Testimony of Commissioner Philip D. Moeller

Before the U.S. House of Representatives
Committee on Energy and Commerce,
Subcommittee on Energy and Power

Regarding the Impact of Regulations Proposed by the
Environmental Protection Agency (EPA)

September 14, 2011

Chairman Whitfield, Ranking Member Rush, and members of the Subcommittee, thank you for the invitation to testify on the subject of how regulations by the Environmental Protection Agency are expected to impact the reliability of electricity in this nation. As the people in San Diego and surrounding areas experienced last week, modern society cannot function in any useful way without a continuous and reliable supply of electricity.

As today's hearing will likely demonstrate, EPA is considering a suite of rules that will—if implemented—affect the nation's electric generation fleet. These rules all have different implementation timelines and the ability of regulated entities to comply will differ as well. This has created a high degree of uncertainty in the electric generation sector as to whether specific units should be retired or retrofitted, and if so, when these decisions should be made. Despite this uncertainty, this nation can retire a significant amount of older, fossil-based generation. However, such retirements need to be handled in an orderly way to avoid regulatory, economic, and reliability chaos.

As a Commissioner, I can be "fuel neutral" when it comes to assuring that our nation's wholesale electric rates are just and reasonable. But I cannot be neutral on the subject of reliability. As the recent heat waves this summer showed, generation units that rarely run were essential to providing reliable electric service when the health, safety and economic livelihood of citizens was at stake.

Two sets of consequences arise from the implementation of the EPA rules. One is economic and the other is reliability. Although different, they are related. On the economic front, the law of supply and demand means that removing any significant amount of generation from the nation's supply of generators will almost surely have price-raising consequences for electric consumers. This can benefit some generation owners and be detrimental to others. And it is not FERC's role to determine whether the public health benefits of closing certain units outweigh the public health consequences of higher electricity prices. But the fact that higher prices can impact public health and safety needs to be acknowledged.

Given the common underlying assumption that power plants fueled by natural gas can be built to replace retiring coal plants, the future availability of natural gas is critical to understanding the economic costs of new EPA regulations. Yet at this time, I am not aware that the EPA has clearly indicated that new sources of natural gas, such as fracking, will be available to help supply new needs for gas. Additionally, a lack of necessary pipeline capacity creates challenges to the extent that pipelines will need to be built or upgraded to provide adequate fuel.

With respect to reliability, I remain concerned that the timeline for electric utility planning and implementation is not compatible with the EPA timelines for its new regulations. Constructing needed transmission assets in this nation is still a very challenging endeavor. Planning, cost-allocation, permitting, siting, and construction are often extremely difficult and controversial, often leading to years of litigation, delay and potentially stranded capital.

Although several public reports indicate that certain regions of this nation should have adequate capacity even after a certain amount of coal plants are retired, the laws of physics dictate that changing the generation mix has implications that are very specific to the location of customers ("load") and the generating plants that remain.[1] Smaller plants may not be needed so much for the amount of energy they provide but rather for the voltage support they provide at that specific location, especially during times of high demand (such as summer and winter peaks, when an adequate supply of electricity is critical to health and safety). Substituting other generation in a different location may not replace the benefits that a plant in that location delivers.

For this reason, the debate over the amount of coal generation that should be retired may miss the larger point. Except for most hydroelectric facilities, our existing electric generation is very likely to be retired in this country within 40

[1] For an example of the impact on reliability from the retirement of specific coal plants, see my attached letter of August 1, 2011 to Senator Murkowski on the retirement of the Eddystone and Cromby coal units, at page 9.

years, to be gradually replaced with newer generating plants. As I have emphasized, instead of concentrating on how many coal plants to retire, the focus should be on the timing of when specific units are likely to retire and what needs to be done to allow them to retire with the least disruption to the nation.

Such an effort to analyze the reliability and economic consequences of the EPA rules does not have to perfectly predict every consequence of such rules. Yet I feel that someone should convene the proper decision makers to begin a serious analysis of the rules. Perhaps such a process would include EPA, FERC, the Department of Energy, NERC, and regional electric planners. Rules requiring advance notice of plant shutdowns could be modified. Clarification of existing legal authority to address reliability challenges by all the affected entities seems helpful. Legislation clarifying the role of EPA and FERC in the event of a conflict over air policy and electric reliability could also be helpful.

