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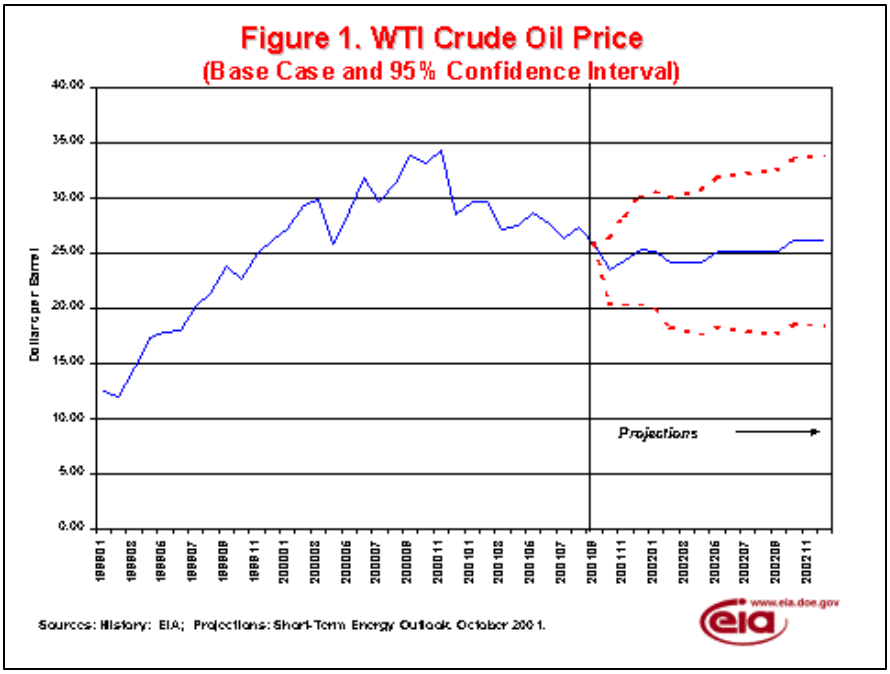
Energy Information Administration

Short-Term Energy Outlook

October 2001



Overview

The economy is not expected to provide impetus to growth in energy demand this winter. Particularly weak are activity levels in the industrial sector. Under normal weather assumptions, relatively weak demand and generally ample fuel inventories portend sharp reductions in fuel prices compared to last winter. Most of the past year's dramatic increase in average residential natural gas costs is expected to be undone this winter as a stark reversal of the constrained natural gas market environment takes hold.

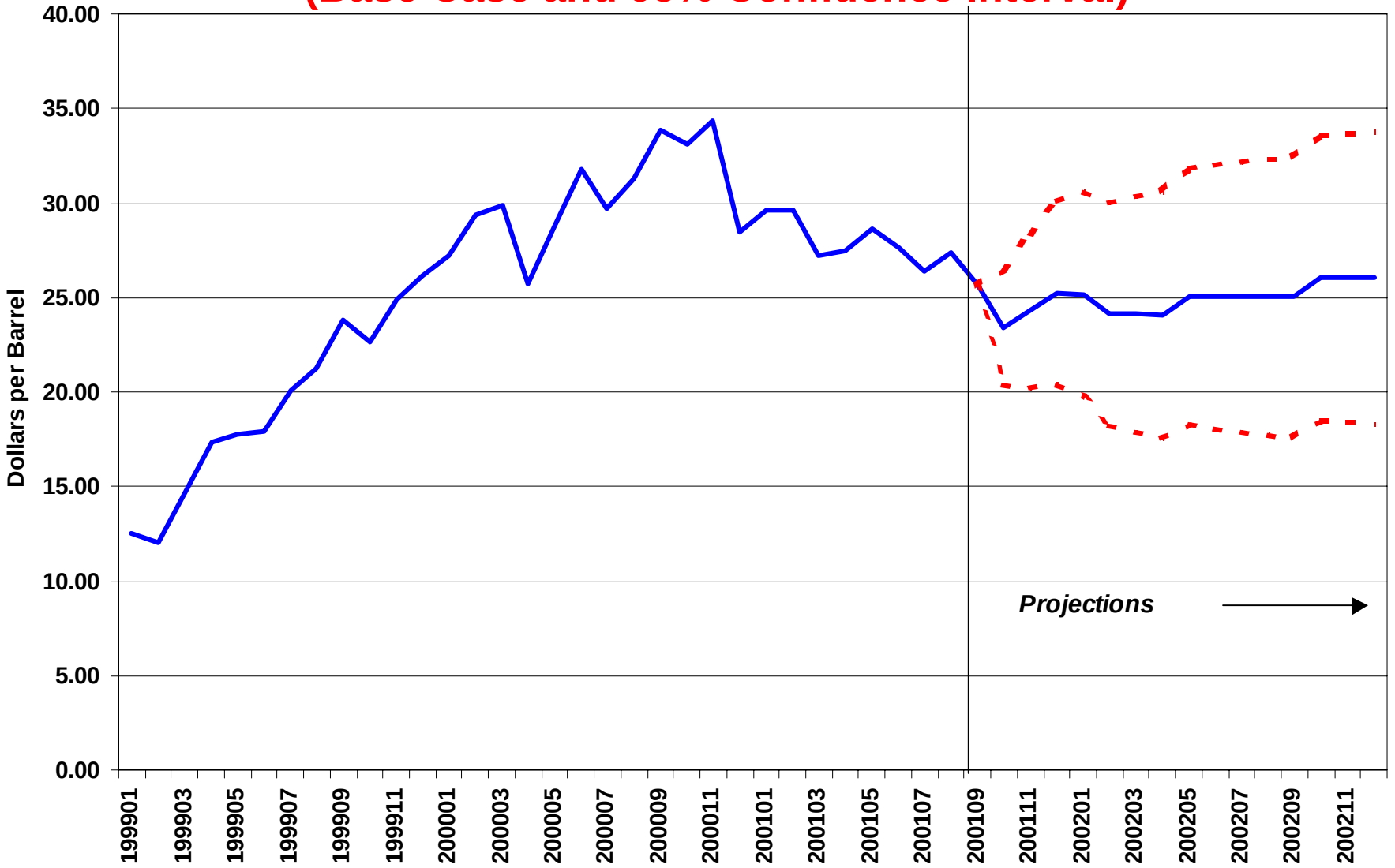
World Oil Markets

World oil prices initially rose in September following the terrorist attack, but then fell sharply as OPEC reassured world markets that it would maintain plentiful supplies on world markets, leaving the market to focus on world oil demand, which was weakening even before the crisis. The U.S. average imported crude oil price in September was an estimated $22 per barrel, down about $1.90 per barrel from August levels, while the U.S. benchmark West Texas Intermediate crude oil price averaged almost $26 per barrel in September (Figure 1). Previously expected tightening of world oil markets in the fourth quarter predicated on continued, if relatively modest, world oil demand growth is less likely now.

U.S. Winter Fuels Outlook

This winter--defined as the period from October 2001 to March 2002--is expected to bring with it lower heating bills than those seen last winter, particularly for homes that heat with natural gas. The main reasons for this outcome are: 1) under normal weather assumptions, heating demand is expected to be about 7 percent below the levels experienced last winter, with most of the difference being concentrated in the fourth quarter of 2001; 2) inventories of key heating fuels--especially natural gas—are noticeably above year-ago levels, which should help insulate prices from any unanticipated demand surge; 3) crude oil prices are expected to be significantly lower than last winter; 4) consumer prices for fuel are expected to be lower than last winter under normal weather conditions, with residential natural gas prices down 29 percent, residential heating oil prices down an average of 13 percent and propane prices down approximately 17 percent. Combined reductions in prices and expected usage rates are expected to lower winter heating bills for typical households by about 34 percent for natural gas-heated homes, 17 percent for oil-heated households, 23 percent for residences using propane as a main heating fuel, and perhaps 3 to 4 percent for households heating with electricity.

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



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

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U.S. Macroeconomic Outlook

Despite continued gains in personal income this year, the worst performance in the industrial manufacturing sector in 21 years is likely to spur the weakest overall expansion in U.S. economic output in 10 years. The already-weakened U.S. economic engine may have been tipped into recession in the second half of 2001 by the shock to commercial activity and consumer confidence of the September terrorist attack. Renewed growth is expected to take hold by mid-2002, but spending and output are expected to remain depressed for the winter.

We assume that real GDP declines marginally (0.6 percent) between the second and fourth quarters of 2001 and that the three consecutive quarters of decline in manufacturing output seen through the first half of this year is extended to five. On an annual basis, real GDP is expected to post a gain of about 1.0 percent (Figure 2), by far the lowest annual rate of economic expansion in the U.S. since the last recession (1991). Compared to last month's Outlook, the downshift in the expected growth rate translates into approximately 1.4 percent less economic output, cumulatively, expected for 2002. Despite the assumed near-term weakness, strong quarterly growth rates are expected to appear by mid-2002, leading to progressively more solid annual growth rates over the next 2 years. This year's weak economic performance contributes to what most likely will be the first absolute decline in overall energy demand (0.5 percent) since at least the early 1990's.

Electric Power Summary

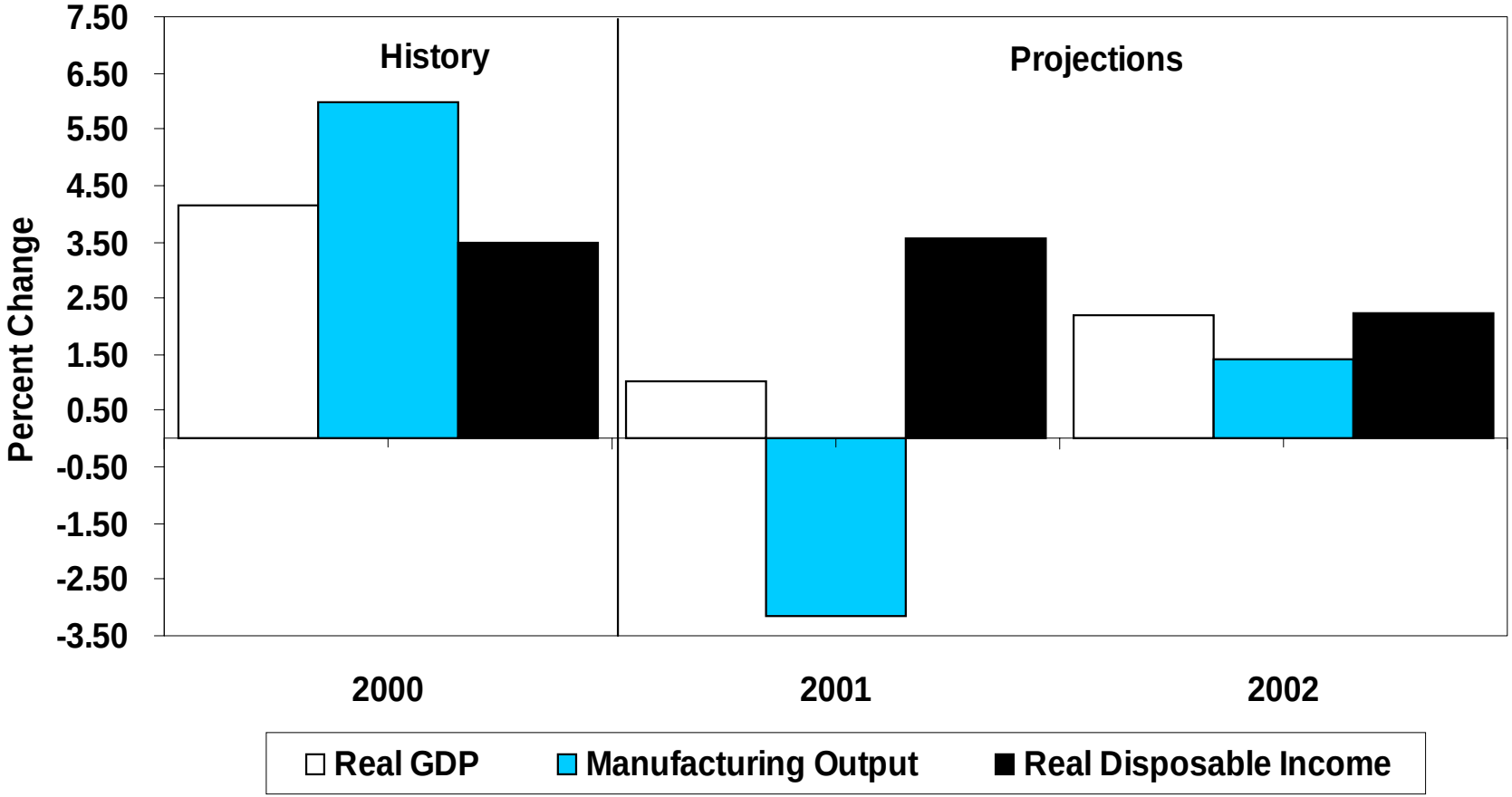
This winter, electricity demand is expected to fall by about 1.0 percent, compared with last winter's demand growth of 4.6 percent, due both to the slower economy and the assumption of normal winter weather compared with last year's cold weather. Over the whole year of 2001, electricity demand growth is expected to be minimal (about 0.5 percent) mainly because of the weak economy. Industrial demand growth for electricity is expected to be sharply negative in 2001 compared to its 2000 level, falling by 48 billion kilowatt hours (4.4 percent), but to revive somewhat in 2002 along with the economy. The industrial sector has been impacted by the economic slowdown as well as by the high natural gas prices during the first half of 2001.

International Oil Markets

Crude Oil Prices. World oil prices first rose in September with the onset of the crisis, and then fell sharply as OPEC reassured world markets that it would ensure plentiful supplies, leaving the market to focus on world oil demand, which was weakening even before the crisis. The U.S. average imported crude oil price in September was estimated at $22 per barrel, down almost $2 per barrel from August levels, while the U.S. benchmark West Texas Intermediate crude oil price averaged about $26 per barrel in September. The OPEC basket price, which generally tracks closely with the average imported crude oil price, averaged about $24 per barrel. World oil prices are expected to firm in the fourth quarter with the onset of seasonal increases in world oil demand. As a barometer of developing world oil market tightness, expected inventory patterns over the next 15 months suggest weaker underlying support for oil prices than previously projected.

International Oil Demand. In its previous Outlook, EIA noted that world oil demand during the past decade grew by at least 1 million barrels per day each year except during periods of serious international crises and that this would be EIA's baseline projection for 2001. A week after the release of the Outlook, the world did indeed enter a serious political and economic crisis, and moved closer to a global recession. In the near-term, the largest impact is expected to come from the large drop in global demand for jet fuel. Worldwide jet-fuel demand probably fell by about 10 percent outside the United States and by as much as twice that within the United States. In addition, revised economic estimates indicate that the United States, viewed as the engine for global economic growth, may be in the midst of a recession. These two factors

Figure 2. Macroeconomic Indicators



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have resulted in EIA's lowering its global demand projections for fourth quarter 2001 by 700,000 barrels per day.

The outlook for 2002 projects that U.S. commercial jet fuel use will recover somewhat, and that global jet fuel demand will be down by roughly 5 percent. Weaknesses in the world's economies are projected to reduce growth further, leaving OPEC to supply a world oil market that is projected to be much smaller in 2002 than previously projected. The projected growth in world oil demand in 2002 is now projected at 900,000 barrels per day, down from 1.4 million barrels per day in the previous Outlook (Figure 3).

International Oil Supply. Prior to the crisis, the EIA Outlook indicated that OPEC's planned production cutback in September was likely to be curbed because demand in the world's largest oil consumer, the United States, continued to be stronger than expected and OECD and world commercial inventories were tightening. These trends were expected to continue in 2002, increasing the demand for OPEC oil.

In fact, it is assumed that the OPEC 10 will further deviate from their September quota to reassure world oil markets that supplies will be available during the crisis and out of concern for the weakening outlook for world economic growth. OPEC overproduction is expected to be about 1.3 million bbl/d in the fourth quarter 2001.

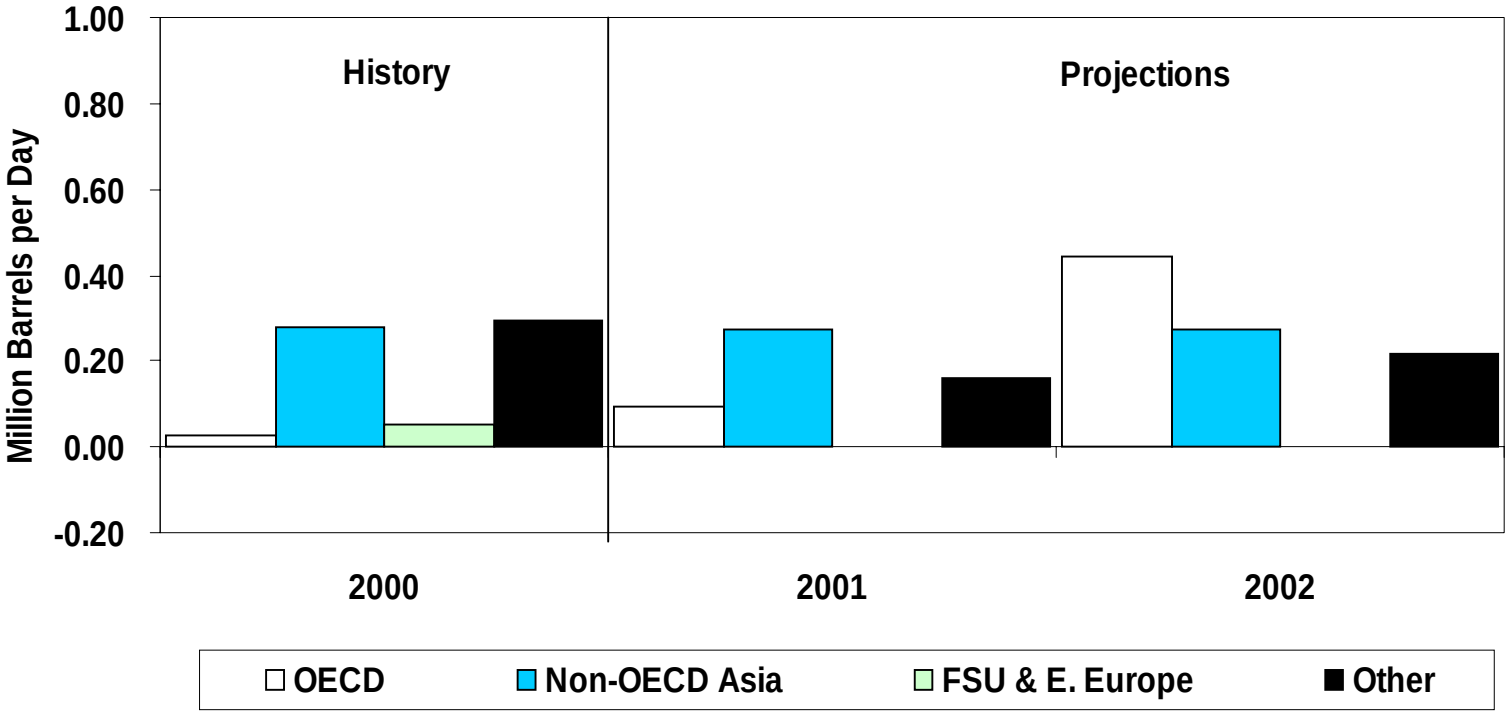
Non-OPEC production is expected to increase by about 1.2 million barrels per day in 2002, greater than the projected growth in demand. As a result, the call on OPEC oil will decline.

World Oil Inventories. At the beginning of September, OECD commercial oil stocks (crude and product) were estimated to be at the bottom end of their normal range, only slightly higher than last year's extremely low levels. With the increase in OPEC 10 production and the decline in world oil demand, OECD commercial stocks are projected to loosen and move into the middle of their range in 2002 (Figure 4). EIA does not attempt to estimate oil inventory levels on a global basis. However, the direction in which OECD commercial oil inventories are headed is discerned from EIA's world oil supply and demand estimates.

U. S. Energy Prices

Gasoline Prices Despite obvious concerns about potential supply disruptions immediately after the September 11 attacks, and despite some scattered reports of price gouging during the second week of September, gasoline prices have remained steady or fallen since the onset of the crisis. In fact, in the week after the attacks, on a national average, motor gasoline prices increased by 0.2 cents per gallon from the previous week. In one region of the country, the Midwest, retail prices actually fell by a few cents per gallon. In the three weeks since the attack, retail prices have dropped an average of 11 cents per gallon, falling in every region of the country. The national average monthly price for regular gasoline averaged about $1.52 per gallon in September, 10 cents per gallon higher than the August price (Figure 5). It should be noted, however, that prior to the events of September 11, the petroleum market was operating in a fairly stretched mode as stock levels were tightening. This was quite evident by the rapid price responses of wholesale and retail gasoline that occurred following the refinery shutdown on August 14 in Lemont, Illinois with much of the price jump concentrated in the Midwest. The terrorist attack in New York City caused the harbor to be closed temporarily and has also led to a slowdown in barge traffic. The result of this was a tightening of gasoline supplies accompanied by a corresponding surge in spot prices. However, this was short-lived. Spot prices for gasoline and other petroleum products have since backed down as the supply situation currently appears less murky. With lower crude oil prices and a slowing economy, we expect prices to start falling by the fourth quarter. Gasoline inventories have remained within the normal range despite relative strong mid-summer gasoline demand (Figure 6). The softening of the economy and falling crude oil prices should keep gasoline inventories at reasonably adequate levels. Thus, we believe that gasoline prices are likely to end the year at less than $1.35 per gallon.

