

ENERGY MARKET TRANSPARENCY AND REGULATION

HEARING BEFORE THE SUBCOMMITTEE ON ENERGY OF THE COMMITTEE ON ENERGY AND NATURAL RESOURCES UNITED STATES SENATE ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

TO

RECEIVE TESTIMONY ON DRAFT LEGISLATION TO IMPROVE ENERGY MARKET
TRANSPARENCY AND REGULATION

MARCH 25, 2009



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ENERGY MARKET TRANSPARENCY AND REGULATION

WEDNESDAY, MARCH 25, 2009

U.S. SENATE,
SUBCOMMITTEE ON ENERGY,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The committee met, pursuant to notice, at 2:08 p.m. in room SD-366, Dirksen Senate Office Building, Hon. Senator Maria Cantwell presiding.

OPENING STATEMENT OF HON. MARIA CANTWELL, U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. This hearing will come to order. I want to thank Senator Risch for being here today and my colleague Senator Johnson. I hope that this will be the first of many subcommittee hearings that we have working together in trying to make progress on our Nation's energy challenges.

We're here today to examine two pieces of proposed legislation that will help prevent future energy price bubbles and market manipulation. We have worked with many stakeholders in developing these bills and have received a lot of positive feedback.

For instance we've heard from the Industrial Energy Consumers of America whose membership are significant consumers of natural gas and from every major energy intensive manufacturing sector. We've also received positive feedback from other organizations that we'll make part of the record.

The first piece of legislation which was S. 672 adds real teeth for FERC's anti-manipulation authority. It provides FERC with the tools to stop bad actors before they wreak havoc on energy consumers and the economy. One of the lessons we learned from the Western Energy Crisis in 2000 and 2001.

The committee, then led by Chairman Domenici, gave the Federal Energy Regulatory Commission important anti-manipulation authority in the Energy Policy Act of 2005. To date FERC has used this new authority to conduct a 135 investigations resulting in 27 settlements totaling over almost \$65 million in civil penalties. One example of FERC's work is the enforcement actions the Commission took for alleged market manipulation against AMARANTH.

These actions yielded 291 million in civil penalties along with 167 in penalties from energy trading partners. However I understand that in this case of AMARANTH the hedge fund liquidated its assets before FERC could complete its enforcement action leaving little left for FERC to collect on its penalties it originally

sought. That falls quite short of what an estimated nine billion of AMARANTH shenanigans really cost natural gas consumers.

AMARANTH is a notable example of why we need to strengthen and clarify FERC's enforcement powers to protect consumers and deter manipulation. S. 672 would empower FERC with cease and desist authority to stop manipulative schemes currently in progress. The Securities and Exchange Commission and the Commodities Futures Trading Commission already have this authority. It would allow FERC to act more like a cop stopping the robbery in progress instead of trying to piece together what happened at a crime scene after the fact.

Second, the bill empowers FERC to freeze assets of any entity that is suspected of market manipulation and creating a bright line on deterrent so that bad actors know if they attempt to manipulate the market there will be a penalty.

Finally in order to give more effectively recover unjust and unreasonable rates the law would allow a refund to occur from the time that FERC brings the case. Currently FERC can only recover damages to the time that they actually prove the case.

We're also going to consider important legislation that would increase transparency in data collection in oil markets. I know that some of you are here specifically to testify on that. Mr. McCullough as you have testified in the past before this committee.

Mr. McCullough was one of the many experts that released independent reports that helped show a bright line in these oil markets. These reports demonstrated the tight correlation between physical and financial oil markets. Thanks to several of the hearings this committee has had in previous years, we've learned that we don't have all the necessary data collection or the focus to understand what has really been going on in energy markets.

To that end the committee has drafted legislation that would establish an office within the Energy Information Administration to collect and analyze information from both the physical and paper markets. It will improve their ability to predict future energy prices which will help businesses and consumers plan for the future. It will also empower regulators to more effectively police the markets.

So I look forward to hearing the testimony of the witnesses today. Now I'd like to turn it over to the ranking member, Senator Risch for his opening statement.

**STATEMENT OF HON. JAMES E. RISCH, U.S. SENATOR
FROM IDAHO**

Senator RISCH. Thank you very much, Madame Chairman. We all know that free markets and free people have delivered the most successful and fluent society that's ever existed on the face of this Earth. We also know that free markets only work when they're free from monopolies and from market manipulation.

So in that context I think we need to examine all these things and make sure the balance stays in place that indeed we have free markets. But at the same time that we don't have people that are involved in market manipulation.

Thank you, Madame Chair.

Senator CANTWELL. Thank you.

Senator Johnson.

STATEMENT OF HON. TIM JOHNSON, U.S. SENATOR FROM SOUTH DAKOTA

Senator JOHNSON. Thank you, Senator Cantwell for holding this important hearing to gather information in how to improve energy market transparency in regulation.

Senator CANTWELL. Thank you, Senator Johnson.

Senator Shaheen.

Senator SHAHEEN. I don't have a statement.

Senator CANTWELL. We'll turn to our witnesses. I want to welcome them.

Dr. Howard Gruenspecht, is that right? Ok. Acting Administrator of the Energy Information Agency.

Anna Cochrane, Acting Director of the Office of Enforcement for the Federal Energy Regulatory Commission.

Robert McCullough, Managing Partner at McCullough Research.

Finally, Gerry, no, sorry, Gerry Ramm, representing the Petroleum Marketers Association of America.

Thank you all for being here and for your testimony today. So we're going to start with you, Dr. Gruenspecht. I just will say for my colleagues I know there's a possibility of a vote coming up sometime in the next hour.

So we'll just have to work through that. So we ask in advance the indulgence of those testifying.

So, Dr. Gruenspecht.

STATEMENT OF HOWARD GRUENSPECHT, ACTING ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION

Mr. GRUENSPECHT. Madame 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. The Energy Information Administration is the independent statistical and analytical agency within the Department of Energy. 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.

Since the proposed legislation aims to improve our understanding of the effects of interactions between energy and financial markets, I'll start by describing some of the efforts that we're already undertaking in this area. 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 Federal agencies and experts from the academic community. The presentations and the discussions highlighted several points including the need for better and more accessible data on trader activity in futures markets, the importance of examining alternative theories of trader behavior, and the need to continue examining the role of supply and demand fundamentals using better and more accurate data. EIA staff also presented its research into the use of implied volatilities from the options markets as a measure of uncertainty in short-term price forecasts. Following further review by the Committee on Energy Statistics of the American Statistical Association, we plan to report these calcula-

tions in each edition of our monthly, short term outlook to provide additional context for our analysis. We plan to continue our dialog on this issue at a session on financial markets and short-term energy prices at the EIA annual energy conference in early April.

Based on our current knowledge, EIA staff believes that improved insight into the relationships between trader behavior and fundamentals in forming prices will require building insight into the full process of price formation, from developing theory through the analysis of pertinent data. Such data might in some cases be purchased from commercial sources, but additional data collection, whether by EIA or other agencies, could also be warranted. A major investment of resources and time is likely to be required, and the difficulties are such that conclusive results are unlikely to be quickly obtained.

Let me now turn to our specific comments on the March 18 draft of the Energy Market Transparency Act of 2009, focusing 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.

Our initial assessment is that the data collections proposed in subsection (n) could be both difficult and expensive. This suggests a 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 legislation.

A key issue with subsection (n) is the feasibility of the collection. EIA currently surveys crude and product stocks at petroleum terminals, for instance, but those stocks are held on a custody basis, and terminal operators may not know the identity of the owners. With the assistance of other agencies, EIA may be able to identify and survey at least a subset of owners, who may include entities other than the refineries, pipelines and terminal operators—who usually report to EIA. However, such an activity should be recognized as involving far more than simply adding questions about ownership to surveys that are currently completed by those having custody of inventories. We suggest that a limited threshold of respondents be used rather than owners of “all” oil and natural gas inventories.

Turning to the role of other Federal agencies, the CFTC and the Internal Revenue Service, among others, may already have some of the desired information or have lists of entities that would constitute a portion of those that would need to be surveyed in order to collect it. For example, the IRS already collects some data by ownership, such as end-of-month product inventory at petroleum terminals, for tax purposes. Ownership matters there.

The IRS has also established a Joint Operations Committee to enable State and Federal motor fuel tax compliance activities, and that committee has in turn established a national data center that provides a technical foundation for a common motor fuel data repository.

Given our lack of involvement with holders of energy futures contracts or energy commodity swaps to date, we’re inclined to defer

to the CFTC regarding those types of entities. We agree therefore with the language in subsection (n) stating that the plan should be developed in consultation with other Federal agencies. However, for reasons discussed in my written testimony, the proposed timelines on page two of the legislation don't seem realistic.

Turning to confidentiality of proprietary information, the draft legislation applies Section 12(f) of the Federal Energy Administration Act of 1974. At times respondent-level data collected under this authority has been the subject of Freedom of Information Act requests including requests from private parties that anticipate opportunities for using the survey data for private gain. An alternative approach would be to make these data collections subject to the Confidential Information Protection and Statistical Efficiency Act. Ultimately the choice of which data collection authority to cite will depend on the intended uses of the data, how sensitive the reported information is to respondents, and the purposes for which the information may be shared with other agencies. These considerations are not specified in the draft legislation.

Turning finally to resources, any new mandated data collections would be handled by existing staff that would need to be pulled from previously planned activities pending the availability of additional staff and resources. This could lead to delays in current high-priority projects such as integrating ethanol into our weekly data petroleum 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.

This concludes my statement, Madame Chairman. I'd be pleased to answer any questions you or the other Members may have.

[The prepared statement of Mr. Gruenspecht follows:]

PREPARED STATEMENT OF HOWARD GRUENSPECHT, ACTING ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION

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.

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.

¹The 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.

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.

Senator CANTWELL. Thank you.
Ms. Cochrane, thank you for being here.

STATEMENT OF ANNA COCHRANE, ACTING DIRECTOR, OFFICE OF ENFORCEMENT, FEDERAL ENERGY REGULATORY COMMISSION

Ms. COCHRANE. I'm sorry. Madame Chairman and members of the subcommittee, thank you for the opportunity to appear before

you today. I note that I appear before you as a staff witness and do not speak for individual members of the Commission.

Transparency in our Nation's electric and natural gas energy markets is critically important to the Commission in fulfilling its statutory responsibilities to ensure just and reasonable wholesale rates for electric and natural gas customers. The subcommittee's review of this important topic is a timely one. The commission has undertaken a number of initiatives to increase transparency in the Nation's energy markets, including some that predate the Energy Policy Act of 2005 and some based on the authority Congress granted to it in EPACT 2005.

I have described these initiatives in more detail in my written testimony, but would like to highlight some of the most significant initiatives. To make electric transmission service more transparent the Commission issued regulations in 1996 requiring public utility transmission providers to implement an open access, same time information system or OASIS to share information about the electric transmission system with all users of the system at the same time. OASIS is an important tool to ensure that there is no undue discrimination in the provision of transmission services in interstate commerce and to help prevent the exercise of market power.

In 2001, the Commission issued a final rule that requires all public utilities including power marketers to file an electric quarterly report summarizing data about their currently effective contracts and wholesale power sales made during each calendar quarter including transaction specific information. This publicly available data is particularly useful for monitoring markets for indications that market power may be being exercised and provides an insight into pricing trends throughout the electric industry.

In 2003, the Commission issued a policy statement on electric and natural gas price indexes that explained the Commission's expectations of natural gas and electricity price index developers and the companies that report transaction data to them. The Commission has recently undertaken two initiatives pursuant to the new transparency authority which Congress granted the Commission in EPACT 2005. These initiatives taken together will provide the Commission with a more complete picture of the wholesale natural gas market and the supply and demand fundamentals underlying that market.

The Commission's oversight staff in the Office of Enforcement conducts daily oversight and monitoring of energy markets as well as research and analysis facilitated by customized reports prepared from the information available to us. If we discover a market anomaly we analyze the situation further to determine if it can be explained by market fundamentals. If not, we refer the matter to our investigation staff.

Staff also works closely with the RTO and ISO market monitoring units. The Commission recently enhanced the independence of the market monitors, extended their scope of reporting and required the RTOs and ISOs to provide the market monitors with adequate resources and full access to market information. Much of our oversight staff's research and analysis is shared with the public through website postings, regional monthly calls with State regu-

latory officials and presentations at open Commission meetings and other public conferences.

Transparency in energy markets is important to ensure just and reasonable rates under the FPA and NGA and to protect customers. Much has been done by the Commission to increase transparency in wholesale electric and natural gas markets especially over the last few years. The Commission will continue to be vigilant in this area.

The Commission's new market manipulation authority granted by Congress in EPACT 2005 also helps us protect customers. A few additional tools could help the Commission better ensure that customers are protected. For example, congressional action to give the Commission cease and desist authorities for violations of the FPA and NGA. The ability to freeze assets of entities that violate the market manipulation rules would give the Commission the same enforcement tools that both the SEC and CFTC have long possessed.

In addition authority to temporarily suspend market rules on file under the FPA when necessary to protect against potential abuse of market power could also be useful. If Congress determined that it was appropriate to provide the Commission with such authorities it is likely that they would be used only in rare circumstances, if at all. However their statutory existence would have a deterrent effect.

Thank you again for giving me the opportunity to appear before you today. I'd be happy to answer any questions you might have. [The prepared statement of Ms. Cochrane follows:]

PREPARED STATEMENT OF ANNA COCHRANE, ACTING DIRECTOR, OFFICE OF ENFORCEMENT, FEDERAL ENERGY REGULATORY COMMISSION

Madam Chairman, and Members of the Subcommittee:

My name is Anna Cochrane, and I am Acting Director of the Federal Energy Regulatory Commission's (Commission) Office of Enforcement. Thank you for the opportunity to appear before you today to discuss energy market transparency and regulation. I appear before you today as a staff witness and do not speak for individual members of the Commission. Transparency in our nation's electric and natural gas energy markets is critically important to the Commission in fulfilling its statutory responsibilities to ensure just and reasonable wholesale rates for electric and natural gas customers. The Subcommittee's review of this important topic is a timely one.

