Short-Term Energy Outlook – January 2005

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Winter Fuels Update (Figure 1)

Consumer prices for heating fuels are relatively unchanged since the December *Outlook* , leaving projections for household heating fuel expenditures about the same as previously projected, despite continued warm weather in the middle of the heating season. Heating oil expenditures by typical Northeastern households are expected to average 30 percent above last winter's levels, with residential fuel oil prices averaging $1.82 per gallon for the October-to-March period. Expenditures for propane-heated households are expected to increase about 20 percent this winter. Expected increases in expenditures for natural gas-heated households have been raised slightly to 10 percent.

Crude Oil and Petroleum Products (Figures 2 to 8)

The projected average West Texas Intermediate (WTI) crude oil price for the first quarter of 2005 is about $43 per barrel, approximately $8 per barrel higher than in the first quarter of 2004 but $3 per barrel below the first quarter projection in the previous *Outlook*. WTI prices fell by $10 per barrel on average during the past two months due to: the ongoing restoration of oil production in the Gulf of Mexico shut in due to Hurricane Ivan, unseasonably warm weather in the United States, and rising U.S. and OECD commercial oil inventories in general. This *Outlook* extends the projection period through 2006. EIA's initial assessment is that WTI prices are likely to remain in the $42-$43 per barrel range (on average) throughout 2005-2006.

World petroleum demand growth for 2005-2006 is projected to average about 2.1 million barrels per day, still strong growth but down from the 2.6 million barrels per day demand growth seen in 2004. Global economic growth is expected to settle at more sustainable rates over the next two years, tempered in part by high world oil prices. The lower global oil demand growth also reflects the fact that Chinese oil demand growth is expected to moderate from the very high rate seen in 2004, when a dramatic increase in demand for oil-generated power occurred. This source of demand is not expected to be nearly as important over the next two years.

Because oil demand growth is expected to remain strong in 2005-2006, U.S. oil inventories and inventories in the other industrialized countries are not expected to show much growth from end-2004 levels. However, the record levels of production by OPEC countries in recent months have finally resulted in inventory builds in the OECD countries. Commercial inventories in these countries, which had been relatively low compared to historical standards, rose above the middle of the observed 5-year historical range. In addition, OPEC (and world) production capacity rose by a half million barrels per day to 1.1-1.6 million barrels per day above current output levels, as Saudi Arabia de-mothballed capacity at several fields. However, even with this action, the global capacity utilization rate remains near 99 percent.

The tsunami, which struck South Asia on December 26, while devastating and massive in scope, appears to have had minimal impact on oil markets or on energy markets

Exhibit 141-1

generally.Global oil demand growth is likely to be the key factor for oil markets in 2005. While most analysts expect global oil demand growth to be significantly less than the 2.6 million barrels per day seen in 2004, markets will remain tight if it is close to the 2.0 million barrels per day EIA expects in 2005, a level that exceeds expected growth in non-OPEC supply and downstream refinery capacity. However, if world oil demand grows by less than 1.5 million barrels per day in 2005, as some analysts are expecting, oil markets could loosen up and the likelihood that prices could ease in 2005 would increase.

U.S. petroleum demand in 2005 is projected to average 20.9 million barrels per day, up 2.0 percent from the 2004 level. An additional 1.9-percent growth is anticipated for 2006. Motor gasoline demand is projected to rise 1.9 percent in 2005 and 2.4 percent in 2006, in line with highway travel growth. Jet fuel demand, buoyed by continued recovery in both capacity and utilization, is projected to climb 2.6 percent in 2005 and 1.9 percent in 2006. Distillate fuel oil demand, which has grown by about 4 percent per year for the last 2 years, is expected to grow more slowly in 2005 and 2006 at 2.5 percent and 1.3 percent, respectively, as industrial growth slows.

On January 10, 2005 , the U.S. monthly average pump price for regular gasoline was $1.79 per gallon, down 5 cents per gallon from one month ago. Recently, gasoline prices have been falling in response to lower crude oil prices. Additionally, the drop in spot gasoline prices reflects robust gasoline inventories, which are close to the upper end of their normal range for this time of year. Pump prices for regular gasoline are expected to average about $1.82 per gallon during the first quarter of 2005, up about 16 cents from Q1 2004 but down about 12 cents from Q4 2004. Continued growth in gasoline demand in the U.S. is expected to move average prices to about the mid-$1.90's by spring, about the same as in 2004. The improvement in current and expected gasoline supplies has reduced the likelihood of significant increases in average gasoline prices in 2005 compared to 2004. However, for heating oil, prices in 2005 are still anticipated to average about 12 cents per gallon higher than their 2004 average level. Heating oil inventories are still at or below the normal range in most areas (including the East Coast where heating oil demand is concentrated). Despite warm weather so far this heating season, we are not yet ready to reduce price expectations for heating oil to the same extent as price expectations for gasoline.

