

Testimony of Chairman Jon Wellinghoff
Federal Energy Regulatory Commission
Before the House Subcommittee on Energy and Power
Of the Committee on Energy and Commerce
United States House of Representatives

September 14, 2011

Mr. Chairman, Ranking Member Rush, and members of the Subcommittee:

My name is Jon Wellinghoff, and I am the Chairman of the Federal Energy Regulatory Commission (FERC or Commission). With me are Commissioners Marc Spitzer, Phil Moeller, John Norris, and Cheryl LaFleur. I thank you for the opportunity to appear before you today to discuss our views on the planning processes used in this country by utilities and regional planning authorities to maintain a reliable electric grid and potential impacts of the Environmental Protection Agency's (EPA) new and proposed power sector regulations on electric reliability and those planning processes.

Electric reliability and environmental protection are both important to this country's future. The issues are related. For example, regulations that the EPA recently finalized or is now considering will affect the operation of some electric generation units. With sufficient information and time, the electric industry can plan to meet both its reliability and environmental obligations.

Most notably, existing planning authorities with developed modeling capabilities have or could obtain all the necessary data and tools to analyze the potential local and regional reliability impacts stemming from those EPA regulations. Indeed, planning

authorities such as the PJM Regional Transmission Organization are already taking steps in that direction. Given these capabilities, these planning authorities provide the appropriate forums for addressing any potential local and regional impacts of these EPA regulations on electric reliability. However, for planning authorities to conduct these analyses, they will need early notice of retirements to accurately identify and address reliability issues.

The Commission also has a role to play with respect to electric reliability. In general, the Commission has used its existing authority in the past to protect reliability. To this end, the Commission has overseen the establishment of mandatory and enforceable standards that protect the reliability of the Bulk-Power System. Looking forward, the Commission does and will, for example, review studies to determine the changes that occur due to changes in the mix and location of resources in a region, as well as planning-related proposals that account for implementation of these EPA regulations. The Commission also can and will share our staff's expertise with EPA when appropriate. Commission staff has had numerous consultations with EPA staff on issues related to these EPA regulations, including informal assessments that each has conducted.

I will discuss more fully below staff's informal assessment of generator retirements and the reasons why it is inadequate to use as a basis for decision making. More generally, however, it is important to recognize that, although the Commission is well-suited and able to perform its statutory duties, including those with respect to reliability, it does not possess either the data or the models necessary to replace the industry's individual and collective planning processes in addressing the potential local

and regional impacts of the EPA regulations on electric reliability.

Industry Can Plan to Meet its Reliability and Environmental Obligations

As I have said before, available data indicates that the electric industry has added significant amounts of generating capacity when circumstances warranted. As a point of reference, EIA data shows that between 2000 and 2004, an annual average of 38.74 GW of capacity was added nationally, with a peak addition of 58.06 GW in 2002. Similarly, the electric industry has the ability to plan for the EPA regulations, which will affect the operation of some electric generation units. In particular, existing planning authorities with developed modeling capabilities can analyze the potential local and regional reliability impacts stemming from these results.

A number of factors would need to be taken into consideration in such an analysis. One such factor is generator retirements. Some information related to generator retirements is largely publicly available. This information includes information such as which plants currently have SO₂ controls, the age of each generating plant, and whether the plant owner had already announced plans to retire the plant.

Much other information related to generator retirement is not publicly available. For example, detailed financial information regarding a generator unit owner's current status, access to capital, and the current market and contract positions of the facility would influence the generator's likely business plan. Additionally, the extent of an entity's financial commitments to affected units, the percentage of the entity's fleet that is impacted, and any other large scale projects or issues could affect decisions to retire or retrofit any given unit.

Further, detailed physical information would be needed to perform an adequate

determination about whether a specific generator is likely to retire or not. Documents such as site maps or facility diagrams would be necessary to determine the size of the site on which the generation is located, the ability of the site to accommodate new or additional equipment, site specific impediments to required equipment or construction, and the estimated cost of needed retrofits. Outage information, including the impact to the unit's availability or likelihood of equipment malfunction, also would be needed to perform an adequate assessment. Thus, generator retirements are business decisions that are based in large part on non-public, proprietary information and models that the Commission does not possess. Utilities have been hesitant to provide this type of proprietary information to FERC because of concerns that FERC could not prevent its further release under the Freedom of Information Act.

Analyzing the potential for generator retirement alone cannot provide a sufficient basis for an assessment of the local and regional reliability impacts of the proposed EPA regulations. The analysis would also need to evaluate whether the generator's retirement would cause a reliability concern. Any assessment would need to analyze detailed reliability information and study such information as the generator unit's necessity to the connecting network to meet all reliability standards. Such an analysis must include all anticipated conditions considering such items as alternative network configurations and maintenance outage schedules of other elements in the Bulk-Power System network. To perform these types of analyses, generator specific retirement or retrofit information would need to be available as well as all of the limiting criteria of the reconfigured system.

In addition, if the analysis showed that the retirement might cause a reliability

concern, a reliability assessment would need to evaluate whether there are alternatives that might be available to offset any generator retirement; for example, whether a retiring generating unit could be retrofitted with a gas burner or a new generator could replace the retiring generator. The assessment would also need to evaluate whether demand response or energy efficiency could replace the capacity lost by retiring generation. There could also be new or planned generation or transmission that could mitigate a reliability standards violation.