THE COMMISSION'S EFFORTS TO PROMOTE TRANSPARENCY

The Commission has undertaken a number of initiatives to increase transparency in the nation's energy markets, including some that predate the Energy Policy Act of 2005 (EPAct 2005) by over a decade. It has used its Natural Gas Act (NGA) and Federal Power Act (FPA) authorities to collect information and require reporting of market information to improve transparency in wholesale natural gas and electric markets and in electric transmission and natural gas transportation. In addition, the Commission has used the specific Natural Gas Act transparency authority Congress granted to it in EPAct 2005 to improve transparency in natural gas markets. These efforts are discussed below.

To make electric transmission service more transparent, the Commission issued regulations in 1996 requiring public utility transmission providers to implement an Open Access Same-time Information System, or OASIS, to share information about the electric transmission system with all users of the system at the same time. Through the OASIS, transmission customers can view information regarding the availability of transmission capacity and the usage of the transmission system by other wholesale power customers. The terms and conditions of service are clearly posted on the OASIS, including the prices for each type of service offered and reserved. If the transmission provider discounts its price for a particular customer, it

must announce that discount to all wholesale customers through an OASIS posting. The transmission provider also must post the reason for denying any request for service, along with information regarding curtailments and interruptions of service to those that have confirmed reservations. These OASIS requirements were patterned on similar requirements that had been earlier implemented for interstate natural gas transportation. OASIS requirements remain an important tool to ensure that there is no undue discrimination in the provision of transmission services in interstate commerce and to help prevent the exercise of market power.

The Commission also has taken several important steps to increase the transparency of electricity and natural gas commodity prices. For example, in 2001, the Commission issued a final rule that requires all public utilities, including power marketers, to file an Electric Quarterly Report (EQR) summarizing data about their currently effective contracts and wholesale power sales made during each calendar quarter, including transaction specific information. EQR data is public and available for use on the Commission's website. EQR data is particularly useful for monitoring markets for indications that market power may be being exercised and provides an insight into pricing trends throughout the electric industry. For example, the information reported in the EQR (1) assists in corroborating or refuting evidence of market power submitted by sellers seeking market-based rate authority, (2) assists addressing on the record protests involving regional market conditions, and (3) helps determine whether sellers are complying with Commission-imposed price mitigation measures.

In addition, in 2003, the Commission issued a Policy Statement on Electric and Natural Gas Price Indices that explained the Commission's expectations of natural gas and electricity price index developers and the companies that report transaction data to them. The Policy Statement, among other things, directed the Commission's staff to continue to monitor price formation in wholesale markets, including the level of reporting to index developers and the amount of adherence to the Policy Statement standards by price index developers and by those who provide data to them. In adhering to this directive, Commission staff documented improvements in the number of companies reporting prices from back offices, adopting codes of conduct, and auditing their price reporting practices. These efforts resulted in significant progress in the amount and quality of both price reporting and the information provided to market participants by price indices.

In 2005, the Commission issued Order No. 668 which, among other things, revised its Uniform System of Accounts (USofA) to accommodate the restructuring changes that are occurring in the electric industry and to provide uniformity and transparency in accounting for and reporting of transactions and events affecting public utilities, including Regional Transmission Organizations (RTO). These changes in accounting and financial reporting should improve cost recovery practices by providing details concerning the cost of RTO functions, and increased assurance that the costs are both legitimate and reasonable. In addition, in 2008, the Commission further enhanced the transparency of the business activities of natural gas companies and public utilities by requiring them to provide greater detail in their annual financial forms filed with the Commission. Public utility customers, state commissions, and the public now have more detailed information on wholesale sales to allow them to better assess the justness and reasonableness of interstate natural gas pipeline and electric utility rates.

In EPAAct 2005, Congress enhanced the Commission's authority to facilitate price transparency in both the electric and natural gas markets. Such authority was given to the Commission "for the public interest, the integrity of . . . markets, fair competition," as well as for the protection of consumers. New Section 23 of the NGA and new section 220 of the FPA enhance the Commission's authority to ensure confidence in the nation's electric and natural gas markets. The Commission's market-oriented policies for the wholesale electric and natural gas industries require that interested persons have broad confidence that reported market prices accurately reflect the interplay of legitimate market forces. Without confidence in the fairness of price formation, the true value of transactions is very difficult to determine. Further, price transparency makes it easier for the Commission to ensure that jurisdictional prices are "just and reasonable."

Pursuant to its new transparency authority under NGA section 23, the Commission issued Order No. 704-A to require natural gas wholesale market participants, including a number of entities that may not otherwise be subject to the Commission's traditional NGA jurisdiction to identify themselves and annually report summary information about their physical transactions that contribute to natural gas price indices. The reported information will make it possible for the Commission to assess the formation of index prices and the use of index pricing in natural gas mar-

kets. The first annual reports will be filed on May 1 for transactions that occurred during the 2008 calendar year.

Also pursuant to the NGA section 23 authority, the Commission recently revised its regulations to improve the transparency of wholesale natural gas markets in the United States, by requiring the dissemination of greater information about scheduled natural gas flows throughout the national pipeline network. The Commission has long required interstate natural gas pipelines to post on their internet web sites substantial information about their natural gas transportation business. On November 28, 2008, the Commission issued Order No. 720, in which it found that it is also necessary to obtain information from major non-interstate natural gas pipelines in order to obtain a complete picture of the wholesale natural gas market and the supply and demand fundamentals underlying that market.

Specifically, Order No. 720 required major non-interstate pipelines to post on their publicly accessible websites daily operational information, such as scheduled volume information and design capacity for each receipt and delivery point with a design capacity greater than 15,000 MMBtu per day. Order No. 720 defined a major non-interstate pipeline as a pipeline that is not classified as a natural gas company under the Natural Gas Act and delivers on average more than 50 million MMBtu of gas annually over a three-year period. Order No. 720 also required interstate pipelines to post similar information regarding their no-notice transportation services. Order No. 720 is currently pending on rehearing. Major non-interstate pipeline companies are currently required to comply with the new rules 150 days after the issuance of an order on rehearing.

While the Commission does not regulate financial commodity market trading, activities in financial commodity markets can affect the electric and natural gas physical markets that the Commission regulates. It is therefore important that the Commission coordinate closely with the Commodity Futures Trading Commission (CFTC), which is responsible for the day-to-day regulation of commodity futures. In an effort to ensure coordination of overlapping jurisdiction between these two agencies, Congress directed in EAct 2005 that the two Commissions execute a Memorandum of Understanding (MOU) related to information sharing. Specifically, it directed that the MOU include provisions ensuring that information requests to markets within the respective jurisdiction of each agency are properly coordinated to minimize duplicative information requests, and provisions regarding the treatment of proprietary trading information. The agencies signed an MOU shortly after enactment of EAct 2005. Pursuant to the provisions of this MOU, the staffs of the two agencies have worked closely together to help ensure that both have the information necessary to perform their statutory functions. These efforts have contributed to more effective enforcement and oversight by our Commission over the physical energy markets.

The Commission's oversight staff within the Office of Enforcement conducts daily oversight of energy markets through regularly scheduled morning meetings, as well as research and analysis conducted throughout the day and as part of long-term projects. This research is facilitated by customized reports prepared from the information available to the oversight staff as well as information and analysis developed by third-party information providers. The oversight staff's long-term projects include developing tools to automate and enhance analysis of the information that will become available through the Commission's transparency efforts, like Order No. 704-A and Order No. 720.

In addition to maintaining an oversight staff, the Commission requires all RTOs and Independent System Operators (ISOs) to maintain a market monitoring function to analyze the state of the markets and refer to the Commission any suspected market violations. In October 2008, the Commission took action through Order No. 719 to enhance the independence of the market monitors and extend the scope of reporting required of the market monitors. The Commission's independence reforms included requiring the market monitors to report to the RTO or ISO board of directors rather than to management and requiring the RTOs and ISOs to provide the market monitors with adequate resources and full access to market information. The Commission's reporting reforms required production of a quarterly report that broadened the scope of recipients of market data produced by the market monitors, and shortened the lag time for release of bid and offer data.

In addition to the formal reporting required of the RTO and ISO market monitors, Commission oversight staff have almost daily contact with the market monitors to discuss issues identified during the oversight staff's market monitor activities. In addition to routine contacts with the RTO and ISO market monitors, the Commission's oversight staff have several structured interactions with the market monitors including semi-annual meetings with all of the market monitors and regularly

scheduled monthly meetings between the Commission staff and individual market monitors.

Finally, it is important to note that the information collected by the Commission is analyzed and, when appropriate, is shared with the public. The staff does this by posting material on the oversight section of the FERC website and making presentations at open Commission meetings and other public conferences. The information posted on the oversight website includes a monthly “snapshot” report that provides information about market outcomes during the previous month. The Commission staff use the “snapshot” report as the basis for monthly conversations about energy markets with state regulatory officials. During these calls, state regulatory officials often share their insights into factors influencing their local energy markets. In addition, the oversight staff publishes an annual State of the Markets report that summarizes major events in natural gas and electricity markets during the previous year. The oversight staff present the findings from its State of the Market report, as well as its Winter and Summer Assessments, at open Commission meetings.

POTENTIAL IMPROVEMENTS TO THE COMMISSION’S ABILITY TO PROTECT CUSTOMERS

In addition to the role of transparency in energy markets to help ensure just and reasonable rates for wholesale sales and transmission of electric energy and wholesale sales and transportation of natural gas, there are other tools the Commission uses to help monitor markets and protect customers. Among those are the market rules the Commission approves or establishes under its FPA section 205 and 206 authority for organized electric markets administered by ISOs and RTOs and the implementation of the Commission’s new market manipulation authority granted by Congress in EPAct 2005. In this regard, there are certain additional legislative changes that could further facilitate the Commission’s ability to protect against market manipulation and more timely ensure that market rules contained in FERC tariffs do not cause unexpected harm to the marketplace. If Congress determined it appropriate to provide the Commission with such authorities, it is likely that they would be used only in rare circumstances, if at all. However, their statutory existence would have a deterrent effect.

First, Congress could give the Commission “cease and desist” authority under both the FPA and NGA. The Commission could use this authority if it determines that a market participant’s behavior was ongoing and significantly harming the public interest. While the Commission currently has the ability to seek United States District Court injunctive relief, direct cease and desist authority would expand the Commission’s enforcement tool box to match those of the SEC and the CFTC.

Second, Congress could consider giving the Commission authority that would allow it to prevent the dissipation of assets by a company under investigation for violating market manipulation rules under the FPA or NGA. If the Commission had the authority to freeze assets, it could prevent a company from frustrating the Commission’s ability to order disgorgement or restitution after determining that there was a violation of the anti-manipulation rule. The SEC and the CFTC have comparable authority.

Third, Congress could consider giving the Commission authority, in emergency circumstances, to temporarily modify or suspend market rules on file at the Commission under the FPA if those market rules were unexpectedly allowing market power to be exercised or causing other serious problems in the organized markets. This could be followed by normal FPA procedures for long-term changes to the market rules.

CONCLUSION

In summary, transparency in energy markets is important to ensure just and reasonable rates under the FPA and NGA and to protect customers. Much has been done by the Commission to increase transparency in wholesale electric and natural gas markets, especially over the last few years, and the Commission will continue to be vigilant in this area. In addition to transparency, there are other regulatory tools that could be used by the Commission to help ensure that customers are protected. For example, Congressional action to give the Commission cease and desist authority for violations of the FPA and NGA, and the ability to freeze assets of entities that violate the market manipulation rules, would give the Commission the same enforcement tools that both the SEC and the CFTC have long possessed. In addition, authority to temporarily suspend market rules on file under the FPA when necessary to protect against potential abuse of market power could be useful.

Thank you again for giving me the opportunity to appear before you today. I would be happy to answer any questions you may have.

Senator CANTWELL. Thank you very much.
Mr. McCullough, thank you for being here.

**STATEMENT OF ROBERT F. MCCULLOUGH, JR., MANAGING
PARTNER, MCCULLOUGH RESEARCH, PORTLAND, OR**

Mr. MCCULLOUGH. Good afternoon. Thank you very much for the opportunity to be here today.

In preparing for this I went back to page 485 of the Wealth of Nations. That's the page that uses the term "invisible hands." It's been often quoted. It's been seldom read.

The passage was not simply praise of the market. It was warning against market participants who say that they are performing their trades for the public good. The point is without understanding the market, without the data to review the market, we don't know whether they're telling the truth or not.

Two centuries ago Adam Smith was worried enough about it to write a page on this issue. I think we should actually make a few people read the full page, not just the one quote. I'm talking today about the oil peak that we had last year. At our office we've taken to calling that the "Pickens' Peak." I've put it up on a poster board today.

We lived through the price of oil doubling and then falling back by a factor of four. That is a level of volatility we'd never seen in our history. At the time we had variety of explanations. We were told it was having to do with the Chinese and the Indians who apparently are easy to blame for things, exchange rates, surging demand.

Luckily the Energy Information Administration provides a lot of data. It's very useful data. It is extremely important in this process.

Can I get the next poster board?

We've been through this process trying to review. Now that we have the data what has occurred?

The first thing that we discover is that there was no demand spike. In point of fact the EIA's forecast of quantities was exceedingly good. It was, frankly, astonishingly good.

We had a net increase in production, production over our requirements in the spring. Then we had a decrease in inventory, production less than requirements in the fall. That may surprise some people since it goes the wrong direction.