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



* FSU = Former Soviet Union

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

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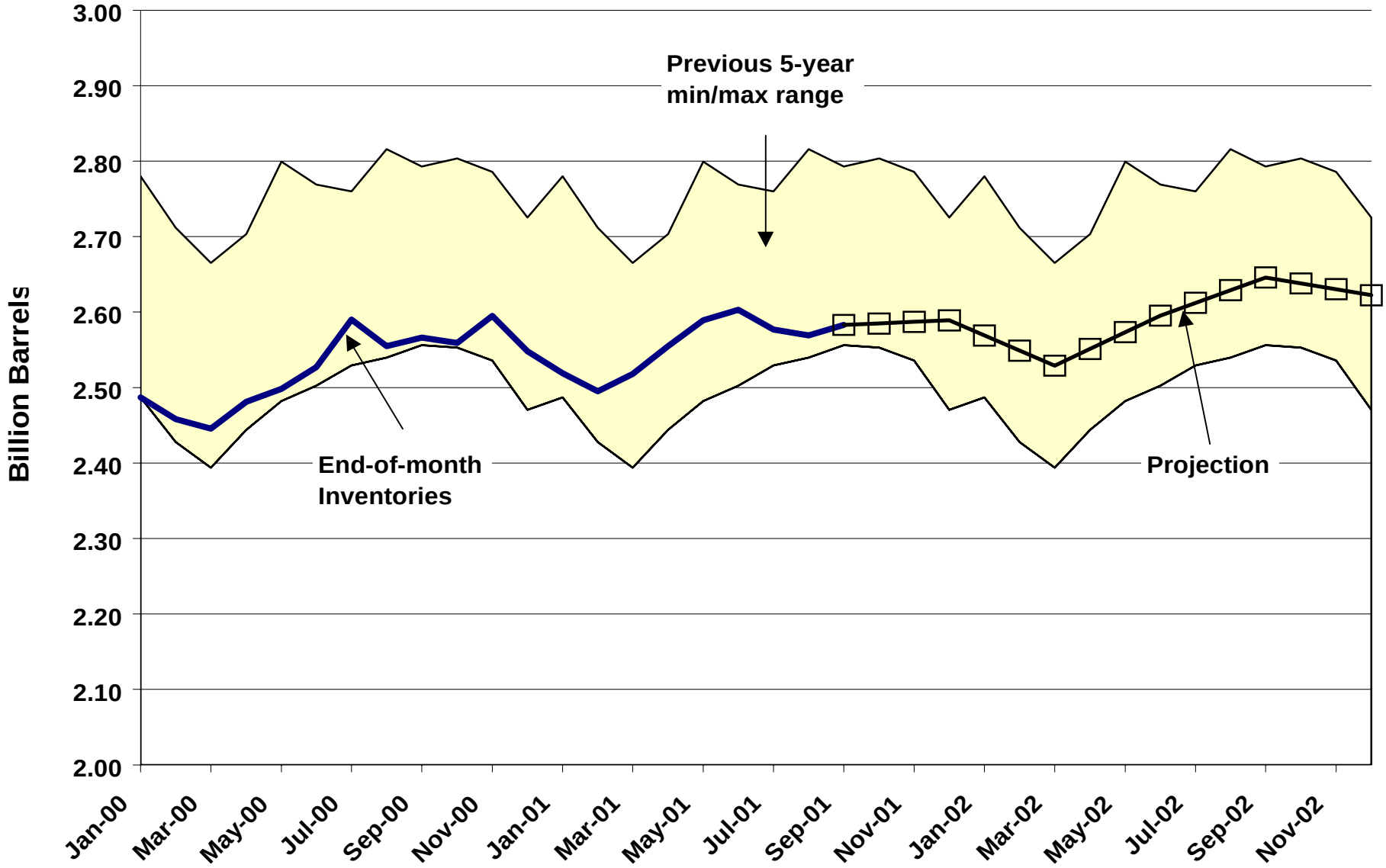
Figure 4. OECD Commercial Oil Stocks



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

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Figure 5. Motor Gasoline Prices

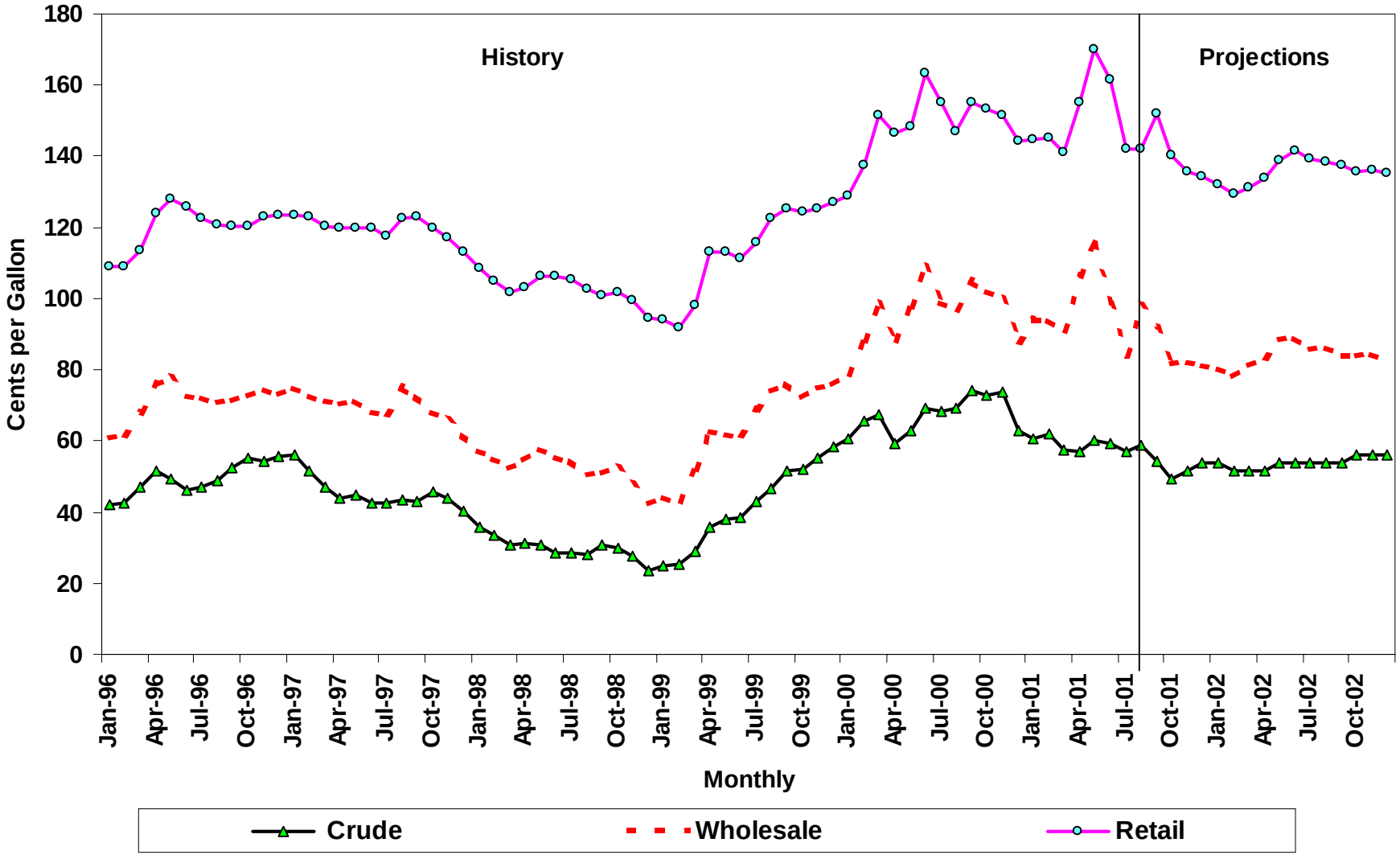

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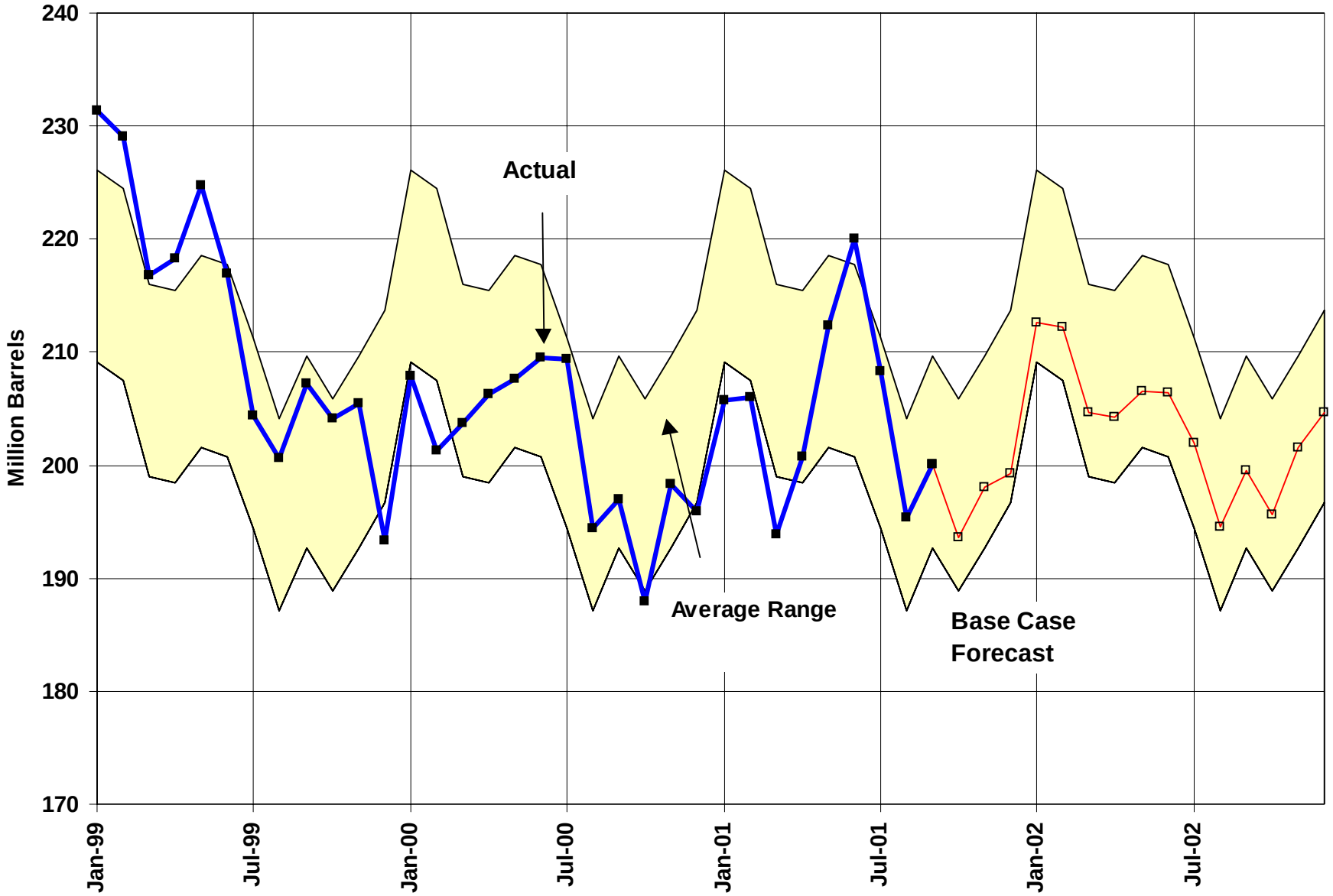
Figure 6. U.S. Gasoline Inventories



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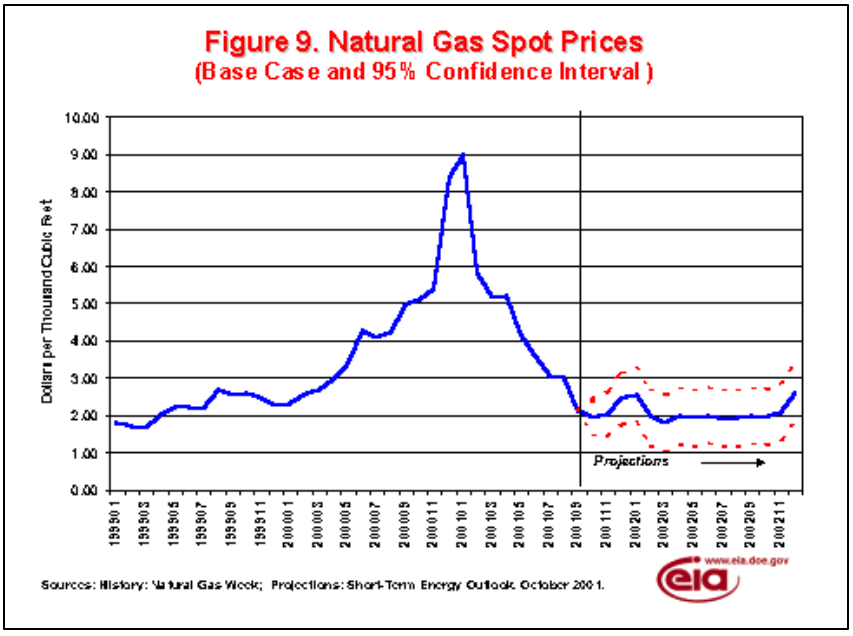
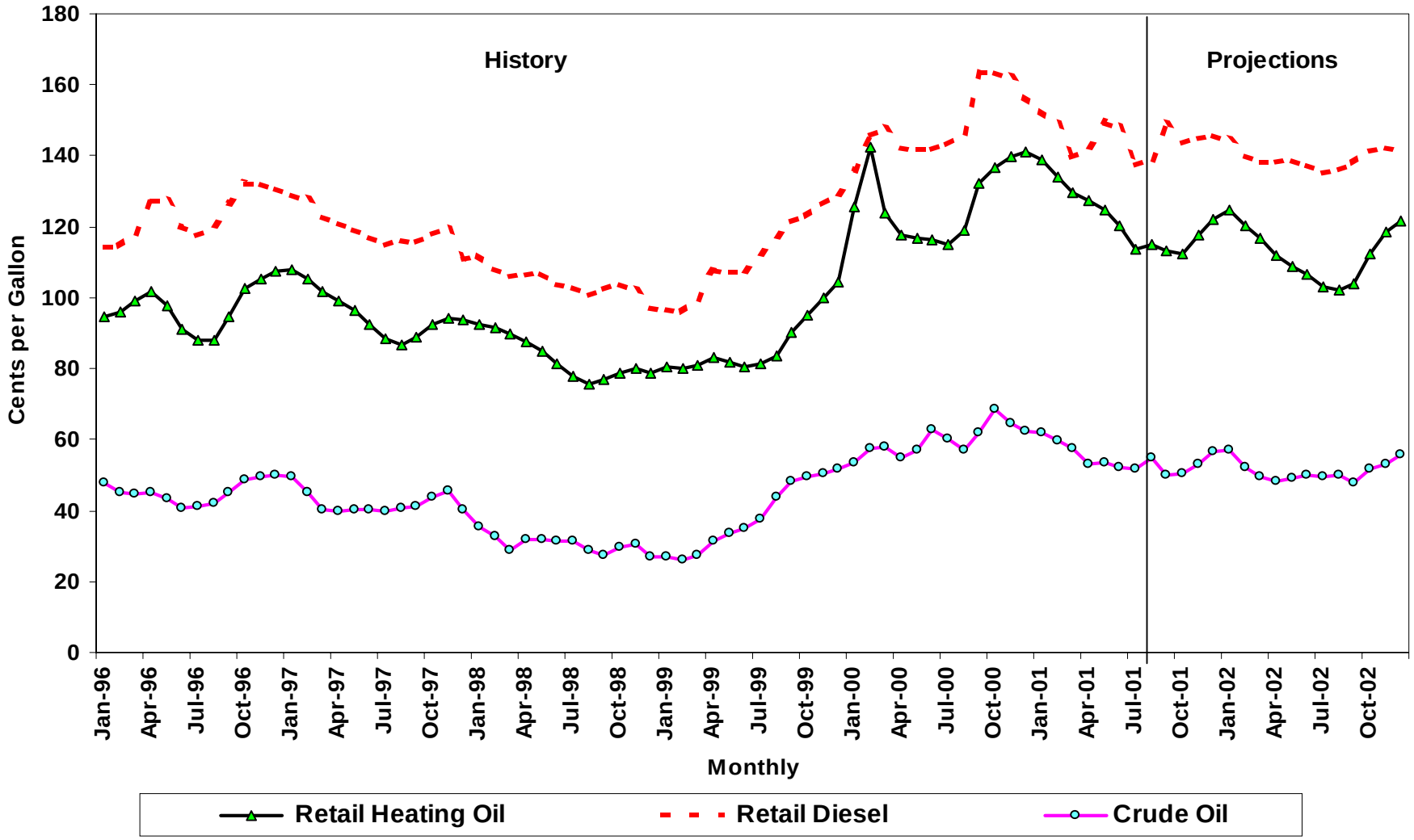
Distillate Fuel Oil (Diesel and Heating Oil) The price of diesel fuel, like the price of gasoline, jumped in September to $1.49 per gallon, 9 cents per gallon above the August price, for much of the same reasons as the gasoline price spike (Figure 7). The refinery shutdowns in August and early September, not the terrorist attack, were responsible for the supply disruption. Under normal circumstances, diesel prices would be expected to remain firm through the end of the year, as overall demand for distillate fuels increases during the heating season. Ironically, one factor that may counteract the upward pressure on diesel prices is the sudden oversupply of kerosene jet-fuel that resulted from the nearly total shutdown of air traffic and the subsequent slowdown of air travel following the terrorist attacks of September 11. With demand for jet fuel currently depressed, some refinery production of kerosene jet fuel could be either added to the supply of distillate fuel either by changing the yields or by blending into distillate as a finished product. Diesel prices, which normally would rise with heating oil prices, are expected to slip a little for the reasons stated above. Further downward price pressure would stem from a falling economy and relatively strong inventories. Moreover, in the fourth quarter, U.S. crude oil costs are expected to be about $7.60 per barrel (18 cents per gallon) less than a year ago. Similarly, residential heating oil prices are projected to be lower this upcoming winter compared to last winter (about 17 cents per gallon less), as we begin the heating season with a higher distillate stock level compared to last year. Distillate stock levels at the end of September are 8 percent above last year's level (Figure 8). By the end of November and December, when distillate stocks normally peak, we expect U.S. inventories to rise to about 130 million barrels, within the "normal" range and about 10 percent above last year's level. However, this would still be about 4 percent below the previous 5-year average. It should be noted that refinery outages in the Midwest may make distillate fuel markets tight there. For a detailed analysis of this situation, see the EIA special report "PADD 2 Gasoline and Distillate Fuel Near-Term Outlook." One dynamic that will tend to alleviate any potential strain on distillate markets of some of the strain experienced last winter is the striking swing in the net supply situation for natural gas. Ample and relatively cheap gas this winter is likely to reverse the switching toward distillate fuels that occurred during the period of last December through the first quarter of 2001.



Natural Gas The physical supply of natural gas was not affected by the September 11 terrorist attacks. Except for a brief panicky price spike that followed when the spot markets first opened several days after the attack, the spot price of gas has actually fallen to $2.00 per thousand cubic feet (or less). Lower economic activity has generated conditions that greatly reduce natural gas demand in the industrial sector. Weak industrial demand and generally moderate summer weather have generated a collapse in natural gas prices and bulging underground storage levels for gas. Assuming normal weather, and barring any major production disruptions-- such as a hurricane in the Gulf-- by the start of the heating season, working gas in underground storage is projected to be close to 20 percent above last year's level and about 10 percent above the previous 6-year average. The weakened economy is expected to hold wellhead prices below $2.50 per thousand cubic feet throughout the forecast period (Figure 9). Wellhead prices this winter are projected to be less than half the price they were last winter. The average for 2001 is now projected be

