

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426



Office of Commissioner Philip D. Moeller

January 27, 2014

The Honorable Ed Whitfield
Chairman
Subcommittee on Energy and Power
United States House of Representatives
Washington, DC 20515

Dear Chairman Whitfield:

Thank you for your continuing interest in our work at the Federal Energy Regulatory Commission (FERC), and for providing me with an opportunity to express my views during your oversight hearing "Evaluating the Role of FERC in a Changing Energy Landscape".

Enclosed is my response to your questions. As always, I am available to meet with you to discuss this or any other matter concerning the work of the Commission.

Sincerely,

Philip D. Moeller

Answers of Commissioner Philip Moeller to
Additional Questions for the Record

The Honorable Ed Whitfield

1. Last year, EPA projected that less than 10 gigawatts of the nation's coal-fired generation would retire by 2015 as a result of EPA's new and proposed regulations impacting the power sector. It's not quite 2014 and already 50 gigawatts of coal-fired power generation have announced closure or early retirement at least partly because of EPA's regulations. You can't eliminate 50,000 megawatts of baseload generation from the electricity portfolio in such a short time period and not expect some negative impacts on reliability.

a. As the agency responsible for ensuring the reliability of the electric grid, do you share my concerns that these retirements could negatively impact reliability?

Answer: Yes, absolutely. A very significant amount of generation has been retired in a very short time frame. This has the potential to create reliability issues in specific load pockets. Of most concern to me is the summer of 2016, by which time even more generation is expected to retire. Several regions within the United States could experience reliability challenges, but of most concern is the footprint of the Midcontinent Independent System Operator (MISO) that is projecting reserve margins below eight percent. It is important to recognize that under MISO rules, shortages are shared throughout the region. If load has to be curtailed to maintain system reliability, potentially all 15 states could experience load shedding if the system is stressed due to hot weather or other forces. Although MISO and many entities including the affected states are working to address this situation, it is worth monitoring very closely.

b. How much coordination has FERC had with EPA on the reliability impacts of EPA's power sector regulations?

Answer: Although FERC staff continues to communicate with EPA and the regions on the status of the regulations and their impacts, particularly the "MATS" regulation, I would prefer a more formal and transparent communication process. Conditions are changing quickly as more retirements are announced and as more analysis is conducted on the reliability implications of these retirements.

c. To what extent did EPA coordinate with FERC prior to issuing its recently proposed greenhouse gas standards for new fossil fuel-fired power plants?

Answer: As noted above, FERC staff continues to communicate with EPA. I have been informed that those interactions, however, have not focused on the proposed GHG standards for new fossil fuel-fired power plants.

2. If the Administration continues down its path of taking fuel choice decisions away from the electric industry, and reducing fuel diversity, what negative consequences would you expect?

Answer: Reducing fuel diversity has the potential to increase electricity price volatility and increase electricity prices overall, depending on the price of fuel. Fuel diversity also helps to ensure a reliable power grid. History shows that every source of fuel will occasionally face problems in generating energy, but with multiple sources of fuel, those problems will have less of an impact on our ability to have electricity when we need it.

3. You have been very active in promoting greater coordination between the natural gas sector and the electricity sector given the greater reliance on natural gas to generate electricity. Can you please provide us with an update on the progress FERC has made with respect to these coordination efforts? What next steps does FERC have planned?

Answer: The Commission continues to engage with state policymakers and industry on issues related to gas and electric coordination. This dialogue began in early 2012 when, noting the growing dependence on natural gas for power generation, I requested written comments from the public on a series of gas-electric coordination questions and concerns. The Commission continued this dialogue by opening a formal docket and following up in August 2012 with a series of regional conferences across the country to gather additional information. Since then, Commission staff has actively monitored gas-electric coordination activities taking place at the regional level, and conducted outreach to assess progress being made within each region. The Commission received quarterly reports from its staff on gas-electric coordination activities throughout 2013, and will continue to receive such reports throughout 2014. In addition, all seven RTO/ISOs appear before the Commission on May 16, 2013, and October 17, 2013, to share their experiences managing natural gas and electric coordination during the winter and spring, and summer and fall, respectively. During their last appearance before the Commission, the RTO/ISOs reported on their progress in addressing gas-electric issues, including the initiation of a broad study of natural gas infrastructure needs across the Eastern Interconnection, and also shared their expectations for the 2013-2014 winter heating season.