Let's turn to the next slide which shows the price forecast of the EIA. The problem with this slide is that that the EIA's price forecast was just flat wrong. Now when I say that, it's not to make fun of them, I had no possible explanation of the spike either.

But what we had was a spot on forecast of quantities and an absolute inability to forecast prices. This is in spite of the fact that we've got a large staff of very bright people who had followed every barrel of oil as closely as they could. The difficulty we have is not that someone did a bad job. The difficulty is that we don't have the right model.

Economists will tell you that this could not happen in perfect competition. If we were talking about farmers in Iowa raising rye and wheat, it wouldn't happen. However if we're talking about an oligopoly, relatively few players, it makes perfect sense.

You intend to hold inventory when prices were increasing hoping to be able to sell it at a much higher price. It may not be criminal. It could in fact simply be even cagey.

But the key is that we have almost no data to follow this through. In reviewing the legislation before you I was very pleased to find that you'll be accumulating inventory data. Because with the increases in world inventory it would have been very interesting to find out who actually were the players that held that inventory.

We found out mid-summer by the CFTC reclassifying one player that a single firm of brokers from Switzerland held a very high percentage of the foreign contracts on the NYMEX. That amazed all of us. Not one of us had considered that they had taken such a strong position.

We'd be very interested to find out that they'd had a strong position in inventory as well. Quite frankly until we start tracking the numbers, we're not going to know what's happening. The worst part is because we don't think oil will become more plentiful in the near future we are likely to see more of these spikes with high volatility and even more unfortunate those travel through the entire economy directly to natural gas which is a competing energy source and then on to electricity.

We're in the midst of the most major recession of our lifetimes. A large component of that was the destruction of the automobile industry. The impact on low income homeowners of heating prices that doubled last winter. If I had my way I would go much further than this bill.

I would certainly praise FERC for the quarterly electric reports. That's a very valuable tool. The best way to discourage bad actions is to make them public. The quarterly reports do that. I think they've had a tremendous impact on the industry. I'd like to see an extension all the way through the energy industry, through natural gases and certainly to oil.

Thank you very much.

[The prepared statement of Mr. McCullough follows:]

PREPARED STATEMENT OF ROBERT F. MCCULLOUGH, JR., MANAGING PARTNER,
MCCULLOUGH RESEARCH, PORTLAND, OR

Thank you for the opportunity to testify today before the Energy Subcommittee.

America's most significant import, crude oil, has such strong connections with natural gas and electricity that it affects the entire economy. It is also the import we know the least about. U.S. regulators do not collect data on any spot transactions, and data is available on only a portion of forward transactions. Although we fear that the oil market may have become dominated by speculators, we do not know who they are, or their possible impacts. We do know that oil prices are frequently anomalous. For example, on March 15, 2009, OPEC decided to maintain output at levels agreed to before the onset of the current recession. This was good news for oil consumers. Unfortunately, however, oil prices have risen significantly in the ensuing ten days.

On January 30, 2008, T. Boone Pickens predicted that oil prices would reach \$100.00 a barrel during the first half of 2008.¹ By July 23, he predicted that oil prices would reach \$300.00 a barrel by the year 2018.²

¹T. Boone Pickens shares his views on energy, politics, the Olympics, OSU's new president, *The Daily Oklahoman*, January 30, 2008.

²Pickens warns of \$300 oil, *Herald News Services*, July 23, 2008.

But oil prices in 2008 did not obey Mr. Pickens. On July 3, oil peaked at \$146.00 a barrel, only to fall precipitously to a yearly low of \$31.00 a barrel on December 22.

At McCullough Research, we have taken to calling the anomalous prices in 2008 the “Pickens’ Peak” in honor of Mr. Pickens’ forecasting initiatives.

Because of the linkages among the nation’s fuel markets, retail gasoline, natural gas, and electricity followed similar trajectories during 2008. Pressure on household budgets accentuated the subprime financial crisis, and the change in automobile economics brought a steep decline in car sales.

While oil is arguably the U.S. economy’s most important commodity, it is ironic that no agency of the U.S. government has been assigned the task of investigating and explaining the extraordinary price changes of last year.

Current responsibilities are allocated among the Federal Energy Regulatory Commission (pipelines), the CFTC (some, but not all, forward contracts), and the EIA (forecasting.) On June 10, 2008, the CFTC announced the formation of an inter-agency task force, including the CFTC, the Federal Reserve, the Department of the Treasury, the SEC, the DOE, and the Department of Agriculture, to study commodity markets. The task force expeditiously published an interim report, but apparently stopped its activities soon thereafter.³

It is surprising that not one of the three lead federal agencies has expressed much in-interest in Pickens’ Peak. A review of materials issued by FERC, which regulates natural gas and electricity trades, but not oil trades, also reveals little interest in the dramatic run-up in the price of oil in the first half of 2008.

Like the market surveillance of electricity and natural gas prices, reviews of pricing anomalies largely rely upon third parties, such as McCullough Research, that are retained to examine whether the markets are reflecting fundamental supply and demand conditions.

THE EIA’S SHORT TERM ENERGY OUTLOOK (STEO) FORECASTS

The preeminent independent forecast of world oil markets is performed monthly at the Energy Information Administration. Curiously, this resource was largely ignored by apologists for the 2008 price spike, who relied instead on anecdotes concerning exchange rates, Chinese and Indian oil imports, and surging U.S. demand. Now that data from 2008 is in hand, it is useful to compare the EIA’s quantity forecasts with actual historical quantities.

On January 8, 2008, the STEO forecasted supply shortfalls at the beginning and the end of 2008.

The chart* shows the EIA’s forecasted additions (blue line) to world oil inventories in the spring and early summer of 2008, followed by drawdowns in the fall and winter of 2008. Actual data (red line) shows that while the EIA accurately predicted the basic pattern, it underestimated the inventory build-up during the price spike and the reduction in inventories during the autumn when oil prices were falling.

It is worth noting that the EIA had correctly forecasted all of the fundamentals that supposedly drove up last year’s market prices, including:

- Demand from China (which did not change materially during the run-up in prices)⁴
- Demand from the U.S. (which declined during the run-up in prices)⁵

Yet the EIA’s price forecast was very poor.

Examining the numbers the way a statistician would approach this problem, the EIA’s forecast of quantities is statistically significant at 99%, i.e. very good. The EIA’s forecast of prices, however, is not statistically significant at any level.

We may conclude therefore that the basic assumptions underlying the EIA’s forecast require careful examination. It appears likely that price responses to changes in supply and demand are more complex than those modeled in the EIA’s price forecast.

THE ECONOMIC THEORY OF OLIGOPOLISTIC MARKETS

The heart of the problem is the assumption that the global crude oil market reflects a competitive market with a large number of buyers and sellers. Very little research has been performed concerning the degree of competition in the oil market.

³ Interim Report on Crude Oil, Interagency Task Force on Commodity Markets, July 23, 2008.

* Charts have been retained in subcommittee files.

⁴ EIA STEO Table 3a, <http://www.eia.doe.gov/emeu/steo/pub/contents.html>

⁵ Ibid.

Although we know that mergers have reduced the number of very large players, there is almost no real data about the degree of market concentration.

Understanding the degree of competition is crucial, because economic theory gives very different predictions under different market structures:

1. Perfect Competition

In perfect competition the presence of many buyers and many sellers make it impossible for any one supplier (or a small group of suppliers) to set prices. To forecast prices in perfect competition, economists rely upon the years of experience that have established the use of supply and demand curves.

1. Oligopoly

Oligopoly is a market with relatively few sellers. Forecasting prices in an oligopoly is far more complex since a few large players can—and do—exert control over prices.

Inventories are important in an oligopoly. A market with only a few large participants is likely to experience situations where market participants will accumulate inventory rather than sell their products at prices they see as less than their long-term prospects.

An extreme case of oligopoly is a market with a few pivotal suppliers. A pivotal supplier can exert strong control over prices because its output is absolutely required to meet demand even after all alternative supplies have been purchased.

In a dynamic economic model we would expect an oligopolist in a market with increasing prices to accumulate inventory to sell during later periods. If the market for oil experienced prices increasing 6% per month—as happened in the first six months of 2008—only a very altruistic competitor would not be tempted to increase its inventory in anticipation of higher prices later. If other competitors made similar decisions, their inventory changes would also alter the supply of oil available to the market and increase oil prices.

If a pivotal supplier was present, its inventory decisions could directly set the price in the market. Decisions to withhold supply are frequently observed in the nation's wholesale electricity markets. This was the case during the Western Market Crisis of 2000-2001 when major suppliers in California reported only 50% availability for their plants during periods of high demand.

Given the data now available from the EIA, the assumption of oligopoly is a better candidate for a model of the world oil market than perfect competition. Inventories rose during the period of rising prices and then fell when prices were falling.

Statistically, the relationship between prices and net world production has been positive since 2006.

Increases to world inventories—production larger than current needs—has been correlated with higher prices. This is more consistent with oligopolistic behavior than perfect competition. Given the extreme levels reached during July 2008, it is very possible that the oil market had one or more pivotal suppliers.

RECOMMENDATIONS

The inability of the federal government to fully investigate oil price behavior in 2008 is fundamentally a data problem. Perhaps it is not a coincidence that oil is the most opaque of our nation's energy supplies.

The transparency legislation that you are discussing today is a step in the right direction, because it will expand the EIA's ability to track oil inventories within the U.S. by owner.

We know so little at this point that any information is useful. There are, however, limitations to having only a small amount of the information available. The oil inventories in the U.S. in 2008 averaged only 37% of total OECD inventories. They do not include data from either Russia or OPEC.

As with the current problems with the CFTC's oversight being limited to just a fraction of the total forward markets, inventory data for the U.S. will not identify inventory decisions from our major trading partners. I recommend that another useful step is to direct the EIA to identify data-sharing arrangements with our OECD partners, including Canada, our single largest oil supplier.

Over the last decade, and especially after 9-11, Americans have been told that the concept of secrecy applies to many types of energy transactions. There has been little public debate about the heightened levels of secrecy in energy transactions, or studies of the impact of this secrecy on energy prices and on our national economy.

The American economist, Paul Samuelson, always included transparency in markets as one of the conditions for perfect competition. If we are seeking more efficient

oil markets that are less vulnerable to manipulation, we may want to re-examine a concept of secrecy that may be taking us in the opposite direction.

My testimony before the Senate Energy and Natural Resources Committee on September 18, 2008 stated that we have a double standard for reporting market data. While some energy sources are relatively transparent, other competing energy sources are largely opaque. FERC's Web site openly publishes the electricity trades within the U.S. on a quarterly basis, and is a good model for reporting other energy sources.⁶ The creation of an Oil Quarterly Report modeled after FERC's Electric Quarterly Report would give regulators, decision-makers, and the public a better sense of whether oil markets are dysfunctional.

This completes my testimony today.

Senator CANTWELL. Thank you, Mr. McCullough.

Mr. Ramm, welcome to the committee. Thank you for being here.

STATEMENT OF GERRY RAMM, SENIOR EXECUTIVE, INLAND OIL COMPANY, EPHRATA, WA, ON BEHALF OF THE PETROLEUM MARKETERS ASSOCIATION OF AMERICA

Mr. RAMM. Chairman Cantwell, Ranking Member Risch and distinguished members, I want to thank you for this invitation. I appreciate the opportunity to provide some insight. Draft legislation entitled, Energy Market Transparency Act is a good start toward a lot of the things that we've been trying to do as an industry.

I'm also pleased to speak to the detrimental effects that inadequately regulate the commodity markets and the abusive trading practices that have had a devastating effect on the independent fuel marketers in the Nation. I want to thank the chairwoman and the committee for your efforts to bring greater transparency and accountability to the commodity markets. Without your dedication this issue would never get any attention that it needs.

I serve as Vice Chairman of the Petroleum Marketers Association of America. PMAA is a national federation of 47 State and regional trade associations representing over 8,000 independent fuel marketers. These marketers account for approximately half of the gasoline sold in the United States and nearly all the distillate fuels consumed by motor vehicles and home heating oil users.

Chairwoman, it was 4 years ago when PMAA members first sat in your office to discuss our concerns regarding this price volatility. The correlations that we were seeing in the under regulated energy commodity market and we appreciate your strong commitment to resolving this issue. Unlike the other panelists, I'm just a small businessman. I'm not an economist. I don't work for the Federal Government, just a small business person in Eastern Washington.

Large scale institutional investors speculating in the energy markets are a driving force behind energy prices today. The rising crude oil prices, which reached \$150 a barrel for December delivery in July of last year only to fall dramatically to as low as \$33 when that fuel was delivered on the spot price in December, was not completely a result of supply and demand fundamentals, but was unduly influenced by excessively leveraged speculators, index investors and hedge funds. Futures prices should operate on real data and not to be driven by surges in buying.

Last week futures prices on motor fuel went up 20 cents a gallon. In Iraq prices also rose 20 cents a gallon. Did supply and demand

⁶Depending On 19th Century Regulatory Institutions to Handle 21st Century Markets, <http://www.mresearch.com/pdfs/355.pdf>

in Seattle, L.A., Houston or New York change? That price increase happened when supplies are at an all time high. Just this last week, distillate fuels went up another 10 cents.

According to the hedge fund managers, Michael Masters, during the first 6 months of 2008 index speculators in hedge funds poured about 55 billion into commodity indexes which resulted in the buying of between 130 to 170 million barrels of West Texas intermediate crude oil in the futures market. However by late July and early August index speculators began to pull out money of the commodity indexes. Approximately \$70 billion were withdrawn from these commodity indexes resulting in the selling of around 230 million barrels of crude oil by the end of the year.

