

Energy and Energy Costs Are

FRONT PAGE NEWS

*(Includes a Summary of Energy Cost Increases
Between 1999 and 2000)*

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Crude oil prices, gasoline prices, electricity brownouts, natural gas prices, heating oil shortages have been hot topics for the media this year. The national presidential election has meant even more front page and editorial energy coverage.

There will be a lot of finger pointing between the government, the industry and the consuming public. All of this will take place with very little real understanding of the energy industry by these three segments.

CRUDE OIL PRICES

OPEC is making an effort to stabilize the crude oil marker price in the \$22 to \$28 barrel range. At the March 2000 meeting, OPEC implemented a process to automatically increase or decrease production to maintain the oil price in that range. The leaders made a mistake by not implementing their policy between meetings. Now the process, while still in place, does not have the potency that it was designed to have. The likelihood of world crude oil prices falling dramatically this year are very small.

GASOLINE PRICES

The refineries and product pipelines have some regional bottlenecks due to environmental requirements. This is causing an additional increase to the gasoline prices beyond the increased crude oil costs.

ELECTRICITY BROWNOUTS

Electric deregulation has not yet learned the costing methodology problem for electric service. Deregulated electricity will mean volatility in electric prices, something the electric consumer is unprepared for. Brownouts will cause the cost of reliable electricity to increase as individual consumers put in expensive standby equipment. This additional capital cost is above the cost consumers pay via their utility bills.

NATURAL GAS PRICES

The government shifted 180 degrees on natural gas supplies in the United States. They now believe the gas resources are huge, compared to the conventional government wisdom of a few years ago when they believed they were scarce. They are advocating the use of natural gas to the point of not preparing for the winter demand with summer storage. The wellhead prices will likely be still higher in the winter.

FUEL OIL IN THE NORTHEAST

The refiners have not built the necessary fuel oil inventories for the winter heating season. This will make the winter supply short and very high priced.

SUMMARY COMPARISON OF THIS YEAR'S (2000) UNITED STATES ENERGY BILL WITH LAST YEAR'S (1999).

The U.S. energy bill in 1999 was \$528 billion dollars. The U.S. energy bill for the year 2000 will be \$618 billion, an increase of \$90 billion. See table below.

U.S. Energy Expenditures and Yearly Differential

Billions of Nominal Dollars

Year	1999	2000	Increase
<u>Sector</u>			
Residential and Commercial	\$190	\$207	\$17
Industrial	\$141	\$161	\$20
Raw Materials	\$20	\$23	\$3
Transportation	\$176	\$226	\$50
Totals	\$528	\$618	\$90

U.S. Energy Expenditures as a share of GNP

U.S. GNP in \$Trillions	\$8.12	\$8.47	\$.350
Energy Cost Percent of GNP	6.5%	7.2%	.7%

U.S. Expenditures for Imported Energy

Payments for Energy Imports, \$Billion	\$75	\$110	\$35
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This is based on our copyrighted World Energy Model, which has a confidence level of plus or minus 20%. Before you criticize this model's accuracy as unacceptable, please note that no other model exists for comparison. Others, including the U.S. government, still utilize the old 1968 energy model. Other models are not reconcilable and do not combine and trace Btu's and \$'s.

This model allows for a pragmatic, rational analysis from a macro energy perspective.

SUMMARY ON COMMENTARY

An increase of .7% for energy expenditures as a percentage of U.S. GNP is a major *Trend Discontinuity*.

The U.S. expenditures for foreign energy imports will go over \$100 billion for the first time. The previous peak was \$83B in 1980.

U.S. dependency on foreign energy will remain more than 25%.

Increased consumer spending on energy will reduce some sectors of GNP, but it will increase the energy companies contribution to GNP as a partial offset. Overall, the discontinuity increase in energy cost will probably decrease the GNP growth rate maybe 1%, from a forecasted 4.4% to a 3.4% growth rate with a lag in timing. (One percent of an eight trillion GNP is \$80 billion, nearly equaling the increase in energy expenditures) The slowing economy and high energy pricing might prove crucial in the coming fall elections. While the forecast data is for the whole year, the great majority of these price increases took place in the second half of the year.

ABOUT THE AUTHOR

Mr. Dale Steffes, P.E., founder of Planning and Forecasting Consultants, Houston, Texas, is a gifted observer of the international energy scene. He specializes in independent analyses of market opportunities for major energy producers and users. Mr. Steffes' freedom from the strictures which often cause governmental, corporate, and industry errors in judgment have made his evaluations especially worthwhile to those executives who understand the merits of a professional outside viewpoint.

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