Through these activities, we have learned that gas-electric coordination issues are typically regional in nature, and vary depending on each region's particular infrastructure, supply and demand conditions, and market structures. However, the Commission has identified two sets of common issues across all regions: communication and information sharing between the two industries, and scheduling practices between the gas and electric industries. To address continued concerns regarding communications and information sharing between the industries, on November 15, 2013, the Commission issued a Final Rule (Order No. 787) providing explicit authority to interstate natural gas pipelines and public utilities that own, operate or control facilities used for the transmission of electric energy in interstate commerce to voluntarily share non-public, operational information with each other, subject to a No-Conduit Rule which prohibits sharing this information with a third-party. This Final Rule became effective on December 23, 2013. As I mentioned in the hearing, I thank the Office of Management and Budget for an expedited effective date. The Final Rule recognized that some pipelines or public utilities may have existing tariff provisions that preclude a communication that would otherwise be authorized by the Final Rule. Since the Final Rule became effective, both pipelines and

public utilities have submitted to the Commission proposed revisions to their tariffs to permit the communications authorized under Order No. 787. The Commission has taken prompt action on these filings to allow for the information sharing pipelines and public utilities deem necessary to promote the reliability and integrity of their systems. During the recent extreme cold weather experienced on January 6-7, 2014, the communications permitted by this Final Rule proved useful to electric system operators in maintaining reliability.

The Commission also continues to consider opportunities to better coordinate the scheduling of natural gas and electricity markets in light of increased reliance on natural gas for electric generation. Through a series of regional gas-electric technical conferences held in the summer of 2012, industry participants highlighted the need for greater alignment of natural gas and electric scheduling practices. Therefore, at the direction of the Commission, staff conducted a further technical conference in April 2013 which focused on natural gas and electric scheduling practices --- the conference included topics such as whether and how utilities can most effectively match their scheduling times with the nationwide natural gas scheduling timeline, and whether additional opportunities for nominating natural gas pipeline capacity can be provided and, if so, under what conditions. The Commission is currently reviewing the record developed at that technical conference, and the comments that were filed following the technical conference, and is examining opportunities for further Commission action.

4. Should behind-the-meter generation be treated as a demand response resource or a generation resource? What is the justification for treating behind-the-meter generation differently from traditional generation in terms of how it is compensated in the market, and the accountability to deliver as promised?

Answer: While behind-the-meter-generation (BTMG), as its name implies, is a bona-fide generation resource, BTMG is also commonly employed as a demand response resource during periods of peak demand when traditional forms of dispatchable generation may not be sufficient to meet the need for power in a specific area or “load pocket”. While BTMG is considered to be both a demand response resource and a generation resource, its physical characteristics and impacts differ from what people typically consider to be “demand response” or load reduction (i.e., an actual reduction in power usage). Notably, the dispatch of BTMG (which often consists of older diesel-fired units, lacking advanced emissions controls) has identifiable negative externalities, such as increased air pollution during peak periods, particularly on the hottest summer days. As such, I do not believe that BTMG resources are comparable to other forms of demand response and I am concerned that the continuing, and not insubstantial, participation of BTMG in demand response programs will undermine efforts towards improving air quality.

With regard to BTMG’s accountability to deliver its resource when needed, I understand that in some organized electricity markets, the grid operator is unable to dispatch these resources directly from the control room and may have difficulty in measuring and verifying whether a load reduction is being effectuated in real time. In terms of compensation, the organized electricity markets have been ordered by the FERC, consistent with Order No. 745 to compensate all forms of demand response, including BTMG, in a manner that I believe results in the overcompensation of demand response resources as compared to traditional generating resources (e.g., power plants, wind farms, and hydro-electric projects). My explanation of why I

believe demand response resources are being overcompensated is discussed at length in my dissenting opinion to Order No. 745 (Demand Response Compensation in Organized Wholesale Energy Markets, 134 FERC ¶ 61,187, March 15, 2011), which is currently pending a decision before the United States Court of Appeals for the District of Columbia Circuit.

5. I understand from hydropower owners and operators that there is hydropower licensing cases in which two or more federal agencies, contained within different departments, regulate the same activity under the license for a single hydropower project. These conflicting requirements on the owner/operator increase delays and project costs.

a. What steps can FERC take to promote greater efficiency, predictability and balance in the process for licensing and relicensing of hydropower projects?

Answer: The Commission makes every effort, within the constraints of the Federal Power Act and other statutes to promote efficiency, predictability, and balance in the hydropower licensing process.

Federal agencies have mandatory conditioning authority with respect to FERC licenses under either FPA section 4(e) (conditions for projects on federal lands) or 18 (fishway prescriptions), and, effectively, under the Endangered Species Act. Likewise, states can condition FERC licenses via their Clean Water Act Section 401 water quality certification authority. Under current law, the Commission has no authority to modify these conditions. As you noted, occasionally the Commission receives conflicting conditions from the agencies with respect to the same activity or resource. The Commission's options for resolving such cases are limited by the extent of the agencies' willingness to modify their conditions. In some such cases, convening a technical conference with the agencies, or engaging in alternative dispute resolution is sufficient to resolve the inconsistency. If the conflict cannot be resolved, the Commission has the option of issuing the license and doing its best to help the parties resolve conflicts that arise during the license term, or it may choose not to issue the license. As I mentioned during the hearing, Congress may want to consider setting deadlines for other agencies to act, or alternatively Congress may want to consider giving the Commission greater authority to determine whether conditions proposed by other agencies are appropriate for the project under consideration.