Oil should not have skyrocketed to previously mentioned records last year only to see prices dramatically collapse a few months later. Investors were looking not to actually buy oil futures, but to make a fast buck in a paper trade. This practice caused oil prices to rise faster and fall harder than could ever be explained by ordinary market forces.

Consumers, small businesses and economy were forced into a roller coaster ride of greed and fear. The commodity markets need the ability to determine a fair and predictable price for energy. Commodity markets were not designed as investment classes. They were set up for price discovery and for physical hedgers to manage risk by entering into a futures contract in order to lock in a price for future delivery.

Index funds managers who believe commodities are an asset class are speculators. They are so large and generally lack fundamental commodity market knowledge that they have dramatically distorted these markets we rely on. This abuse of this original intent must end now.

Often times you hear the argument that for every buyer there is a seller to justify that there is a market for any price. Even though that is true, oftentimes the buyer and seller are both speculators, who set the commodity price determined by the enthusiasm of the buyer compared to the enthusiasm of the seller. Unfortunately for consumers they have to buy that commodity both gasoline and diesel fuel.

When the prices have ratcheted up by speculators thus drivers and farmers and all consumers have to buy this fuel at today's price and that has been driven up by speculators playing a futures game. PMAA member's companies rely on these markets to provide the consumer with a quality product that a price reflective of market fundamentals.

Traditional speculators serve an important role by providing liquidity in the commodity markets for this to be accomplished. However investment in hedge funds have wreaked havoc on the price discovery mechanism that commodity futures markets provide to bonafide physical hedgers. PMAA urges Congress to expedite commodity markets reform legislation through the legislative process. If Congress does not act and another excessively leverage speculative bubble occurs again, how do you think that's going to affect our economy?

Regarding the draft legislation, PMAA strongly supported language in the 2005 Energy Policy Act that required DOE to examine

the amount of useable storage that is available in the United States. We believe there has been a dramatic reduction of useable storage and that policymakers may not be aware of the extent of that reduction. Part of the reduction has been caused by overly aggressive underground storage tank requirements, specifically related to spill regulations that render much storage unusable. Therefore PMAA supports efforts to obtain data on storage availability.

Regarding section three, enhanced information on ownership of critical energy supplies, data collection would have to occur on a frequent basis. Reporting requirements on the amount of commercially held oil should have a minimum threshold. Particularly in regard to heating oil contracts which should not be included in the reporting requirements that we believe.

We support the intent of the committee's legislation to bring transparency to help eliminate excessive speculation in the energy commodity markets. In addition beyond the committee's jurisdiction in order to bring greater transparency to the energy commodity futures market legislation must impose aggregate position limits on non-commercial traders including over the counter markets. Distinguish between legitimate hedgers in the business of actually delivering the fuel to the consumer and those in the market purely for speculative purposes.

We need to close the end in the swaps loopholes and increase staff and resources at the CFTC. PMAA and our customers need our public officials to take a stand against abusive trading practices that artificially inflate energy prices and severely damage our economy.

We support free interchange on community futures markets in an open, well regulated and transparent exchange that are subject to the rules of accountability and law. Reliable futures markets are crucial to the entire petroleum industry and the American economy. Let's make sure that these markets are competitively driven by supply and demand and not purely the speculative limits and the whims and greed of Wall Street.

I want to thank you for this opportunity to testify. I'll answer any questions I can.

[The prepared statement of Mr. Ramm follows:]

PREPARED STATEMENT OF GERRY RAMM, SENIOR EXECUTIVE, INLAND OIL COMPANY, EPHRATA, WA, ON BEHALF OF THE PETROLEUM MARKETERS ASSOCIATION OF AMERICA

Honorable Chairwoman Cantwell, Ranking Member Risch and distinguished members of the committee, thank you for the invitation to testify before you today. I appreciate the opportunity to provide some insight on draft legislation entitled the "Energy Market Transparency Act of 2009." I am also pleased to speak to the detrimental effects that inadequately regulated commodities markets and abusive trading practices have had on our nation's independent fuel marketers and home heating fuel providers.

I thank the Chairwoman and the committee for your efforts to bring greater transparency and accountability to commodity markets. Without your dedication, this issue would never have gained the attention it deserved.

I serve as Vice Chairman of the Petroleum Marketers Association of America (PMAA). PMAA is a national federation of 47 state and several regional trade associations representing over 8,000 independent fuel marketers. These marketers account for approximately half of the gasoline and nearly all of the distillate fuel consumed by motor vehicles and home heating equipment in the United States.

Chairwoman, it was four years ago when PMAA members first sat in your office to discuss our concerns regarding energy price volatility and the correlations that we were seeing in the under-regulated energy commodity market, and we appreciate your strong commitment to resolving the issue.

Large-scale, institutional investors speculating in the energy markets are a driving force behind energy prices. The rise in crude oil prices, which reached \$150 a barrel for December delivery in July of last year, only to fall dramatically to as low as \$33 in December, was not completely a result of supply and demand fundamentals. But was unduly influenced by excessively-leveraged speculators, index investors and hedge funds.

Futures prices should operate on real data and not be driven by surges in buying. Last week futures prices on motor fuel went up 20 cents and rack prices also rose 20 cents. Did supply and demand change in Seattle, L.A., Houston, and New York? And that price increase happened when supplies are at an all time high.

According to hedge-fund manager Michael Masters, during the first six months of 2008, index speculators and hedge funds poured around \$55 billion into commodity indices which resulted in the buying of between 130 and 170 million barrels of West Texas Intermediate crude oil in the futures market; however, by late July and early August, index speculators began to pull money out of commodity indices. Approximately \$70 billion dollars were withdrawn from these commodity indices resulting in the selling of around 230 million barrels of crude oil by the end of the year.

According to a January 11, 2009 CBS News' 60 Minutes investigation titled, "Did Speculation Fuel Oil Price Swings?," oil should not have skyrocketed to previously mentioned record levels last year, only to see prices dramatically collapse a few months later. The piece highlighted how investors were looking not to actually buy oil futures, but to make a fast buck in a "paper trade." This practice caused oil prices to rise faster and fall harder than could ever be explained by ordinary market forces alone. American consumers, small businesses and the broader economy were forced onto a roller coaster ride of greed and fear. However, the greatest victim of the 2008 energy crisis was consumer confidence in these markets' ability to determine a fair and predictable price for energy.

Commodity markets were not designed as an investment class—they were set up for physical hedgers to manage price risk by entering into a futures contract in order to lock in a price for future delivery. These index funds managers who believe commodities are an asset class, are really unwitting speculators. They are so large and lack fundamental commodity market knowledge, that they have dramatically distorted these markets we rely on. This abuse of this original intent must end now.

Oftentimes you hear the argument that for every buyer there is a seller to justify that there is a market for any price. Even though that is true, oftentimes the buyer and seller are both speculators who set the commodity price determined by the enthusiasm of the buyer compared with the enthusiasm of the seller. Unfortunately for consumers, they have to buy the commodity (gasoline, distillates) when the price has been ratcheted up by speculators. Thus, drivers, farmers, and all consumers have to buy the fuel at today's price that has been driven by speculators playing a futures game.

PMAA member companies rely on these markets to provide the consumer with a quality product at a price reflective of market fundamentals. Traditional speculators serve an important and healthy role by providing needed liquidity in the commodities market for this to be accomplished. However, investment and hedge funds have wreaked havoc on the price discovery mechanism that commodity futures markets provide to bona-fide physical hedgers.

Congress should act quickly to restore the transparency and oversight needed for secure and stable commodities markets and help restore the confidence in these markets that physical hedgers and consumer once had. If Congress does not act, and another excessively leveraged speculative bubble occurs again, how do you think it will affect the economy?

Therefore, PMAA urges Congress to expedite commodity markets reform legislation through the legislative process. Please do not allow the bill to be stalled by the financial services regulatory overhaul debate.

Specifically regarding the draft legislation, PMAA strongly supported language in the 2005 Energy Policy Act that required DOE to examine the amount of useable storage that is available in the U.S. We believe there has been a dramatic reduction in the amount of useable storage in the U.S., and that policy makers may not be aware of the extent of the reduction. Part of the reduction has been caused by overly aggressive under-ground storage tank requirements, specifically related to spill regulations that render much storage un-useable. Therefore, PMAA supports efforts to obtain data on storage availability.

Regarding Section 3, Enhanced Information on Ownership of Critical Energy Supplies, data collection would have to occur on a frequent basis and reporting requirements on the amount of commercially held oil should have a minimum threshold. We support the Committee's legislation. In addition, beyond the Committee's jurisdiction, in order to bring greater transparency to the energy commodities futures market, legislation must:

- Impose aggregate position limits at the control entity level on non-commercial traders, and across all trading environments, including over-the-counter markets that do not have physical connection to the underlying commodity;
- Distinguish between legitimate hedgers in the business of actually delivering the fuel to consumers, and those who are in the market for purely speculative purposes;
- Close the "London Loophole" by requiring foreign exchanges with energy contracts for delivery in the U.S. and/or that allow U.S. access to their platforms to be subject to comparable U.S. rules and regulations;
- Close the "Swaps Loophole" which allows so-called "index speculators" (who now amount to one-third of the market) an exemption on position limits which enable them to control unlimited amounts of energy commodities;
- Increase staff and other resources at the CFTC.

PMAA and our customers need our public officials to take a stand against abusive trading practices that artificially inflate energy prices and severely damage our economy. We strongly support the free exchange of commodity futures on open, well regulated and transparent exchanges that are subject to the rule of laws and accountability. Reliable futures markets are crucial to the entire petroleum industry and the American economy. Let's make sure that these markets are competitively driven by supply and demand and not purely the speculative whims and greed of Wall Street.

Thank you again for allowing me the opportunity to testify before you today.

Senator CANTWELL. Thank you, Mr. Ramm. Thank you for again, for all the witnesses being here. I know some of you have been before the full committee before or other committees talking about this important issue. So we appreciate your expertise and knowledge on it.

I think we're going to do 5-minute rounds. Hopefully we can get through a few questions before the votes occur this afternoon. But Ms. Cochrane, I think I'll start with you because in 2009 then Chairman Kelliher recommended to the committee several of these legislative proposals that we are considering as part of a larger energy package, the cease and desist authority, the dissipation in assets, the emergency authority.

I'm sitting here with my colleague from Idaho thinking about what if we would have had these powers in place prior to the Western energy crisis. What do you think would have happened in that instance as opposed to what transpired there over a several year period of time, if we would have had these kinds of authorities?

Ms. COCHRANE. I think specifically with regard to the authority that would allow us to, on an emergency basis, modify or revise market rules. That would have been a useful tool to have at the time. Specifically during the Western energy crisis when the Commission found significant market flaws such as the requirement for the three IOUs to buy 100 percent of their energy in spot markets. We had to first propose market rule changes. Then allow notice and comment before requiring the changes.

So I think that rule in particular would have helped with the energy crisis.

Senator CANTWELL. How long a period of time was that?

Ms. COCHRANE. I don't have an answer.

Senator CANTWELL. From the comment period and the rule, was that several months or?

Ms. COCHRANE. It would have been several months, yeah. We would have had to go through a process, a notice and comment process before changing a rule.

As far as the other language, during the Western energy crisis, we didn't have the authorities that we have now under EPACT 2005 to police against market manipulation. I think it was because of that crisis that the Congress gave us that authority in 2005. So the other two authorities of, in particular the freezing assets, we would only apply if market manipulation was found. So that wouldn't have been availing at the time.

Senator CANTWELL. FERC has brought several cases. I can't remember the number right now. So what are you finding in these cases that FERC has been successful in bringing forward?

Ms. COCHRANE. As far as in all our enforcement actions we have. I would note that we have an annual report on enforcement that we provide. We look at what we do each fiscal year. I note that during fiscal year 2008, we did open 20 investigations involving allegations of market manipulation.

Many of those investigations and the numbers that you provided are still ongoing. So they're non-public investigations that I can't really talk about at this time.

Senator CANTWELL. How many have been settled?

Ms. COCHRANE. I do have these numbers. We have settlements with 27 companies for a total of 64.67 million. Many of those were involved tariff violations or other violations in addition to market manipulation.

Senator CANTWELL. Ok. Mr. McCullough, on this point of information and how valuable it can be on the data collection, do you know of any government reporting right now that informs regulators, both about the, you know, the interconnection between the financial and physical market. I mean the reason why I ask that is because so much of the physical aspects of the oil market are also connected, you know, to the holders on the futures side.

So do you know anybody that is connecting that information now as far as government reporting?

Mr. McCULLOUGH. No. The best we have at the moment are the EIA statistic report of the STO. They're good. They're very useful.

But the fact is no one is following the spot oil market. There's a fair amount of academic research including in the interesting paper recently brought out by the CFTC concerning the impacts of term structures. I think most of us believe that spot and forward are highly correlated.

What that means is that we are only watching one door of the Department's door. The shoplifters have figured out which door to leave by. It's not a good situation at all. It's not a practical solution to understanding why we had these sudden shifts in oil prices.

There's just too much we're not following on. I believe, frankly, I was going to say day to day basis, on any basis.

Senator CANTWELL. What, in the collection of this data will allow us to do what? What will it allow us to see?

Mr. McCULLOUGH. We are still hypothesizing why we had to run up to 143. By the way we all have a different number for that high peak. But I think we'd all agree it was big.

There are a variety of things that could have happened there. If I had a quarterly oil report what I would have been looking for is a fair amount of concentration in oil. I would have certainly been looking for major players who had changed their purchasing strategies in the spring of last year.

If this was in fact a spot for a gamut and we've seen a fair number of those over the years that I would have expected to have seen the inventories increasing because traditional suppliers, major suppliers, were actually choosing to sell less during that high price period. Now let me stress that might not be criminal. It's only criminal if there's a conspiracy. Since we don't have a clue what's going on, we have not a clue to know whether it's a conspiracy.