At FERC, we hold hearings, conferences, and meetings that are open to the public on our various statutory obligations, and by my count, the Commission has held at least four public meetings on electric reliability within the past two years. In my opinion, FERC and its staff are committed to ensuring that the power grid improves its reliability, so that blackouts like the event last week in San Diego are less likely to happen again.

When it comes to reliability, we do not outsource that function to private entities known as RTOs or ISOs,[2] as those entities do not have the statutory authority of this Commission to ensure reliability. Nor do we generally outsource our reliability obligations to the North American Electric Reliability Corporation (NERC), as that would be inconsistent with the law. According to the law, FERC is obligated to review and approve the reliability standards of NERC, and to consider, on its own motion or upon complaint, a proposed reliability standard to address a specific matter.

Since we do not outsource our reliability obligations to the RTOs and ISOs, I do not believe that we should outsource the reliability questions related to EPA regulations to the RTOs and ISOs. Such a delegation of our expertise would be unprecedented, especially in light of the impacts that some, including FERC staff, expect from the EPA regulations. Nor do I believe that a private entity like NERC is the only organization capable of examining the vital issue of reliability. While NERC has experts from industry that can examine reliability issues, FERC is part of the federal government, and FERC has a statutory obligation to consider matters that could have an impact on the reliability standards.[3]

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[2] RTOs are Regional Transmission Organizations and ISOs are Independent System Operators organized under rules and policies established by FERC under its orders known as Order No. 888 and Order No. 2000.

[3] As stated under Section 215 of the Federal Power Act, the "Commission, upon its own motion or upon complaint, may order the Electric Reliability Organization [certified to be NERC] to submit to the Commission a proposed reliability standard or a modification to a reliability standard that addresses a

While I agree that it would be impossible to know what all the final EPA rules will eventually require, and while I agree that it would be impossible to know with certainty which coal plants will shut down as a result of EPA regulations, I see a need for FERC to become further involved in the reliability implications of EPA actions. Specifically, I have said that "the federal government needs to convene an open and transparent process to assess the reliability implications of the EPA rules individually and in aggregate."[4] I have also said, "at minimum, the Commission should direct its staff to use its expertise to perform an analysis of the EPA's rules that could impact reliability of electricity —and disclose that analysis for public comment—and then hold a technical conference for public input."[5]

The electric industry can plan to meet whatever EPA regulations become final. This nation has complied with EPA regulations in the past, and we can do it in the future, given enough time and information. Yet, that is the basic question that we face today: how much time and information will be needed by the public so that EPA regulations can be followed?

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specific matter if the Commission considers such a new or modified reliability standard appropriate to carry out this section." If retiring one or two coal plants could impact the ability of grid operators to comply with NERC standards, the simultaneous retirement of many coal plants nationwide would similarly be expected to impact NERC standards.

[4] See pages 10-11 of my letter to Senator Murkowski for my recommendations.

[5] Ibid.

Given that many EPA regulations impacting the power grid are not yet final, I recognize that FERC cannot arrive at a perfect and complete understanding of how EPA proposals will impact reliability. But FERC continuously faces uncertainty about future conditions for the energy industry, and despite uncertainty, FERC acts using its best judgment and in consideration of the best available information. For example, this nation faces uncertainty about the threat facing the future power grid from future threats to cyber security. Yet we act to avoid these threats today, despite not knowing what technology will be used in the future power grid, and despite not knowing when or if any particular cyber attack will come. In other words, not being absolutely certain of the future has never been a good argument in favor of stopping discussion about problems that could arise in the future.

I have recommended an open process involving FERC, NERC and stakeholders to help reduce the possibility that we will have reliability problems as a result of the EPA—I do not expect that we could undertake a process that will result in a perfect understanding of which coal plants will retire.

Thank you again for the opportunity to testify. I look forward to working with you in the future and to answering any questions.