Existing planning authorities have developed modeling capabilities to analyze the potential local and regional reliability impacts of the proposed EPA regulations. They now have or could obtain all the necessary data to perform this analysis. These processes use specific entity and regional information such as the many different configurations of the network, the flexibility and profile of the load pockets, the limiting reliability criteria of the affected systems, local and regional plans to alleviate constraints, and the deliverability of alternative resources. By contrast, this information is not typically needed when the Commission reviews and enforces reliability standards under Section 215 of the Federal Power Act.

For these reasons, the existing planning authorities provide the appropriate forums for addressing any potential impact of these EPA regulations on electric reliability. As I noted earlier, for planning authorities to conduct these analyses, they will need early notice of retirements to accurately identify and address reliability issues.

The Commission's Role in Protecting Reliability

The Commission also has a role to play with respect to electric reliability. Under Section 215 of the Federal Power Act, the Commission's role and responsibilities in

ensuring the Bulk-Power System operates reliably is to establish and enforce electric Reliability Standards developed by the Electric Reliability Organization (ERO), which is the North American Electric Reliability Corporation (NERC). By law, Reliability Standards cannot include any requirement to enlarge Bulk-Power System facilities or to construct new transmission capacity or generation capacity. 16 U.S.C. § 824o(a)(3) (2006). Further, section 215(i) of the FPA states that section 215 “does not authorize the ERO or the Commission to order the construction of additional generation or transmission capacity or to set and enforce compliance with standards for adequacy or safety of electric facilities or services.”

In addition, the Commission has taken action pursuant to its ratemaking authority to require or allow utilities to operate when needed while meeting their environmental obligations.

Looking forward, the Commission does and will review studies to determine the changes that occur due to a change in the mix and location of resources in a region. The Commission also does and will review planning-related proposals that account for implementation of these proposed EPA regulations. The Commission also can and will share our staff’s expertise with EPA when appropriate.

The ability to fulfill these statutory responsibilities, however, does not mean that the Commission is equipped or staffed to perform a comprehensive resource analysis and plan that would assess and address the potential local and regional electric reliability impacts of the proposed EPA regulations. I do not believe that developing such capability at the Commission is an efficient use of government resources when, as discussed above, the electric industry through existing planning authorities can conduct

such analysis. I also note that FERC does not have the authority to require the construction or retirement of generation facilities.

Commission Staff Informal Assessment

As noted above, Commission staff conducted an informal assessment of generator retirements. That informal assessment must be viewed in light of the factors that would need to be considered to perform an adequate assessment of the potential local and regional reliability impacts of these EPA regulations. Although staff provided an adequate back-of-the envelope first assessment of the amount and location of potential generator retirements, that informal assessment cannot be relied upon to determine specific effects on system reliability. Therefore, it is inadequate to use as a basis for decision making.

Commission staff's informal assessment was based on information that was publicly available at the time it was conducted. For example, some generators had already announced that they would be retiring regardless of the outcome of the EPA regulations. However, as outlined above, much of the information necessary to perform an accurate assessment of generator retirements is not public.

Staff also had to make numerous assumptions in performing its informal assessment. First, staff's informal assessment was performed before all the regulations were proposed and finalized. Therefore, staff had to make assumptions regarding what the proposed EPA regulations might require. These rules have since changed during the EPA rulemaking process and may continue to change. For example, similar to other

national studies performed at the time, staff's informal assessment assumed that the steam generating units employing once-through cooling systems could be required to replace their cooling water systems with closed-loop cooling systems. However, EPA states that under its proposed rules, closed-loop cooling systems are not required of existing facilities and that "in meeting the impingement requirement that a limited number of fish be killed by a facility, the facility would determine which technology to employ to meet the impingement limit."

Second, staff had to make assumptions in evaluating the susceptibility of individual generators to the proposed EPA regulations. In performing the informal assessment, Commission staff chose certain factors to consider, such as what generators had SO₂ controls, age of the plant, and whether the plant owner had already announced plans to retire the plant. Commission staff then decided to weight each factor. As these inputs to the informal assessment have changed, projected outcomes would necessarily change.

Depending on the scenario that was evaluated, that informal, preliminary assessment produced varying results, ranging from 40 GW to 81 GW in estimated retirements. It is true that the first iteration of the results showed 81 GW as likely or very likely to retire. However, as time passed and Commission staff gained more knowledge about what EPA was proposing and included actual announced plant retirements, those numbers decreased.

Finally, staff's preliminary assessment only evaluated potential generator retirements, it did not evaluate the potential local or regional reliability impacts those retirements might have. It also did not evaluate any alternatives that might be available

to the regions to offset any generator loss such as new or planned generation or transmission, retrofits of coal-to-gas burners, demand-side resources, or energy efficiency strategies.

Conclusion

In conclusion, I believe that given enough information and time, the electric industry can plan to meet whatever EPA regulations become final. While the Commission has an important role to play in protecting electric reliability, it does not have the data and models necessary to replace the industry's individual and collective planning processes. Industry, using existing planning authorities that have already developed modeling capabilities, have or could get all the necessary data for such analysis. These planning authorities are already taking steps to account for implementation of these EPA regulations. Therefore, these planning authorities provide the appropriate forums for addressing any potential impact of the proposed EPA regulations.