

TESTIMONY OF
DR. HOWARD GRUENSPECHT
ACTING ADMINISTRATOR
ENERGY INFORMATION ADMINISTRATION
BEFORE THE
SUBCOMMITTEE ON ENERGY
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATE SENATE

MARCH 25, 2009

Madam Chairman and Members of the Committee, I appreciate the opportunity to appear before you today to discuss draft legislation entitled the “Energy Market Transparency Act of 2009,” received from Committee staff on March 18.

The Energy Information Administration (EIA) is the independent statistical and analytical agency within the Department of Energy that produces objective, timely, and relevant data, projections, and analyses to assist policymakers, help markets function efficiently, and inform the public. We do not promote, formulate, or take positions on policy issues, and our views should not be construed as representing those of the Department of Energy or the Administration.

Because concerns regarding volatility in oil prices and the factors that have contributed to it appear to be the motivation for the proposed legislation, I will start by briefly describing some recent and ongoing activities that EIA has undertaken to improve its understanding of the effects of interactions between energy and financial markets. I will then turn to specific comments on the draft legislation.

Earlier this month, EIA held a workshop on the relationships between futures and financial market activity and the underlying physical market for crude oil. Participants included staff from the Commodity Futures Trading Commission (CFTC), the Federal Reserve Board, the Government Accountability Office, and the International Monetary Fund, as well as staff from EIA, other Department of Energy offices and experts from the academic community. Topics discussed included: Can information obtained from

futures and financial over-the-counter markets enhance the understanding of the underlying physical markets? Can activity in futures and financial over-the-counter markets cause short-term price fluctuations in spot markets, even in the absence of change in underlying oil market fundamentals? What kind of models and data are most appropriate to fully understand the relationships between financial and physical markets? The presentations and resultant discussion highlighted several points, including the following: there is a need for better and more accessible data on trader activity in the futures markets; it is important to examine alternative theories of trader behavior; and there is a need to continue examining the role of fundamentals using better and more accurate data.

We know that members of this Committee, other EIA customers, and EIA analysts have considerable interest in quantifying the uncertainty surrounding short-term price forecasts. At the workshop, members of EIA's *Short-Term Energy Outlook (STEO)* team presented research into the use of implied volatilities from the New York Mercantile Exchange options markets as a measure of uncertainty in short-term price forecasts. Group discussion of this research coalesced around a particular method for calculating probability distributions for future oil prices using implied volatilities reflected in prevailing prices of options contracts. The American Statistical Association's Committee on Energy Statistics is scheduled to provide a further review of this method at its April meeting. By mid-year, we intend to report these calculations in each edition of the *STEO* to provide additional context for our own analysis.

EIA has also included a session on financial markets and short-term energy prices as a part of its annual energy conference, scheduled for April 7-8, 2009. We hope that the discussion among the panelists will further inform our research agenda and advance the ongoing dialogue in the broader community.

Looking ahead based on our current understanding, EIA staff believe that effective analysis of the effects of trading on resulting prices will require not only better data, but a much stronger theoretical approach as well. Analysts within and outside EIA continue to grapple with understanding the gap between very short-term and longer-term price formation. A comprehensive theory of how trader behavior affects longer-term prices is simply not well developed and without a well-developed theory, analysts are reduced to data mining and testing unformed hypotheses.

The limited availability of aggregate data that can be used to track trader strategy and behavior compounds the challenge faced by analysts. In the most obvious example, the position information that the CFTC publishes is separated into categories of commercial and non-commercial traders; categories that do not map cleanly to hedgers and speculators. Without a way of identifying trades and positions taken for speculative purposes, direct analysis of the effects of speculation on price formation is not really possible. Since the EIA and CFTC staffs maintain a cooperative relationship, we know the CFTC has been struggling with this problem, and may have made some advances, but those CFTC data have not been made public.

EIA staff believe that an improved understanding of the relationships between trader behavior and fundamentals in forming prices will require the gathering and deployment of strong analytic capabilities focused on building insight into the full process of price formation, from developing theory through the analysis of pertinent data. Such data, assuming they exist, might in some cases be purchased from commercial sources. In other cases, additional data collection, whether by EIA or other agencies, may also be warranted. A major investment of resources and time is likely to be required, and the difficulties are of sufficient magnitude that conclusive results are unlikely to be quickly obtained.