Figure 7. Distillate Fuel Prices



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

Figure 8. Distillate Fuel Inventories

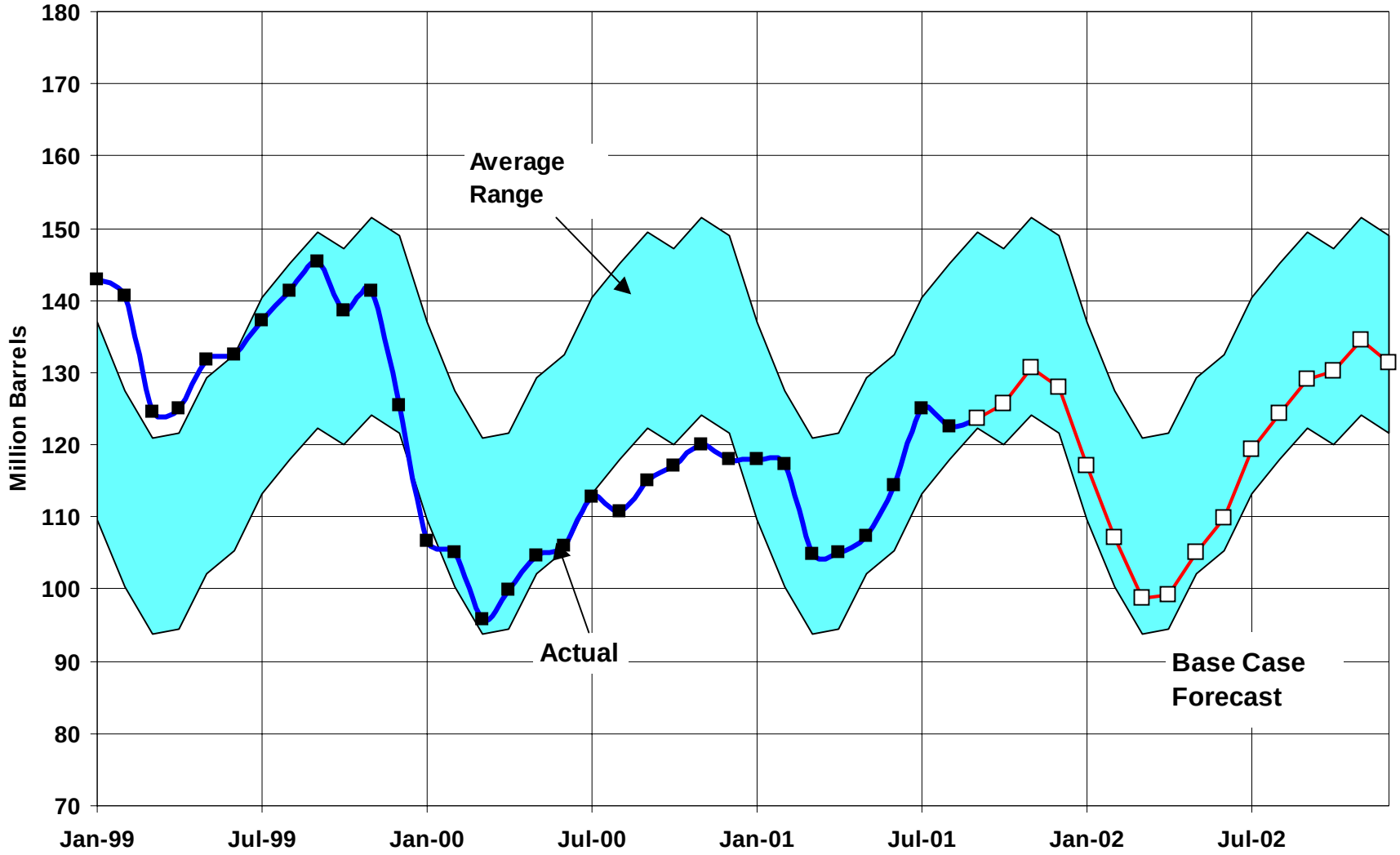

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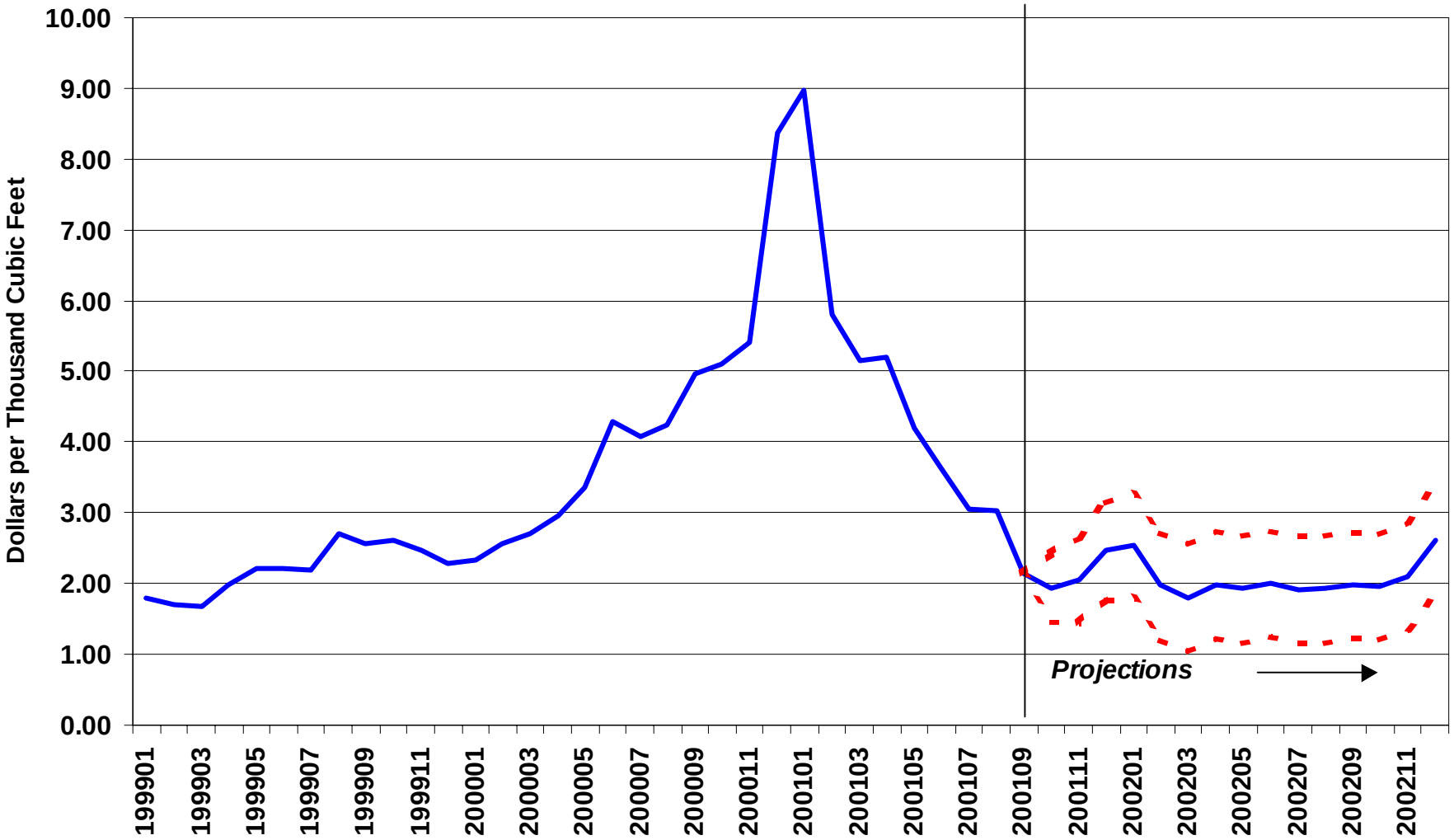
Figure 9. Natural Gas Spot Prices
(Base Case and 95% Confidence Interval)



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

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about $4.00 per thousand cubic feet. Next year, we expect inventories to remain at relatively high levels and, therefore, we expect further diminishing in the average annual wellhead price to about $2.10 per thousand cubic feet. Prices could disintegrate even more if we experience mild weather this fall and winter.

Electric Utility Fuels With natural gas prices plunging more rapidly than oil prices, the price of delivered gas to electric utilities dropped to about 11 percent below the heavy fuel oil price in September (Figure 10). In August, these delivered prices had reached parity on an average Btu basis, after a year-long situation of gas being the more expensive fuel. Next year, gas prices are expected to continue to decline on an annual basis more rapidly than oil prices. The spot price of coal to electric utilities climbed a little this year, partly because of pressures for coal substitution for relatively scarce gas and also because of the very tight storage position of coal at power generating stations. By the end of the year, the situation is expected to reverse itself, with coal stocks rebounding and gas prices at low levels. Spot prices of coal have also fallen dramatically since June. Still, on an annual basis, coal prices are expected to increase slightly this year, after years of annual price declines. Next year, coal prices should recede as coal stocks gain and natural gas prices continue to fall.

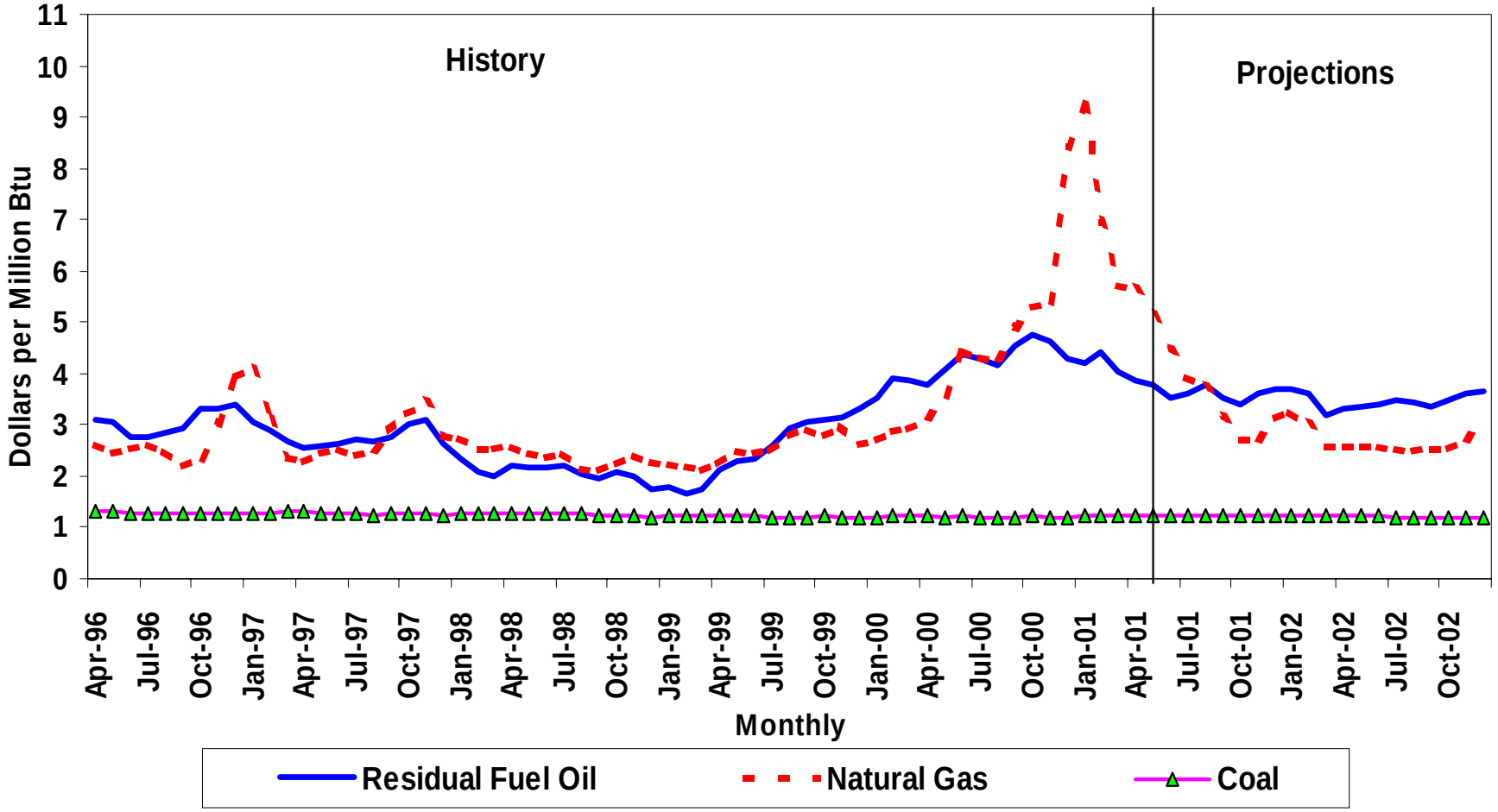
U.S. Oil Demand

The events of September 11 have resulted in a sharply lower projection for petroleum demand compared to that of the previous Outlook. Although economic growth had been slowing for several months, the terrorist attacks are likely to add to economic weakness and postpone economic recovery until later in 2002, affecting petroleum demand. Demand in the current year is projected to average 19.72 million barrels per day, up 20,000 barrels per day, or 0.1 percent, from the average for 2000 (Figure 11). That is the smallest such increase since 1995, when virtually no demand growth was recorded. Excluding the substantial price-induced fuel switching away from natural gas during the first quarter, the year-to-year change would have shown a substantial decline. Demand in 2002, however, is expected to average 20.04 million barrels per day, an increase of 320,000 barrels per day, or 1.6 percent, but a noticeable reduction from earlier projections.

In the first quarter of this year, demand jumped more than 560,000 barrels per day from the same period in 2000. But that growth was due to unusual factors, among which were: the spike in natural gas prices to record levels, which stimulated oil demand in the price-sensitive industrial and electric utility sectors; increased space-heating requirements, brought about by colder-than-average weather compared to the previous year's mild first quarter; unusual strength in first-quarter diesel demand in apparent reaction to the weak shipments of the fourth quarter of 2000, and, Y2K-related concerns about deliverability, which boosted end-of-1999 shipments and depressed January 2000 deliveries. The second quarter, in contrast, registered a year-to-year overall increase of only 77,000 barrels per day. Due to a weakening economy and assumptions of normal weather, oil demand during the second half of this year is projected to decline by 270,000 barrels per day.

For the current year, motor gasoline demand is expected to grow 1.2 percent compared to the 0.5 percent rate of increase of the previous year. During the summer driving season (i.e., the second and third quarters) demand grew by only 0.7 percent. During that period, prices spiked to record levels and growth in disposable income slowed markedly. The final quarter of 2001 is projected to witness only modest demand growth despite the recent personal income tax rebates and lower prices. In 2002, motor gasoline demand is projected to climb 2.1 percent, closer to normal but partly bolstered by some increased driving due to the expected cutbacks in air travel. The beginnings of an economic recovery and the lagged effects of retail price declines since the Spring 2001 are expected to boost travel activity, especially in the latter half of the year.

Figure 10. Fossil Fuel Prices to Electric Utilities



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

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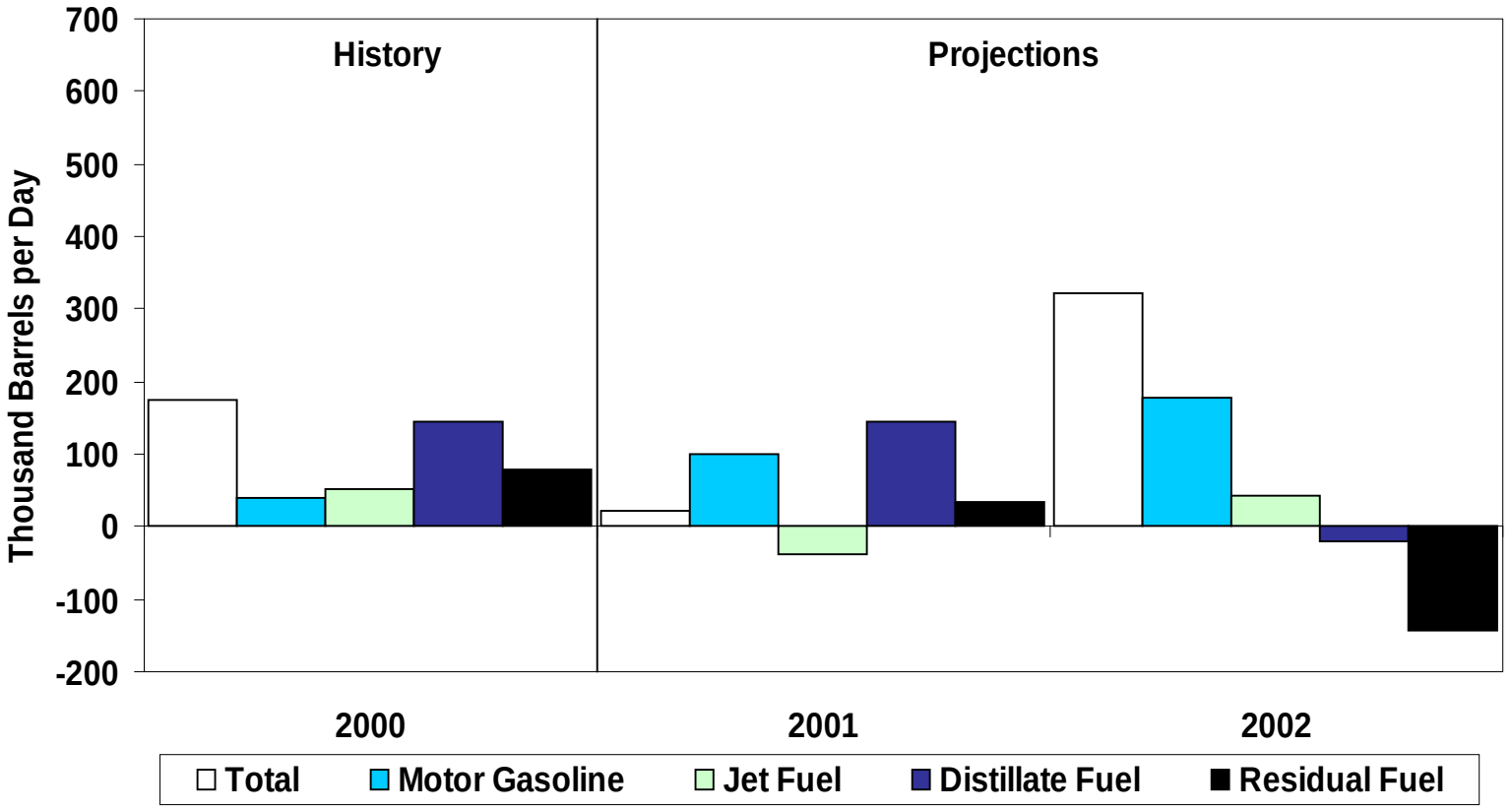
Figure 11. Petroleum Products Demand Growth
(Change from Year Ago)



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Total jet fuel demand, which had been weak even before the terrorist incidents, is expected to decline by 2.2 percent for 2001. For the second half of this year, the combination of the temporary shutdown of air services and a substantial trimming of capacity is projected to result in a 7-percent decline in demand compared to the second half of 2000. Following two years of substantial growth, revenue ton-miles are projected to decline by 3 percent in the current year, the first such decline since the Gulf War. Capacity is projected to decline more than 1 percent. In the following year, during which economic growth is projected to resume, total jet fuel demand is projected to increase by a modest 2 percent, buoyed by a 2-percent increase in revenue ton-miles and a 1-percent growth in industry-wide capacity.

Distillate fuel oil demand, having increased by 4.2 percent in 2000, is projected to increase a further 3.2 percent in the current year despite the slowdown in economic growth. In the first quarter of 2001, the return to a normal winter compared to the mild period the previous year resulted in a substantial increase in shipments of heating oil. But some of the first-quarter strength also derives from the volatile nature of diesel shipments. Diesel deliveries during the first quarter were stronger than expected, following weaker-than-expected shipments during the fourth quarter of 2000. In the fourth quarter of 2001, transportation diesel is projected to increase slightly: a small switch to ground transportation resulting from a reduction in air capacity is expected to partially offset the effects of additional economic weakness resulting from the terrorist attack. In 2002, total distillate demand is projected to decline slightly. That projection, however, assumes that purchases by power generators will be less than half of the record levels of early 2001, an expectation bolstered by burgeoning natural gas supplies. Diesel fuel shipments, however, are projected to increase, but only at a 2.0-percent rate. Space-heating demand is also projected to decline slightly under assumptions of normal weather.

Residual fuel oil demand is projected to increase by almost 4 percent in the current year. Growth during the first half of the year--due primarily to fuel switching in the power-generation and industrial sectors--averaged almost 25 percent. The second half of 2001 is projected to see a decline of more than 13 percent as a result of the substantial decline of natural gas prices as well as a slowing economy. In 2002, the assumption of normal weather, a relatively weak economy and continued low levels of natural gas prices are expected to result in a contraction of residual fuel oil demand by 15 percent for the year, mainly because of industrial and power sector switching back to natural gas.

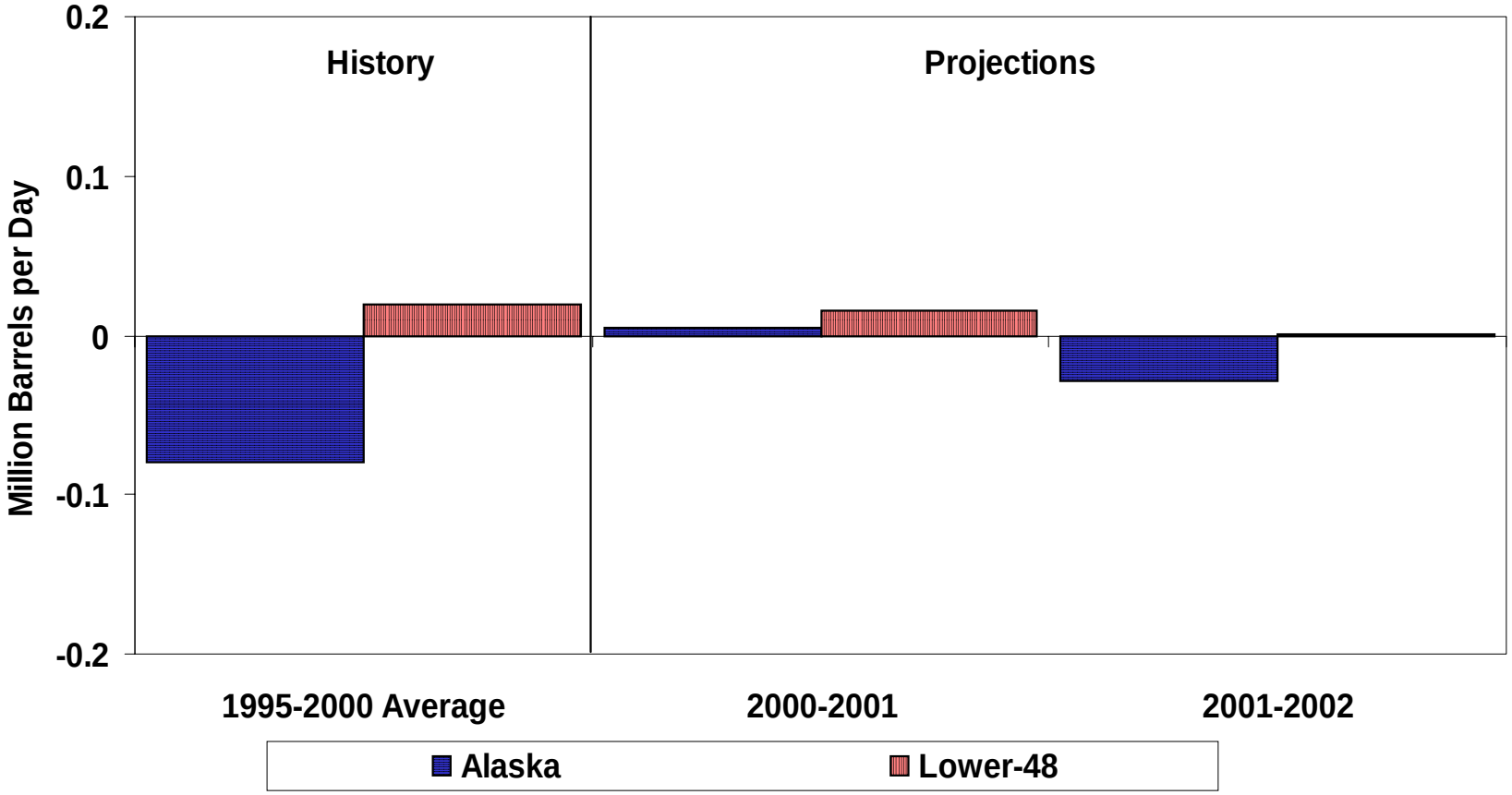
U.S. Oil Supply

Average domestic oil production is expected to increase by 23,000 barrels per day, or 0.3 percent in 2001, to a level of 5.84 million barrels per day. For 2002, a small decline is expected for a production rate of 5.81 million barrels per day average for the year (Figure 12).

