45**	**1.45**	**1.41**	**1.38**	**1.36**	**1.32**	**1.29**	**1.27**	**1.25**	**1.22**	**1.20**	**1.23**	*1.22*	*1.23*	*1.19*
Heavy Fuel Oil [d] (dollars per million Btu)	**3.22**	**2.48**	**2.46**	**2.36**	**2.40**	**2.60**	**3.01**	**2.79**	**2.07**	**2.38**	**4.27**	**3.71**	*3.56*	*4.65*	*3.85*
Natural Gas (dollars per million Btu)	**2.32**	**2.15**	**2.33**	**2.56**	**2.23**	**1.98**	**2.64**	**2.76**	**2.38**	**2.57**	**4.33**	**4.43**	*3.67*	*4.97*	*4.50*
Other Residential															
Natural Gas (dollars per thousand cubic feet)	**5.80**	**5.82**	**5.89**	**6.17**	**6.41**	**6.06**	**6.35**	**6.95**	**6.83**	**6.69**	**7.77**	**9.63**	*7.83*	*9.04*	*9.00*
Electricity (cents per kilowatthour)	**7.85**	**8.05**	**8.23**	**8.34**	**8.40**	**8.40**	**8.36**	**8.43**	**8.26**	**8.16**	**8.24**	**8.48**	*8.41*	*8.52*	*8.37*