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, D.C. 20426

Office of Commissioner Philip D. Moeller

August 1, 2011

The Honorable Lisa A. Murkowski
United States Senate
Washington, DC 20510

Dear Senator Murkowski:

Thank you for your continuing interest in our work at the Federal Energy Regulatory Commission (FERC). As described in your letter to me, I raised the issue of how actions of the Environmental Protection Agency (EPA) could impact the reliability of our nation's electric system at the Commission's September 2010 open meeting, and I have been deeply interested in how our staff has been communicating with both the public and within government on this issue of critical importance to our nation. Thus, I share your concern about ensuring that we maintain a reliable and affordable supply of electricity.

Given these concerns, I have long-stated that I can be "fuel neutral" but I cannot be "reliability neutral". That is, I can be neutral as a regulator with regard to how competitive markets ultimately decide which types of power plants are most efficient and affordable, regardless of whether those power plants are fueled by water, natural gas, fuel oil, uranium, coal, wind, the sun, or any other fuel. But I cannot be neutral about the reliability of our electricity.

The Federal Power Act provides this Commission with statutory responsibilities over certain reliability matters. For that reason, the Commission has engineering staff in its Office of Electric Reliability that is dedicated to the topic of electric reliability, and many other Offices at the Commission have engineering and technical staff with expertise on that topic. Thus, I believe that this Commission can play an important role in providing information to the EPA on the extent to which its proposed rules will have an impact on electric reliability.

Given that you've sent similar letters to my fellow Commissioners, my answers could differ from their responses. Yet I think that should be expected, as we are individuals with potentially different views on this matter.

Thank you for asking these questions. Here are my answers:

Question 1. *With respect to the impact on electric reliability of the listed EPA rules affecting generation of electric power, please list and describe the Commission's actions taken; studies conducted; assistance provided to any other agency, including EPA; collaborative efforts with any other agency; and provision of data to any other agency.*

Answer: Concerning the impact of the listed EPA rules on electric reliability, the Commission has not acted or studied or provided assistance to any agency, including EPA. Because this answer may not be expected, I wish to clarify that the Commission acts mostly through orders in individual proceedings, although it sometimes issues reports, or holds conferences for the public, or acts in other ways.

While the Commission itself may not have acted, individual Commissioners can express their opinions, as can the staff of the Commission. I have been informed that our staff has provided assistance to other federal agencies on this topic, and that the staff has been studying various impacts of EPA proposals on energy markets. Such assistance by staff is not binding upon the Commission, and can take place without the knowledge of all or some Commissioners. The relationship of the Commission to its staff is described in the Code of Federal Regulations, and includes the following:

> The Commission staff provides informal advice and assistance to the general public and to prospective applicants for licenses, certificates, and other Commission authorizations. Opinions expressed by the staff do not represent the official views of the Commission, but are designed to aid the public and facilitate the accomplishment of the Commission's functions. Inquiries may be directed to the chief of the appropriate office or division. 18 CFR Section 388.104(a).

In addition, the Commission has "delegated authority" to several individuals on its staff. That delegated authority often extends only to matters that are unopposed or of a noncontroversial nature.[1]

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[1] *See* 18 CFR Section 375.301(c); 18 CFR Section 375.303(b); 18 CFR Section 375.307(b); 18 CFR Section 375.308(x); 18 CFR Section 375.315(b). And for a general discussion of staff's relationship to Commission action, *see, Obtaining Guidance on Regulatory Requirements,* 123 FERC ¶ 61,157, at PP 30-34 (2008).

Question 2. *Regarding collaborative efforts between FERC and EPA described above, has an Inter-Agency Task Force been established? If so, please state or provide:*

a. *the date it was established;*
b. *the source of its authority;*
c. *a copy of its charter;*
d. *a description of the scope of its work;*
e. *a schedule of its meetings, including a list of its meetings to date and any planned meetings;*
f. *any minutes of its meetings; and*
g. *a list of the agencies and agency officials participating.*

Answer: I do not believe that the meetings that have been held between staff in the Office of Electric Reliability and EPA constitute an Inter-Agency Task Force as described in the subparts of your question.