Comments on the Draft Energy Market Transparency Act of 2009

As a Federal statistical agency, EIA strongly supports data transparency as a means of achieving its mission and agrees that additional data on physical and financial oil and natural gas markets would be helpful in increasing understanding of oil price discovery. EIA's comments, which follow, focus on three main issues: first, the feasibility of the specific data collection called for in the draft legislation; second, providing a broader perspective on other potentially relevant data sources; and, finally, data confidentiality.

Comments on Section 3

General. EIA's initial assessment is that the data collection efforts proposed in subsections (n) and (o) could be both difficult and expensive. This does not, in itself,

mean that they are inappropriate, but it does suggest the need to consider whether other, more readily obtainable, data might provide comparable or even better insights into energy markets. In part, the answer may depend on an even more basic question – the intended uses of the data, which are not described in the draft legislation. These questions are important to consider, and so are intertwined with EIA’s more specific comments that follow.

Ownership of energy commodities. A key issue with subsection (n) is the feasibility of the proposed data collection, i.e., how to determine who are the owners of “all” inventories and therefore who should report to EIA. EIA currently surveys stocks at petroleum terminals, for instance, but those stocks are held on a custody basis, not an ownership one. Terminal operators may not know who the owners of the stocks are. These operators would know who brought the product to the terminal and who leases the tanks, but the product could have been subsequently sold—something that can occur daily—and still remain in the same tanks. Ownership would also be difficult to identify in the cases of minority position owners and joint ventures. The universe of actual owners (i.e., intended survey respondents) is unknown and perhaps unknowable, particularly outside of the physical market participants EIA usually deals with such as refiners, pipelines, and terminal operators. With the assistance of other agencies, EIA might be able to identify and survey at least a subset of owners, but such an activity should be recognized as involving far more difficulty than simply adding questions about ownership to the surveys that are currently completed by those having custody of inventories.

The universe of owners could include those entities covered by subsection (n)(2) as well, i.e., “any person holding or controlling energy futures contracts or energy commodity swaps....”. Some of the issues prompted by trying to identify the owners of petroleum inventories apply to natural gas inventories as well. We suggest that a limited threshold of respondents be used, rather than owners of “all” oil and natural gas inventories called for in proposed subsection (n)(1). The language in subsection (n)(1)(A) that calls for information collection “to the maximum extent practicable” is reflective of our concern but the inclusion of “all” is problematic.

Other Federal agencies. Federal agencies such as the CFTC and the Internal Revenue Service (IRS) may already have some of the desired information and/or have lists of entities that would constitute a portion of the entities that would need to be surveyed in order to collect ownership and transaction information.

In terms of existing data sources, EIA is aware that the IRS already collects some data by ownership, such as end-of-month product inventory at petroleum terminals, for tax purposes. It is not clear, however, if the ownership definition IRS uses for tax collection would be useful for increased understanding of trading-price relationships.

It should also be noted that the IRS has established a Joint Operations Committee (JOC), a partnership of dedicated Federal and state fuel tax administration resources, to enable state and Federal motor fuel tax compliance activities, foster interagency and multi-

national cooperation, and to provide strategic analyses of domestic and foreign motor fuel distribution trends and patterns. The JOC works toward those ends through the innovative use of technology and other means to collect, analyze and share information, and conduct joint compliance initiatives. To support analysis related to its missions, the JOC has established a National Data Center consisting of a technical foundation for a common motor fuel data repository. More specifically, the JOC can incrementally identify, acquire and integrate State, Federal and other commercial third-party data sources that bear on the national fuel inventory. The compiled data can be used to track and trend fuel movement within the nation's Fuel Distribution System¹ for the purpose of developing improved baselines for measuring fuel supply, fuel distribution and fuel consumption.

Since EIA has had no prior involvement with holders of energy futures contracts or energy commodity swaps, we are inclined to defer to the CFTC regarding those types of entities. We agree, therefore, that the language in subsections (n)(1) and (n)(2) that states that the plan should be developed "in consultation with other Federal agencies (as necessary)" is the appropriate approach to take. It is quite likely that an interagency task force would be needed to develop and implement the plan for the proposed collections, considering the scope of the proposal.