[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: Base Case

(Million Barrels per Day, Except Closing Stocks)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Supply															
Crude Oil Supply															
Domestic Production [a]	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	**5.88**	**5.82**	**5.80**	*5.82*	*5.75*	*5.61*
Alaska	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	**1.48**	**1.39**	**1.30**	**1.17**	**1.05**	**0.97**	**0.96**	*0.98*	*0.95*	*0.95*
Lower 48	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	**5.08**	**5.07**	**5.16**	**5.08**	**4.83**	**4.85**	**4.84**	*4.83*	*4.80*	*4.67*
Net Commercial Imports [b]	**5.76**	**5.67**	**5.98**	**6.67**	**6.95**	**7.14**	**7.40**	**8.12**	**8.60**	**8.60**	**9.01**	**9.30**	*9.10*	*9.51*	*9.94*
Net SPR Withdrawals	**0.06**	**0.05**	**-0.01**	**-0.02**	**0.00**	**0.00**	**0.07**	**0.01**	**-0.02**	**0.02**	**0.08**	**-0.02**	*-0.13*	*-0.08*	*-0.03*
Net Commercial Withdrawals	**0.00**	**-0.01**	**0.02**	**-0.05**	**-0.01**	**0.09**	**0.05**	**-0.06**	**-0.05**	**0.11**	**0.00**	**-0.07**	*0.09*	*-0.03*	*-0.06*
Product Supplied and Losses	**-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*	*0.00*	*0.00*
Unaccounted-for Crude Oil	**0.26**	**0.20**	**0.26**	**0.17**	**0.27**	**0.19**	**0.22**	**0.14**	**0.11**	**0.19**	**0.15**	**0.12**	*0.04*	*0.12*	*0.16*
Total Crude Oil Supply	**13.41**	**13.30**	**13.41**	**13.61**	**13.87**	**13.97**	**14.19**	**14.66**	**14.89**	**14.80**	**15.07**	**15.13**	*14.92*	*15.28*	*15.63*
Other Supply															
NGL Production	**1.56**	**1.66**	**1.70**	**1.74**	**1.73**	**1.76**	**1.83**	**1.82**	**1.76**	**1.85**	**1.91**	**1.87**	*1.88*	*1.94*	*1.96*
Other Hydrocarbon and Alcohol Inputs	**0.13**	**0.15**	**0.20**	**0.25**	**0.26**	**0.30**	**0.31**	**0.34**	**0.38**	**0.38**	**0.38**	**0.38**	*0.43*	*0.41*	*0.40*
Crude Oil Product Supplied	**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*	*0.00*	*0.00*
Processing Gain	**0.68**	**0.71**	**0.77**	**0.77**	**0.77**	**0.77**	**0.84**	**0.85**	**0.89**	**0.89**	**0.95**	**0.90**	*0.95*	*0.94*	*0.95*