But in terms of public policy, even if it isn't criminal it would be critical for us to understand that behavior so that we could prepare for it and perhaps create measures to discourage it.

Senator CANTWELL. Thank you.

Senator Risch.

Senator RISCH. Thank you, Madame Chairman. Mr. McCullough, excuse me for not knowing more about the details of this. This is a complex area. It's hard for us to keep on the simple stuff, let alone the complex stuff.

But let me ask you this. Why is this done in the oil market, but yet not in copper or wheat or something like that? I mean it seems to me that there's so much trading and so much bigger in oil that it would be harder to do than in one of the smaller markets. Help me out.

Mr. McCULLOUGH. It is, Don. We're all used to the Hunt Brothers attempt to corner the silver market 20 years ago. There's nothing new to this.

The United States has the CFTC and the Department of Agriculture have reviewed commodity markets for many years. We've seen efforts to corner commodity markets in many years. We have however seen a shift in oil. We used to have seven sisters and now depending on how you count it, we have four or five. So we've leveled concentration there.

We've seen a dramatic shift in where the oil is produced. We used to be the major oil producer in the entire world for a long period in our history. Now we're major importers.

So we've seen enough changes that we begin to suspect that we might have a market shift. The one thing I comment on was last summer the CFTC had changed their statistics enough that we could puzzle through what one player was. We were amazed to find that that player had 20 percent of the net long positions in the NYMEX.

This is a Swiss broker. They're probably fine people and not proposing anything criminal. I'm just noting people most of us had never heard of before suddenly turned out to be major players in the entire U.S. oil market.

That's in sort of information that's useful for us to have.

Senator RISCH. Ms. Cochrane, help me out here. Tell me where the breaking point is? Where do you cross the line between being

a legitimate trader who is trying to make the biggest profit that they possibly can. I mean, that's what traders do verses a market manipulator?

Where does somebody cross the line?

Ms. COCHRANE. The big difference is the legal definition of speculation, I mean of market manipulation. It's really a fraud statute. So what we have to show is that the trader had an intent to manipulate the market if the trader is taken advantage of a market rule or a market loophole then we don't have authority to go after them. But if they're intentionally trying to manipulate the market then that's where we can go after them.

Senator RISCH. So this all comes down to a matter of intent.

Ms. COCHRANE. Yes, it does.

Senator RISCH. A trader who is trading and happens to manipulate the market just because their idea is going here, going there doesn't commit an offense. It's only a person who sets out to actually manipulate the market. Is that what you're telling me?

Ms. COCHRANE. We view it that if they knew or should have known that their actions could have had an impact on the physical markets that are under our jurisdiction then they acted recklessly and resulted in the manipulation that would also be market manipulation. We could also look at reckless—

Senator RISCH. I'm losing something in the definition because by its very nature every trade is going to have an effect, some way, on the market, is it not?

Ms. COCHRANE. Our authority is only over manipulation of the physical markets under our jurisdiction. So a trade, you know, again if they have legitimate reasons. If they're hedging or they're just engaging in, you know, speculative behavior.

Hedging, in and of itself, is not illegal and is not necessarily bad for the market. It can increase liquidity and increase transparency. But it's a very fact intensive inquiry to determine whether it's a fraud in fact, is taking place.

Senator RISCH. Indeed really, every market needs market makers. Thank you very much. Thank you.

Senator CANTWELL. Thank you, Senator.

Senator Shaheen.

Senator SHAHEEN. Thank you, Madame Chairman, thank you all for being here this afternoon. I especially appreciate hearing and seeing the graphs that show the market and the manipulation of the market. Because for many of us who, particularly in the Northeast in New Hampshire where we live through the high heating oil prices and saw the impact of those on families and on people trying to keep their cars operating.

It's reassuring to see that what some of said was happening at the time is actually, given the analysis, what we see did happen because, as you know, there's been a lot of debate about that. To pick up a little bit on Senator Risch's questions about, you know, how do you determine whether fraud was involved and, you know, where do you cross the line with manipulation. Shouldn't the goal of our oversight of markets be to avoid or prevent the kind of manipulation that we saw over the last year, regardless of whether there was intent involved or not?

I mean, shouldn't the goal be to avoid that kind of manipulation of the markets? I would direct that at whoever would like to answer.

Mr. MCCULLOUGH. Regulating markets retroactively is the single most expensive and most inefficient way to do it. With all due respect to Ms. Cochrane, who I hope will protect me in many different ways.

I don't want to see her go into action. I want to see the market be just and reasonable on the way in. The best possible way to avoid manipulation is to bring that market in the light of day.

Senator Risch, you asked is there a bright shining light on fraud? Often there is. Case in point, throughout the electric and gas markets we've had many cases where traders will create artificial trades.

In fact ENRON had a book. They called it the fake trade book. That was used to fool market price indexes either put together by the Federal Government or put together by individual sources. That's simple fraud.

They lied to the press. They lied to the Federal Government to set prices at the wrong level, people thought and then to take a profit from it. Those people should go to jail.

How do I find out if they're lying? I find out if we have a quarterly electric report. I could actually see what the trades were.

If they said one thing here and they did another thing there. It's self evident. It's also self enforcing. You're not going to make that lie if you're going to be discovered immediately.

When we don't have that transparency then we have people lying. You know, we used to say good neighbors and good fences. But I will tell you, bad fences make bad neighbors. So when we don't have the data we're encouraging people to undertake those manipulations.

Senator SHAHEEN. Just to follow up a little bit on that. Given the fluidity of financial markets and the commodities markets that we're talking about, how do we ensure that the data that's collected is accurate and timely?

Mr. MCCULLOUGH. There's always a chance that people will be lying under oath on their submissions to the U.S. Government. I think that's a possibility. But once we have that in place we know the person signing those reports is putting his freedom on the line.

So I think to the degree we make those reports enforced by the full weight of the law we're going to have an impact. At the moment in many of these markets we never know whether any of the data is correct. So we will never have a way of finding out if they're lying or not.

But in a few cases and the EQR is one of them. We do have a chance, later on, to figure out whether they were telling the truth or not.

Senator SHAHEEN. I am almost out of time, but just very quickly because the recommendation by a couple of you has been to close the loopholes on London and on the swaps market. Is it your assessment that closing the ENRON loophole has been successful in addressing the abuses that we saw with that loophole? Again, I'm happy to have any of you respond or is there more we need to do there?

Mr. RAMM. As far as the ENRON loophole of course that does with electrical markets end. But it does plan to a little bit more of the fact that of the electronic trading that happened in the commodity markets at the time that the Commodity Modernization Act was enacted in 2000. What we've seen and maybe to speak to your first question was these markets were not designed to have all of the speculative money poured into them.

They aren't an equity market. So when you pour all of this money in, it's hard for the market to respond in a way that's fundamental in the ways that it happened before. If you look at the commodity trading that happens in the NYMEX even. You look at what gets traded on the floor verses what gets traded electronically.

Electronically is happening fast and furious and with a lot of money. I think that in some of the questions about fraud and manipulation in general the markets weren't designed for this excessive speculation in the marketplace. There was always a balance.

The CFTC has an obligation to see that speculation doesn't injure price discovery. I would offer that speculation has injured price discovery of what the markets were designed for.

Senator SHAHEEN. Thank you.

Senator CANTWELL. Senator Dorgan, thank you for joining us.

Senator DORGAN. Thank you very much. I'm sorry I was late. But thank you to all of the witnesses.

I think, Mr. McCullough when I walked in you said something that I think is prescient. You said we don't have a clue. I thought, well that's accurate. I don't think any of us in this room have a clue as to what drove the price of oil up like a roman candle to \$147 a barrel in day trading 1 day, then back down.

We've had hearing after hearing on this. Energy Information Administration, I have pounded you like you were on a meat rack trying to get out of you what do you think happened because we're spending \$100 million on your agency for information. The answer with Mr. Caruso is a, we don't know. We think it's the fundamentals, kind of.

But there was nothing in the fundamentals that could ever justify the run up in these prices and the run back down. What we know is that 37 percent of the oil future market traders in 2,000 were speculators. In a few short years 80 percent were speculators.

Mr. Ramm, I think you said it. That market was not designed for that kind of unbelievable speculation. I think that the Commodity Futures Trading Commission did, in my judgment, a shameful job of regulating. They actually provided their own blind folders, which is pretty bizarre for a regulatory agency.

So I think the purpose of this hearing is to find out what do we do about all this to prevent it from happening again? We don't have a clue. You're right about that.

That's because so much of what has happened is on the dark money side of things. We can't see it. We don't know where it is.

It's so dark out there. We ought to bring it all into the light to be able to understand it. Who's trading what? What are the consequences?

We do know just little snippets. We know that at a time when investment banks still apparently had a little money, they were

buying oil storage capability to buy oil and take it off the market and store it and sell it later. So you know, we knew some of the players. But we knew just snippets of information.

But there's much more we don't know than what we do know. Senator Cantwell has done a lot of work on this, as have I. I've chaired hearings on this subject.

I hope we can find a way to effectively establish regulation transparency and then have regulators who care about their work so that we have a market that works. We need an oil futures market that works. You can't get rid of the market.

You must have a market. It's a very important market. Normal hedging is an important part of what we're doing.

But when you run speculators up from 37 percent of the market to 80 percent of the market, that changes the oil futures market in a very significant way, and not for the better. That's why we had, I think, this huge spike.

Mr. McCullough, are you speaking for all of us in this room when you said we don't have a clue?

Mr. MCCULLOUGH. I found that at 58 I know a lot less than I did when I was 21, Senator. Can I show you one chart?

Senator DORGAN. Yes.

Mr. MCCULLOUGH. The next chart up here. Yes. This is an x/y chart. Along the horizontal axis we've put the net contribution to world inventories. Along the vertical axis we've put the price of WTI crude.

Now we believe that when we've got more supply, the price should be going down. This is a statistical analysis over the last 2 years. Over that period the world has turned on its head.

By the way, this is significant at 99 percentile which in statistics taught me would say, oh wow, results. What we've ended up with for the last 2 years is the exact opposite of the relationship we would expect. Now if we were talking about dark energy and dark matter and a physicist came into here and said my new super accelerator is giving the exact wrong answer. You'd be saying I'm about to create new science. This would be a Nobel Prize moment.

For us, either analysts or policymakers, this is a very exciting result. It says that our basic hypothesis about the market is wrong. We're not talking about Ma and Pa Kettle rising over a week. We're talking about a very, very different world from the one we saw before.

Senator DORGAN. But we're not talking about dark matter. We're talking about dark money.

Mr. MCCULLOUGH. We're talking about—I'm sorry, Senator.

Senator DORGAN. Go ahead. No, that's fine.

Mr. MCCULLOUGH. We're talking about something that indicates that we desperately need to know about this because every prediction we're making is going to be wrong until we get to the bottom of why having a surplus of production in world markets is getting correlated with rising prices.

Senator DORGAN. Yes. Dr. Gruenspecht, my time is up, and I really owed you a question. But you've testified before.

Mr. GRUENSPECHT. That's all right, sir.

[Laughter.]

Senator DORGAN. I understand you're pleased my time is up.

[Laughter.]

Senator DORGAN. Yes, but thank you for being with us. We're expecting some real help out of Energy Information Administration. I found that through the Energy and Water Subcommittee that I chair in Appropriations. We need some real help.

What I got from Mr. Caruso, who is an awfully nice guy. But he was just sitting there saying, you know what? It's the fundamentals.

That is sheer nonsense. Nothing had changed in the fundamentals to justify what happened. The American people are the victims of what happened.

Let me say this, Senator Cantwell. Thanks for holding the hearing and hanging on to this subject because we need to fix it.

Senator CANTWELL. Thank you, Senator Dorgan. I know you have chaired many hearings on this subject as well. So we appreciate your leadership and your attention to this as well.

I want to go back to the issue about once we actually find somebody at fault of market manipulation. How do we stop them from dumping all their assets? Because we can see from the AMARANTH case that once the penalties were assessed the ability to collect on them, which I would assume if people in the marketplace don't think that there really is a strong deterrent.

I mean there isn't a strong issue there, they might continue these practices. So how do we actually stop them from dumping these assets?

Ms. COCHRANE. Senator, currently we don't have the authority to stop them from dumping their assets.

Senator CANTWELL. How would this new authority help you in that?

Ms. COCHRANE. Oh, yes. The new authority would allow us, at some point during the process the Commission would be able to issue an order directing them to freeze their assets and would help us preserve the status quo in order to ultimately disclose profits and perhaps settle a penalty.

We would issue an order and direct them to, you know, basically cease and desist.

Senator CANTWELL. So FERC would issue the order. At that point in time—

Ms. COCHRANE. Yes.

Senator CANTWELL [continuing]. They would have to freeze their assets until any resolution of the situation.

Ms. COCHRANE. Right.

Senator CANTWELL. So unlike AMARANTH who by that point in time had already gone through a process of liquidating their assets, so to speak.

Ms. COCHRANE. Right.

Senator CANTWELL. In this case, AMARANTH would have been stopped at an earlier point by FERC on concerns of their activities in the natural gas market and would have been required then to set aside revenue in fact if they were found guilty of those actions. Is that correct?

Ms. COCHRANE. Right. We would have been able to take action to prevent the dissipation or dispersion of the assets if the Commis-

sion had the authority at that time and had chosen to do so would have been able to.

Senator CANTWELL. Do other agencies have any authority to stop manipulators from avoiding penalties that you know of?

Ms. COCHRANE. In my understanding is that the CFTC and the SEC also have this authority.

Senator CANTWELL. So it's authority that has been used and used successfully by those agencies?

Ms. COCHRANE. My understanding is that these authorities are used very rarely. As far as the CFTC, my understanding is that they've used the cease and desist authority only about four times in the last 20 years. So it is used rarely.