Lower-48 States oil production is expected to increase by 15,000 barrels per day to a rate of 4.87 million barrels per day in 2001, followed by an increase of 1,000 barrels per day in 2002. Shell started production in 1999 from their Ursa field, which will peak late in the year. Shell's Brutus platform is expected to start production in the third quarter of 2001, with peak oil production of 100,000 barrels per day in 2002. Oil production from the Mars, Troika, Ursa, Dianna-Hoover and Brutus Federal Offshore fields is expected to account for about 9.8 percent of the lower-48 oil production by the fourth quarter of 2002.

Alaska is expected to account for 16.3 percent of total U.S. oil production in 2002. Its oil production is expected to increase by 0.4 percent in 2001 and then decrease by 3.0 percent in 2002. The increase in 2001 is the result of adding two new satellite fields, Colville River (Alpine) and Prudhoe Bay (Aurora), which contributed to Alaska North Slope production. Alpine averaged over 100,000 barrels per day during August. Aurora peak production should also occur late this year. Another satellite field, North Star, is expected to come on in early- to mid-2002 and peak at a rate of 65,000 barrels per day later that year. A substantial portion of the oil production from Alaska comes from the giant Prudhoe Bay Field. Production from the Kuparuk

Figure 12. U.S. Crude Oil Production Growth
(Change from Year Ago)



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River field and from West Sak, Tabasco and Tarn fields is expected to average 217,000 barrels per day during 2001 and 2002.

Natural Gas Demand and Supply

Based on 5 month's worth of monthly survey data on gas consumption and the downward revision of estimates of economic growth as a result of the September 11 attack, a decline of 2.0 percent in total natural gas demand growth for the year 2001 is likely (Figure 13). We currently estimate that total industrial gas use (excluding consumption by nonutility power generators for electricity production) fell by about 600 billion cubic feet (18 percent) during the first half of 2001 compared to the first half of 2000 due to a combination of very high gas prices and falling industrial production in gas-intensive industries. The U.S. Labor Department reported that industrial production has been falling for the past consecutive 11 months, with the latest month of data being August. Natural gas use related to electricity output by independent power producers as well as industrial and commercial cogenerators rose sharply – by 23 percent in the first quarter and is estimated to have grown by a similar amount in the second quarter, compared to 2000 levels. While price conditions have now swung back in favor of using natural gas as a result of lower demand, the depressed demand situation is not expected to improve appreciatively until 2002 due to lowered assumptions about economic growth for this year.

Natural gas demand in 2002 is expected to rise by 3.9 percent as the economy picks up somewhat from its virtual stall in 2001 (increasing industrial demand for fuel) and as much lower gas prices encourage displacement of oil and other fuels in favor of natural gas.

Based on EIA survey data and recent information from the American Gas Association on early-season storage additions, we estimate that, on an EIA survey basis, working gas in storage at the end of September was 2,974 billion cubic feet. Storage is well above last year's level and also above the previous 6-year average (Figure 14). As storage levels have risen, spot natural gas prices have fallen. In September, spot wellhead gas prices fell to about $2.00 per thousand cubic feet (mcf).

Heating degree-days this winter are assumed to be normal, or 7.2 percent lower than last winter. Winter demand growth for total natural gas is projected to decline by 1.3 percent compared with growth of 6.2 percent last winter. Residential and commercial demand for natural gas is expected to be 6.0 and 5.2 percent, respectively, lower than last winter, due mainly to the assumption of normal weather. With industrial production expected to be down this winter, the principal sector keeping gas demand from falling sharply is the power generating sector. Gains here are not the result of output strength but rather the reversal of significant fuel substitution away from gas that occurred amidst the gas market squeeze that developed last winter. Thus, spot wellhead prices, which averaged $6.30/mcf last winter, are expected to be almost two thirds lower this winter at about $2.10/mcf.

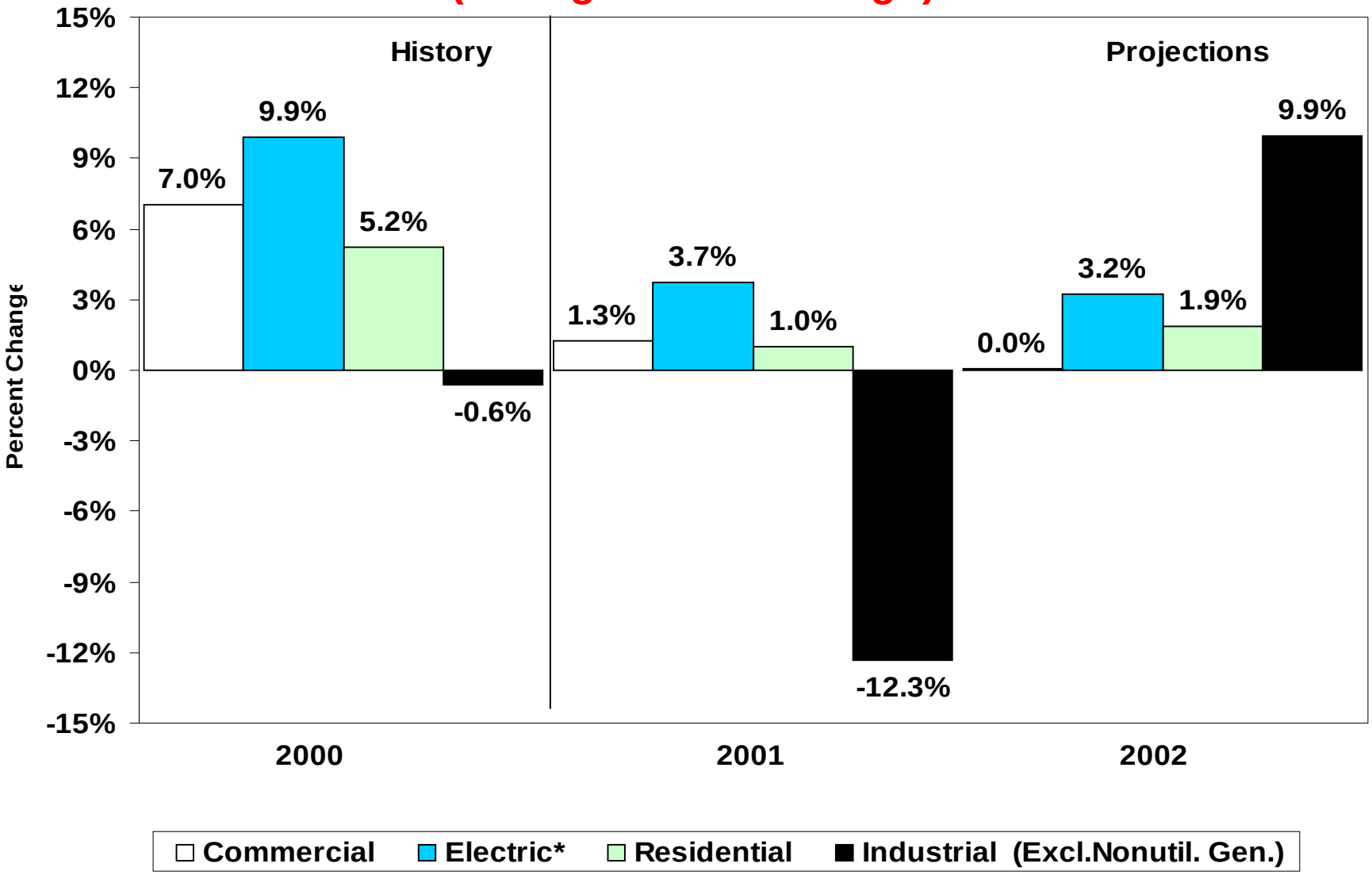
Domestic gas production has been revised downward somewhat and is now expected to grow by 1.4 percent in 2001 and by 1.3 percent in 2002. Net imports of natural gas are projected to rise by about 2.4 percent in 2001 and by 4.6 percent in 2002.

Electricity Demand and Supply

Total annual electricity demand growth (retail sales plus industrial generation for own use and other direct sales) is projected to be under 1.0 percent in 2001 and 1.4 percent in 2002. This is compared with estimated demand growth in 2000 of 2.8 percent over 1999's level. Electricity demand growth is expected to be slower in the forecast years than it was in 2000 (Figure 15) mainly because the economy is growing much more slowly than it was in 2000.

Figure 13. Natural Gas Demand Growth by Sector

(Change from Year Ago)



* Includes gas to electric utilities and nonutility generators.

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

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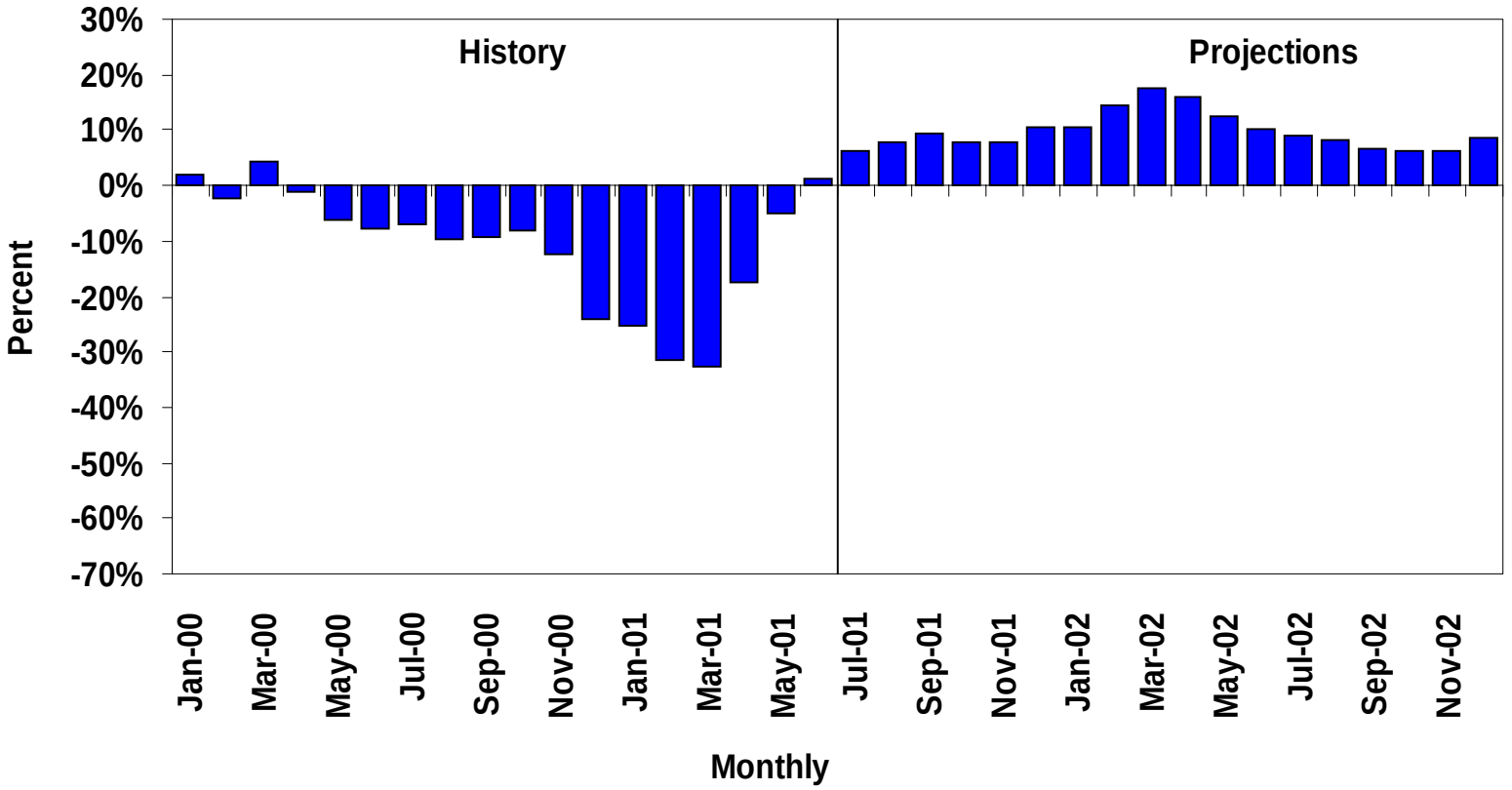
Figure 14. Working Gas in Storage
(Difference from Previous 5-Year Average)



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

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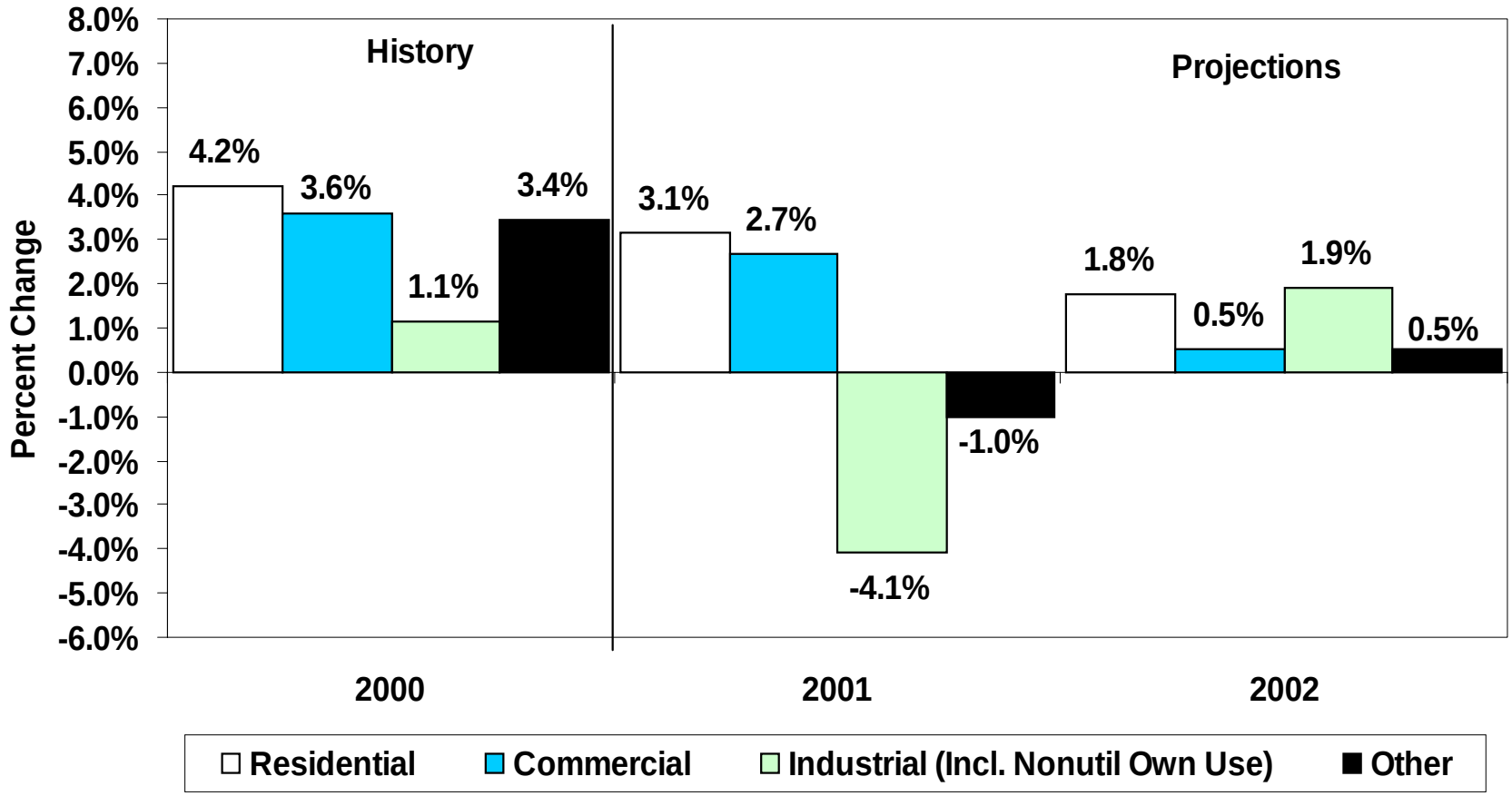
Figure 15. U.S. Electricity Demand Growth by Sector
(Change from Year Ago)



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

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The industrial sector has been impacted by the economic slowdown as well as by the high gas prices during the first half of 2001. Industrial demand growth for electricity is expected to be negative in 2001 compared to its 2000 level, falling by 48 billion kilowatt hours (4.4 percent), but to revive somewhat in 2002 along with the economy. In 2001, growth in residential and commercial demand for electricity is expected to be 3.2 percent and 2.7 percent, respectively, due mainly to continued expansion of the customer base and weather effects. These two sectors (particularly the commercial sector) are expected to be weaker next year because of the lack of weather effects and very slow growth in commercial employment.

This winter, total electricity demand growth is expected to be negative (down 0.9 percent) compared with last winter's demand growth of 4.6 percent due both to a weaker industrial economy and the assumption of normal weather (Table 10).

Table HL1. U. S. Energy Supply and Demand

	Year				Annual Percentage Change		
	1999	2000	2001	2002	1999-2000	2000-2001	2001-2002
Real Gross Domestic Product (GDP) (billion chained 1996 dollars)	**8857**	**9224**	*9319*	*9523*	**4.1**	*1.0*	*2.2*
Imported Crude Oil Price [a] (nominal dollars per barrel)	**17.22**	**27.72**	*22.98*	*22.00*	**61.0**	*-17.1*	*-4.3*
Petroleum Supply (million barrels per day)							
Crude Oil Production [b]	**5.88**	**5.82**	*5.84*	*5.81*	**-1.0**	*0.3*	*-0.5*
Total Petroleum Net Imports (including SPR)	**9.91**	**10.42**	*10.55*	*10.94*	**5.1**	*1.2*	*3.7*
Energy Demand							
World Petroleum (million barrels per day)	**74.9**	**75.6**	*76.1*	*77.0*	**0.9**	*0.7*	*1.2*
Petroleum (million barrels per day)	**19.52**	**19.70**	*19.72*	*20.04*	**0.9**	*0.1*	*1.6*
Natural Gas (trillion cubic feet)	**21.70**	**22.74**	*22.28*	*23.14*	**4.8**	*-2.0*	*3.9*
Coal [c] (million short tons)	**1045**	**1082**	*1101*	*1108*	**3.5**	*1.8*	*0.6*
Electricity (billion kilowatthours)							
Retail Sales [d]	**3312**	**3413**	*3429*	*3482*	**3.0**	*0.5*	*1.5*
Nonutility Use/Sales [e]	**189**	**187**	*186*	*186*	**-1.1**	*-0.5*	*0.0*
Total	**3501**	**3600**	*3616*	*3668*	**2.8**	*0.4*	*1.4*
Total Energy Demand [f] (quadrillion Btu)	**97.2**	**99.5**	*99.0*	*101.2*	**2.4**	*-0.5*	*2.2*
Total Energy Demand per Dollar of GDP (thousand Btu per 1996 Dollar)	**10.97**	**10.78**	*10.62*	*10.62*	**-1.7**	*-1.5*	*0.0*
Renewable Energy as Percent of Total [g]	**7.2**	**6.9**	*6.4*	*7.0*			

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

[b] Includes lease condensate.

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

[d] Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.

[e] Defined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review (MER*). Data for 2000 are estimates.

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

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

SPR: Strategic Petroleum Reserve.

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

Sources: Historical data: Latest data available from Bureau of Economic Analysis and Energy Information Administration; latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; and *Quarterly Coal Report*, DOE/EIA-0121; *International Petroleum Statistics Report* DOE/EIA-0520; *Weekly Petroleum Status Report,* DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast SHOCK0918.

Table 1. U.S. Macroeconomic and Weather Assumptions

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Macroeconomic [a]															
Real Gross Domestic Product (billion chained 1996 dollars - SAAR)	**9103**	**9229**	**9260**	**9304**	**9335**	**9338**	*9324*	*9279*	*9347*	*9468*	*9583*	*9693*	**9224**	*9319*	*9523*
Percentage Change from Prior Year	**4.2**	**5.2**	**4.4**	**2.8**	**2.5**	**1.2**	*0.7*	*-0.3*	*0.1*	*1.4*	*2.8*	*4.5*	**4.1**	*1.0*	*2.2*
Annualized Percent Change from Prior Quarter	**2.3**	**5.6**	**1.3**	**1.9**	**1.3**	**0.2**	*-0.6*	*-1.9*	*2.9*	*5.2*	*4.9*	*4.6*			
GDP Implicit Price Deflator (Index, 1996=1.000)	**1.063**	**1.068**	**1.073**	**1.078**	**1.087**	**1.093**	*1.097*	*1.101*	*1.108*	*1.112*	*1.117*	*1.123*	**1.070**	*1.094*	*1.115*
Percentage Change from Prior Year	**2.1**	**2.3**	**2.4**	**2.4**	**2.3**	**2.3**	*2.2*	*2.2*	*1.9*	*1.7*	*1.9*	*2.0*	**2.3**	*2.2*	*1.9*
Real Disposable Personal Income (billion chained 1996 Dollars - SAAR)	**6432**	**6524**	**6566**	**6635**	**6679**	**6719**	*6899*	*6790*	*6817*	*6888*	*6963*	*7026*	**6539**	*6772*	*6923*
Percentage Change from Prior Year	**2.6**	**3.6**	**3.7**	**4.0**	**3.8**	**3.0**	*5.1*	*2.3*	*2.1*	*2.5*	*0.9*	*3.5*	**3.5**	*3.6*	*2.2*
Manufacturing Production (Index, 1996=1.000)	**1.237**	**1.261**	**1.272**	**1.267**	**1.241**	**1.226**	*1.209*	*1.201*	*1.204*	*1.223*	*1.249*	*1.271*	**1.259**	*1.219*	*1.237*
Percentage Change from Prior Year	**6.3**	**7.0**	**6.4**	**4.2**	**0.4**	**-2.7**	*-5.0*	*-5.2*	*-3.0*	*-0.2*	*3.3*	*5.8*	**6.0**	*-3.2*	*1.4*
OECD Economic Growth (percent) [b]													**3.3**	*1.7*	*2.3*
Weather [c]															
Heating Degree-Days															
U.S.	**2023**	**485**	**93**	**1853**	**2279**	**452**	*90*	*1622*	*2234*	*518*	*86*	*1622*	**4454**	*4443*	*4459*
New England	**3007**	**909**	**196**	**2385**	**3273**	**847**	*143*	*2238*	*3174*	*883*	*167*	*2237*	**6497**	*6501*	*6462*
Middle Atlantic	**2713**	**692**	**129**	**2234**	**2919**	**624**	*88*	*2003*	*2891*	*700*	*105*	*2002*	**5768**	*5634*	*5698*
U.S. Gas-Weighted	**2115**	**512**	**100**	**1957**	**2417**	**473**	*96*	*1714*	*2351*	*555*	*90*	*1714*	**4684**	*4700*	*4710*
Cooling Degree-Days (U.S.)	**45**	**380**	**742**	**62**	**23**	**388**	*786*	*76*	*33*	*347*	*782*	*76*	**1229**	*1273*	*1237*

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

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

[c] Population-weighted degree days. A degree day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population.