Net Product Imports [c]	**1.38**	**0.76**	**0.94**	**0.93**	**1.09**	**0.75**	**1.10**	**1.04**	**1.17**	**1.30**	**1.40**	**1.59**	*1.38*	*1.62*	*1.78*
Product Stock Withdrawn	**-0.14**	**-0.04**	**0.06**	**-0.05**	**0.00**	**0.15**	**0.03**	**-0.09**	**-0.17**	**0.30**	**0.00**	**-0.23**	*0.15*	*-0.01*	*-0.06*
Total Supply	**17.04**	**16.56**	**17.10**	**17.26**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	**19.65**	*19.69*	*20.18*	*20.66*
Demand															
Motor Gasoline [d]	**7.31**	**7.23**	**7.38**	**7.48**	**7.60**	**7.79**	**7.89**	**8.02**	**8.25**	**8.43**	**8.47**	**8.61**	*8.85*	*9.00*	*9.26*
Jet Fuel	**1.52**	**1.47**	**1.45**	**1.47**	**1.53**	**1.51**	**1.58**	**1.60**	**1.62**	**1.67**	**1.73**	**1.66**	*1.61*	*1.62*	*1.66*
Distillate Fuel Oil	**3.02**	**2.92**	**2.98**	**3.04**	**3.16**	**3.21**	**3.37**	**3.44**	**3.46**	**3.57**	**3.72**	**3.85**	*3.77*	*4.00*	*4.06*
Residual Fuel Oil	**1.23**	**1.16**	**1.09**	**1.08**	**1.02**	**0.85**	**0.85**	**0.80**	**0.89**	**0.83**	**0.91**	**0.81**	*0.65*	*0.71*	*0.70*
Other Oils [e]	**3.95**	**3.99**	**4.20**	**4.17**	**4.41**	**4.36**	**4.63**	**4.77**	**4.69**	**5.01**	**4.87**	**4.73**	*4.80*	*4.85*	*4.98*
Total Demand	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	**19.65**	*19.68*	*20.18*	*20.66*
Total Petroleum Net Imports	**7.16**	**6.42**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	**9.76**	**9.91**	**10.42**	**10.90**	*10.49*	*11.14*	*11.72*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**323**	**325**	**318**	**335**	**337**	**303**	**284**	**305**	**324**	**284**	**286**	**312**	*278*	*287*	*308*
Total Motor Gasoline	**220**	**219**	**216**	**226**	**215**	**202**	**195**	**210**	**216**	**193**	**196**	**210**	*211*	*205*	*211*
Jet Fuel	**52**	**49**	**43**	**40**	**47**	**40**	**40**	**44**	**45**	**41**	**45**	**42**	*40*	*40*	*42*
Distillate Fuel Oil	**132**	**144**	**141**	**141**	**145**	**130**	**127**	**138**	**156**	**125**	**118**	**145**	*134*	*134*	*135*
Residual Fuel Oil	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	**45**	**36**	**36**	**41**	*31*	*36*	*38*
Other Oils [f]	**227**	**251**	**292**	**237**	**274**	**348**	**280**	**204**	**212**	**396**	**246**	**178**	*342*	*246*	*228*