Senator CANTWELL. Who did you say?

Ms. COCHRANE. The CFTC.

Senator CANTWELL. I think maybe we could say with some conjecture they should have been using it a little more aggressively given what's transpired.

I want to go back to the data question again, Mr. McCullough because this information you've provided in your latest chart. Is this information that you collected, your organization, McCullough Research?

Mr. MCCULLOUGH. This is taken from a short term electric outlets of the EIA. It's available on about a 1-month lag. So we didn't have it in front of us in September.

Senator CANTWELL. So how would this information been collected in a more timely basis or shared? Are you saying this is EIA responsibility?

Mr. MCCULLOUGH. It's good data. It's EIA data. We rely on it. It's very important for forecasting, you know, the status of overall world production levels.

What it doesn't tell us is the case that Senator Dorgan just raised which is if people were trying to acquire storage facilities in order to store physical product in order to create a short term corner. If that was true that was the sort of thing then we would be able to turn over to the Department of Justice or the CFTC. But at the moment all I know is that on this very high level summary data, we have a situation where the net production levels appear to be completely opposite everything we've ever learned about economics in terms of their impact on price.

If we found that there was a major player who seemed to be at the scene of each crime, so to speak. Then we would actually know that we would have to pursue that and get an explanation why. If we'd have had that data for ENRON, for example, we might have caught some of the times that they had spot forward gamuts back in 2000 and 2001.

Senator CANTWELL. Is this information that CFTC is collecting because you know, there's been a little dispute about, you know, roles and responsibilities here. Is this information being collected or analyzed by someone?

Mr. MCCULLOUGH. No. You know, we have talked about AMARANTH. I'm very glad that FERC took a role in AMARANTH. But the fact is that AMARANTH took manipulations were in forward markets.

It would not have been accessible to FERC to have intervened at the appropriate moment because that was data that was sitting in CFTC files. The CFTC itself didn't react until AMARANTH went under. So the manipulations at AMARANTH, they effectively tried to corner North American natural gas for certain months, would not have been accessible to the regulators to move on in a timely fashion.

So we really need to get that data out there as well as giving people the power to react to it.

Senator CANTWELL. So the data collection in this case would have been EIA's responsibility but shared with agencies like FERC is what you're saying.

Mr. McCULLOUGH. For AMARANTH it would have been CFTC. Then I would hope it would be shared with FERC because frankly the only way we found out about this is when we found out that Mr. Hunter had tried to corner the market and failed. His entire hedge fund went under.

Senator CANTWELL. I meant on this actual.

Mr. McCULLOUGH. Oh, on this one.

Senator CANTWELL. Yes, on the WTI market.

Mr. McCULLOUGH. Unfortunately FERC doesn't have oil authority. It's oil's responsibility at the top of the pipeline as I understand it. I don't want to get in trouble with different Federal agencies, but I would love them to have oil authority.

Frankly they've got some of the skills they've built up in the agency for electric and gas. These are, when all is said and done, in Siamese twin commodities. Natural gas prices and oil prices are very highly correlated.

Electricity prices and natural gas prices are very highly correlated. I think I've just proposed something rather beyond my ability to affect unfortunately.

Senator CANTWELL. Yes. Thank you. There is a vote on. So I want to see if my colleagues have further questions.

Senator RISCH. You know there is a vote. We're going to need to run in a minute. But can somebody answer this question briefly?

What is the oil market like compared to other commodities in number of traders, number of dollars and what have you? Who can take a run at that real quick? I mean how does it compare to wheat or corn or whatever the biggest?

Mr. GRUENSPECHT. I think it's very big for a commodity market, and small relative to something like the currency markets. But relative to other commodities, I think there's a significant amount of trading.

Senator RISCH. Ok. Mr. McCullough? Thirty seconds. How'd this happen that the market turned upside down, exactly the opposite prices for supply and demand?

Mr. McCULLOUGH. My hypothesis is real straight forward. We had a market with a lot of players, many buyers, many sellers that's evolved over time. We now have a fewer number of buyers and sellers and they are larger entities.

This looks like oligopoly strategies being played out in the market as opposed to the perfect competition of our college courses.

Senator RISCH. Very good. Thank you.

Senator CANTWELL. Thank you. Thank you. I want to thank all the witnesses for their testimony today and to share with my colleagues that if they any follow up questions we can submit them to the witnesses and if they could respond to us.

These legislative proposals are things we're going to be considering as part of the mark up on energy legislation. So we appreciate your response to that. This meeting is adjourned.

[Whereupon, at 3:15 p.m. the hearing was adjourned.]

APPENDIXES

APPENDIX I

Responses to Additional Questions

RESPONSES OF ANNA COCHRANE TO QUESTIONS FROM SENATOR BINGAMAN

Question 1. Please describe the benefits that the Commission has seen from the Open Access Same-time Information System (OASIS), with emphasis on the number of alleged violations that OASIS has detected that the Commission has then gone on to pursue.

How many of the violations that the Commission pursues are the result of FERC discovery, and how many are the result of self-reports?

Answer. The Commission generally requires public utilities subject to its jurisdiction to maintain Open Access Same-time Information Systems (OASIS). OASIS systems are electronic databases that provide information regarding available transmission capacity and prices as well as an ability to request transmission service. This data is regularly updated and provided simultaneously to all users of the utility's OASIS system. The purpose of OASIS systems is to ensure that existing and potential transmission customers have non-discriminatory access to relevant transmission data from the transmission provider.

The primary benefit of OASIS postings is market transparency. Market participants should have simultaneous access to data relevant to making transmission purchasing decisions. Our OASIS regulations also prohibit transmission providers from providing transmission data on a preferential basis, including to an affiliate or business partner. OASIS therefore plays a key role in our mission to ensure that our regulated transmission markets are fair and transparent. Therefore, OASIS is not designed so much to detect violations as it is to prevent them, by making the transactions so transparent that would-be violators are deterred. Though OASIS data sometimes evidences violations of Commission requirements, the Commission's enforcement activities relating to OASIS more often have to do with ensuring that market participants timely and materially comply with the OASIS system requirements.

Violations of our regulations related to OASIS systems are varied. For example, through our normal auditing functions within the Office of Enforcement, we have uncovered instances in which a transmission provider has failed to provide all of the information required on OASIS. In fiscal year 2008, we found 13 such instances of noncompliance with our regulations through our auditing process. The data was promptly corrected or supplied on the OASIS by the transmission provider in response to the auditors' report.

Other types of potential violations are related to FERC's policies prohibiting undue discrimination among transmission customers by the transmission provider, touching upon OASIS postings. For example, FERC imposed a \$10 million civil penalty under a consent agreement with PacifiCorp related to several self-reported violations of the company's Open Access Transmission Tariff and OASIS postings. In re PacifiCorp, 118 FERC ¶ 61,026 (2007). Similarly, our investigations of SCANA Corporation and Otter Tail Power Company revealed that the companies had been erroneously utilizing network transmission service to make off-system power sales. In re SCANA Corporation, 118 FERC ¶ 61,028 (2007) (consenting to imposition of civil penalty without admitting or denying violation); Otter Tail Power Company, 123 FERC 1161,213 (2008) (consenting to imposition of civil penalty without admitting or denying violation). Commission audit staff uncovered non-compliance at MidAmerican Energy Company involving preferential transmission service to the company's wholesale merchant function. MidAmerican Energy Company, 112 FERC

¶ 61,346 (2005). The Commission penalized Arizona Public Service Company \$4 million for OASIS posting violations and for making off-system power sales without purchasing transmission service. Arizona Public Service Company, 109 FERC ¶ 61,271 (2004).

Question 2. Are the Electric Quarterly Reports (EQRs) audited for accuracy?

Answer. Yes. Commission staff reviews over 1,200 Electric Quarterly Reports (EQR) filings each quarter for accuracy and completeness. Commission staff determines whether sellers have timely complied with the requirements set forth by the Commission through the use of software tools designed to identify inconsistencies in the data. Once identified, staff contacts EQR filers to determine whether the information filed is correct and, if not, assists filers in revising their EQRs to come into compliance with Commission requirements. During FY2008, Commission staff contacted over 300 filers regarding issues with their EQRs.

In addition, Commission staff has completed 18 audits of EQR data during FY2004-09. The Commission will consider conducting audits of EQR data in future audit planning cycles.

Question 3. In your written testimony, you stated that EQRs are helpful in determining “whether sellers are complying with Commission-imposed price mitigation measures.” Could you describe how the Commission decides when to impose price mitigation?

Answer. In organized markets, each regional transmission organization (RTO) and independent system operator (ISO) has established market rules which govern when and how price mitigation is imposed. These market rules are stated in the RTO’s or ISO’s tariff, which is filed with the Commission and subject to public comment before the market rules go into effect. Proposals on when to impose price mitigation may come to the Commission from the RTO or ISO, from any market participants (e.g., through complaints filed with the Commission), from other interested participants in a proceeding (e.g., state regulatory commissions), or from the Commission itself. In many cases, these market rules are the subject of stakeholder deliberations before they are submitted to the Commission for approval. The decision on when to approve price mitigation rules is a case-by-case determination that is made after reviewing the record in a particular case. The Commission may accept the rules in whole or in part, reject them, or establish further proceedings.

Different RTOs/ISOs apply mitigation in their organized energy markets using one of two methods. Under the first, bid caps are applied when a structural market power screen is failed, such as when there are few or no competing bids for service, and the seller’s bid must be accepted due to a transmission constraint. Under the second, bid caps are applied when a seller’s bid exceeds an estimate of its marginal costs by an established threshold and as a result, the market price is increased by another established threshold. The thresholds vary among RTOs and ISOs.

Also, in either traditional or RTO/ISO markets, public utilities that make wholesale sales of electric energy, capacity or ancillary services under market-based rates authority granted by the Commission are subject to Commission-imposed mitigation on a seller-specific basis in instances where a market power problem has been identified. Such mitigation includes, but is not limited to, various forms of price mitigation which can be tailored to address the specific market circumstances of the applicant. Section 35.38 of the Commission’s regulations also provides for default price mitigation in instances where the seller fails to provide alternative mitigation that is sufficient to address the identified market power problem.

Question 4. Please describe how cease-and-desist authority, such as proposed in S. 672, could have altered any cases that have been pursued, or are currently being pursued, by the Commission.

Answer. The cease-and-desist authority proposed in S. 672 would permit the Commission to order any entity that may be committing a violation or may have committed a violation to cease and desist from the violation. Such authority would be utilized by the Commission to temporarily prohibit practices that it preliminarily determines are likely to result in significant harm to consumers or significant harm to the public interest, until such time as the Commission has concluded its investigation of the matter.

Once an investigation commences, subjects almost always promptly and voluntarily stop the activities that gave rise to the investigation so as to limit their potential exposure to penalties should FERC determine that violations have occurred. For this reason, we have not yet encountered many situations where cease and desist authority would have been utilized. However, as our investigations, particularly investigations into market manipulation, continue, the Commission could face a situation where a subject continues the activity after we commence an investigation, especially if such a violation is particularly profitable. The ability to quickly and flexibly respond to such an event is the primary benefit of the cease and desist authority

provided in S. 672. In addition, the Commission's current ability to file in district court for an injunction is limited to ongoing violations or suspected future violations, yet our investigations necessarily focus on conduct that occurred in the past and there may be circumstances where the nature and extent of past violations give rise to a concern that violations may recur. This authority makes clear that the Commission can order a subject to cease specific conduct based on its past behavior.

I also want to distinguish between cease and desist authority and the related authority under S. 672 to order an entity subject to investigation for possible manipulation to preserve its assets. This latter authority would be utilized when the subject is in the process of dissolving its business or monies are being distributed to owners or creditors. In these instances, the Commission could act to ensure that monies will be available should there be an ultimate order requiring disgorgement and/or penalties. The Amaranth matter is an example of a situation where the prohibition of dissipation of assets authority could have been used to good effect.

RESPONSES OF ANNA COCHRANE TO QUESTIONS FROM SENATOR MURKOWSKI

Question 1. Could you clarify the status of the Amarenth case, since statements in the hearing seemed to indicate that Amarenth has already been found liable?

Answer. The Amaranth proceeding is currently in litigation before an administrative law judge at the Commission. On July 26, 2007, the Commission issued an order that directed the Amaranth respondents to show cause why they should not be found to have violated the Anti-Manipulation Rule promulgated by the Commission under section 315 of the Energy Policy Act of 2005, and why they should not be assessed civil penalties and disgorge unjust profits associated with their actions. Responses were submitted along with briefs on the merits by the respondents and trial staff within the Commission's Office of Enforcement.

On review of those responses and briefs, the Commission on July 17, 2008, issued an order ruling on certain preliminary legal issues raised by the parties and setting for hearing issues involving disputes of material fact. Specifically, the Commission directed an administrative law judge to determine, based on the allegations contained in the Show Cause Order and in the brief submitted by the Office of Enforcement, whether any of the respondents violated the Anti-Manipulation rule and whether they unjustly profited from their activities, and if so the level of unjust profits. The Commission reserved for itself the issues of whether civil penalties should be imposed for the respondents' alleged violations and the method by which the respondents should disgorge any unjust profits. The Commission stated that it would make those determinations based on the record developed at the hearing.

The judge presiding over the hearing has established a procedural schedule requiring the conclusion of discovery and the submission of written testimony by July 23, 2009. The hearing is scheduled to begin on August 4, 2009, followed by an initial decision by the judge on or before December 1, 2009.

Question 2. Can you provide a breakdown of how many cases FERC is pursuing that deal directly with market manipulation, in terms of both number and percentage?

Answer. Currently, the Division of Investigations has open 23 investigations (some involving multiple subject companies) in which market manipulation is a potential violation. These 23 investigations constitute approximately 45% of all investigations currently open.