The Honorable John Shimkus

1. Are you aware that the United States Military Academy (USMA) at West Point is at capacity for electric power and how would you describe this situation?

Answer: Please see Acting Chairman Cheryl LaFleur's response, as I concur with her reasoning and answers related to this set of questions.

2. Has the transmission system at USMA been substantially upgraded since the 1970s?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

3. What are the expected improvements for a typical transmission system that is 40 years old?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

4. Is there a general calculation used by utilities to forecast demand increase that would drive the upgrade of infrastructure?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

5. Is the age of the transmission system supporting USMA a concern?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

6. Are utilities obligated to provide power requisite with current and future demand?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

7. Who is responsible for the funding of upgrades?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

8. Are utility companies obligated to submit master plans or capital improvement plans? If so, what has been submitted with regard to USMA?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

9. How does USMA's electric energy use affect the neighboring communities, such as Highland Falls and Fort Montgomery?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

The Honorable Michael C. Burgess

1. Commissioners, I join many of my colleagues who are concerned about a growing trend within Federal agencies to expand their jurisdiction without being given the authority by the Congress. Just because some long time government employee or employees may be predisposed one way or another, we are a nation of laws and even agencies are not exempt from the limitations placed on them by statutes we have passed that give them their jurisdiction.

There seems to be a good deal of uncertainty as to how FERC and DOE are regulating natural gas and natural gas export and exactly what "natural gas" is. I hope that, as new processes for recovering, transporting and storing hydrocarbons are developed, FERC and DOE will adhere to a strict construction of the statutory definition and not try to reach out and regulate products which are liquid, like LPGs, or which are specially manufactured to meet customer needs. Do you agree that we should interpret the law wherever possible in ways which minimize regulatory impediments?

Answer: Generally, yes. Please see Acting Chairman Cheryl LaFleur's response, as I concur with her reasoning and answer.

The Honorable David B. McKinley

At our hearing on December 5th, we discussed the definition of "natural gas," the application of that definition to Natural Gas Liquids and the effect of that application on new "solvation" technologies which produce liquid mixtures of selected natural gas and NGL constituents. I understand that these mixtures are similar in characteristics to LPG but can be effectively used to capture and transport any or all of the gas constituents that come out of the wellhead. As I noted, this technology can be extremely useful in capturing and recovering the significant volume of gas that is currently being flared in West Virginia and in alleviating the glut of certain gas constituents like ethane that currently exists in our region.

It is my understanding that the deployment of this technology in my state and others (Mr. Hall raised similar issues in his questioning) is being delayed by uncertainty as to whether FERC and DOE will treat this new mixture of gas and NGL constituents as a liquid like LPG and thus not subject to export controls and other regulatory strictures applicable to "natural gas" or, in the alternative, whether the natural gas definition will be stretched to cover this new technology and delay its implementation. I was heartened by the Chairman's assurance that there are no plans to redefine natural gas under the Natural Gas Act but would like answers to the following questions in order to resolve the uncertainties which are currently impeding the deployment of these new technologies.

- 1. My understanding is that both DOE and FERC have historically concluded that NGLs such as Propane, Ethane and LPG are not "natural gas" and may be produced, transported and exported without being subject to the facility siting and other regulatory restrictions which apply to natural gas. Are you aware of any policy reason for deviating from this approach and regulating either NGL facilities (particularly those other than pipelines) or the transportation and use of NGLs in a manner different than that which has been historically followed? Hasn't the current approach been essentially problem free? Is there any reason to expand jurisdiction and move into an area which has been problem free?**

Answer: Please see Acting Chairman Cheryl LaFleur's response.

2. As a matter of policy, should the mixtures created by new technologies which alter LPG, by incorporating into it additional hydrocarbon constituents found in wellhead gas, be treated like LPG, to which it is most similar in characteristics, or like pipeline quality natural gas, which is subject to regulation by FERC and DOE? Shouldn't it be our policy to minimize regulatory interference with business decisions where there is no demonstrated need for regulation?

Answer: For these three questions, please see Acting Chairman Cheryl LaFleur's response as I agree with her reasoning and answers.