[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: Base Case

(Trillion Cubic Feet)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Supply															
Total Dry Gas Production	**17.81**	**17.70**	**17.84**	**18.10**	**18.82**	**18.60**	**18.85**	**18.90**	**19.02**	**18.83**	**18.99**	**19.37**	*18.87*	*19.15*	*19.46*
Net Imports	**1.45**	**1.64**	**1.92**	**2.21**	**2.46**	**2.69**	**2.78**	**2.84**	**2.99**	**3.42**	**3.54**	**3.60**	*3.51*	*3.64*	*3.75*
Supplemental Gaseous Fuels	**0.12**	**0.11**	**0.12**	**0.12**	**0.11**	**0.11**	**0.11**	**0.10**	**0.10**	**0.10**	**0.09**	**0.08**	*0.08*	*0.08*	*0.08*
Total New Supply	**19.38**	**19.45**	**19.88**	**20.42**	**21.39**	**21.40**	**21.75**	**21.84**	**22.12**	**22.35**	**22.61**	**23.06**	*22.45*	*22.87*	*23.29*
Working Gas in Storage															
Opening	**2.85**	**3.07**	**2.82**	**2.60**	**2.32**	**2.61**	**2.15**	**2.17**	**2.17**	**2.73**	**2.52**	**1.72**	*2.90*	*2.38*	*2.36*
Closing	**3.07**	**2.82**	**2.60**	**2.32**	**2.61**	**2.15**	**2.17**	**2.17**	**2.73**	**2.52**	**1.72**	**2.90**	*2.38*	*2.36*	*2.46*
Net Withdrawals	**-0.22**	**0.24**	**0.23**	**0.28**	**-0.28**	**0.45**	**-0.02**	**0.00**	**-0.56**	**0.21**	**0.80**	**-1.18**	*0.53*	*0.01*	*-0.10*
Total Supply	**19.16**	**19.70**	**20.11**	**20.70**	**21.11**	**21.85**	**21.73**	**21.84**	**21.56**	**22.56**	**23.41**	**21.87**	*22.98*	*22.88*	*23.19*
Balancing Item [a]	**0.00**	**-0.14**	**0.12**	**0.09**	**0.13**	**0.35**	**0.87**	**0.89**	**0.67**	**-0.17**	**0.03**	**0.12**	*-1.55*	*-0.86*	*-0.14*
Total Primary Supply	**19.16**	**19.56**	**20.23**	**20.79**	**21.24**	**22.20**	**22.60**	**22.73**	**22.24**	**22.39**	**23.44**	**21.99**	*21.43*	*22.02*	*23.05*
Demand															
Residential	**4.39**	**4.56**	**4.69**	**4.96**	**4.85**	**4.85**	**5.24**	**4.98**	**4.52**	**4.73**	**4.99**	**4.81**	*4.85*	*4.85*	*5.01*
Commercial	**2.62**	**2.73**	**2.80**	**2.86**	**2.90**	**3.03**	**3.16**	**3.21**	**3.00**	**3.04**	**3.22**	**3.04**	*3.13*	*3.08*	*3.25*
Industrial	**8.24**	**8.36**	**8.70**	**8.87**	**8.91**	**9.38**	**9.69**	**9.71**	**9.49**	**9.16**	**9.38**	**8.25**	*7.59*	*8.70*	*8.80*
Lease and Plant Fuel	**1.24**	**1.13**	**1.17**	**1.17**	**1.12**	**1.22**	**1.25**	**1.20**	**1.17**	**1.08**	**1.13**	**1.15**	*1.12*	*1.18*	*1.18*
Other Industrial	**7.01**	**7.23**	**7.53**	**7.70**	**7.79**	**8.16**	**8.44**	**8.51**	**8.32**	**8.08**	**8.25**	**7.10**	*6.47*	*7.52*	*7.62*
CHP [b]	**1.06**	**1.06**	**1.11**	**1.12**	**1.18**	**1.26**	**1.29**	**1.28**	**1.36**	**1.40**	**1.39**	**1.37**	*1.37*	*1.40*	*1.46*
Non-CHP	**5.95**	**6.17**	**6.42**	**6.57**	**6.61**	**6.90**	**7.15**	**7.23**	**6.97**	**6.68**	**6.87**	**5.73**	*5.10*	*6.12*	*6.16*
Transportation [c]	**0.66**	**0.60**	**0.59**	**0.63**	**0.69**	**0.70**	**0.71**	**0.76**	**0.64**	**0.65**	**0.65**	**0.61**	*0.59*	*0.53*	*0.59*
Electric Power [d]	**3.24**	**3.32**	**3.45**	**3.47**	**3.90**	**4.24**	**3.81**	**4.06**	**4.59**	**4.82**	**5.21**	**5.29**	*5.28*	*4.87*	*5.38*
Total Demand	**19.16**	**19.56**	**20.23**	**20.79**	**21.24**	**22.20**	**22.60**	**22.73**	**22.24**	**22.39**	**23.44**	**21.99**	*21.43*	*22.02*	*23.05*