Question 3. What other enforcement proceedings is FERC currently undertaking?

Answer. FERC engages in a number of enforcement activities beyond matters involving opened investigations regarding market manipulation. For example, the Commission is handling four manipulation proceedings in which orders to show cause have been issued. These proceedings, involving Amaranth (Docket No. IN07-26), Energy Transfer Partners (Docket No. IN06-3), National Fuel Marketing Company (Docket No. IN09-10), and Seminole Energy Services, Inc. (Docket No. IN09-9) are in various procedural stages at the Commission.

Additionally, the Office of Enforcement's Division of Investigations currently has 28 investigations (some with multiple subject companies) pending which do not involve market manipulation. These cases run the gamut of the Commission's regulatory authority, including pipeline capacity release activities, the allocation of network transmission service, potential undue discrimination, possible standards of conduct violations, and pipeline and electric utility tariff violations. Notably, investigations of potential violations of new Electric Reliability Standards authorized by EPCA 2005 are an emerging and increasingly significant proportion of the Commission's investigative activity.

The Office of Enforcement also receives self-reports of potential violations from the regulated community. Such reports are reviewed by staff attorneys to determine

whether an investigation is warranted. In fiscal year 2008, the Commission received and reviewed 68 self-reports and 36 were subsequently opened as investigations.

Further, the Division of Audits within the Office of Enforcement conducts both financial and non-financial audits of the entities subject to the Commission's regulations. For fiscal year 2008, this division conducted 60 audits resulting in 156 recommendations for corrective action. Our auditors address a wide range of enforcement issues, including open access transmission tariff compliance, interconnection rules, standards of conduct, and Commission filing requirements.

Additionally, the Office of Enforcement operates a publicly-accessible Enforcement Hotline. The Enforcement Hotline is staffed during all business hours by attorneys within the Division of Investigations. Where warranted, the Office utilizes information obtained through the Hotline as a basis to begin an investigation.

Question 4. Considering the separate notion of modifying Section 5 of the NGA, have you assessed the degree to which retroactive refunds, and the resulting insecurity of pipeline revenues, would have on the ability of pipelines to access the capital markets?

Answer. We have not done a quantitative assessment. However, the current proposals to modify section 5 of the NGA are similar to section 206 of the FPA. Among other limitations, these provisions set a refund effective date no earlier than the date a complaint is filed or the Commission issues a notice of its intent to initiate such a proceeding. There is no evidence that refund liability under Section 206 of the FPA has significantly impaired access by the electric utility industry to the capital markets.

Question 5. Is the proposal for retroactive refunds limited to cost of service or does it also apply to rate design and cost allocation? If the latter, how can you justify making it retroactive?

Answer. The proposal to revise NGA section 5 to permit the Commission to establish a retroactive refund effective date would apply to all refunds, including refunds that result from a finding that the pipeline's existing rate design or allocation of costs among its customers is unjust and unreasonable. Currently, when the Commission finds under NGA section 5 that a pipeline's rate design or existing allocation of costs among its shippers is unjust and unreasonable, the Commission allows the pipeline to implement any offsetting rate increases at the same time as it implements the rate decreases. This ensures that the Commission's action under NGA section 5 does not cause the pipeline to under recover its cost of service. Similarly, if NGA section 5 is amended to be consistent with section 206 of the FPA, the Commission could nonetheless continue this practice of ensuring that changes in rate design or cost allocation do not cause a shortfall for the pipeline. It should also be noted that refunds are discretionary under this provision and that, if they are ordered, they are limited to 15 months.

Question 6. Isn't it true that markets determine the ultimate price for natural gas (i.e. it is not a compendium of segmented costs along the way). Thus, retroactive refunds would have little or no impact on the delivered price of gas. Rather, it's just a quest between market participants, including producers, to capture the netback.

Answer. It is true that the price of natural gas is market-determined. Some customers purchase their gas in locations close to the market where it will be consumed, such as Chicago. However, other customers purchase their gas at market hubs or producing areas, and pay to transport that gas to the market where it will be resold or consumed.

For any specific transaction, the party which acts as shipper on the interstate natural gas pipeline could be a local distribution company, a producer, a marketer, another interstate pipeline, or an end-user. Retroactive refunds would go initially to whichever of the numerous parties in a chain of commercial transactions was the actual shipper, if that shipper was paying the maximum tariff rate. But a number of shippers enter into negotiated rate transportation contracts under which retroactive refunds may be reduced or relinquished, in exchange for a mutually-agreeable rate; whether refunds apply is a matter of the specific contract terms.

Many local distribution companies (LDCs), regulated by state public service commissions, continue to hold sufficient long-term capacity to ensure adequate deliveries to their markets, and the state public service commissions most likely would require those LDCs to flow through any retroactive refunds they receive to their customers, including residential consumers. In the case of a producer which held long-term firm pipeline capacity for the transportation of its gas to market, the producer would receive the retroactive refund; this refund would defer some of the producer's transportation costs, and may result in an increase in its effective revenues from the transaction.

Regardless of whether the shipper is a producer, marketer, pipeline, LDC, or end-user, the shipper's transportation payments support the transmission infrastructure

needed to allow a healthy competitive natural gas market to function, and it is these shippers and their customers who receive the benefit of any retroactive refunds pipelines are ordered to make.

Question 7. Isn't adequate pipeline capacity key to keeping delivered costs low? For example, during the New England cold snap of 2004 it was a lack of pipeline capacity—not a lack of natural gas—which resulted in prices spiking over \$50 per mmbtu. If retroactive refunds impair the ability of pipes to access capital markets and continue robust construction aren't we running the risk of repeating that example?

Answer. Adequate pipeline capacity is certainly a key element in keeping delivered natural gas costs low. Since the New England cold snap of 2004, over 3,600 MMcf per day of pipeline delivery capacity and 800 MMcf of liquefied natural gas deliverability has been placed in service in the Northeast with Commission approval. An additional 2,000 MMcf per day of pipeline capacity to the region is currently under construction. The additional new capacity—along with generally milder weather—is one reason why price spikes during the winter of 2008-09 were less frequent and less severe than those in the recent past.

The Commission diligently reviews the proposed rates associated with new construction to assure that rates are just and reasonable. The Commission would only order rate refunds in cases where those rates are determined, after considerable review, not to be just and reasonable. Additionally, in those cases the Commission is limited in its ability regarding the refunds ordered.

Question 8. Most of the merchant generators who operate gas fired generation facilities do not hold firm transportation capacity on the natural gas on the pipelines that serve them. During the cold snap of 2004 this very nearly resulted in an inadequacy of electric power generation. Have you evaluated the degree to which the failure to hold firm capacity jeopardizes electric reliability on a larger scale?

Answer. A number of factors contributed to conditions in the New England electricity market during the 2004 cold snap. Commission staff began an assessment even while the cold snap continued and identified many areas that contributed to market events. ISO-NE and state agencies, at the urging of the Commission, took several steps to reduce the risk of winter disruptions. Those steps included:

- Altering bidding schedules during cold snaps so generators know their power commitment before gas trading and pipeline scheduling deadlines.
- Improving operations to allow for increased power imports.
- Restricting economic outages during cold snaps.
- Including fuel and pipeline data in the unit commitment and forecasting process.
- Working with states to clarify emissions rules and make them more flexible.

Reserving firm capacity directly from a pipeline on a year round basis can be costly and may not always benefit the public. The Commission has created conditions where those that value capacity the most from day to day can acquire it at a market price through a transparent posting system. This market price tells generators the value of capacity during times of constraint; it tells the power system operators that other resources may be more economic; and it tells pipeline companies when sufficient demand exists to justify new construction. During the winter of 2008-09, independent power providers purchased 20% of the pipeline capacity released in the Northeast.

Question 9. When is the last time the Commission updated its policy on incremental pricing of gas transmission capacity, as compared to rolled in pricing? Don't we now have a system with wildly variant prices for the same essential service? How do you justify that result?

Answer. The last generic policy review of the Commission's incremental and rolled-in pricing policies was completed in 2000. Certification of New Interstate Natural Gas Pipeline Facilities, 88 FERC ¶ 61,227 (1999), order on clarification, 90 FERC ¶ 61,128 (2000), order on clarification, 92 FERC ¶ 61,094 (2000) (collectively we refer to these orders as the "Certificate Policy Statement"). Under this policy, pipelines and shippers have significant flexibility to negotiate rates which provide a fair balance between the pipeline and individual shippers dealing with both price and risks, such as the risk of future cost overruns, while ensuring that other shippers who do not benefit from newly constructed capacity do not bear the costs. As a result, shippers who enter into long-term contracts for pipeline transportation service may pay different rates, depending on when they entered into their contract, and other factors (such as how much must be invested in new facilities to provide the requested service).

In addition, shippers also have the opportunity to seek released capacity from other shippers or interruptible capacity from the pipeline itself. This allows competi-

tion to take place between the pipeline and releasing shippers. This competition creates short-term market prices which reflect the relative surplus or scarcity of capacity on individual pipelines and gives all interested shippers opportunities to acquire short-term spot market gas supplies and the pipeline capacity necessary to deliver their gas to market. On a nation-wide basis these opportunities allow shippers to seek the most cost-effective supplies of natural gas delivered to their markets.

Question 10. In testimony you stated that if FERC detects market manipulation, it has no means to order a stop to such manipulation until the administrative proceeding results in a finding of liability. Isn't it true that FERC does have that ability through the federal court system?

If so, is this ability truly inadequate to deal with manipulation or is it simply a bit less convenient for FERC to obtain judicial injunctive relief?

Answer. To be clear, under Section 20 of the Federal Power Act (FPA) and Section 314 of the Natural Gas Act (NGA), the Commission has the authority to seek an injunction from the federal district courts to stop actions that constitute or will constitute a violation of our regulations, the acts, or our orders. Such an injunction will be issued by the courts "upon a proper showing." Proceedings under FPA Section 20 and NGA Section 314 are subject to the same scheduling, procedural requirements, legal standards, and burden of proof as those faced by private litigants seeking injunctions from the federal courts. And, as noted above, the authority is limited to situations where the Commission has a basis to find that ongoing or future conduct violates or will violate the law.

The proposals contained in S. 672 would permit the Commission itself to issue an order to companies subject to investigation to temporarily cease and desist from potential violations based on past, ongoing, or suspected future conduct. Notice and hearing would be required prior to the issuance of such an order, except in the circumstance where such procedures are impracticable or contrary to the public interest. Upon issuance of such a temporary cease and desist order, the subject of the order could request reconsideration by the Commission or proceed immediately to the Circuit Courts of Appeals to obtain review of the order. Moreover, the related asset freeze authority remedy may not clearly be available even in a district court injunction proceeding under Rule 64 of the Federal Rules of Civil Procedure, absent an express federal statutory authority. The procedure provided for in S. 672 allows for much quicker action to stop prohibited conduct or the dissipation of assets than going to federal district court while also allowing for immediate access to appellate court review.

Further, the existing authority to seek injunction from the courts would not reach the situation posed by Amaranth. Section 20 of the FPA only allows the Commission to seek an injunction of acts or practices that "constitute or will constitute a violation" of the FPA or the Commission's regulations or orders. Amaranth's conduct was completed by the time the investigation commenced and its distribution of assets was not, itself, an action that is a violation of the Act or the Commission's regulations or orders.

The proposals would bring FERC's authority and practices more in line with the authority and practices in place at CFTC and SEC. It would also expand our ability to stop potential violations. Under existing authority, the Commission would need to demonstrate the subject is engaged or is about to engage in violations to obtain an injunction. However, under S. 672, the Commission may, as a precautionary measure, issue an order to prohibit any actions the subject would take that would harm the public interest without proving the likelihood that the violation would be repeated. Perhaps most importantly, the proposals would allow the Commission to act rapidly and flexibly to deal with potential violations, including market manipulation, by ensuring that the public interest is protected while investigations are pending. The proposals strike an appropriate balance between the need to quickly respond to potential violations and important due process rights.

RESPONSE OF HOWARD GRUENSPECHT TO QUESTION FROM SENATOR MURKOWSKI

Question 1. Do you think that there are certain duties and functions that are fundamentally inconsistent with EIA's mission and capacity that would be better left to the CFTC?

Answer. Yes, EIA's mission is to provide policy-neutral data, forecasts, and analyses to promote sound policy making, efficient markets, and public understanding regarding energy and its interaction with the economy and the environment. The CFTC's mission is to protect market users and the public from fraud, manipulation, and abusive practices related to the sale of commodity and financial futures and options, and to foster open, competitive, and financially-sound futures and option mar-

kets. For both EIA and the CFTC, knowledge and understanding of the market are very important. EIA's work focuses on extracting information from the data available through its surveys and third-party providers. CFTC's market oversight is directed to supporting its policy-related activities, including development and enforcement of regulations. The institution of processes for sharing data, expertise and insights on a more timely basis—some of which has already begun—will help both agencies. However, given the policy neutrality of EIA's mission, it should not directly engage in the policy-related functions of the CFTC that include regulation and enforcement.

APPENDIX II

Additional Material Submitted for the Record

NATURAL GAS SUPPLY ASSOCIATION,
March 27, 2009.

Hon. MARIA CANTWELL,
Chair, Subcommittee on Energy, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR CHAIR CANTWELL: The Natural Gas Supply Association (“NGSA”) requests inclusion of these comments in the record for the Subcommittee on Energy’s hearing on draft legislation to improve energy market transparency and regulation held on March 25, 2009. In particular, NGSA recently became aware of the proposed Amendment to the Natural Gas Act (“NGA”) giving the Federal Energy Regulatory Commission (“FERC”) cease-and-desist authority, and would like to submit brief initial comments on the proposed language.