SAAR: Seasonally-adjusted annualized rate.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release G.17(419)*. Projections of OECD growth are based on WEFA Group, "World Economic Outlook," Volume 1. Macroeconomic projections are based on DRI/McGraw-Hill Forecast SHOCK0918.

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

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Macroeconomic [a]															
Real Fixed Investment (billion chained 1996 dollars-SAAR)	**1683**	**1719**	**1730**	**1732**	**1740**	**1696**	*1653*	*1623*	*1612*	*1627*	*1656*	*1684*	**1716**	*1678*	*1645*
Real Exchange Rate (index)	**1.047**	**1.070**	**1.083**	**1.113**	**1.103**	**1.143**	*1.147*	*1.140*	*1.123*	*1.120*	*1.107*	*1.093*	**1.078**	*1.133*	*1.111*
Business Inventory Change (billion chained 1996 dollars-SAAR)	**5.3**	**22.0**	**12.0**	**12.9**	**-15.0**	**-35.5**	*-25.9*	*-13.8*	*-6.4*	*-0.1*	*7.0*	*8.8*	**13.1**	*-22.5*	*2.3*
Producer Price Index (index, 1982=1.000)	**1.303**	**1.321**	**1.333**	**1.353**	**1.385**	**1.363**	*1.348*	*1.346*	*1.348*	*1.346*	*1.351*	*1.357*	**1.328**	*1.361*	*1.351*
Consumer Price Index (index, 1982-1984=1.000)	**1.703**	**1.715**	**1.730**	**1.743**	**1.761**	**1.774**	*1.781*	*1.791*	*1.799*	*1.807*	*1.817*	*1.829*	**1.723**	*1.777*	*1.813*
Petroleum Product Price Index (index, 1982=1.000)	**0.830**	**0.899**	**0.954**	**0.969**	**0.892**	**0.962**	*0.855*	*0.783*	*0.800*	*0.782*	*0.760*	*0.800*	**0.913**	*0.873*	*0.785*
Non-Farm Employment (millions)	**131.0**	**131.9**	**131.9**	**132.3**	**132.6**	**132.5**	*132.2*	*131.7*	*131.6*	*132.0*	*132.6*	*133.3*	**131.8**	*132.2*	*132.4*
Commercial Employment (millions)	**91.4**	**91.9**	**92.3**	**92.7**	**93.1**	**93.3**	*93.1*	*92.8*	*92.9*	*93.3*	*93.9*	*94.5*	**92.1**	*93.1*	*93.7*
Total Industrial Production (index, 1996=1.000)	**1.208**	**1.231**	**1.241**	**1.238**	**1.217**	**1.204**	*1.187*	*1.180*	*1.183*	*1.201*	*1.223*	*1.244*	**1.230**	*1.197*	*1.213*
Housing Stock (millions)	**115.7**	**115.9**	**116.4**	**116.8**	**117.5**	**117.8**	*118.0*	*118.4*	*118.7*	*119.1*	*119.4*	*119.7*	**116.2**	*117.9*	*119.2*
Miscellaneous															
Gas Weighted Industrial Production (index, 1996=1.000)	**1.124**	**1.133**	**1.124**	**1.111**	**1.088**	**1.084**	*1.074*	*1.074*	*1.079*	*1.091*	*1.108*	*1.124*	**1.123**	*1.080*	*1.100*
Vehicle Miles Traveled [b] (million miles/day)	**6838**	**7682**	**7689**	**7221**	**6937**	**7724**	*7870*	*7349*	*7111*	*7856*	*8053*	*7595*	**7358**	*7472*	*7656*
Vehicle Fuel Efficiency (index, 1999=1.000)	**0.995**	**1.010**	**0.984**	**0.984**	**0.987**	**1.010**	*0.999*	*0.991*	*0.999*	*1.004*	*1.002*	*0.997*	**0.993**	*0.997*	*1.000*
Real Vehicle Fuel Cost (cents per mile)	**4.18**	**4.30**	**4.29**	**4.36**	**4.20**	**4.42**	*3.93*	*3.84*	*3.70*	*3.70*	*3.63*	*3.70*	**4.28**	*4.10*	*3.68*
Air Travel Capacity (mill. available ton-miles/day)	**455.5**	**475.9**	**489.1**	**470.6**	**475.5**	**494.6**	*471.4*	*430.9*	*449.0*	*468.3*	*486.4*	*476.3*	**472.8**	*468.0*	*470.1*
Aircraft Utilization (mill. revenue ton-miles/day)	**256.6**	**287.6**	**292.5**	**269.4**	**263.5**	**286.3**	*277.3*	*246.8*	*254.7*	*274.9*	*290.2*	*277.0*	**276.5**	*268.4*	*274.3*
Airline Ticket Price Index (index, 1982-1984=1.000)	**2.309**	**2.419**	**2.474**	**2.375**	**2.399**	**2.408**	*2.456*	*2.447*	*2.477*	*2.484*	*2.492*	*2.511*	**2.394**	*2.427*	*2.491*
Raw Steel Production (millions tons)	**29.02**	**29.53**	**27.45**	**25.01**	**25.53**	**25.73**	*24.94*	*24.84*	*25.38*	*25.79*	*25.47*	*25.59*	**111.02**	*101.04*	*102.24*

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

[b] Includes all highway travel.

SAAR: Seasonally-adjusted annualized rate.

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

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

(Million Barrels per Day, Except OECD Commercial Stocks)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Demand [a]															
OECD															
U.S. (50 States)	**19.3**	**19.5**	**20.0**	**20.0**	**19.9**	**19.6**	*19.8*	*19.7*	*19.9*	*19.7*	*20.2*	*20.3*	**19.7**	*19.7*	*20.0*
U.S. Territories	**0.4**	**0.3**	**0.3**	**0.4**	**0.4**	**0.3**	*0.3*	*0.4*	*0.4*	*0.4*	*0.4*	*0.4*	**0.3**	*0.4*	*0.4*
Canada	**1.9**	**1.9**	**2.0**	**2.1**	**1.9**	**1.9**	*2.0*	*2.1*	*2.0*	*2.0*	*2.1*	*2.1*	**2.0**	*2.0*	*2.0*
Europe	**14.5**	**13.9**	**14.4**	**14.6**	**14.3**	**14.0**	*14.4*	*14.6*	*14.6*	*13.7*	*14.2*	*14.8*	**14.4**	*14.3*	*14.3*
Japan	**6.0**	**5.0**	**5.4**	**5.6**	**6.1**	**5.0**	*5.4*	*5.6*	*6.1*	*5.0*	*5.2*	*5.7*	**5.5**	*5.5*	*5.5*
Australia and New Zealand	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	**1.0**	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1.0*	**1.0**	*1.0*	*1.0*
Total OECD	**43.1**	**41.6**	**43.1**	**43.6**	**43.6**	**41.8**	*42.9*	*43.3*	*44.0*	*41.7*	*43.1*	*44.4*	**42.9**	*42.9*	*43.3*
Non-OECD															
Former Soviet Union	**3.9**	**3.7**	**3.7**	**3.7**	**3.8**	**3.7**	*3.7*	*3.7*	*3.8*	*3.7*	*3.7*	*3.7*	**3.7**	*3.7*	*3.7*
Europe	**1.5**	**1.5**	**1.5**	**1.5**	**1.6**	**1.6**	*1.5*	*1.5*	*1.6*	*1.6*	*1.6*	*1.6*	**1.5**	*1.6*	*1.6*
China	**4.6**	**4.6**	**4.6**	**4.6**	**4.8**	**4.8**	*4.7*	*4.7*	*5.0*	*4.9*	*4.9*	*4.9*	**4.6**	*4.8*	*4.9*
Other Asia	**8.9**	**9.0**	**8.8**	**9.1**	**9.1**	**9.1**	*8.8*	*9.2*	*9.3*	*9.3*	*9.0*	*9.4*	**9.0**	*9.1*	*9.2*
Other Non-OECD	**13.6**	**13.9**	**14.0**	**13.9**	**13.8**	**14.1**	*14.2*	*14.0*	*13.9*	*14.2*	*14.3*	*14.2*	**13.9**	*14.0*	*14.1*
Total Non-OECD	**32.6**	**32.7**	**32.5**	**32.9**	**33.2**	**33.2**	*32.9*	*33.2*	*33.6*	*33.7*	*33.4*	*33.8*	**32.7**	*33.1*	*33.6*
Total World Demand	**75.7**	**74.4**	**75.7**	**76.5**	**76.8**	**75.1**	*75.8*	*76.5*	*77.6*	*75.4*	*76.5*	*78.2*	**75.6**	*76.0*	*76.9*
Supply [b]															
OECD															
U.S. (50 States)	**9.1**	**9.1**	**9.0**	**9.0**	**8.8**	**9.1**	*9.0*	*9.0*	*9.0*	*9.1*	*9.0*	*9.0*	**9.1**	*9.0*	*9.0*
Canada	**2.7**	**2.7**	**2.7**	**2.8**	**2.8**	**2.8**	*2.7*	*2.9*	*2.9*	*2.8*	*3.0*	*3.0*	**2.7**	*2.8*	*2.9*
North Sea [c]	**6.3**	**5.9**	**5.9**	**6.1**	**5.9**	**5.6**	*5.8*	*6.2*	*6.0*	*5.8*	*5.9*	*6.3*	**6.0**	*5.9*	*6.0*
Other OECD	**2.0**	**2.0**	**1.9**	**1.9**	**2.0**	**1.9**	*2.0*	*2.0*	*1.8*	*1.9*	*1.9*	*1.9*	**2.0**	*2.0*	*1.9*
Total OECD	**20.1**	**19.7**	**19.6**	**19.8**	**19.6**	**19.4**	*19.5*	*20.0*	*19.7*	*19.6*	*19.7*	*20.2*	**19.8**	*19.6*	*19.8*
Non-OECD															
OPEC	**29.3**	**30.8**	**31.6**	**31.7**	**31.1**	**30.0**	*30.3*	*29.7*	*29.4*	*29.6*	*29.8*	*29.4*	**30.9**	*30.3*	*29.6*
Former Soviet Union	**7.9**	**8.0**	**8.2**	**8.5**	**8.6**	**8.7**	*8.9*	*8.9*	*8.9*	*9.0*	*9.2*	*9.2*	**8.1**	*8.8*	*9.1*
China	**3.3**	**3.3**	**3.2**	**3.2**	**3.3**	**3.3**	*3.3*	*3.3*	*3.2*	*3.3*	*3.3*	*3.3*	**3.2**	*3.3*	*3.3*
Mexico	**3.5**	**3.5**	**3.5**	**3.4**	**3.6**	**3.5**	*3.6*	*3.6*	*3.7*	*3.7*	*3.8*	*3.7*	**3.5**	*3.6*	*3.7*
Other Non-OECD	**11.2**	**11.2**	**11.4**	**11.6**	**11.4**	**11.3**	*11.4*	*11.4*	*11.7*	*11.9*	*12.0*	*12.2*	**11.3**	*11.4*	*12.0*
Total Non-OECD	**55.1**	**56.7**	**58.0**	**58.4**	**58.1**	**56.8**	*57.5*	*56.9*	*57.0*	*57.5*	*58.1*	*57.8*	**57.0**	*57.3*	*57.6*
Total World Supply	**75.2**	**76.4**	**77.6**	**78.2**	**77.6**	**76.2**	*77.0*	*76.9*	*76.7*	*77.1*	*77.8*	*78.0*	**76.8**	*76.9*	*77.4*
Stock Changes															
Net Stock Withdrawals or Additions (-)															
U.S. (50 States including SPR)	**0.2**	**-0.5**	**0.0**	**0.6**	**-0.1**	**-0.9**	*0.0*	*0.5*	*0.2*	*-0.7*	*-0.3*	*0.3*	**0.1**	*-0.1*	*-0.1*
Other	**0.3**	**-1.4**	**-1.9**	**-2.3**	**-0.7**	**-0.3**	*-1.2*	*-0.9*	*0.7*	*-1.0*	*-1.0*	*-0.1*	**-1.4**	*-0.8*	*-0.3*
Total Stock Withdrawals	**0.5**	**-2.0**	**-1.9**	**-1.7**	**-0.8**	**-1.1**	*-1.2*	*-0.4*	*0.9*	*-1.7*	*-1.3*	*0.2*	**-1.3**	*-0.9*	*-0.5*
OECD Comm. Stocks, End (bill. bbls.)	**2.4**	**2.5**	**2.6**	**2.5**	**2.5**	**2.6**	*2.6*	*2.6*	*2.6*	*2.6*	*2.7*	*2.7*	**2.5**	*2.6*	*2.7*
Non-OPEC Supply	**45.9**	**45.6**	**45.9**	**46.4**	**46.5**	**46.2**	*46.7*	*47.1*	*47.3*	*47.4*	*48.0*	*48.6*	**46.0**	*46.6*	*47.8*
Net Exports from Former Soviet Union	**4.0**	**4.3**	**4.5**	**4.8**	**4.8**	**5.0**	*5.3*	*5.3*	*5.0*	*5.3*	*5.5*	*5.5*	**4.4**	*5.1*	*5.3*

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

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

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

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

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

SPR: Strategic Petroleum Reserve

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

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

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

Table 4. U. S. Energy Prices

(Nominal Dollars)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Crude Oil Prices (dollars per barrel)															
Imported Average[a]	**26.84**	**26.55**	**29.12**	**28.25**	**24.12**	**23.84**	*22.89*	*20.99*	*21.34*	*21.67*	*22.00*	*23.00*	**27.72**	*22.98*	*22.00*
WTI[b] Spot Average	**28.82**	**28.78**	**31.61**	**31.96**	**28.82**	**27.92**	*26.46*	*24.34*	*24.48*	*24.75*	*25.06*	*26.05*	**30.29**	*26.88*	*25.09*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**2.26**	**3.06**	**3.87**	**5.20**	**6.37**	**4.55**	*3.04*	*2.20*	*2.21*	*1.97*	*1.95*	*2.14*	**3.61**	*4.02*	*2.07*
Petroleum Products															
Gasoline Retail[c] (dollars per gallon)															
All Grades	**1.44**	**1.57**	**1.56**	**1.54**	**1.47**	**1.66**	*1.49*	*1.40*	*1.35*	*1.41*	*1.41*	*1.39*	**1.53**	*1.51*	*1.39*
Regular Unleaded	**1.40**	**1.53**	**1.52**	**1.50**	**1.43**	**1.62**	*1.45*	*1.37*	*1.31*	*1.38*	*1.38*	*1.36*	**1.49**	*1.47*	*1.36*
No. 2 Diesel Oil, Retail (dollars per gallon)	**1.43**	**1.42**	**1.51**	**1.61**	**1.47**	**1.47**	*1.42*	*1.45*	*1.41*	*1.38*	*1.37*	*1.42*	**1.49**	*1.45*	*1.39*
No. 2 Heating Oil, Wholesale (dollars per gallon)	**0.85**	**0.78**	**0.91**	**0.97**	**0.83**	**0.80**	*0.75*	*0.74*	*0.73*	*0.67*	*0.67*	*0.76*	**0.89**	*0.79*	*0.72*
No. 2 Heating Oil, Retail (dollars per gallon)	**1.31**	**1.17**	**1.23**	**1.40**	**1.35**	**1.25**	*1.14*	*1.19*	*1.21*	*1.10*	*1.03*	*1.19*	**1.31**	*1.26*	*1.18*
No. 6 Residual Fuel Oil, Retail[d] (dollars per barrel)	**23.62**	**24.57**	**25.10**	**27.41**	**25.12**	**22.27**	*22.00*	*22.53*	*22.33*	*20.60*	*20.65*	*22.57*	**25.34**	*23.02*	*21.55*
Electric Utility Fuels															
Coal (dollars per million Btu)	**1.21**	**1.21**	**1.18**	**1.20**	**1.23**	**1.25**	*1.24*	*1.23*	*1.23*	*1.23*	*1.20*	*1.19*	**1.20**	*1.24*	*1.21*
Heavy Fuel Oil[e] (dollars per million Btu)	**3.74**	**4.16**	**4.34**	**4.52**	**4.22**	**3.72**	*3.66*	*3.58*	*3.54*	*3.36*	*3.44*	*3.59*	**4.26**	*3.81*	*3.47*
Natural Gas (dollars per million Btu)	**2.85**	**3.78**	**4.46**	**6.33**	**7.26**	**5.02**	*3.66*	*2.85*	*2.94*	*2.59*	*2.55*	*2.80*	**4.33**	*4.52*	*2.68*
Other Residential															
Natural Gas (dollars per thousand cubic feet)	**6.53**	**7.81**	**10.10**	**8.72**	**9.99**	**10.49**	*10.33*	*7.06*	*6.48*	*7.26*	*8.65*	*6.70*	**7.72**	*9.27*	*6.83*
Electricity (cents per kilowatthour)	**7.77**	**8.37**	**8.59**	**8.12**	**7.96**	**8.68**	*9.13*	*8.49*	*8.10*	*8.66*	*8.87*	*8.38*	**8.23**	*8.58*	*8.51*

[a] Refiner acquisition cost (RAC) of imported crude oil.

[b] West Texas Intermediate.

[c] Average self-service cash prices.

[d] Average for all sulfur contents.

[e] Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

Notes: Data are estimated for the fourth quarter of 2000. Prices exclude taxes, except prices for gasoline, residential natural gas, and diesel. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