Question 3. *Please describe all work being jointly performed by FERC staff, including work done in collaboration with EPA – whether in connection with an Inter-Agency task force or otherwise – regarding the potential impact of EPA regulations on the retirement of electric generating units and, to the extent such information has been developed, the specific type and characteristics of units that may face retirement as a consequence of such regulations.*

Answer: Based upon the information that I received from staff in the Commission's Office of Electric Reliability (OER), staff has shared public information with EPA, provided information to EPA on the types of studies that would be needed to address reliability concerns, and provided EPA with a set of questions about EPA's analytical results so that staff could better understand an ICF model that was used by EPA. Staff in OER told me that they made an effort not to create an impression that the Commission either endorses or disagrees with the study performed by EPA. According to OER staff, EPA's reliability analysis has been limited to generation adequacy assessments for 2015. EPA's analysis is apparently limited to the expected retirements caused by two of its rulings (does not include coal residuals, green house, clean water, and others). According to the information that I received from Commission staff, they have pointed out to EPA that a reliability analysis should explore transmission flows on the grid, reactive power deficiencies related to closures, loss of frequency response, black start capability, local area constraints, and transmission deliverability.

In addition, and also based upon the information that staff has told me, staff has indicated to EPA that the regional transmission planners would be best suited to run these studies. Commission staff has suggested that EPA interact with the ongoing initiatives at the grid operators known as "PJM" and "MISO" which are assessing the effect of projected retirements on their grids. Commission staff

informed me that they believe that EPA needs to interact with regional transmission planners to determine the issues that may affect the regional grids, especially during the transition period when plants are retired and others are shut down to retrofit their facilities.

According to Commission staff, the ICF model used by EPA is a pipes and bubbles tool which assumes transmission deliverability is not an issue within the region. The ratings of the pipes (transfer limits) are apparently determined by consultants who analyze available transmission planning studies, historical OASIS postings and linear analysis. Based on the rating of the pipes, OER staff understands that the tool determines if firm transfers can be delivered from region to region as well as capacity additions needed to meet target reserve margins. OER staff believes that the ICF model does not consider certain reliability issues. According to OER staff, the ICF model could provide a potential scenario of the generation mix available in future years. OER staff believes that a transmission requirements study would still be needed to develop a transmission expansion plan for the potential generation mix that may result from the ICF tool.

Question 4. *Please describe FERC's efforts to explain the effect of potential retirements on electric reliability. If research, data, or analysis has been developed by or supplied to FERC, please provide it. If no analysis has been conducted, please explain why.*

Answer: The Commission has not engaged in efforts to explain the effect of potential retirements on electric reliability. The Commission has not issued any reports, orders, held a conference, or taken any action on this matter. While the Commission itself has not taken action, individual Commissioners have expressed their opinions. In that regard, on May 3, 2011, I discussed this matter with Gina McCarthy, Assistant Administrator for the Office of Air and Radiation, and some of her staff. On October 28, 2009, at Chairman Wellinghoff's invitation, I participated in a meeting with EPA, White House, Department of Energy, and others at a meeting with the White House Council on Environmental Quality.

While the Commission has not acted on this matter, the staff of the Commission has expressed its opinions. In response to why the Commission has not performed an "analysis", I believe that the Commission should consider whether it should issue a report containing a formal Commission analysis. If the Commission decides against the issuance of an analysis, then at minimum, the Commission should direct its staff to use its expertise to perform an analysis of the EPA's rules that could impact reliability of electricity --- and disclose that analysis for public comment --- and then hold a technical conference for public input.

Question 5. *Please describe fully FERC's powers to protect electric reliability in the event of plant retirements, and what measures FERC plans to take to ensure electric reliability or an explanation of why such measures have not been devised. Please provide the following assessments, or an explanation of why such assessments have not yet been devised:*

a. *an assessment of generation adequacy in the face of retirements of significant generating units in transmission-constrained areas;*
b. *an assessment of the effect of retirements of generating units in organized markets for energy and capacity (e.g. on prices and unit commitment); and,*
c. *a general assessment of the capacity to permit and construct new electric generation units in a timely manner such that electric supplies form retired plants are replaced and anticipated demand growth is met.*

Answer: To the extent that measures to ensure reliability have not been devised by Commission staff, then the Commission should direct its staff to develop such plans and take such measures. Given the importance of electric reliability, such plans and measures should be developed in an open process with opportunity for input from the general public.

Question 6. *The Clean Air Transport Rule specifically lists ensuring electric reliability as a "key guiding principle." Please describe any research, documentation or analysis FERC has provided EPA for this rule.*

Answer: To my knowledge, the Commission has not provided EPA with any research, documentation, or analysis of the Clean Air Transport Rule. However, individual Commissioners or the Commission staff may have provided their own opinions to EPA. I believe that the Commission should consider whether it should direct its staff to issue a report to the Commission on the Clean Air Transport Rule.