3. As a matter of law, how can it be determined that a process which mixes various constituents of wellhead gas, including Methane, into Propane and other NGLs to create a mixture of natural gas and natural gas liquids which is similar in characteristic to LPG, is either "natural gas unmixed" or a "mixture of natural and artificial gas" within the meaning of the Natural Gas Act of 1938.

Answer: Please see Acting Chairman Cheryl LaFleur's response.

As I indicated at the hearing, uncertainty regarding these issues is delaying deployment of important new technologies which can be of great import in preventing waste and environmental harms while, at the same time, creating jobs and helping West Virginia's economy.

The Honorable Jerry McNerney

1. In California, we have a number of statutory and regulatory requirements that not only require development of new generation, but also the type of new generation. Is it the Commission's intent to let the ISOs (or in our case the States) lead in deciding whether capacity markets are necessary and, if so, to design them to reflect the unique features of the relevant market?

Answer: For these three questions, please see Acting Chairman Cheryl LaFleur's response, as I agree with her reasoning and answers.

2. My understanding is that some of the current capacity markets require local utilities to buy from the market. Public power utilities in Northern California just built a highly efficient and clean gas plant in my district. Will they be able to utilize this resource and self-supply, rather than being forced onto the market?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

3. There has been recent discussion about whether FERC might push for lower returns for transmission investment. Can you comment on what you see FERC's role being at this time in providing a clear, consistent market signal for the

transmission investment that this Committee has believed to be important for a number of years?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

The Honorable Eliot L. Engel

The Commission has been focused on implementing policies which provide significant advantages to demand response resources relative to traditional generation, presumably because of their superior environmental impact. Yet, in some areas up to 1/3 of this demand response isn't the type use reduction and demand side management we normally conceive of when we're talking about demand response. Instead, a great deal of this actually appears to be load shifting rather than demand reduction and the load is being shifted from low emitting generation sources to inefficient, diesel-fueled, backup generators, that don't have environmental controls.

1. How this is consistent with the purported environmental benefits DR is supposed to bring?

Answer: For these two questions, please see Acting Chairman Cheryl LaFleur's response, as I agree with her reasoning and her answers. However in terms of compensation, the organized electricity markets have been ordered by the FERC, consistent with Order No. 745 to compensate all forms of demand response, including BTMG (Behind-the-Meter-Generation), in a manner that I believe results in the overcompensation of demand response resources as compared to traditional generating resources (e.g., power plants, wind farms, and hydro-electric projects). My explanation of why I believe demand response resources are being overcompensated is discussed at length in my dissenting opinion to Order No. 745 (Demand Response Compensation in Organized Wholesale Energy Markets, 134 FERC ¶ 61,187, March 15, 2011), which is currently pending a decision before the United States Court of Appeals for the District of Columbia Circuit.

A second problem seems to be that when this bundled demand response commits to provide system reliability 3 years ahead of time, it simply does not show up when it is needed.

1. What is the Commission doing to ensure these demand response resources are real, and are fully committed to meet their obligations for providing system reliability?

Answer: Please see Acting Chairman Cheryl LaFleur's response.

The Honorable Gene Green

The liquefied petroleum gas (LPG) industry is an important component of the Texas oil and gas industry. In Texas, the Railroad Commission administers and enforces state laws and rules related to LPG, while the Environmental Protection Agency is responsible for oversight and regulation of emissions and clean air standards, and the U.S. Department of Transportation regulates some aspects of transportation.

1. New technologies have now entered the marketplace for producing LPG-like products, called Compressed Gas Liquids that are customized blends of gas and gas liquids. How can we ensure that these new Compressed Gas Liquids products and facilities are similarly regulated to the LPG industry?

Answer: For this question, please see Acting Chairman Cheryl LaFleur's response as I agree with her reasoning and her answer.

The Honorable Mike Doyle

Manufacturing companies argue that they are overpaying for natural gas as a result of interstate pipeline rates. FERC needs to assure consumers that pipeline companies are charging a "just and reasonable" rate as required under the Natural Gas Act.

1. What is FERC doing to ensure that consumers are not overcharged?

Answer: Please see Acting Chairman Cheryl LaFleur's response, as I agree with her reasoning and answer.

The Natural Gas Supply Association conducts a study every year using Form 2 data that pipelines are required to file with the FERC. The latest report indicated that that pipelines are overcharging by \$3 .4 billion. This seems to be a problem in the sense that these dollars are coming from consumers.

2. Some have suggested that one way to address the issue would be reform of the Natural Gas Act to ensure that customers (after proving that they have been overcharged by interstate pipelines) can receive a refund back to the date of a filed complaint- a change that would give gas customers the same protections afforded under law to electricity customers since 1988. What are your thoughts on this?

Answer: I have consistently stated that I would support such a reform.