

March 29, 2010

Ms. Karen R. Robinson  
Office of Oil and Gas  
EI-40, Forrestal Building  
U.S. Department of Energy  
1000 Independence Ave SW  
Washington, D.C. 20585

**Response to Energy Information Administration – Agency Information Collection Activities: Request for Comments and Recommendations (Federal Register Notice, January 27, 2010)**

Dear Ms. Robinson:

I am responding to the Energy Information Administration’s request for comments and recommendations regarding “information needed to support analysis and increased understanding of energy markets,” issued January 27, 2010.

**I. The Energy Information Administration has become a data “dump.” The quality of data published by EIA has deteriorated. It can perform a real service by improving the quality of the data reported.**

EIA publishes a vast array of statistics on the energy industry. My focus is on the statistics reported on petroleum. Some of the statistics published by EIA are very good. Others are no better than random numbers.

Information on inventory levels provides an example of the variation in data quality. EIA publishes statistics weekly and monthly. The weekly statistics are issued five days after the end of the reporting period. The monthly data are issued approximately 90 days after the end of the month. The monthly data are then revised a year later. There is often a large difference between the change in inventories published in the weekly statistics and the change in inventories reported a year later in the final statistics. In one example, the weekly data showed a decline in finished gasoline stocks over a month of more than 14 million barrels. This change was later revised to a six-million-barrel decline when the final monthly data were reported.

These statistical errors have consequences. An error in the weekly report that overstates a stock decline will likely lead to price increases that are not justified by the “fundamentals.” As a consequence, consumers may pay billions more for product than they should. An error in the weekly report that underestimates a drop in inventories will lead to lower prices and probably lower refining margins, cutting oil industry profits.

The quality of the weekly data can be measured by comparing price spreads in markets with inventory levels. There is a long literature on the relationship between price spreads and inventories. It began with Keynes and Working and was updated by Brennan and more recently Williams and Wright. These economists, as well as many others, have also noted that prices contain all market information. Statistical tests I have performed indicate that the correlation between prices spreads and the monthly data reported by DOE are much higher than the correlation of weekly inventories with price spreads. Since price data are seldom if ever revised and since prices are known to contain all market information, one can conclude that the inventory data issued by DOE on a monthly basis are of much higher quality.

The Energy Information Administration should endeavor to improve the quality of the weekly data published on petroleum before trying to collect more information. At present, the weekly data are random numbers. The use of these data by the market will impose excess costs on consumers at times and cause significant losses to refiners at other times. Under such circumstances, one could conclude that the taxpayer money used to fund the EIA was causing real damage to the U.S. economy. Indeed, in my view, the EIA is an agency of potential economic destruction at present.

## **II. The EIA can improve the quality of the data it reports by reducing the amount of data published on a weekly and monthly basis.**

Presently, EIA collects thousands of independent pieces of information from reporting companies on a weekly and monthly basis. The data forms are long and cumbersome. Furthermore, there seems to be a focus on the quantity of data collected rather than the quality.

The requirement that so much detail be reported no doubt creates complications for firms. Companies required to report will allocate the minimum amount of resources necessary to complete the form, both in the number of work hours and the quality of the work hours. Those assigned to complete EIA forms are not now and will never be on the road to top management. Thus to improve the quality of the information it receives, EIA must focus on the key aggregates rather than asking companies to provide information on all activities. The quality of gasoline inventory data would likely be bettered if, for example, the EIA asked companies to supply information on inventories of finished and conventional gasoline held in each of the five reporting areas rather than asking them to distinguish between perhaps 20 different types of gasoline.

The EIA can undoubtedly improve the quality of the data it reports by (1) limiting the amount collected and (2) simplifying the reports firms have to complete. Individuals who process the reports at DOE will have more time to examine each submission and catch errors if they have less information to review. Such analysis would likely increase the data quality.

**III. The EIA should not attempt to collect data on energy transactions as suggested in the Notice.**

The EIA suggests it is considering collecting information associated with energy market behavior. I have extensive experience in such research through my academic work and consulting (see *Adjusting to Volatile Energy Prices*, Washington, D.C.: Institute for International Economics, 1994).

**Attempts to collect information on oil inventories and other physical oil assets held by the 50 largest oil companies will have grave financial implications for U.S. consumers.** The oil trading industry prizes its secrecy and will do everything it can to avoid reporting. One of the obvious responses to a data collection attempt will be the movement of oil inventories to firms that do not conduct business in the United States. The EIA's arm may be long, but it cannot require a firm to report to it if the firm does not do business here. Imposing a rule that requires firms doing business in the U.S. to report on offshore inventories will tend to drive stocks away from the United States. American consumers will pay dearly for such an action and oil firms will reap large profits because domestic prices will then be higher. (Hopefully, the EIA economists understand the relationships between inventories and prices.)

**The EIA should not attempt to collect information on transactions taking place on recognized futures exchanges.** These data are already reported in great depth by the exchanges and by the CFTC. Unlike the EIA, the exchanges and the CFTC have great competency in this area. The EIA can add nothing here. Given the current budgetary constraints, it is pointless for the agency to do anything.

**The EIA should not attempt to collect information on behavior in the OTC market for physical delivery of energy commodities.** This information is extremely diffuse, making categorization difficult. For years, *Petroleum Argus* tracked deals in the North Sea market that resulted in delivery, as well as those that did not. To track just the North Sea market, *Argus* had to have a number of reporters checking transactions daily. The EIA would easily require 100 well-paid and well-trained experts to track physical transactions in all U.S. markets that might have to report to it. The payoff in information would not be worth the effort or expense. I base this statement on my experience in examining transactions made by a few companies in various litigation matters. It is extremely difficult to find useful information regarding this type of data unless one is a real expert and can devote hours to the search.

Imposing a requirement that transactions data be reported to the EIA could also change market behavior, quite possibly raising prices to consumers. The growth of energy commodity markets helped break control over the markets once held by the large integrated companies. (This is a point Dan Yergin misses in his work.) I have calculated in my research that the burgeoning of oil trading between 1985 and 2005 added between 0.25 and 0.5 percentage points to world growth each year by preventing OPEC from sustaining artificially high oil prices. The downward pressure on prices came from the OTC and spot transactions the EIA contemplates following. Experience shows that a requirement to report such information will change trading patterns, quite probably strengthening integrated companies at the expense of the traders and independent companies that have helped keep prices down. Consumers would pay a heavy price for EIA's intervention.

**IV. In conclusion, the EIA's data collection efforts now pose a minor drag on economic activity. The EIA should seek to reduce its negative economic impact, not increase it.**

The random number nature of EIA's weekly data on oil industry activity imposes a high cost on consumers and the oil industry. The EIA should seek to reduce this cost by improving the quality of its data. The quality can be bettered if the amount of information collected is reduced and more effort placed on verifying the data published. The EIA will know it has succeeded if differences between the weekly data and the monthly data published after a year become insignificant.

The EIA should not attempt to collect data on offshore inventories or transactions. Such efforts will change industry behavior, moving stocks out of the reach of the EIA data collectors. Such efforts could also cause companies to move away from markets, effectively returning us to a world of greater integration and higher prices.

Sincerely,

Philip K. Verleger  
David Mitchell EnCana Professor  
Haskayne School of Business  
University of Calgary