Question 7. *Regarding the Commission's FY 2010 Performance and Accountability Report to Congress, quoted above, and the staff analysis of electric reliability impacts referenced in the quotation, please describe or provide:*

a. *the study and all supporting materials including research;*
b. *a list of any other agencies involved in the production of the study with information on their involvement*
c. *actions FERC has taken or plans to take based on the study; and*
d. *how and where the study has been made public, or why it has not been released*

Answer: I believe that the Chairman will describe staff's work on this topic when the Chairman sends his response to you.

Question 8. *In your view, would compliance with EPA or other environmental regulations excuse a violation of FERC-approved electric reliability standards? If so, should the Commission refrain from imposing penalties for these violations?*

Answer: In my view, compliance with EPA or other environmental regulations would not necessarily excuse a violation of FERC-approved reliability standards. Every individual case should be addressed on its merits. For example, instead of excusing reliability standards, perhaps in some cases compliance with FERC-approved reliability standards should excuse non-compliance with EPA regulations. As stated above, I can be "fuel neutral" but I cannot be "reliability neutral".

Question 9. *Please assess whether FERC has sufficient statutory authority to protect electric reliability in collaboration with other federal entities that are undertaking rulemakings.*

Answer: At this time, the Commission seems to have sufficient statutory authority to protect electric reliability against actions that might be taken by EPA --- given my assumption that EPA, if provided with accurate information, will take actions that appropriately balance the importance of reliable electric supply against its statutory obligations. To assist the EPA, this Commission already has authority to issue reports, hold conferences, and seek information from the public on the reliability impacts of contemplated EPA rules. In addition, this Commission can describe the reliability impacts of the actions contemplated by the EPA by making appropriate submissions in the various rulemakings that are in process at EPA.

My views are shaped by the complexity and cost associated with shutting down a power plant --- and my concern that EPA be able to accurately model that process as part of its decision making. If a power plant is retired with inadequate notice, electricity can become less affordable and less reliable. Before a power plant is retired, the operator of the transmission grid must consider how to provide reliable electricity without that plant as part of the network.

A numerical example shows how cost and reliability need to be considered when a power plant is retired. That is, the operator of the transmission network could determine that a power plant can be retired only after utilities invest $50 million into upgrading the transmission system. Since they are long-lived transmission assets, those $50 million in assets would be expected to be in-service for some fifty years, which means that they would cost customers roughly $1 million a year (ignoring interest and present value). But in the interim, the power plant owner would be entitled to recover its costs of remaining open even after it had decided to shut its plant down. That cost could be $50 million to customers for one year of service --- a cost that could have been avoided had the $50 million in transmission upgrades been in service. Thus, while the transmission upgrades

might only cost about $1 million each year for fifty years, the $50 million paid by consumers in one year to keep a plant open could make the retirement more costly than necessary. And this example doesn't even consider the cost of building a new power plant to replace the power that will be unavailable with the shut down.

In addition to this example, please see my concluding thoughts below, where I describe the recent plans to close certain generating units in the Philadelphia area that are known as Cromby and Eddystone.

Question 10. *Is FERC or any other agency, to your knowledge, soliciting or relying upon advice or assistance from any entity established pursuant to the Federal Advisory Committee Act?*

Answer: No, not to my knowledge.

Concluding Thoughts

I greatly appreciate your decision to send me these questions. Not only have you raised the visibility of this important issue, but your inquiry has prompted the Commission staff to better inform me on this topic.

- **The Critical and Complex Role of Reliability**

The recent and enduring heat wave that simultaneously impacted a large portion of the population of the United States underscores the essential and life-saving importance of electric reliability. With economic weakness and closed factories throughout the nation, you might have expected the available power plants to easily handle the heat wave. Yet the operators of the power grid relied on all of their available resources, including coal plants that are expected to be shut down because of EPA decisions, in order to ensure the reliability of the grid and the health and safety of the public.