NGSA represents integrated and independent companies that produce and market domestic natural gas. Established in 1965, NGSA encourages the use of natural gas within a balanced national energy policy and promotes the benefits of competitive markets to ensure reliable and efficient transportation and delivery of natural gas and to increase the supply of natural gas to U.S. consumers. NGSA strongly opposes market manipulation and believes that FERC should have sufficient enforcement tools to deter and stop such conduct. As NGSA stated as part of an industry coalition in a white paper submitted to FERC in Docket No. AD07-13, we believe that the vitality of the markets regulated by FERC depends on the agency’s vigorous, firm and fair use of its enforcement authority.

However, it is also important that FERC’s enforcement tools provide the proper checks and balances, giving all parties due process rights. FERC’s authorities have already been significantly broadened in recent years, and NGSA believes the tools already at the commission’s disposal are sufficient. To date, there has been only one reported instance in which a company distributed its assets, “frustrating the agency’s ability to collect civil penalties.” (January 21, 2009 letter from Chairman Kelliher to Senator Bingaman). If it is determined that FERC requires additional enforcement authority beyond the existing court injunction powers provided for in both Section 717s(a) of the NGA and the Energy Policy Act of 2005, NGSA believes certain modifications are needed to clarify and enhance the proposed language in order to ensure that any additional enforcement authority is also coupled with a balanced approach to due process. NGSA’s suggestions with regard to Senate Bill 672 titled “Natural Gas and Electricity Review and Enforcement Act” include the following:

1. GIVEN THE NATURE OF ANY TEMPORARY CEASE-AND-DESIST AUTHORITY, IT SHOULD ALSO INCLUDE OTHER ENFORCEMENT LIMITS

NGSA believes the language in Section 2(e)(1) of the proposed amendment should be further tailored to limit the types of pre-emptive enforcement actions that FERC will have authority to employ. NGSA is concerned that the current language is overly broad and may give FERC the authority to unnecessarily hinder, or even stop, companies from operating their businesses (e.g. revocation of blanket certificate authority). NGSA suggests modifying the proposed language in Section 2(e)(1) so that the remedy within any cease-and-desist order is narrowly tailored to address the alleged violation. As stated below regarding emergency orders, the amount of assets that can be frozen should be commensurate with the level of penalty that ultimately may be assessed. Failure to incorporate this limit could unreasonably result in a company no longer being able to operate its business, potentially impairing the supply of natural gas to the market.

2. REQUIRE DE NOVO COURT REVIEW

To ensure the fairness of due process, the judicial review of a FERC cease-and-desist order should provide all parties, including FERC, with equal deference. Specifically, the proposed language should be modified to grant explicitly de novo jurisdiction to the reviewing district courts, thus allowing the court to make an independent determination of all of the facts and all of the issues surrounding the agency's actions. As courts have previously recognized in cases involving other agencies, such de novo review is appropriate in analogous circumstances where the agency has the ability to serve as the prosecutor, judge and jury in the proceeding. (See *NRC v. Radiation Tech, Inc.*, 519 F. Supp. 1266, 1286 (D. N.J. 1981); *FCC v. Summa Corp.*, 447 F. Supp. 923, 925 (D. Nev. 1978). In situations where an emergency cease-and-desist order is issued without a prior hearing, it is critical that on judicial review, the district court is able to independently review the facts and circumstances in order to determine whether the order was appropriate.

3. EMPLOY THE CFTC MODEL FOR ANY IMMEDIATE EMERGENCY ACTIONS

The proposed language for the cease-and-desist authority appears to be modeled after Section 21(c) of the Securities Exchange Act of 1934 ("SEA"). Instead, NGSA believes that the U.S. Commodity Futures Trading Commission's ("CFTC") model provides the most effective due process procedures for addressing undesirable behavior. In particular, for emergency situations, NGSA supports adopting language modeled after Section 6c of the Commodities Exchange Act ("CEA"), which states that,

Whenever it shall appear to the Commission that any registered entity or other person has engaged, is engaging, or is about to engage in any act or practice constituting a violation of any provision of this chapter or any rule, regulation, or order thereunder, or is restraining trading in any commodity for future delivery, the Commission may bring an action in the proper district court of the United States or the proper United States court of any territory or other place subject to the jurisdiction of the United States, to enjoin such act or practice, or to enforce compliance with this chapter, or any rule, regulation or order thereunder, and said courts shall have jurisdiction to entertain such actions. (emphasis added)

One of the primary functions of the CFTC is to enforce laws which ensure that market participants do not engage in actions that manipulate the marketplace. Conversely, the SEC is primarily responsible for supervising fiduciary responsibility between market participants, which ensures that all market participants are treated fairly and without discrimination. Given that the enforcement activities of the FERC and the CFTC are similar, it follows that to the extent FERC's enforcement powers should be broadened, the laws governing the CFTC enforcement activities could serve as an appropriate model rather than the laws which govern the responsibilities of the SEC.

Moreover, FERC has the authority under Section 717s(a) of the NGA to seek an injunction through the district courts. Modifying the proposed language to mirror the CFTC approach in those instances where FERC has not yet held a hearing reinforces Section 717s(a) and will help safeguard against any tendency by the agency to serve as prosecutor, judge and jury prior to full fact-finding. This will guarantee parties an independent adjudication of findings that protect the public interest.

NGSA further favors the CFTC model in those situations in which a prior hearing is not practical because certain cease-and-desist provisions in the current language fail to provide parties with sufficient due process protection, give the Commission unlimited discretion, or provide a low threshold for action. The proposed legislation, unlike the CFTC model, would allow the agency to issue a cease-and-desist order without notice and hearing. Specifically, the areas of concern with the proposed approach are as follows:

- **No Limits on the Power to Freeze Assets.** In Section 2(f), the proposed language gives FERC the ability to prevent the dissipation or conversion of assets. If FERC is granted this ability, the assets subject to being frozen should not be unlimited. Instead, the amount of assets that can be frozen should be commensurate with the level of penalty that ultimately may be assessed. The failure to limit this amount could unreasonably result in an unjustified inequity or a company that is no longer able to operate its business.
- **The Standard Is Too Low for Issuing an Emergency Order without Hearing.** In Section 2(f)(2), the proposed language gives FERC authority to bypass a hearing prior to issuing a cease-and-desist order in instances where FERC determines

that a prior hearing would be “impracticable or contrary to the public interest.” In contrast, courts have a higher standard for issuing a restraining order to preserve the status quo. For example, in district court a restraining order will only be granted, without a prior hearing, in situations where the moving party can plead and prove: (1) reasonable probability of success on the merits; (2) irreparable injury; and (3) a balance of equities in favor of the moving party. A similarly high standard should apply when considering whether use of cease-and-desist authority by FERC is appropriate.

- No Deadline is Specified for FERC Action Once an Emergency Cease-and-Desist Order Issues. Section 2(g)(2)(B) states that an applicant can request a hearing within 10 days of an emergency order and FERC shall hold a hearing and render a decision “at the earliest practicable time.” Given that a cease-and-desist order can have significant consequences for a company, FERC action on a hearing and decision in an instance where a cease-and-desist order has already been issued should be expedited and not left unspecified. A hearing should take place within 10 days of the order and a decision should be issued within 30 days of the order.

To the extent any further FERC enforcement authority is warranted, NGSa strongly endorses the CFTC model for cease-and-desist authority, and asks that the Committee consider modifying Section 2(f) to require a court injunction in instances where an immediate cease-and-desist order must be issued.

Thank you for the opportunity to provide these comments. In closing, we appreciate the Committee’s efforts to consider whether FERC has sufficient enforcement authority in order to prevent market manipulation, and believe the tools already at the commission’s disposal are sufficient. To date, there has been only one reported instance in which a company reportedly distributed its assets in order to avoid pending penalties. In the event Congress decides to move forward with this legislation, NGSa hopes you will give our suggestions serious consideration so that balanced due process benefits are provided to all potentially affected parties.

Sincerely,

R. SKIP HORVATH.

AMERICAN PUBLIC GAS ASSOCIATION,
March 25, 2009.

Hon. MARIA CANTWELL,
U.S. Senate, 511 Senate Dirksen Building Washington, DC.

DEAR SENATOR CANTWELL: On behalf of the American Public Gas Association (APGA), I want express our strong support for S. 672—The Natural Gas and Electricity Review and Enforcement Act which you recently introduced. I commend you for your efforts on behalf of natural gas consumers.

APGA is the national association for publicly-owned natural gas distribution systems. Of the some 1,200 local distribution systems in the United States, approximately 1,000 are public gas systems located in 36 states; over 700 of these systems are APGA members. Publicly-owned gas systems are not-for-profit, retail distribution entities owned by, and accountable to, the citizens they serve. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies that have natural gas distribution facilities.

Your legislation will bring parity to the manner in which electric customers versus gas customers are treated when it comes to the ability of the Federal Energy Regulatory Commission (FERC) to review and timely set just and reasonable rates. Correcting this inequity in Section 5 of the Natural Gas Act to allow the FERC to set a refund-effective date commensurate with the date on which a consumer complaint is filed and will allow FERC to treat regulated pipelines just as it currently treats regulated electricity transmission providers. This is a critical consumer protection tool that the current and past FERC Chairmen and sitting Commissioners have themselves recognized that FERC is lacking.

Your legislation will also provide the FERC with cease and desist authority. Currently, if FERC wants an entity to refrain from certain offensive activities, such as market manipulation, it must go to court to obtain an order, which can be a time-consuming exercise. By contrast, Congress has provided other federal agencies, such as the Commodity Futures Trading Commission and the Securities Exchange Commission, with cease and desist authority, which gives the agency the authority to order a bad actor to cease its offensive behavior immediately. This authority would significantly enhance the FERC’s ability to protect consumers by providing it with the ability to stop market manipulation and other market abuses in a timely fashion.

I thank you for your efforts on behalf of natural gas consumers and look forward to working with you and others towards passage of these critical consumer protection provisions.

Sincerely,

BERT KALISCH,
President and CEO.

AMERICAN PUBLIC GAS ASSOCIATION,
March 25, 2009.

Hon. JEFF BINGAMAN,
Chairman, Committee on Energy and Natural Resources, U.S. Senate, Washington, DC.

DEAR CHAIRMAN BINGAMAN: On behalf of the American Public Gas Association (APGA), I request your support to eliminate the wide disparity that currently exists in the manner that electric customers are treated versus natural gas customers. Under the Federal Power Act (FPA), the Federal Energy Regulatory Commission (FERC) has the ability to review and timely set just and reasonable rates because the complaint section of the FPA provides for refunds. There is no corresponding protection for consumers under the Natural Gas Act (NGA).

Yesterday, Senator Cantwell introduced legislation, S. 672, that would correct this inequity (by putting gas customers on the same footing as electric power customers), and I urge your support of this legislation that provides FERC with this critical consumer protection tool—a tool that the FERC Chairman and all sitting Commissioners have outspokenly supported.

APGA is the national, non-profit association of publicly-owned natural gas distribution systems. Nationwide there are approximately 1,000 public gas systems in 36 states. Public gas systems range in size from Philadelphia Gas Works, the largest and longest-operating public gas utility in the U.S., to Wagon Mound Municipal Gas Department in New Mexico that serves approximately 80 customers.

Under the FPA, if a complaint is filed and FERC rules that the rate the customers have paid was unjust and unreasonable, FERC has the authority to order refunds from and after the date the complaint case was filed. By contrast, FERC does not have the same authority under the NGA to provide for the reimbursement to a gas customer that is determined to have been paying an unjust and unreasonable rate after a complaint has been filed. Under NGA Section 5, FERC can only rule that a rate reduction take effect prospectively after FERC's order is issued, which more often than not occurs years after a complaint is filed. Given the time and expense of a complaint proceeding and the pipeline's obvious and strong incentive to delay the proceeding (since no refunds can be ordered under NGA Section 5), the absence of a refund-effective date provision in NGA Section 5 completely undermines its effectiveness, as the FERC Commissioners themselves have expressly recognized.

Last week the Natural Gas Supply Association (NGSA) released a study (copy attached) that analyzed the cost recovery of 32 major pipelines based on financial data that they are required to file annually with the FERC. The study shows, among other things, that "over a 5-year period [from 2003-2007], pipelines earned roughly \$3.7 billion more than they would have collected on an average 12% allowed return on equity. While pipelines have clearly performed effectively for their shareholders, it is just as clear that returns are at a point where FERC oversight is necessary." The study also shows that seven of the 32 pipelines earned on average equity returns in excess of 20%. In fact in the case of one pipeline, Natural Gas Pipeline Company of America, its 5-year average return on equity was 34.4% (ranging from a low of 29% to a high of 40%).

One of the arguments raised in the past by the pipeline lobby against providing FERC with this consumer protection tool is that it would have a negative impact upon a pipeline's ability to attract new capital, and this in turn would have an adverse impact on infrastructure investment. This argument is a red-herring with no basis in fact. The FERC in establishing just and reasonable rates provides for the recovery of all costs, including debt costs and a fair return on equity. And a fair return on equity must, as the Supreme Court long ago mandated, permit the regulated utility to go to the marketplace to raise capital at reasonable rates. In addition, many infrastructure projects are undertaken by pipelines, as identified in the NGSA study, that are not in the egregious overcollection category.

Ironically, the pipelines never argue that they are not over-recovering their costs—only that if caught they should not have to refund the overcharges. The FERC Commissioners, all of whom support infrastructure improvement and the

amendment of NGA Section 5 to provide for the establishment of a refund-effective date, understand that this is not an "either-or" proposition.

As the Committee considers developing an energy package, I hope you will support much-needed legislation that provides natural gas consumers with the same level of protection from overcharges that currently exists for electric consumers. The current economic climate, not to mention the NGA's requirement that rates be just and reasonable, demands nothing less.

Sincerely,

BERT KALISCH,
President & CEO.

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