Natural Gas (Figures 9 to 10)

The average Henry Hub natural gas spot price was $6.32 per thousand cubic feet (mcf) in November and $6.77 per mcf in December. However, the recent unusually mild winter weather in the Northeast reduced heating demand, which in turn, lowered spot prices for natural gas. Between December 20 and January 3, the price at the Henry Hub fell sharply from $7.35 per mcf to $5.70per mcf.

Working gas in storage is estimated to have totaled 2,698 billion cubic feet at the end of December. This figure is 5 percent higher than one year ago and 12 percent higher than the five-year average. With the heating season now more than half over and ample storage, natural gas prices are likely to ease over the next several months. Henry Hub prices are

expected to average $5.77 per mcf in 2005. In 2006, prices are projected to average $5.95 per mcf as the supply of natural gas is expected to tighten.

In response to continued economic growth, natural gas demand is projected to increase by 3.0 percent in 2005. Domestic natural gas production in 2005 is projected to increase by 1.7 percent from 2004 levels, partly due to high gas-directed drilling rates and partly due to continued recovery in the Gulf of Mexico from the effects of Hurricane Ivan. Steady increases in liquefied natural gas imports, restrained export growth, and carryover from the robust storage levels noted above are expected to contribute to moderate improvement in the supply picture in 2005.

Electricity and Coal Outlook (Figures 11 to 13)

Electricity demand is expected to increase by 3.3 percent in 2005 and by an additional 2.1 percent in 2006, following estimated growth of 1.4 percent in 2004. Coal demandin the electric power sector is expected to show a solid gain of 2.9 percent in 2005 and another 2.6 percent in 2006. Power sector demand for coal continues to increase even as oil and gas prices remain high. U.S. coal productionis expected to grow by 2.9 percent in 2005 and by an additional 2.6 percent in 2006. Hydroelectric power availability, which now appears to have fallen slightly in 2004, is expected to rebound in 2005 by as much as 11 percent nationally, provided normal precipitat tion patterns prevail.

Table HL1. U.S. Energy Supply and Demand: Base Case
(Energy Information Administration\Short-Term Energy Outlook –January 2005)

	Year				Annual Percentage Change		
	2003	2004	2005	2006	2003-2004	2004-2005	2005-2006
Real Gross Domestic Product (GDP) (billion chained 2000 dollars)	10381	10843	*11228*	*11581*	4.4	*3.6*	*3.1*
Imported Crude Oil Price a (nominal dollars per barrel)	27.74	36.09	*36.6*	*36.00*	30.1	*1.4*	*-1.6*
Petroleum Supply (million barrels per day)							
Crude Oil Production b	5.68	5.44	*5.58*	*5.76*	-4.3	*2.7*	*3.2*
Total Petroleum Net Imports(Million Barrels per Day) (including SPR)	11.24	11.85	*12.07*	*12.20*	5.4	*1.9*	*1.1*
Energy Demand							
World Petroleum (million barrels per day)	78.4	82.4	*84.5*	*86.5*	3.3	*2.5*	*2.4*
Petroleum (million barrels per day)	20.03	20.48	*20.89*	*21.29*	2.2	*2.0*	*1.9*
Natural Gas (trillion cubic feet)	21.93	21.90	*22.57*	*23.04*	-0.1	*3.0*	*2.1*
Coal c (million short tons)	1095	1104	*1136*	*1161*	0.9	*2.9*	*2.3*
Electricity (billion kilowatthours)							
Retail Sales d	3500	3547	*3663*	*3743*	1.3	*3.3*	*2.2*
Other Use/Sales e	174	178	*185*	*187*	2.7	*3.6*	*1.0*
Total	3674	3725	*3848*	*3930*	1.4	*3.3*	*2.1*
Total Energy Demand f (quadrillion Btu)	97.4	98.2	*101.0*	*102.8*	0.9	*2.9*	*1.8*
Total Energy Demand per Dollar of GDP (thousand Btu per 2000 Dollar)	9.66	9.06	*9.00*	*8.88*	-3.4	*-0.7*	*-1.3*
Renewable Energy as Percent of Total g	6.5%	6.7%	*6.7%*	*6.6%*			

[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 Energy Information Administration (EIA) *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 2003 are estimates.

[e]Defined as the sum of facility use of onsite net electricity generation plus direct sales of power by industrial- or commercial-sector generators

to third parties, reported annually in Table 7.5 of the *Monthly Energy Review* (*MER*). Data for 2003 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 EIA's *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. EIA 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; estimates and forecasts are in italics. The forecasts were generated by simulation of the Short-Term Integrated Forecasting System.

Sources: Historical data: Latest data available from Bureau of Economic Analysis and Energy Information Administration; latest data available from EIA databases supporting the following reports: *Petroleum Supply Monthly*, DOE/EIA-0109; *Petroleum Supply Annual*, DOE/EIA-0340/2; *Natural Gas Monthly*, DOE/EIA-0130; *Electric Power Monthly*, DOE/EIA-0226; and *Quarterly Coal Report*, DOE/EIA-0121; *International Petroleum Monthly* DOE/EIA-0520; *Weekly Petroleum Status Report*, DOE/EIA-0208. Macroeconomic projections are based on Global Insight Model of the US Economy, December 2004

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