My consistently expressed concern with EPA rulemakings has been the potential for a negative impact on reliability. I believe the system can absorb significant retirement of older coal-fired, oil-fired and natural gas-fired generation units. But it absolutely must be done in an orderly manner that does not impact our health and safety.

- **Timing of EPA Regulations and Utility Planning Horizons**

The timing of the EPA regulations does not conform to the relevant planning horizons in the electric sector of our economy, one of the most capital-intensive sectors of industry. Transmission lines and power plants are often planned over

a ten-year period, and in consideration of the long-lived nature of assets that are expected to be in service for more than forty years. Compounding this situation is the fact that the United States has several distinct wholesale markets for electricity, including different types of markets that are broadly categorized as bilateral markets (covering many western and southeastern states) and organized markets (including markets in Texas, California, and many Midwestern and eastern states).

The rules for these electricity markets are not standardized. For reliability purposes, this exacerbates the challenge of conforming to EPA rules. Each region has different standards for planning for new power plants and transmission lines, and different standards for retiring an existing power plant. Thus, EPA and Commission staff must ensure that their analysis of reliability impacts is applicable in all regions of the nation, not just one or two.

In addition, some of the organized markets hold auctions of electric capacity three years in advance of the time when such capacity is needed. These auctions are generally designed to ensure that adequate generating capacity will be built when it is needed three years in the future. Other markets are considering equivalent types of "forward" capacity markets for the same reasons. A three-year advance cycle of generation procurement does not align with the EPA rules, as bidders into these markets may not know whether they can submit bids for all of their power plants, or if some of their power plants will need to retire within the next three years because of EPA regulations.

Prior to the most recent heat waves this summer, several studies concluded that the nation has enough excess capacity to absorb the retirement of surplus power plants. We should all be able to agree that surplus power plants can be retired if the remaining power plants are located where they can replace the power that will no longer be available. But looking at this issue from the perspective of the minimum number of power plants that is absolutely necessary doesn't answer the question of where power plants must be located. An older coal plant in a specific location may not provide a lot of energy to the grid, but it may be in a location with access to transmission lines or where its voltage support is critical for reliability.

- **The Cromby-Eddystone Example**

I have often cited the retirement of two electricity generating plants in the area surrounding Philadelphia as an example of how EPA air rules could impact the reliability of specific pockets of electricity load. In December 2009, Exelon provided notice to PJM of its intent to deactivate the Cromby and Eddystone units --- four fossil-fired generating units located in Southeastern Pennsylvania, all of which had operated for more than fifty years. Cromby Unit No. 1 is a 144 MW coal-fired unit; Cromby Unit No. 2 is a 201 MW peaking unit that is fueled by

gas or oil. Eddystone No. 1 and No. 2 are both coal-fired units with a capacity of 279 MW and 309 MW, respectively.

Upon receipt of Exelon's notice, PJM conducted a deactivation study and determined that Cromby Unit No. 2 and Eddystone Unit No. 2 would be needed past their planned deactivation date to manage localized reliability issues pending completion of transmission system upgrades. Specifically, unless 18 identified transmission upgrades totaling $44 million were constructed and placed into service, the study revealed that the retirement of these generating units could have an adverse effect on reliability. Some of these upgrades were placed in-service earlier this year and the last of these upgrades are expected to be completed by June 2012.

As part of its obligation to ensure just and reasonable rates, the Commission conducted a proceeding that would determine the amount of compensation that would allow Exelon to recover its costs if it decided to keep the units operational. In that proceeding, Exelon explained that in 2009, the two generating units realized negative pre-tax cash flow of approximately $28 million when selling capacity, energy, and ancillary services at market rates. Exelon anticipated that future cash flows would be significantly negative because the units would require costly project investment to maintain their operability and because their dispatch would be limited due to environmental restrictions. Moreover, the generating units failed to clear in their regional capacity auctions, demonstrating that Exelon's costs to operate the units as capacity resources exceed the market price for capacity.

The proceeding settled prior to a formal hearing and the Commission ruled that the generating units could collectively charge customers about $82 million to continue operating before the transmission upgrades entered service.[2] The financial implications of at least this situation are clear: in order to retire these units, customers will pay at least $44 million for transmission upgrades, to be collected over the next forty to fifty years, and customers will also pay some $82 million to Exelon so that the power plants will be available for about a year, to be collected over the next year or so.