[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.

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

[c] Pipeline fuel use plus natural gas used as vehicle fuel.

[d] Natural gas used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

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

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

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

(Million Short Tons)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Supply															
Production	**1029.1**	**996.0**	**997.5**	**945.4**	**1033.5**	**1033.0**	**1063.9**	**1089.9**	**1117.5**	**1100.4**	**1073.6**	**1127.7**	*1099.9*	*1107.5*	*1133.9*
Appalachia	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**467.8**	**460.4**	**425.6**	**419.4**	**432.8**	*405.4*	*400.0*	*402.3*
Interior	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**170.9**	**168.4**	**162.5**	**143.5**	**147.0**	*148.6*	*136.3*	*131.8*
Western	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.3**	**488.8**	**512.3**	**510.7**	**547.9**	*549.9*	*571.3*	*599.8*
Primary Stock Levels [a]															
Opening	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**34.0**	**36.5**	**39.5**	**31.9**	*35.9*	*32.0*	*32.0*
Closing	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**34.0**	**36.5**	**39.5**	**31.9**	**35.9**	*32.0*	*32.0*	*32.2*
Net Withdrawals	**-4.4**	**0.4**	**-1.0**	**8.7**	**-7.9**	**-1.2**	**5.8**	**-5.3**	**-2.6**	**-2.9**	**7.6**	**-4.0**	*3.9*	*S*	*-0.2*
Imports	**2.7**	**3.4**	**3.8**	**7.3**	**7.6**	**7.2**	**7.1**	**7.5**	**8.7**	**9.1**	**12.5**	**19.8**	*16.9*	*17.6*	*18.3*
Exports	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	**88.5**	**90.5**	**83.5**	**78.0**	**58.5**	**58.5**	**48.7**	*39.6*	*40.3*	*41.2*
Total Net Domestic Supply	**921.6**	**890.9**	**897.8**	**886.9**	**961.8**	**950.4**	**986.3**	**1008.5**	**1045.7**	**1048.1**	**1035.2**	**1094.8**	*1081.1*	*1084.8*	*1110.7*
Secondary Stock Levels [b]															
Opening	**147.1**	**170.1**	**170.2**	**166.8**	**123.1**	**139.6**	**138.0**	**126.0**	**108.8**	**131.6**	**149.1**	**108.5**	*145.6*	*147.8*	*177.1*
Closing	**170.1**	**170.2**	**166.8**	**123.1**	**139.6**	**138.0**	**126.0**	**108.8**	**131.6**	**149.1**	**108.5**	**145.6**	*147.8*	*177.1*	*186.0*
Net Withdrawals	**-23.0**	**-0.1**	**3.3**	**43.8**	**-16.5**	**1.5**	**12.0**	**17.2**	**-22.8**	**-17.5**	**40.7**	**-37.1**	*-2.2*	*-29.3*	*-8.9*
Waste Coal Supplied to IPPs [c]	**0.0**	**0.0**	**6.0**	**6.4**	**7.9**	**8.5**	**8.8**	**8.1**	**9.0**	**9.6**	**10.1**	**10.6**	*11.1*	*11.6*	*14.8*
Total Supply	**898.5**	**890.8**	**907.2**	**937.1**	**953.2**	**960.4**	**1007.1**	**1033.9**	**1031.8**	**1040.2**	**1086.0**	**1068.3**	*1090.0*	*1067.1*	*1116.5*
Demand															
Coke Plants	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	**33.0**	**31.7**	**30.2**	**28.2**	**28.1**	**28.9**	**26.1**	*23.4*	*25.5*	*23.6*
Electric Power Sector [d]	**782.6**	**783.9**	**795.1**	**831.6**	**838.4**	**850.2**	**896.9**	**921.4**	**936.6**	**940.9**	**985.8**	**965.1**	*971.2*	*994.8*	*1032.7*
Retail and General Industry	**83.1**	**81.5**	**80.2**	**81.1**	**81.2**	**78.9**	**77.7**	**78.0**	**72.3**	**69.6**	**69.3**	**67.5**	*65.4*	*61.2*	*60.2*
Residential and Commercial	**6.7**	**6.1**	**6.2**	**6.2**	**6.0**	**5.8**	**6.0**	**6.5**	**4.9**	**4.9**	**4.1**	**4.1**	*4.3*	*3.9*	*3.8*
Industrial	**76.3**	**75.4**	**74.0**	**74.9**	**75.2**	**73.1**	**71.7**	**71.5**	**67.4**	**64.7**	**65.2**	**63.4**	*61.1*	*57.2*	*56.4*
CHP [e]	**27.8**	**27.0**	**28.2**	**28.9**	**29.7**	**29.4**	**29.4**	**29.8**	**28.5**	**27.8**	**28.0**	**26.4**	*26.5*	*26.9*	*28.0*
Non-CHP	**48.5**	**48.4**	**45.8**	**46.0**	**45.5**	**43.7**	**42.3**	**41.7**	**38.9**	**37.0**	**37.2**	**36.9**	*34.7*	*30.3*	*28.4*
Total Demand [f]	**904.5**	**899.2**	**907.7**	**944.1**	**951.3**	**962.1**	**1006.3**	**1029.5**	**1037.1**	**1038.6**	**1084.1**	**1058.6**	*1060.0*	*1081.5*	*1116.5*
Discrepancy [g]	**-6.0**	**-8.5**	**-0.5**	**-7.0**	**1.9**	**-1.7**	**0.8**	**4.3**	**-5.3**	**1.6**	**1.9**	**9.6**	*30.0*	*-14.4*	*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 2001 and projections for 2002 and 2003 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