¹ The U.S. Fuel Distribution System is an extensive infrastructure that connects buyers and sellers of fuel within the financial market. The physical infrastructure encompasses a vast array of capital, including drilling rigs, pipelines, ports, tankers, barges, trucks, crude oil storage facilities, refineries, product terminals, and retail storage tanks and pumps which are used to refine, produce, and distribute fuel to the consumer.

Timelines. The level of effort needed to develop and implement the plan envisioned in the draft legislation would be quite substantial, and is likely to require a great deal of EIA and interagency work. It also could well involve the modification of existing surveys or the creation of new ones, which are time consuming processes in their own right and include both an initial 60-day public comment period as well as a lengthy review by the Office of Management and Budget that provides an additional opportunity for public comment. Thus, the deadlines on page 2 of the legislation do not appear to be realistic and would need to be extended. It is difficult to specify alternative time periods at this early stage of consideration; one alternative would be to say “as soon as practicable after the date of enactment....” and take the same approach for the time period after the date on which notice is to be provided.

Protection of Proprietary Information. The legislation applies section 12(f) of the Federal Energy Administration Act of 1974 to information collected under subsection (n). This statute authorizes EIA to share company-level data with all Federal agencies as well as with the Congress and the courts. At times, respondent-level data collected under this authority has been the subject of Freedom of Information Act (FOIA) requests by private, non-governmental parties. This includes requests from private organizations that anticipate opportunities for utilizing EIA respondent-level data for private gains. An alternative approach would be to make these data collections subject to the Confidential Information Protection and Statistical Efficiency Act (CIPSEA) which requires additional safeguards for protecting the identity of reported information and for sharing individual respondent (i.e., company-specific) information. For data collected under CIPSEA,

sharing company-level data is restricted to statistical use only and cannot be released for non-statistical, including regulatory or FOIA, purposes. Ultimately, the choice of which data collection authority to cite will depend on the level of protection that is required, the intended use of the data, how sensitive the reported information is to respondents in identifiable form, and the purposes for which the information may be shared with other agencies. These considerations are not specified in the draft legislation.

We cannot speak to the detailed information protection policies and statutes in place in other Federal agencies, including CFTC and IRS, which generally are more stringent than EIA's and do not require an affirmative obligation to share data with other Federal agencies. They would, of course, also have to be taken into account in the development and implementation of the proposed information collection plan, providing yet another reason for extending the deadlines mentioned previously.

Funding. Though no cost estimate could be provided until the details of the plan required under the draft legislation are finalized, the proposed section 3 activities would likely be both time-consuming and expensive. It should also be noted that, pending the availability of additional staff and resources, these activities would be handled by existing staff that would need to be pulled from their previously planned activities, which could lead to delays in current high-priority projects such as integrating ethanol into our weekly petroleum data program, collecting custody-based petroleum data at the individual terminal level rather than across an entire Petroleum Administration for Defense District, and addressing other existing data quality issues.

Financial Markets Analysis Office. Proposed subsection (o) creates a Financial Markets Analysis Office within EIA, the director of which reports directly to the Administrator. EIA would prefer to have the latitude to restructure EIA as necessary, rather than have a new office designated by statute. Expertise in energy markets is located across several EIA offices, the staff of which work together across office lines to produce forecasts and analyses. Cross-office teams are created as needed, including for work on financial markets.

Comments on Section 4

Section 4 of the draft legislation establishes an interagency Working Group on Energy Markets, the membership of which is composed of the Secretary of Energy (who serves as chairperson), the Secretary of the Treasury, the heads of four independent agencies (CFTC, Federal Energy Regulatory Commission, Federal Trade Commission, and the Securities and Exchange Commission), and the EIA Administrator. The Working Group is tasked with several purposes and functions, one of which is to make recommendations to the President and the Congress regarding laws and regulations that may be needed to “prevent excessive speculation in energy commodity markets....” While we agree that EIA could make a valuable contribution in advancing many of the identified purposes and functions, EIA’s role as a policy-neutral statistical agency may lead a future EIA Administrator to avoid taking an active role in making any recommendations on laws and regulations.

This concludes my prepared testimony, Madam Chairman. I would be pleased to answer any questions you and the other Members may have.