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

Table 5. U.S. Petroleum Supply and Demand: Mid World Oil Price Case

(Million Barrels per Day, Except Closing Stocks)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Crude Oil Supply															
Domestic Production [a]	**5.85**	**5.84**	**5.76**	**5.83**	**5.85**	**5.84**	*5.82*	*5.86*	*5.83*	*5.82*	*5.79*	*5.81*	**5.82**	*5.84*	*5.81*
Alaska	**1.02**	**0.97**	**0.91**	**0.99**	**0.99**	**0.96**	*0.94*	*1.01*	*0.96*	*0.94*	*0.92*	*0.97*	**0.97**	*0.97*	*0.95*
Lower 48	**4.83**	**4.87**	**4.86**	**4.85**	**4.86**	**4.88**	*4.87*	*4.85*	*4.87*	*4.89*	*4.87*	*4.84*	**4.85**	*4.87*	*4.87*
Net Imports (including SPR) [b]	**8.19**	**9.26**	**9.59**	**9.03**	**8.95**	**9.45**	*8.94*	*8.74*	*9.10*	*9.81*	*9.84*	*9.43*	**9.02**	*9.02*	*9.55*
Other SPR Supply	**0.02**	**0.00**	**0.02**	**0.00**	**0.02**	**0.01**	*0.01*	*0.01*	*0.03*	*0.13*	*0.13*	*0.16*	**0.01**	*0.01*	*0.12*
SPR Stock Withdrawn or Added (-)	**-0.02**	**0.01**	**-0.02**	**0.32**	**-0.02**	**-0.01**	*-0.03*	*-0.01*	*-0.03*	*-0.13*	*-0.13*	*-0.16*	**0.07**	*-0.02*	*-0.12*
Other Stock Withdrawn or Added (-)	**-0.14**	**0.07**	**0.14**	**-0.08**	**-0.22**	**-0.01**	*0.02*	*0.13*	*-0.19*	*-0.01*	*0.17*	*0.03*	**0.00**	*-0.02*	*0.00*
Product Supplied and Losses	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	**0.00**	*0.00*	*0.00*
Unaccounted-for Crude Oil	**0.26**	**0.22**	**0.15**	**-0.01**	**0.10**	**0.23**	*0.51*	*0.21*	*0.21*	*0.22*	*0.22*	*0.21*	**0.15**	*0.26*	*0.22*
Total Crude Oil Supply	**14.14**	**15.40**	**15.62**	**15.10**	**14.75**	**15.65**	*15.27*	*14.92*	*14.91*	*15.71*	*15.89*	*15.33*	**15.07**	*15.15*	*15.46*
Other Supply															
NGL Production	**1.98**	**1.94**	**1.93**	**1.79**	**1.64**	**1.89**	*1.86*	*1.84*	*1.88*	*1.92*	*1.89*	*1.92*	**1.91**	*1.81*	*1.90*
Other Inputs	**0.36**	**0.39**	**0.38**	**0.37**	**0.38**	**0.39**	*0.39*	*0.39*	*0.37*	*0.37*	*0.37*	*0.38*	**0.38**	*0.39*	*0.37*
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	**0.94**	**0.95**	**0.94**	**0.96**	**0.93**	**0.93**	*0.93*	*0.93*	*0.92*	*0.94*	*0.94*	*0.92*	**0.95**	*0.93*	*0.93*
Net Product Imports [c]	**1.52**	**1.43**	**1.29**	**1.36**	**2.05**	**1.58**	*1.32*	*1.20*	*1.41*	*1.32*	*1.46*	*1.38*	**1.40**	*1.53*	*1.39*
Product Stock Withdrawn or Added (-)	**0.35**	**-0.62**	**-0.13**	**0.41**	**0.11**	**-0.86**	*-0.01*	*0.42*	*0.38*	*-0.54*	*-0.32*	*0.40*	**0.00**	*-0.09*	*-0.02*
Total Supply	**19.29**	**19.49**	**20.03**	**19.99**	**19.86**	**19.58**	*19.75*	*19.70*	*19.87*	*19.73*	*20.23*	*20.32*	**19.70**	*19.72*	*20.04*
Demand															
Motor Gasoline	**8.08**	**8.62**	**8.70**	**8.49**	**8.27**	**8.66**	*8.77*	*8.58*	*8.37*	*8.86*	*8.95*	*8.82*	**8.47**	*8.57*	*8.75*
Jet Fuel	**1.65**	**1.69**	**1.79**	**1.77**	**1.73**	**1.72**	*1.65*	*1.66*	*1.72*	*1.69*	*1.75*	*1.77*	**1.73**	*1.69*	*1.73*
Distillate Fuel Oil	**3.77**	**3.56**	**3.63**	**3.91**	**4.21**	**3.72**	*3.70*	*3.83*	*4.10*	*3.68*	*3.66*	*3.93*	**3.72**	*3.86*	*3.84*
Residual Fuel Oil	**0.79**	**0.82**	**0.98**	**1.05**	**1.02**	**0.99**	*0.94*	*0.83*	*0.89*	*0.74*	*0.83*	*0.75*	**0.91**	*0.94*	*0.80*
Other Oils [d]	**5.00**	**4.81**	**4.94**	**4.75**	**4.63**	**4.49**	*4.69*	*4.81*	*4.80*	*4.76*	*5.04*	*5.06*	**4.87**	*4.65*	*4.92*
Total Demand	**19.29**	**19.49**	**20.03**	**19.97**	**19.85**	**19.57**	*19.75*	*19.70*	*19.87*	*19.73*	*20.23*	*20.32*	**19.70**	*19.72*	*20.04*
Total Petroleum Net Imports	**9.71**	**10.70**	**10.88**	**10.39**	**10.99**	**11.03**	*10.26*	*9.94*	*10.51*	*11.14*	*11.30*	*10.81*	**10.42**	*10.55*	*10.94*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**297**	**291**	**278**	**286**	**305**	**306**	*304*	*292*	*310*	*311*	*295*	*293*	**286**	*292*	*293*
Total Motor Gasoline	**204**	**210**	**197**	**196**	**194**	**220**	*200*	*199*	*205*	*206*	*200*	*205*	**196**	*199*	*205*
Finished Motor Gasoline	**157**	**165**	**154**	**153**	**145**	**169**	*155*	*158*	*157*	*163*	*157*	*161*	**153**	*158*	*161*
Blending Components	**47**	**45**	**43**	**43**	**48**	**51**	*45*	*42*	*48*	*43*	*43*	*43*	**43**	*42*	*43*
Jet Fuel	**40**	**44**	**42**	**45**	**40**	**43**	*46*	*48*	*44*	*44*	*45*	*45*	**45**	*48*	*45*
Distillate Fuel Oil	**96**	**106**	**115**	**118**	**105**	**114**	*124*	*128*	*99*	*110*	*129*	*131*	**118**	*128*	*131*
Residual Fuel Oil	**36**	**37**	**38**	**36**	**39**	**43**	*38*	*38*	*36*	*36*	*38*	*38*	**36**	*38*	*38*
Other Oils [e]	**233**	**270**	**287**	**247**	**253**	**289**	*304*	*260*	*256*	*291*	*305*	*261*	**247**	*260*	*261*
Total Stocks (excluding SPR)	**907**	**957**	**957**	**927**	**936**	**1015**	*1015*	*965*	*948*	*998*	*1012*	*973*	**927**	*965*	*973*
Crude Oil in SPR	**569**	**569**	**570**	**541**	**542**	**543**	*546*	*547*	*549*	*561*	*574*	*589*	**541**	*547*	*589*
Heating Oil Reserve	**0**	**0**	**0**	**2**	**2**	**2**	*2*	*2*	*2*	*2*	*2*	*2*	**2**	*2*	*2*
Total Stocks (including SPR)	**1476**	**1526**	**1527**	**1468**	**1478**	**1558**	*1560*	*1511*	*1497*	*1560*	*1586*	*1562*	**1468**	*1511*	*1562*

[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.

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] Model

(Percent Deviation Base Case)

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

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

[b] Short-Term Integrated Forecasting System.

[c] Refiner acquisitions cost of imported crude oil.

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

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

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

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

(Million Barrels per Day)

	High Price Case	Low Price Case	Difference		
			Total	Uncertainty	Price Impact
United States	*6.02*	*5.55*	*0.47*	*0.07*	*0.39*
Lower 48 States	*5.04*	*4.60*	*0.44*	*0.06*	*0.38*
Alaska	*0.98*	*0.95*	*0.03*	*0.02*	*0.02*

Note: Components provided are for the fourth quarter 2002. Totals may not add to sum of components due to independent rounding.
Source: Energy Information Administration, Office of Oil and Gas, Reserves and Natural Gas Division.

Table 8. U.S. Natural Gas Supply and Demand: Mid World Oil Price Case

(Trillion Cubic Feet)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Total Dry Gas Production	**4.71**	**4.73**	**4.80**	**4.83**	**4.75**	**4.86**	*4.83*	*4.90*	*4.85*	*4.84*	*4.88*	*5.01*	**19.08**	*19.34*	*19.59*
Net Imports	**0.87**	**0.82**	**0.88**	**0.95**	**0.97**	**0.82**	*0.90*	*0.93*	*0.99*	*0.89*	*0.94*	*0.97*	**3.53**	*3.62*	*3.78*
Supplemental Gaseous Fuels	**0.03**	**0.02**	**0.02**	**0.03**	**0.03**	**0.02**	*0.03*	*0.03*	*0.03*	*0.03*	*0.03*	*0.03*	**0.10**	*0.10*	*0.12*
Total New Supply	**5.61**	**5.57**	**5.71**	**5.81**	**5.74**	**5.70**	*5.76*	*5.86*	*5.88*	*5.76*	*5.85*	*6.01*	**22.71**	*23.06*	*23.49*
Working Gas in Storage															
Opening	**2.51**	**1.15**	**1.71**	**2.47**	**1.72**	**0.74**	*1.87*	*2.97*	*2.50*	*1.30*	*2.04*	*2.91*	**2.51**	*1.72*	*2.50*
Closing	**1.15**	**1.71**	**2.47**	**1.72**	**0.74**	**1.87**	*2.97*	*2.50*	*1.30*	*2.04*	*2.91*	*2.46*	**1.72**	*2.50*	*2.46*
Net Withdrawals	**1.36**	**-0.56**	**-0.77**	**0.75**	**0.98**	**-1.13**	*-1.10*	*0.47*	*1.21*	*-0.75*	*-0.87*	*0.45*	**0.79**	*-0.78*	*0.05*
Total Supply	**6.97**	**5.02**	**4.94**	**6.56**	**6.72**	**4.57**	*4.66*	*6.33*	*7.08*	*5.01*	*4.98*	*6.46*	**23.50**	*22.28*	*23.54*
Balancing Item [a]	**-0.02**	**-0.05**	**-0.23**	**-0.47**	**0.44**	**0.13**	*-0.01*	*-0.56*	*0.23*	*0.05*	*-0.16*	*-0.51*	**-0.76**	*0.00*	*-0.40*
Total Primary Supply	**6.96**	**4.97**	**4.71**	**6.10**	**7.16**	**4.70**	*4.65*	*5.78*	*7.31*	*5.06*	*4.82*	*5.96*	**22.74**	*22.28*	*23.14*
Demand															
Lease and Plant Fuel	**0.27**	**0.27**	**0.28**	**0.28**	**0.28**	**0.28**	*0.28*	*0.29*	*0.28*	*0.28*	*0.28*	*0.29*	**1.10**	*1.13*	*1.13*
Pipeline Use	**0.24**	**0.17**	**0.16**	**0.21**	**0.24**	**0.16**	*0.16*	*0.20*	*0.24*	*0.17*	*0.16*	*0.19*	**0.77**	*0.77*	*0.75*
Residential	**2.19**	**0.78**	**0.39**	**1.62**	**2.47**	**0.78**	*0.37*	*1.41*	*2.44*	*0.85*	*0.37*	*1.46*	**4.97**	*5.02*	*5.12*
Commercial	**1.25**	**0.60**	**0.45**	**0.95**	**1.38**	**0.62**	*0.45*	*0.85*	*1.35*	*0.63*	*0.45*	*0.87*	**3.26**	*3.30*	*3.30*
Industrial (Incl. Nonutility Use)	**2.44**	**2.31**	**2.37**	**2.46**	**2.32**	**2.14**	*2.43*	*2.53*	*2.56*	*2.46*	*2.70*	*2.71*	**9.58**	*9.42*	*10.43*
Electric Utilities	***0.57***	***0.83***	***1.07***	**0.58**	**0.47**	**0.72**	*0.96*	*0.50*	*0.44*	*0.68*	*0.86*	*0.43*	**3.05**	*2.64*	*2.40*
Total Demand	**6.96**	**4.97**	**4.71**	**6.10**	**7.16**	**4.70**	*4.65*	*5.78*	*7.31*	*5.06*	*4.82*	*5.96*	**22.74**	*22.28*	*23.14*

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

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

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

Table 9. U.S. Coal Supply and Demand: Mid World Oil Price Case

(Million Short Tons)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Production	**274.0**	**262.2**	**271.0**	**268.3**	**283.6**	**278.3**	*289.5*	*291.0*	*280.0*	*275.5*	*287.8*	*294.8*	**1075.5**	*1142.4*	*1138.0*
Appalachia	**109.5**	**107.0**	**101.8**	**102.6**	**110.8**	**108.0**	*106.6*	*108.8*	*108.0*	*108.2*	*102.9*	*107.8*	**420.9**	*434.1*	*427.0*
Interior	**36.1**	**35.2**	**37.6**	**35.8**	**37.5**	**37.0**	*40.4*	*37.0*	*33.3*	*33.7*	*36.4*	*35.6*	**144.7**	*152.0*	*139.0*
Western	**128.5**	**120.0**	**131.5**	**129.9**	**135.3**	**132.3**	*142.5*	*145.2*	*138.6*	*133.6*	*148.4*	*151.4*	**509.9**	*555.3*	*572.0*
Primary Stock Levels [a]															
Opening	**39.5**	**44.4**	**40.4**	**37.1**	**34.2**	**38.5**	*41.9*	*35.5*	*34.6*	*33.0*	*36.9*	*32.3*	**39.5**	*34.2*	*34.6*
Closing	**44.4**	**40.4**	**37.1**	**34.2**	**38.5**	**41.9**	*35.5*	*34.6*	*33.0*	*36.9*	*32.3*	*34.6*	**34.2**	*34.6*	*34.6*
Net Withdrawals	**-4.9**	**4.0**	**3.3**	**2.9**	**-4.3**	**-3.4**	*6.4*	*0.9*	*1.6*	*-3.8*	*4.6*	*-2.4*	**5.3**	*-0.4*	*(S)*
Imports	**2.8**	**2.7**	**3.6**	**3.4**	**3.9**	**4.1**	*4.5*	*4.3*	*4.5*	*4.5*	*4.5*	*4.6*	**12.5**	*16.8*	*18.1*
Exports	**13.6**	**14.4**	**15.8**	**14.7**	**11.8**	**13.1**	*15.2*	*15.1*	*14.0*	*14.2*	*14.4*	*14.4*	**58.5**	*55.3*	*57.0*
Total Net Domestic Supply	**258.3**	**254.5**	**262.0**	**259.9**	**271.4**	**265.9**	*285.1*	*281.0*	*272.1*	*262.0*	*282.5*	*282.6*	**1034.8**	*1103.5*	*1099.2*
Secondary Stock Levels [b]															
Opening	**143.5**	**141.2**	**137.2**	**120.3**	**108.1**	**113.8**	*127.2*	*109.9*	*115.9*	*123.0*	*127.1*	*112.9*	**143.5**	*108.1*	*115.9*
Closing	**141.2**	**137.2**	**120.3**	**108.1**	**113.8**	**127.2**	*109.9*	*115.9*	*123.0*	*127.1*	*112.9*	*118.2*	**108.1**	*115.9*	*118.2*
Net Withdrawals	**2.3**	**3.9**	**16.9**	**12.2**	**-5.7**	**-13.3**	*17.3*	*-6.0*	*-7.2*	*-4.1*	*14.1*	*-5.3*	**35.4**	*-7.7*	*-2.3*
Waste Coal Supplied to IPPs [c]	**2.5**	**2.5**	**2.5**	**2.5**	**2.6**	**2.6**	*2.6*	*2.6*	*2.8*	*2.8*	*2.8*	*2.8*	**10.1**	*10.6*	*11.1*
Total Supply	**263.2**	**261.0**	**281.5**	**274.6**	**268.3**	**255.2**	*305.1*	*277.7*	*267.7*	*260.7*	*299.4*	*280.1*	**1080.3**	*1106.4*	*1107.9*
Demand															
Coke Plants	**7.3**	**7.4**	**7.3**	**6.9**	**6.8**	**6.7**	*6.7*	*6.3*	*6.6*	*6.4*	*6.6*	*6.3*	**28.9**	*26.4*	*25.9*
Electricity Production															
Electric Utilities	**214.5**	**202.6**	**227.8**	**214.5**	**203.9**	**196.1**	*239.1*	*214.6*	*204.5*	*203.2*	*236.0*	*216.6*	**859.3**	*853.8*	*860.3*
Nonutilities (Excl. Cogen.) [d]	**25.6**	**27.6**	**35.1**	**35.0**	**37.7**	**34.7**	*40.4*	*38.1*	*38.4*	*35.4*	*41.2*	*38.8*	**123.3**	*151.0*	*153.8*
Retail and General Industry	**18.3**	**16.4**	**16.8**	**18.6**	**17.8**	**16.5**	*16.4*	*18.7*	*18.1*	*15.7*	*15.6*	*18.4*	**70.0**	*69.4*	*67.9*
Total Demand [e]	**265.6**	**254.0**	**287.0**	**275.0**	**266.3**	**254.1**	*302.6*	*277.7*	*267.7*	*260.7*	*299.4*	*280.1*	**1081.5**	*1100.6*	*1107.9*
Discrepancy [f]	**-2.4**	**7.0**	**-5.5**	**-0.3**	**2.1**	**1.2**	*2.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	**-1.3**	*5.7*	*0.0*

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

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

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

[d] Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 2000 and projections for 2001 and 2002 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999 and 2000, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

[e] Total Demand includes estimated IPP consumption.

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

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

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

Table 10. U.S. Electricity Supply and Demand: Mid World Oil Price Case

(Billion Kilowatt-hours)

	2000				2001				2002				Year		
	1st	2nd	3rd	4th	1st	2nd	3rd	4th	1st	2nd	3rd	4th	2000	2001	2002
Supply															
Net Utility Generation															
Coal	**426.7**	**402.3**	**447.1**	**420.5**	**399.8**	**383.2**	*451.0*	*401.6*	*390.5*	*389.4*	*451.3*	*414.2*	**1696.6**	*1635.4*	*1645.4*
Petroleum	**10.9**	**16.2**	**23.2**	**21.8**	**24.2**	**21.8**	*26.7*	*13.9*	*16.6*	*12.0*	*20.3*	*10.6*	**72.2**	*86.5*	*59.5*
Natural Gas	**54.5**	**79.3**	**100.8**	**56.1**	**45.7**	**69.1**	*90.8*	*47.4*	*41.8*	*64.4*	*81.4*	*40.4*	**290.7**	*253.0*	*228.1*
Nuclear	**185.0**	**177.4**	**182.0**	**161.1**	**135.8**	**130.1**	*138.6*	*127.1*	*131.7*	*122.9*	*140.1*	*128.6*	**705.4**	*531.5*	*523.3*
Hydroelectric	**67.1**	**73.2**	**57.6**	**50.3**	**50.4**	**50.8**	*47.2*	*53.5*	*65.0*	*70.5*	*60.9*	*61.2*	**248.2**	*201.9*	*257.7*
Geothermal and Other [a]	**0.6**	**0.6**	**0.6**	**0.5**	**0.6**	**0.6**	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	*0.6*	**2.2**	*2.4*	*2.3*
Subtotal	**744.7**	**749.0**	**811.2**	**710.4**	**656.5**	**655.5**	*754.8*	*644.0*	*646.2*	*659.8*	*754.6*	*655.7*	**3015.4**	*2710.7*	*2716.3*
Nonutility Generation [b]															
Coal	**55.4**	**58.3**	**79.4**	**77.9**	**93.5**	**81.1**	*84.2*	*80.0*	*90.5*	*77.9*	*86.7*	*83.1*	**271.1**	*338.7*	*338.1*
Petroleum	**8.0**	**6.6**	**8.9**	**13.2**	**17.0**	**12.0**	*13.3*	*10.5*	*12.8*	*8.2*	*12.3*	*9.7*	**36.6**	*52.8*	*42.9*
Natural Gas	**65.2**	**71.8**	**90.6**	**78.4**	**78.4**	**83.9**	*104.9*	*91.0*	*88.3*	*96.0*	*119.8*	*102.2*	**305.9**	*358.2*	*406.3*
Other Gaseous Fuels [c]	**3.4**	**3.7**	**4.7**	**4.0**	**4.0**	**4.3**	*5.3*	*4.8*	*4.6*	*4.9*	*5.9*	*5.4*	**15.8**	*18.5*	*20.9*
Nuclear	**5.2**	**5.0**	**16.7**	**21.6**	**56.2**	**55.3**	*63.0*	*57.8*	*59.9*	*55.9*	*63.7*	*58.4*	**48.5**	*232.4*	*237.9*
Hydroelectric	**6.3**	**6.7**	**6.3**	**5.6**	**5.3**	**6.4**	*5.2*	*5.9*	*6.9*	*9.0*	*6.7*	*6.8*	**24.9**	*22.9*	*29.3*
Geothermal and Other [d]	**20.2**	**20.1**	**20.9**	**20.7**	**20.4**	**21.5**	*22.1*	*20.7*	*20.5*	*21.3*	*22.4*	*21.0*	**81.8**	*84.7*	*85.3*
Subtotal	**163.6**	**172.2**	**227.5**	**221.3**	**275.0**	**264.5**	*297.9*	*270.7*	*283.5*	*273.2*	*317.5*	*286.5*	**784.6**	*1108.1*	*1160.8*
Total Generation	**908.3**	**921.2**	**1038.7**	**931.7**	**931.4**	**920.0**	*1052.8*	*914.6*	*929.7*	*933.0*	*1072.2*	*942.2*	**3799.9**	*3818.8*	*3877.1*
Net Imports [e]	**9.2**	**8.7**	**13.1**	**4.6**	**3.8**	**7.5**	*12.8*	*7.9*	*6.3*	*7.9*	*12.3*	*7.3*	**35.6**	*32.1*	*33.7*
Total Supply	**917.5**	**929.9**	**1051.8**	**936.3**	**936.4**	**928.0**	*1065.6*	*922.6*	*936.0*	*940.9*	*1084.4*	*949.5*	**3835.5**	*3852.5*	*3910.8*
Losses and Unaccounted for [f]	**54.8**	**70.8**	**50.7**	**59.7**	**39.4**	**72.0**	*66.0*	*59.5*	*42.0*	*69.9*	*66.7*	*64.1*	**236.0**	*236.8*	*242.7*
Demand															
Retail Sales [g]															
Residential	**291.2**	**264.1**	**353.4**	**284.7**	**322.0**	**269.1**	*360.1*	*279.7*	*319.1*	*280.3*	*366.8*	*286.6*	**1193.4**	*1230.9*	*1252.9*
Commercial	**239.5**	**254.2**	**291.6**	**252.7**	**253.1**	**261.5**	*294.8*	*256.4*	*255.1*	*257.6*	*297.0*	*261.6*	**1037.9**	*1065.8*	*1071.3*
Industrial	**260.0**	**267.3**	**277.4**	**266.1**	**248.5**	**252.6**	*265.9*	*256.1*	*248.8*	*261.5*	*273.5*	*263.8*	**1070.8**	*1023.2*	*1047.6*
Other	**26.3**	**26.9**	**30.1**	**27.4**	**26.4**	**26.9**	*29.7*	*26.5*	*26.3*	*26.7*	*29.9*	*27.2*	**110.6**	*109.5*	*110.1*
Subtotal	**817.0**	**812.4**	**952.5**	**830.9**	**850.1**	**810.1**	*950.5*	*818.8*	*849.4*	*826.1*	*967.2*	*839.1*	**3412.8**	*3429.5*	*3481.8*
Nonutility Use/Sales [h]	**45.7**	**46.7**	**48.6**	**45.7**	**46.9**	**45.9**	*49.1*	*44.3*	*44.7*	*44.9*	*50.5*	*46.2*	**186.7**	*186.2*	*186.3*
Total Demand	**862.7**	**859.1**	**1001.1**	**876.6**	**897.0**	**856.0**	*999.6*	*863.1*	*894.0*	*871.0*	*1017.7*	*885.3*	**3599.5**	*3615.7*	*3668.1*
Memo:															
Nonutility Sales to Electric Utilities [b]	**117.9**	**125.5**	**178.9**	**175.6**	**228.0**	**218.6**	*248.8*	*226.4*	*238.8*	*228.3*	*267.0*	*240.3*	**597.8**	*921.9*	*974.5*

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

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

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

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

[e] Data for 2000 are estimates.

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

[g] Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA'S *Electric Power Monthly* and *Electric Power Annual.* Power marketers' sales are reported annually in Appendix C of EIA's Electric Sales and Revenue. Quarterly data for power marketers (and thus retail sales totals) are imputed. Data for 2000 are estimated.

[h] Defined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review (MER*). Data for 2000 are estimates.

