

# Ferguson: Energy Matters

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## Federal Energy Optimism

A better title for the Annual Energy Outlook 2007 released this month by energy bureaucrats in Washington would be the Annual Energy Optimism Statement. According to the forecast, oil and gas prices will fall dramatically in coming years. These fuels will be plentiful, U.S. consumption will increase, and there will be a chicken in every pot.

Yet that rosy outlook, perhaps due to the oil and gas industry's influence in Washington, cannot be ignored, because investment decisions - with massive amounts of money involved and environmental consequences - are predicated on the Department of Energy's Energy Information Administration annual report.

Since 2001, production of natural gas in the U.S. has been declining despite increasing prices, even if one discounts the production lost because of the 2005 hurricanes. According to the outlook, U.S. production will rise in the next two years despite a slight decline in prices.

U.S. natural gas consumption has been declining since 2001 in response to rising prices, again discounting the disruption caused by the 2005 storms. But according to the outlook, consumption will rise sharply in 2007 and 2008 and continue rising through 2020. It could happen, I suppose.

The key assumption behind the forecast of lower natural gas prices, and hence higher consumption, is that imports will increase. Canada will send us more gas despite its own increasing needs for Alberta tar sands operations. Imports of liquefied natural gas will increase, despite Asian and European competition for supplies, the declining value of the dollar, and so on.

The outlook for oil is also optimistic. The price of imported crude oil is forecast to fall from its high of \$69 per barrel this year to \$50/bbl a few years hence. Despite the falling prices, the 20-year decline in U.S. crude production is forecast to end and production even increase a bit. It's comforting to know that high oil prices are a thing of the past.

EIA energy price predictions have been woefully wrong in the last few years. An analysis of the EIA outlook by Mark Bollinger and Ryan Wiser of Lawrence Berkeley Laboratory shows that EIA natural gas price forecasts have consistently been below futures prices. And even the higher gas futures prices failed to predict the run-up in prices for gas actually delivered.

As the LBL analysis points out, the problem with lowball forecasts is that they skew investment decisions. California utilities continue to increase gas-fired electric generation on the assumption that gas prices will fall. As a result, investment in alternatives such as renewable energy is lagging. Despite state law requiring large increases in the utilization of renewable resources, almost no new projects have come on line.

To use my favorite example, if the Tehachapi Wind Energy Project were on line, the state would be paying about \$700 million a year less for natural gas at current prices.

The forecasting problem is compounded by the fact that utilities are not on the hook if the forecasts are wrong. When gas prices are higher than forecast, the additional costs are automatically passed through to ratepayers.

In fairness to the EIA, I should point out that the report issued this month is a preview that provides only its "reference" case. When the full report is released early next year, it will include other scenarios, perhaps less rosy ones.

It is hard to imagine, however, a more optimistic scenario than the EIA reference case. The energy world is full of surprises, but history shows that the surprises are likely to be unpleasant ones.

The value of the dollar could continue its swan dive, driving up the cost of imported energy. The Middle East and Russia, on which the U.S. depends heavily for supplies, are the most unstable areas in the world. Saudi Arabia may not have the oil it claims to have or may decide to limit the rate of depletion. Projections of plentiful and cheap liquefied natural gas could evaporate.

Perhaps the only event that could reduce the cost of energy below the EIA forecast is a worldwide recession. And such a recession would not be good news for consumers, either, despite the lower cost of energy.

As readers well know, my advice is not to count on energy getting cheaper. Prudent planning requires taking the Annual Energy Optimism Statement with a large dose of pessimism.

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