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[2] As provided in the settlement, Eddystone Unit No. 2 received a twelve-month contract term, and Cromby Unit No. 2 received a seven-month term. If the transmission upgrades do not enter service on the expected date, the settlement provides for Exelon with an opportunity for additional compensation. *See* application of Exelon Corp. in FERC Docket No. ER10-1418, and Commission orders issued on September 16, 2010 and May 27, 2011: *Exelon Generation Co., LLC,* 132 FERC ¶ 61,219 (2010) *and Exelon Generation Co., LLC,* 135 FERC ¶ 61,190 (2011).

- **Better Data on Unit Retirements Now Available**

The uncertainty over proposed EPA rules has already impacted capacity markets. As described briefly above, some capacity auctions are held three years in advance. In PJM, the most recent (2011) forward capacity auction for 2014/2015 revealed that an increasing amount of generation from coal-fired plants is at risk of retirement; as 14% less capacity from coal plants cleared the auction when compared to the 2010 auction. PJM predicts that this trend of coal-fired generation retirements will continue into 2012 for its 2015/2016 auction.

PJM's RTO-wide capacity price for 2014/2015 substantially increased by 354 percent from the prior year's auction results. Increased prices in the PJM-West region showed much less price separation than in prior years from the PJM-East region. The rise in PJM-West capacity prices reflects the fact that, due to economic weakness, there are now fewer transmission constraints and congestion on the grid, which in turn allows for more affordable power to flow from west to east.

- **Recommendations**

Not only do I suggest that you and your Committee continue to follow and examine this issue, I respectfully offer several recommendations.

In speaking with reliability experts, one consistent recommendation is that the EPA needs to be involved in regional market stakeholder meetings where system planning is undertaken. Only then can EPA fully appreciate the location-specific impacts of its actions. I have heard from our Office of Reliability that EPA has not been involved to date.

In addition, I believe the federal government needs to convene an open and transparent process to assess the reliability implications of the EPA rules individually and in aggregate. EPA seems a natural choice, given that their rules would be the topic of the process. The Commission may also be a natural choice, given our responsibility for electric reliability. Regardless of which part of government convenes this open and transparent process, I would recommend that the North American Electric Reliability Corporation (NERC) be a major participant in any such process. Given the time constraints imposed by the courts on EPA, perhaps this process should have been initiated long ago. In any event, the feasibility of any court-imposed timeline is, at a minimum, worthy of consideration by Congress.

My answers to your questions also contain several recommendations. In response to question 4, I said that the Commission should consider whether it should issue a report containing a formal Commission analysis of potential retirements on electric reliability. If the Commission decides against the issuance of an analysis, then at minimum, the Commission should direct its staff to use its

expertise to perform an analysis of the EPA's rules that could impact reliability of electricity --- and disclose that analysis for public comment --- and then hold a technical conference for public input.

And in response to question 5, I said that to the extent that measures to ensure reliability have not been devised by Commission staff, then the Commission should direct its staff to develop such plans and take such measures. Given the importance of electric reliability, such plans and measures should be developed in an open process with opportunity for input from the general public.

In response to question 6, I said that the Commission should consider whether it should direct its staff to issue a report to the Commission on the Clean Air Transport Rule.

- **Documents**

I am not providing documents responsive to this request at this time, as I will first have my personal staff review the documents that Commission staff is providing to you. If after that review I discover that I have additional documents in my possession that I believe are responsive, I will provide them to you.

- **Conclusion**

Finally, the impact of retiring power plants can be cushioned by making it easier to build the transmission lines that are needed to move power to customers. By building needed transmission, we can maintain the reliability of our nation's transmission network, while simultaneously improving consumer access to lower-cost power generation. Plus, a well-designed transmission network can allow efficient and cost-effective renewable resources to compete on an equal basis with traditional sources of power. I am always willing to express my thoughts on legislative changes that could ease the difficult process of building transmission.

I have no doubt that this nation is capable of retiring a substantial proportion of older and less efficient power plants that produce a disproportionate amount of air emissions. Nor do I doubt that power plants which emit too many pollutants should be eventually retired. But these retirements must be done in an orderly manner that does not threaten the reliability of electricity, which in turn affects our public health and safety.

Sincerely,

Philip D. Moeller