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

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

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

(Quadrillion Btu)

	Year				Annual Percentage Change		
	1999	2000	2001	2002	1999-2000	2000-2001	2001-2002
Electric Utilities							
Hydroelectric Power [a]	**3.079**	**2.600**	*2.115*	*2.700*	**-15.6**	*-18.7*	*27.7*
Geothermal, Solar and Wind Energy [b]	**0.036**	**0.004**	*0.004*	*0.004*	**-88.9**	*0.0*	*0.0*
Biofuels [c]	**0.021**	**0.021**	*0.023*	*0.021*	**0.0**	*9.5*	*-8.7*
Total	**3.136**	**2.625**	*2.141*	*2.725*	**-16.3**	*-18.4*	*27.3*
Nonutility Power Generators							
Hydroelectric Power [a]	**0.149**	**0.257**	*0.236*	*0.304*	**72.5**	*-8.2*	*28.8*
Geothermal, Solar and Wind Energy [b]	**0.335**	**0.355**	*0.383*	*0.392*	**6.0**	*7.9*	*2.3*
Biofuels [c]	**0.523**	**0.642**	*0.648*	*0.645*	**22.8**	*0.9*	*-0.5*
Total	**1.007**	**1.254**	*1.268*	*1.341*	**24.5**	*1.1*	*5.8*
Total Power Generation	**4.142**	**3.879**	*3.409*	*4.066*	**-6.3**	*-12.1*	*19.3*
Other Sectors [d]							
Residential and Commercial [e]	**0.553**	**0.576**	*0.547*	*0.577*	**4.2**	*-5.0*	*5.5*
Industrial [f]	**1.942**	**2.003**	*2.008*	*2.058*	**3.1**	*0.2*	*2.5*
Transportation [g]	**0.100**	**0.114**	*0.117*	*0.117*	**14.0**	*2.6*	*0.0*
Total	**2.595**	**2.692**	*2.671*	*2.751*	**3.7**	*-0.8*	*3.0*
Net Imported Electricity [h]	**0.219**	**0.255**	*0.230*	*0.242*	**16.4**	*-9.8*	*5.2*
Total Renewable Energy Demand	**6.956**	**6.826**	*6.310*	*7.059*	**-1.9**	*-7.6*	*11.9*

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

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

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

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

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

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

[g] Ethanol blended into gasoline.

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

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

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

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Real Gross Domestic Product (GDP)															
(billion chained 1996 dollars)	**6368**	**6592**	**6708**	**6676**	**6880**	**7063**	**7348**	**7544**	**7813**	**8159**	**8509**	**8857**	**9224**	*9319*	*9523*
Imported Crude Oil Price [a]															
(nominal dollars per barrel)	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.50**	**12.08**	**17.22**	**27.72**	*22.98*	*22.00*
Petroleum Supply															
Crude Oil Production [b]															
(million barrels per day)	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	**5.88**	**5.82**	*5.84*	*5.81*
Total Petroleum Net Imports (including SPR)															
(million barrels per day)	**6.59**	**7.20**	**7.16**	**6.63**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	**9.76**	**9.91**	**10.42**	*10.55*	*10.94*
Energy Demand															
World Petroleum															
(million barrels per day)	**64.8**	**65.9**	**65.7**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.4**	**73.0**	**73.6**	**74.9**	**75.6**	*76.1*	*77.0*
U.S. Petroleum															
(million barrels per day)	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	*19.72*	*20.04*
Natural Gas															
(trillion cubic feet)	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.95**	**21.26**	**21.70**	**22.74**	*22.28*	*23.14*
Coal															
(million short tons)	**877**	**895**	**903**	**899**	**907**	**943**	**950**	**962**	**1006**	**1030**	**1038**	**1045**	**1082**	*1101*	*1108*
Electricity (billion kilowatthours)															
Retail Sales [c]	**2578**	**2647**	**2713**	**2762**	**2763**	**2861**	**2935**	**3013**	**3101**	**3146**	**3264**	**3312**	**3413**	*3429*	*3482*
Nonutility Own Use [d]	**NA**	**100**	**104**	**111**	**122**	**127**	**141**	**149**	**149**	**149**	**160**	**189**	**187**	*186*	*186*
Total	**2578**	**2747**	**2817**	**2873**	**2885**	**2988**	**3075**	**3162**	**3250**	**3295**	**3424**	**3501**	**3600**	*3616*	*3668*
Total Energy Demand [e]															
(quadrillion Btu)	**NA**	**84.2**	**84.2**	**84.5**	**85.6**	**87.4**	**89.2**	**90.9**	**93.9**	**94.2**	**95.2**	**97.2**	**99.5**	*99.0*	*101.2*
Total Energy Demand per Dollar of GDP															
(thousand Btu per 1996 Dollar)	**NA**	**12.77**	**12.55**	**12.66**	**12.44**	**12.37**	**12.14**	**12.07**	**12.02**	**11.54**	**11.19**	**10.97**	**10.78**	*10.62*	*10.62*

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

[b] Includes lease condensate.

[c] Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.

[d] Defined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review (MER*). Data for 2000 are estimates.

[e] "Total Energy Demand" refers to the aggregate energy concept presented in Energy Information Administration, *Annual Energy Review*, 1999, DOE/EIA-0384(97) (AER), Table 1.1. Prior to 1990, some components of renewable energy consumption, particularly relating to consumption at nonutility electric generating facilities, were not available. For those years, a less compehensive measure of total energy demand can be found in EIA's *AER*. The conversion from physical units to Btu is calculated using a subset of conversion factors used in the calculations performed for gross energy consumption in Energy Information Administration, *Monthly Energy Review (MER*). Consequently, the historical data may not precisely match those published in the *MER* or the *AER*.

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

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 Statistics Report* DOE/EIA-520, and Weekly Petroleum *Status Report* DOE/EIA-0208. Macroeconomic projections are based on DRI/McGraw-Hill Forecast SHOCK0918.

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

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Macroeconomic															
Real Gross Domestic Product (billion chained 1996 dollars)	**6368**	**6592**	**6708**	**6676**	**6880**	**7063**	**7348**	**7544**	**7813**	**8159**	**8509**	**8857**	**9224**	*9319*	*9523*
GDP Implicit Price Deflator (Index, 1996=1.000)	**0.802**	**0.833**	**0.865**	**0.897**	**0.919**	**0.941**	**0.960**	**0.981**	**1.000**	**1.019**	**1.032**	**1.047**	**1.070**	*1.094*	*1.115*
Real Disposable Personal Income (billion chained 1996 Dollars)	**4784**	**4907**	**5014**	**5033**	**5189**	**5261**	**5397**	**5539**	**5678**	**5854**	**6169**	**6320**	**6539**	*6772*	*6923*
Manufacturing Production (Index, 1996=1.000)	**0.800**	**0.816**	**0.812**	**0.792**	**0.824**	**0.854**	**0.906**	**0.953**	**1.000**	**1.076**	**1.134**	**1.188**	**1.259**	*1.219*	*1.237*
Real Fixed Investment (billion chained 1996 dollars)	**887**	**911**	**895**	**833**	**886**	**958**	**1046**	**1109**	**1213**	**1329**	**1480**	**1595**	**1716**	*1678*	*1645*
Real Exchange Rate (Index, 1996=1.000)	**NA**	**NA**	**0.913**	**0.915**	**0.923**	**0.958**	**0.938**	**0.875**	**0.920**	**0.990**	**1.040**	**1.039**	**1.078**	*1.133*	*1.111*
Business Inventory Change (billion chained 1996 dollars)	**17.0**	**14.2**	**8.9**	**-6.8**	**-4.7**	**3.6**	**12.1**	**14.1**	**10.1**	**14.8**	**27.2**	**13.3**	**13.1**	*-22.5*	*2.3*
Producer Price Index (index, 1982=1.000)	**1.069**	**1.122**	**1.163**	**1.165**	**1.172**	**1.189**	**1.205**	**1.248**	**1.277**	**1.276**	**1.244**	**1.255**	**1.328**	*1.361*	*1.351*
Consumer Price Index (index, 1982-1984=1.000)	**1.184**	**1.240**	**1.308**	**1.363**	**1.404**	**1.446**	**1.483**	**1.525**	**1.570**	**1.606**	**1.631**	**1.667**	**1.723**	*1.777*	*1.813*
Petroleum Product Price Index (index, 1982=1.000)	**0.539**	**0.612**	**0.748**	**0.671**	**0.647**	**0.620**	**0.591**	**0.608**	**0.701**	**0.680**	**0.513**	**0.609**	**0.913**	*0.873*	*0.785*
Non-Farm Employment (millions)	**105.2**	**107.9**	**109.4**	**108.3**	**108.6**	**110.7**	**114.1**	**117.2**	**119.6**	**122.7**	**125.8**	**128.9**	**131.8**	*132.2*	*132.4*
Commercial Employment (millions)	**67.8**	**70.0**	**71.3**	**70.8**	**71.2**	**73.2**	**76.1**	**78.8**	**81.1**	**83.9**	**86.6**	**89.6**	**92.1**	*93.1*	*93.7*
Total Industrial Production (index, 1996=1.000)	**0.8**	**0.8**	**0.8**	**0.8**	**0.8**	**0.9**	**0.9**	**1.0**	**1.0**	**1.1**	**1.1**	**1.2**	**1.2**	*1.2*	*1.2*
Housing Stock (millions)	**101.4**	**102.8**	**103.4**	**104.4**	**105.4**	**106.7**	**108.0**	**109.6**	**110.9**	**112.3**	**114.1**	**115.7**	**116.2**	*117.9*	*119.2*
Weather [a]															
Heating Degree-Days															
U.S.	**4653**	**4726**	**4016**	**4200**	**4441**	**4700**	**4483**	**4531**	**4713**	**4542**	**3951**	**4169**	**4454**	*4443*	*4459*
New England	**6715**	**6887**	**5848**	**5960**	**6844**	**6728**	**6672**	**6559**	**6679**	**6662**	**5680**	**5952**	**6497**	*6501*	*6462*
Middle Atlantic	**6088**	**6134**	**4998**	**5177**	**5964**	**5948**	**5934**	**5831**	**5986**	**5809**	**4812**	**5351**	**5768**	*5634*	*5698*
U.S. Gas-Weighted	**4804**	**4856**	**4139**	**4337**	**4458**	**4754**	**4659**	**4707**	**4980**	**4802**	**4183**	**4399**	**4684**	*4700*	*4710*
Cooling Degree-Days (U.S.)	**1283.0**	**1156.0**	**1260.0**	**1331.0**	**1040.0**	**1218.0**	**1220.0**	**1293.0**	**1180.0**	**1156.0**	**1410.0**	**1297.0**	**1229.0**	*1272.5*	*1236.7*

[a] Population-weighted degree-days. A degree-day indicates the temperature variation from 65 degrees Fahrenheit (calculated as the simple average of the daily minimum and maximum temperatures) weighted by 1990 population.

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

Sources: Historical data: latest data available from: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Commerce, National Oceanic and Atmospheric Administration; Federal Reserve System, *Statistical Release* G.17(419); U.S. Department of Transportation; American Iron and Steel Institute. Macroeconomic projections are based on DRI/McGraw-Hill Forecast SHOCK0918.

Table A3. Annual International Petroleum Supply and Demand Balance

(Millions Barrels per Day, Except OECD Commercial Stocks)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Demand [a]															
OECD															
U.S. (50 States)	**17.3**	**17.3**	**17.0**	**16.7**	**17.0**	**17.2**	**17.7**	**17.7**	**18.3**	**18.6**	**18.9**	**19.5**	**19.7**	*19.7*	*20.0*
Europe [b]	**12.4**	**12.5**	**12.6**	**13.4**	**13.6**	**13.5**	**13.6**	**14.1**	**14.3**	**14.4**	**14.7**	**14.5**	**14.4**	*14.3*	*14.3*
Japan	**4.8**	**5.0**	**5.1**	**5.3**	**5.4**	**5.4**	**5.7**	**5.7**	**5.9**	**5.7**	**5.5**	**5.6**	**5.5**	*5.5*	*5.5*
Other OECD	**2.6**	**2.7**	**2.7**	**2.7**	**2.7**	**2.8**	**2.9**	**3.0**	**3.0**	**3.1**	**3.1**	**3.2**	**3.3**	*3.4*	*3.4*
Total OECD	**37.1**	**37.6**	**37.5**	**38.1**	**38.8**	**39.0**	**39.9**	**40.6**	**41.4**	**41.8**	**42.3**	**42.8**	**42.9**	*42.9*	*43.3*
Non-OECD															
Former Soviet Union	**8.9**	**8.7**	**8.4**	**8.4**	**6.8**	**5.6**	**4.8**	**4.6**	**4.0**	**3.9**	**3.8**	**3.7**	**3.7**	*3.7*	*3.7*
Europe	**2.2**	**2.1**	**1.7**	**1.4**	**1.3**	**1.3**	**1.3**	**1.3**	**1.4**	**1.5**	**1.5**	**1.5**	**1.5**	*1.6*	*1.6*
China	**2.3**	**2.4**	**2.3**	**2.5**	**2.7**	**3.0**	**3.2**	**3.4**	**3.6**	**3.9**	**4.1**	**4.3**	**4.6**	*4.8*	*4.9*
Other Asia	**4.4**	**4.9**	**5.3**	**5.7**	**6.2**	**6.8**	**7.3**	**7.9**	**8.5**	**9.0**	**8.7**	**9.0**	**9.0**	*9.1*	*9.2*
Other Non-OECD	**10.0**	**10.3**	**10.5**	**10.6**	**11.0**	**11.4**	**11.8**	**12.1**	**12.4**	**12.9**	**13.3**	**13.6**	**13.9**	*14.0*	*14.1*
Total Non-OECD	**27.7**	**28.3**	**28.2**	**28.5**	**28.0**	**28.0**	**28.4**	**29.3**	**30.0**	**31.2**	**31.4**	**32.1**	**32.7**	*33.1*	*33.6*
Total World Demand	**64.8**	**65.9**	**65.7**	**66.6**	**66.8**	**67.0**	**68.3**	**69.9**	**71.4**	**73.0**	**73.6**	**74.9**	**75.6**	*76.0*	*76.9*
Supply [c]															
OECD															
U.S. (50 States)	**10.5**	**9.9**	**9.7**	**9.9**	**9.8**	**9.6**	**9.4**	**9.4**	**9.4**	**9.5**	**9.3**	**9.0**	**9.1**	*9.0*	*9.0*
Canada	**2.0**	**2.0**	**2.0**	**2.0**	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**	**2.7**	**2.6**	**2.7**	*2.8*	*2.9*
North Sea [d]	**3.8**	**3.7**	**3.9**	**4.1**	**4.5**	**4.8**	**5.5**	**5.9**	**6.3**	**6.2**	**6.2**	**6.3**	**6.0**	*5.9*	*6.0*
Other OECD	**1.5**	**1.4**	**1.5**	**1.5**	**1.4**	**1.4**	**1.5**	**1.5**	**1.5**	**1.6**	**1.6**	**1.5**	**2.0**	*2.0*	*1.9*
Total OECD	**17.8**	**17.1**	**17.1**	**17.5**	**17.9**	**18.0**	**18.7**	**19.2**	**19.7**	**19.9**	**19.7**	**19.4**	**19.8**	*19.6*	*19.8*
Non-OECD															
OPEC	**21.5**	**23.3**	**24.5**	**24.6**	**25.8**	**26.6**	**27.0**	**27.6**	**28.3**	**29.9**	**30.4**	**29.3**	**30.9**	*30.3*	*29.6*
Former Soviet Union	**12.5**	**12.1**	**11.4**	**10.4**	**8.9**	**8.0**	**7.3**	**7.1**	**7.1**	**7.1**	**7.2**	**7.6**	**8.1**	*8.8*	*9.1*
China	**2.7**	**2.8**	**2.8**	**2.8**	**2.8**	**2.9**	**2.9**	**3.0**	**3.1**	**3.2**	**3.2**	**3.2**	**3.2**	*3.3*	*3.3*
Mexico	**2.9**	**2.9**	**3.0**	**3.2**	**3.2**	**3.2**	**3.2**	**3.1**	**3.3**	**3.4**	**3.5**	**3.4**	**3.5**	*3.6*	*3.7*
Other Non-OECD	**7.3**	**12.0**	**8.0**	**8.1**	**8.4**	**8.7**	**9.2**	**9.9**	**10.2**	**10.5**	**10.8**	**11.3**	**11.3**	*11.4*	*12.0*
Total Non-OECD	**47.0**	**48.9**	**49.7**	**49.1**	**49.1**	**49.4**	**49.6**	**50.7**	**52.0**	**54.2**	**55.2**	**54.8**	**57.0**	*57.3*	*57.6*
Total World Supply	**64.8**	**65.9**	**66.8**	**66.7**	**67.0**	**67.4**	**68.3**	**69.9**	**71.8**	**74.1**	**74.9**	**74.2**	**76.8**	*76.9*	*77.4*
Total Stock Withdrawals	**0.1**	**0.0**	**-1.1**	**-0.1**	**-0.3**	**-0.4**	**0.0**	**0.0**	**-0.4**	**-1.1**	**-1.3**	**0.7**	**-1.3**	*-0.9*	*-0.5*
OECD Comm. Stocks, End (bill. bbls.)	**2.6**	**2.6**	**2.7**	**2.7**	**2.7**	**2.8**	**2.8**	**2.7**	**2.7**	**2.7**	**2.8**	**2.5**	**2.5**	*2.6*	*2.7*
Net Exports from Former Soviet Union	**3.6**	**3.4**	**3.0**	**2.1**	**2.1**	**2.3**	**2.4**	**2.6**	**3.0**	**3.3**	**3.5**	**3.9**	**4.4**	*5.1*	*5.3*

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

[b] OECD Europe includes the former East Germany.

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

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

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

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

SPR: Strategic Petroleum Reserve

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

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

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

Table A4. Annual Average U. S. Energy Prices

(Nominal Dollars)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Crude Oil Prices (dollars per barrel)															
Imported Average[a]	**14.57**	**18.08**	**21.75**	**18.70**	**18.20**	**16.14**	**15.52**	**17.14**	**20.61**	**18.50**	**12.08**	**17.22**	**27.72**	*22.98*	*22.00*
WTI[b] Spot Average	**15.98**	**19.78**	**24.48**	**21.60**	**20.54**	**18.49**	**17.16**	**18.41**	**22.11**	**20.61**	**14.45**	**19.25**	**30.29**	*26.88*	*25.09*
Natural Gas Wellhead															
(dollars per thousand cubic feet)	**1.69**	**1.69**	**1.71**	**1.64**	**1.74**	**2.04**	**1.85**	**1.55**	**2.17**	**2.32**	**1.95**	**2.17**	**3.61**	*4.02*	*2.07*
Petroleum Products															
Gasoline Retail [b] (dollars per gallon)															
All Grades	**0.92**	**1.02**	**1.17**	**1.15**	**1.14**	**1.13**	**1.13**	**1.16**	**1.25**	**1.24**	**1.07**	**1.18**	**1.53**	*1.51*	*1.39*
Regular Unleaded	**0.91**	**0.99**	**1.13**	**1.10**	**1.09**	**1.07**	**1.08**	**1.11**	**1.20**	**1.20**	**1.03**	**1.14**	**1.49**	*1.47*	*1.36*
No. 2 Diesel Oil, Retail (dollars per gallon)	**0.92**	**0.99**	**1.16**	**1.13**	**1.11**	**1.11**	**1.11**	**1.11**	**1.24**	**1.20**	**1.04**	**1.12**	**1.49**	*1.45*	*1.39*
No. 2 Heating Oil, Wholesale (dollars per gallon)	**0.47**	**0.56**	**0.70**	**0.62**	**0.58**	**0.54**	**0.51**	**0.51**	**0.64**	**0.59**	**0.42**	**0.51**	**0.89**	*0.79*	*0.72*
No. 2 Heating Oil, Retail (dollars per gallon)	**0.81**	**0.90**	**1.06**	**1.02**	**0.93**	**0.91**	**0.88**	**0.87**	**0.99**	**0.99**	**0.85**	**0.88**	**1.31**	*1.26*	*1.18*
No. 6 Residual Fuel Oil, Retail [c] (dollars per barrel)	**14.04**	**16.20**	**18.66**	**14.32**	**14.21**	**14.00**	**14.79**	**16.49**	**19.01**	**17.82**	**12.83**	**16.02**	**25.34**	*23.02*	*21.55*
Electric Utility Fuels															
Coal (dollars per million Btu)	**1.47**	**1.44**	**1.45**	**1.45**	**1.41**	**1.38**	**1.36**	**1.32**	**1.29**	**1.27**	**1.25**	**1.22**	**1.20**	*1.24*	*1.21*
Heavy Fuel Oil [d] (dollars per million Btu)	**2.41**	**2.85**	**3.22**	**2.49**	**2.46**	**2.36**	**2.40**	**2.60**	**3.01**	**2.79**	**2.07**	**2.38**	**4.26**	*3.81*	*3.47*
Natural Gas (dollars per million Btu)	**2.26**	**2.36**	**2.32**	**2.15**	**2.33**	**2.56**	**2.23**	**1.98**	**2.64**	**2.76**	**2.38**	**2.57**	**4.33**	*4.52*	*2.68*
Other Residential															
Natural Gas (dollars per thousand cubic feet)	**5.47**	**5.64**	**5.80**	**5.82**	**5.89**	**6.17**	**6.41**	**6.06**	**6.35**	**6.95**	**6.83**	**6.69**	**7.72**	*9.27*	*6.83*
Electricity (cents per kilowatthour)	**7.49**	**7.64**	**7.85**	**8.05**	**8.23**	**8.34**	**8.40**	**8.40**	**8.36**	**8.43**	**8.26**	**8.16**	**8.23**	*8.58*	*8.51*

[a]Refiner acquisition cost (RAC) of imported crude oil.

[b]West Texas Intermediate.

[c]Average self-service cash prices.

[d]Average for all sulfur contents.

[e]Includes fuel oils No. 4, No. 5, and No. 6 and topped crude fuel oil prices.