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

[d] Coal used for electricity generation and (a limited amount of) useful thermal output by electric utilities and independent power producers.

[f] Total Demand includes estimated IPP consumption.

[g] 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: Base Case

(Billion Kilowatt-hours)

	Year														
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Net Electricity Generation															
Electric Power Sector [a]															
Coal	**1572.1**	**1568.8**	**1597.7**	**1665.5**	**1666.3**	**1686.1**	**1772.0**	**1820.8**	**1850.2**	**1858.6**	**1943.1**	**1881.7**	*1889.9*	*1907.3*	*1965.4*
Petroleum	**118.9**	**112.8**	**92.2**	**105.4**	**98.7**	**68.1**	**74.8**	**86.5**	**122.2**	**111.5**	**105.2**	**121.2**	*87.0*	*110.3*	*104.9*
Natural Gas	**309.5**	**317.8**	**334.3**	**342.2**	**385.7**	**419.2**	**378.8**	**399.6**	**449.3**	**473.0**	**518.0**	**545.9**	*556.7*	*515.0*	*569.2*
Nuclear	**577.0**	**612.6**	**618.8**	**610.4**	**640.5**	**673.4**	**674.7**	**628.6**	**673.7**	**728.3**	**753.9**	**768.8**	*780.2*	*781.1*	*784.2*
Hydroelectric	**286.2**	**281.5**	**245.8**	**273.5**	**250.6**	**302.7**	**338.1**	**346.6**	**313.4**	**308.6**	**265.8**	**204.5**	*253.6*	*284.3*	*288.0*
Geothermal and Other [b]	**37.1**	**41.4**	**44.3**	**46.0**	**45.9**	**42.8**	**44.5**	**45.8**	**46.3**	**48.4**	**49.5**	**48.0**	*50.9*	*55.9*	*57.6*
Subtotal	**2900.8**	**2934.9**	**2933.2**	**3043.0**	**3087.7**	**3192.3**	**3282.8**	**3327.8**	**3455.1**	**3528.4**	**3635.5**	**3570.2**	*3618.2*	*3654.0*	*3769.3*
Other Sectors [c]	**136.9**	**138.7**	**149.4**	**153.4**	**160.8**	**161.0**	**161.4**	**162.4**	**168.6**	**166.4**	**166.6**	**163.3**	*204.2*	*207.8*	*217.6*
Total	**3037.7**	**3073.7**	**3082.6**	**3196.4**	**3248.5**	**3353.3**	**3444.2**	**3490.2**	**3623.7**	**3694.8**	**3802.1**	**3733.5**	*3822.4*	*3861.8*	*3986.9*
Net Imports [d]	**2.3**	**19.6**	**25.4**	**27.8**	**44.8**	**39.2**	**38.0**	**36.6**	**27.6**	**30.6**	**34.0**	**20.3**	*25.3*	*31.4*	*21.7*
Total Supply	**3040.1**	**3093.3**	**3108.1**	**3224.2**	**3293.3**	**3392.5**	**3482.2**	**3526.8**	**3651.3**	**3725.4**	**3836.2**	**3753.8**	*3847.7*	*3893.3*	*4008.6*
Losses and Unaccounted for [e]	**212.5**	**213.2**	**222.7**	**234.7**	**224.7**	**235.2**	**235.0**	**233.1**	**225.9**	**230.2**	**231.7**	**152.0**	*141.6*	*157.6*	*176.7*
Demand															
Retail Sales [f]															
Residential	**924.0**	**955.4**	**935.9**	**994.8**	**1008.5**	**1042.5**	**1082.5**	**1075.9**	**1130.1**	**1144.9**	**1192.4**	**1201.0**	*1267.2*	*1280.5*	*1303.6*
Commercial	**751.0**	**765.7**	**761.3**	**794.6**	**820.3**	**862.7**	**887.4**	**928.6**	**979.4**	**1002.0**	**1055.2**	**1085.0**	*1124.0*	*1131.3*	*1149.4*
Industrial	**945.5**	**946.6**	**972.7**	**977.2**	**1008.0**	**1012.7**	**1033.6**	**1038.2**	**1051.2**	**1058.2**	**1064.2**	**994.1**	*973.7*	*962.9*	*1007.4*
Other	**92.0**	**94.3**	**93.4**	**94.9**	**97.8**	**95.4**	**97.5**	**102.9**	**103.5**	**107.0**	**109.5**	**116.7**	*110.6*	*111.2*	*114.1*
Subtotal	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2934.6**	**3013.3**	**3101.1**	**3145.6**	**3264.2**	**3312.1**	**3421.4**	**3396.8**	*3475.5*	*3485.8*	*3574.5*
Other Use/Sales [g]	**115.0**	**118.0**	**122.0**	**128.0**	**134.0**	**144.1**	**146.0**	**148.1**	**161.1**	**183.1**	**183.0**	**205.1**	*230.6*	*249.8*	*257.4*
Total Demand	**2827.6**	**2880.1**	**2885.4**	**2989.5**	**3068.6**	**3157.3**	**3247.2**	**3293.7**	**3425.3**	**3495.2**	**3604.4**	**3601.8**	*3706.1*	*3735.7*	*3831.9*

[a] Electric Utilities and independent power producers.

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

[c] Electricity generation from combined heat and power facilities and electricity-only plants in the industrial and commercial sectors.

[d] Data for 2001 are estimates.

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

[f] 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 2001 are estimated.

[g] Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators to third parties, reported annually in Table 7.5 of the Monthly Energy Review (MER). Data for 2001 are estimates.

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

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