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

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

Table A5. Annual U.S. Petroleum Supply and Demand

(Million Barrels per Day, Except Closing Stocks)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Crude Oil Supply															
Domestic Production [a]	**8.14**	**7.61**	**7.36**	**7.42**	**7.17**	**6.85**	**6.66**	**6.56**	**6.46**	**6.45**	**6.25**	**5.88**	**5.82**	*5.84*	*5.81*
Alaska	**2.02**	**1.87**	**1.77**	**1.80**	**1.71**	**1.58**	**1.56**	**1.48**	**1.39**	**1.30**	**1.17**	**1.05**	**0.97**	*0.97*	*0.95*
Lower 48	**6.12**	**5.74**	**5.58**	**5.62**	**5.46**	**5.26**	**5.10**	**5.08**	**5.07**	**5.16**	**5.08**	**4.83**	**4.85**	*4.87*	*4.87*
Net Imports (including SPR) [b]	**4.95**	**5.70**	**5.79**	**5.67**	**5.99**	**6.69**	**6.96**	**7.14**	**7.40**	**8.12**	**8.60**	**8.61**	**9.02**	*9.02*	*9.55*
Other SPR Supply	**0.00**	**0.00**	**0.00**	**0.00**	**0.01**	**0.02**	**0.00**	**0.00**	**0.00**	**0.00**	**0.02**	**0.01**	**0.01**	*0.01*	*0.12*
Stock Draw (Including SPR)	**0.00**	**-0.09**	**0.02**	**-0.01**	**0.00**	**-0.08**	**-0.02**	**0.09**	**0.05**	**-0.06**	**-0.07**	**0.09**	**-0.01**	*-0.02*	*0.00*
Product Supplied and Losses	**-0.04**	**-0.03**	**-0.02**	**-0.02**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**-0.01**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*
Unaccounted-for Crude Oil	**0.20**	**0.20**	**0.26**	**0.20**	**0.26**	**0.17**	**0.27**	**0.19**	**0.22**	**0.14**	**0.11**	**0.19**	**0.15**	*0.26*	*0.22*
Total Crude Oil Supply	**13.25**	**13.40**	**13.41**	**13.30**	**13.41**	**13.61**	**13.87**	**13.97**	**14.19**	**14.66**	**14.89**	**14.80**	**15.07**	*15.15*	*15.46*
Other Supply															
NGL Production	**1.62**	**1.55**	**1.56**	**1.66**	**1.70**	**1.74**	**1.73**	**1.76**	**1.83**	**1.82**	**1.76**	**1.85**	**1.91**	*1.81*	*1.90*
Other Inputs	**0.11**	**0.11**	**0.13**	**0.15**	**0.20**	**0.25**	**0.26**	**0.30**	**0.31**	**0.34**	**0.38**	**0.38**	**0.38**	*0.39*	*0.37*
Crude Oil Product Supplied	**0.04**	**0.03**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	*0.00*	*0.00*
Processing Gain	**0.66**	**0.66**	**0.68**	**0.71**	**0.77**	**0.77**	**0.77**	**0.77**	**0.84**	**0.85**	**0.89**	**0.89**	**0.95**	*0.93*	*0.93*
Net Product Imports [c]	**1.63**	**1.50**	**1.38**	**0.96**	**0.94**	**0.93**	**1.09**	**0.75**	**1.10**	**1.04**	**1.17**	**1.30**	**1.40**	*1.53*	*1.39*
Product Stock Withdrawn	**0.03**	**0.13**	**-0.14**	**-0.04**	**0.06**	**-0.05**	**0.00**	**0.15**	**0.03**	**-0.09**	**-0.17**	**0.30**	**0.00**	*-0.09*	*-0.02*
Total Supply	**17.33**	**17.37**	**17.04**	**16.76**	**17.10**	**17.26**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	*19.72*	*20.04*
Demand															
Motor Gasoline [d]	**7.36**	**7.40**	**7.31**	**7.23**	**7.38**	**7.48**	**7.60**	**7.79**	**7.89**	**8.02**	**8.25**	**8.43**	**8.47**	*8.57*	*8.75*
Jet Fuel	**1.45**	**1.49**	**1.52**	**1.47**	**1.45**	**1.47**	**1.53**	**1.51**	**1.58**	**1.60**	**1.62**	**1.67**	**1.73**	*1.69*	*1.73*
Distillate Fuel Oil	**3.12**	**3.16**	**3.02**	**2.92**	**2.98**	**3.04**	**3.16**	**3.21**	**3.37**	**3.44**	**3.46**	**3.57**	**3.72**	*3.86*	*3.84*
Residual Fuel Oil	**1.38**	**1.37**	**1.23**	**1.16**	**1.09**	**1.08**	**1.02**	**0.85**	**0.85**	**0.80**	**0.89**	**0.83**	**0.91**	*0.94*	*0.80*
Other Oils [e]	**4.03**	**3.95**	**3.95**	**3.99**	**4.20**	**4.17**	**4.41**	**4.36**	**4.63**	**4.77**	**4.69**	**5.01**	**4.87**	*4.65*	*4.92*
Total Demand	**17.34**	**17.37**	**17.04**	**16.77**	**17.10**	**17.24**	**17.72**	**17.72**	**18.31**	**18.62**	**18.92**	**19.52**	**19.70**	*19.72*	*20.04*
Total Petroleum Net Imports	**6.59**	**7.20**	**7.16**	**6.63**	**6.94**	**7.62**	**8.05**	**7.89**	**8.50**	**9.16**	**9.76**	**9.91**	**10.42**	*10.55*	*10.94*
Closing Stocks (million barrels)															
Crude Oil (excluding SPR)	**330**	**341**	**323**	**325**	**318**	**335**	**337**	**303**	**284**	**305**	**324**	**284**	**286**	*292*	*293*
Total Motor Gasoline	**228**	**213**	**220**	**219**	**216**	**226**	**215**	**202**	**195**	**210**	**216**	**193**	**196**	*199*	*205*
Jet Fuel	**44**	**41**	**52**	**49**	**43**	**40**	**47**	**40**	**40**	**44**	**45**	**41**	**45**	*48*	*45*
Distillate Fuel Oil	**124**	**106**	**132**	**144**	**141**	**141**	**145**	**130**	**127**	**138**	**156**	**125**	**118**	*128*	*131*
Residual Fuel Oil	**45**	**44**	**49**	**50**	**43**	**44**	**42**	**37**	**46**	**40**	**45**	**36**	**36**	*38*	*38*
Other Oils [f]	**267**	**257**	**261**	**267**	**263**	**273**	**275**	**258**	**250**	**259**	**291**	**246**	**247**	*260*	*261*

[a] Includes lease condensate.

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

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

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

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

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

SPR: Strategic Petroleum Reserve. NGL: Natural Gas Liquids

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

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

Table A6. Annual U.S. Natural Gas Supply and Demand

(Trillion Cubic Feet)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Total Dry Gas Production	**17.10**	**17.31**	**17.81**	**17.70**	**17.84**	**18.10**	**18.82**	**18.60**	**18.85**	**18.90**	**18.71**	**18.62**	**19.08**	*19.34*	*19.59*
Net Imports	**1.22**	**1.27**	**1.45**	**1.64**	**1.92**	**2.21**	**2.46**	**2.69**	**2.78**	**2.84**	**2.99**	**3.42**	**3.53**	*3.62*	*3.78*
Supplemental Gaseous Fuels	**0.10**	**0.11**	**0.12**	**0.11**	**0.12**	**0.12**	**0.11**	**0.11**	**0.11**	**0.10**	**0.10**	**0.10**	**0.10**	*0.10*	*0.12*
Total New Supply	**18.42**	**18.69**	**19.38**	**19.45**	**19.88**	**20.42**	**21.39**	**21.40**	**21.75**	**21.84**	**21.80**	**22.14**	**22.71**	*23.06*	*23.49*
Working Gas in Storage															
Opening	**2.76**	**2.85**	**2.51**	**3.07**	**2.82**	**2.60**	**2.32**	**2.61**	**2.15**	**2.17**	**2.17**	**2.73**	**2.51**	*1.72*	*2.50*
Closing	**2.85**	**2.51**	**3.07**	**2.82**	**2.60**	**2.32**	**2.61**	**2.15**	**2.17**	**2.17**	**2.73**	**2.51**	**1.72**	*2.50*	*2.46*
Net Withdrawals	**-0.09**	**0.34**	**-0.56**	**0.24**	**0.23**	**0.28**	**-0.28**	**0.45**	**-0.02**	**0.00**	**-0.56**	**0.22**	**0.79**	*-0.78*	*0.05*
Total Supply	**18.33**	**19.03**	**18.82**	**19.70**	**20.11**	**20.70**	**21.11**	**21.85**	**21.73**	**21.84**	**21.25**	**22.36**	**23.50**	*22.28*	*23.54*
Balancing Item [a]	**-0.30**	**-0.23**	**-0.11**	**-0.66**	**-0.56**	**-0.42**	**-0.40**	**-0.27**	**0.24**	**0.11**	**0.01**	**-0.67**	**-0.76**	*0.00*	*-0.40*
Total Primary Supply	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.95**	**21.26**	**21.70**	**22.74**	*22.28*	*23.14*
Demand															
Lease and Plant Fuel	**1.10**	**1.07**	**1.24**	**1.13**	**1.17**	**1.17**	**1.12**	**1.22**	**1.25**	**1.20**	**1.16**	**1.08**	**1.10**	*1.13*	*1.13*
Pipeline Use	**0.61**	**0.63**	**0.66**	**0.60**	**0.59**	**0.62**	**0.69**	**0.70**	**0.71**	**0.75**	**0.64**	**0.74**	**0.77**	*0.77*	*0.75*
Residential	**4.63**	**4.78**	**4.39**	**4.56**	**4.69**	**4.96**	**4.85**	**4.85**	**5.24**	**4.98**	**4.52**	**4.73**	**4.97**	*5.02*	*5.12*
Commercial	**2.67**	**2.72**	**2.62**	**2.73**	**2.80**	**2.86**	**2.90**	**3.03**	**3.16**	**3.21**	**3.00**	**3.04**	**3.26**	*3.30*	*3.30*
Industrial (Incl. Nonutilities)	**6.38**	**6.82**	**7.02**	**7.23**	**7.53**	**7.98**	**8.17**	**8.58**	**8.87**	**8.83**	**8.69**	**9.00**	**9.58**	*9.42*	*10.43*
Electric Utilities	**2.64**	**2.79**	**2.79**	**2.79**	**2.77**	**2.68**	**2.99**	**3.20**	**2.73**	**2.97**	**3.26**	**3.11**	**3.05**	*2.64*	*2.40*
Total Demand	**18.03**	**18.80**	**18.72**	**19.03**	**19.54**	**20.28**	**20.71**	**21.58**	**21.96**	**21.95**	**21.26**	**21.70**	**22.74**	*22.28*	*23.14*

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

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

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

Table A7. Annual U.S. Coal Supply and Demand

(Million Short Tons)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Production	**950.3**	**980.7**	**1029.1**	**996.0**	**997.5**	**945.4**	**1033.5**	**1033.0**	**1063.9**	**1089.9**	**1117.5**	**1100.4**	**1075.5**	*1142.4*	*1138.0*
Appalachia	**NA**	**464.8**	**489.0**	**457.8**	**456.6**	**409.7**	**445.4**	**434.9**	**451.9**	**467.8**	**460.4**	**425.6**	**420.9**	*434.1*	*427.0*
Interior	**NA**	**198.1**	**205.8**	**195.4**	**195.7**	**167.2**	**179.9**	**168.5**	**172.8**	**170.9**	**168.4**	**162.5**	**144.7**	*152.0*	*139.0*
Western	**NA**	**317.9**	**334.3**	**342.8**	**345.3**	**368.5**	**408.3**	**429.6**	**439.1**	**451.3**	**488.8**	**512.3**	**509.9**	*555.3*	*572.0*
Primary Stock Levels [a]															
Opening	**28.3**	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**34.0**	**36.5**	**39.5**	*34.2*	*34.6*
Closing	**30.4**	**29.0**	**33.4**	**33.0**	**34.0**	**25.3**	**33.2**	**34.4**	**28.6**	**34.0**	**36.5**	**39.5**	**34.2**	*34.6*	*34.6*
Net Withdrawals	**-2.1**	**1.4**	**-4.4**	**0.4**	**-1.0**	**8.7**	**-7.9**	**-1.2**	**5.8**	**-5.3**	**-2.6**	**-2.9**	**5.3**	*-0.4*	*S*
Imports	**2.1**	**2.9**	**2.7**	**3.4**	**3.8**	**7.3**	**7.6**	**7.2**	**7.1**	**7.5**	**8.7**	**9.1**	**12.5**	*16.8*	*18.1*
Exports	**95.0**	**100.8**	**105.8**	**109.0**	**102.5**	**74.5**	**71.4**	**88.5**	**90.5**	**83.5**	**78.0**	**58.5**	**58.5**	*55.3*	*57.0*
Total Net Domestic Supply	**855.3**	**884.2**	**921.6**	**890.9**	**897.8**	**886.9**	**961.8**	**950.4**	**986.3**	**1008.5**	**1045.7**	**1048.1**	**1034.8**	*1103.5*	*1099.2*
Secondary Stock Levels [b]															
Opening	**185.5**	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	**136.1**	**134.6**	**123.0**	**106.4**	**129.4**	**143.5**	*108.1*	*115.9*
Closing	**158.4**	**146.1**	**168.2**	**167.7**	**163.7**	**120.5**	**136.1**	**134.6**	**123.0**	**106.4**	**129.4**	**143.5**	**108.1**	*115.9*	*118.2*
Net Withdrawals	**27.0**	**12.3**	**-22.1**	**0.5**	**4.0**	**43.2**	**-15.7**	**1.5**	**11.7**	**16.6**	**-23.0**	**-14.1**	**35.4**	*-7.7*	*-2.3*
Waste Coal Supplied to IPPs [c]	**0.0**	**0.0**	**0.0**	**0.0**	**6.0**	**6.4**	**7.9**	**8.5**	**8.8**	**8.1**	**9.0**	**9.6**	**10.1**	*10.6*	*11.1*
Total Supply	**882.3**	**896.5**	**899.4**	**891.4**	**907.8**	**936.5**	**954.0**	**960.4**	**1006.7**	**1033.2**	**1031.6**	**1043.6**	**1080.3**	*1106.4*	*1107.9*
Demand															
Coke Plants	**41.9**	**40.5**	**38.9**	**33.9**	**32.4**	**31.3**	**31.7**	**33.0**	**31.7**	**30.2**	**28.2**	**28.1**	**28.9**	*26.4*	*25.9*
Electricity Production															
Electric Utilities	**758.4**	**766.9**	**773.5**	**772.3**	**779.9**	**813.5**	**817.3**	**829.0**	**874.7**	**900.4**	**910.9**	**894.1**	**859.3**	*853.8*	*860.3*
Nonutilities (Excl. Cogen.) [d]	**NA**	**5.7**	**7.4**	**11.4**	**15.0**	**17.5**	**19.9**	**21.2**	**22.2**	**21.6**	**26.9**	**52.7**	**123.3**	*151.0*	*153.8*
Retail and General Industry	**76.3**	**82.3**	**83.1**	**81.5**	**80.2**	**81.1**	**81.2**	**78.9**	**77.7**	**78.0**	**72.3**	**69.6**	**70.0**	*69.4*	*67.9*
Total Demand [e]	**876.5**	**895.4**	**902.9**	**899.1**	**907.4**	**943.5**	**950.1**	**962.0**	**1006.3**	**1030.1**	**1038.3**	**1044.5**	**1081.5**	*1100.6*	*1107.9*
Discrepancy [f]	**5.8**	**1.1**	**-3.5**	**-7.7**	**0.5**	**-7.0**	**3.9**	**-1.6**	**0.4**	**3.1**	**-6.7**	**-0.9**	**-1.3**	*5.7*	*0.0*

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

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

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

[d] Estimates of coal consumption by IPPs, supplied by the Office of Coal, Nuclear, Electric, and Alternate Fuels, Energy Information Administration (EIA). Quarterly coal consumption estimates for 2000 and projections for 2001 and 2002 are based on (1) estimated consumption by utility power plants sold to nonutility generators during 1999, and (2) annual coal-fired generation at nonutilities from Form EIA-867 (Annual Nonutility Power Producer Report).

[e] Total Demand includes estimated IPP consumption.

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

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

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

Table A8. Annual U.S. Electricity Supply and Demand

(Billion Kilowatt-hours)

	Year														
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Supply															
Net Utility Generation															
Coal	**1540.7**	**1553.7**	**1559.6**	**1551.2**	**1575.9**	**1639.2**	**1635.5**	**1652.9**	**1737.5**	**1787.8**	**1807.5**	**1767.7**	**1696.6**	*1635.4*	*1645.4*
Petroleum	**148.9**	**158.3**	**117.0**	**111.5**	**88.9**	**99.5**	**91.0**	**60.8**	**67.3**	**77.8**	**110.2**	**86.9**	**72.2**	*86.5*	*59.5*
Natural Gas	**252.8**	**266.6**	**264.1**	**264.2**	**263.9**	**258.9**	**291.1**	**307.3**	**262.7**	**283.6**	**309.2**	**296.4**	**290.7**	*253.0*	*228.1*
Nuclear	**527.0**	**529.4**	**576.9**	**612.6**	**618.8**	**610.3**	**640.4**	**673.4**	**674.7**	**628.6**	**673.7**	**725.0**	**705.4**	*531.5*	*523.3*
Hydroelectric	**222.9**	**265.1**	**279.9**	**275.5**	**239.6**	**265.1**	**243.7**	**293.7**	**328.0**	**337.2**	**304.4**	**293.9**	**248.2**	*201.9*	*257.7*
Geothermal and Other [a]	**12.0**	**11.3**	**10.7**	**10.1**	**10.2**	**9.6**	**8.9**	**6.4**	**7.2**	**7.5**	**7.2**	**3.7**	**2.2**	*2.4*	*2.3*
Subtotal	**2704.3**	**2784.3**	**2808.2**	**2825.0**	**2797.2**	**2882.5**	**2910.7**	**2994.5**	**3077.4**	**3122.5**	**3212.2**	**3173.7**	**3015.4**	*2710.7*	*2716.3*
Nonutility Generation [b]	**NA**	**187.6**	**216.7**	**246.3**	**286.1**	**314.4**	**343.1**	**363.3**	**369.6**	**371.7**	**405.7**	**530.9**	**784.6**	*1108.1*	*1160.8*
Total Generation	**2704.3**	**2971.9**	**3024.9**	**3071.3**	**3083.4**	**3196.9**	**3253.8**	**3357.8**	**3447.0**	**3494.2**	**3617.9**	**3704.5**	**3799.9**	*3818.8*	*3877.1*
Net Imports [c]	**31.8**	**11.0**	**2.3**	**19.6**	**25.4**	**27.8**	**44.8**	**39.2**	**38.0**	**36.6**	**27.6**	**30.6**	**35.6**	*32.1*	*33.7*
Total Supply	**2736.0**	**2982.8**	**3027.2**	**3091.0**	**3108.8**	**3198.0**	**3298.6**	**3397.1**	**3485.0**	**3530.8**	**3645.5**	**3735.1**	**3835.5**	*3852.5*	*3910.8*
Losses and Unaccounted for [d]	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	*NA*	*NA*
Demand															
Retail Sales [e]															
Residential	**892.9**	**905.5**	**924.0**	**955.4**	**935.9**	**994.8**	**1008.5**	**1042.5**	**1082.5**	**1075.9**	**1130.1**	**1144.9**	**1193.4**	*1230.9*	*1252.9*
Commercial	**699.1**	**725.9**	**751.0**	**765.7**	**761.3**	**794.6**	**820.3**	**862.7**	**887.4**	**928.6**	**979.4**	**1002.0**	**1037.9**	*1065.8*	*1071.3*
Industrial	**896.5**	**925.7**	**945.5**	**946.6**	**972.7**	**977.2**	**1008.0**	**1012.7**	**1033.6**	**1038.2**	**1051.2**	**1058.2**	**1070.8**	*1023.2*	*1047.6*
Other	**89.6**	**89.8**	**92.0**	**94.3**	**93.4**	**94.9**	**97.8**	**95.4**	**97.5**	**102.9**	**103.5**	**107.0**	**110.6**	*109.5*	*110.1*
Subtotal	**2578.1**	**2646.8**	**2712.6**	**2762.0**	**2763.4**	**2861.5**	**2934.6**	**3013.3**	**3101.1**	**3145.6**	**3264.2**	**3312.1**	**3412.8**	*3429.5*	*3481.8*
Nonutility Use/Sales [f]	**NA**	**100.4**	**104.2**	**111.0**	**121.8**	**126.9**	**140.9**	**149.2**	**148.9**	**149.0**	**159.8**	**188.8**	**186.7**	*186.2*	*186.3*
Total Demand	**2578.1**	**2747.2**	**2816.7**	**2873.0**	**2885.1**	**2988.4**	**3075.5**	**3162.4**	**3250.1**	**3294.6**	**3424.0**	**3500.9**	**3599.5**	*3615.7*	*3668.1*
Memo:															
Nonutility Sales to Electric Utilities	**NA**	**87.1**	**112.5**	**135.3**	**164.4**	**187.5**	**202.2**	**214.2**	**220.6**	**222.7**	**245.9**	**342.0**	**597.8**	*921.9*	*974.5*

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

[b]Net generation.

[c]Data for 2000 are estimates.

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

[e]Total of retail electricity sales by electric utilities and power marketers. Utility sales for historical periods are reported in EIA's *Electric Power Monthly* and *Electric Power Annual*. Power marketers' sales for historical periods are reported in EIA's Electric Sales and Revenue, Appendix C. Data for 2000 are estimates.

[f]Defined as the sum of nonutility facility use of onsite net electricity generation plus direct sales of power by nonutility generators to third parties, reported annually in Table 7.5 of the *Monthly Energy Review (MER*). Data for 2000 are estimates.

Notes: Minor discrepancies with other EIA published historical data are due to rounding. Historical data are printed in bold; forecasts are in italics.

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