

WHITE PAPER ON RECENT DEPARTMENT OF ENERGY REPORT ON RELIABILITY AND EPA POWER-SECTOR RULES

By Scott Segal, director, Electric Reliability Coordinating Council – December 1, 2011

We understand that the Department of Energy (DOE) and the US Environmental Protection Agency (EPA) had a teleconference today to discuss reliability of the electric grid in the context of pending EPA regulations. DOE's new review limited itself only to resource adequacy, which DOE admits is just one component of reliability assessment. Issues of regarding retirements, transmission, black start, ancillary services, and other topics. Indeed, Commissioner Phil Moeller of the FERC identified some 22 areas of inquiry necessary to assess reliability, most of which the DOE does not address. See <http://www.ferc.gov/EventCalendar/Files/20111114160120-Moeller-11-14-11.pdf>

Here are some additional points to consider:

1. Traditionally, the DOE has made it very clear in substantial reports that the utility sector will face significant challenges to electric reliability over the next 15 years and that the cumulative effect of EPA regulations will make it hard to maintain reliability. See below for quotes and citations.
2. It was recommended that DOE engage all stakeholder in an open and robust process to determine the effects of EPA rules on reliability. They have not met the recommendations of their own Electricity Advisory Committee in carefully evaluating reliability impacts. See below for quotes and citations.
3. DOE admits that grid operators, states and power providers hold the best information on reliability from a comprehensive viewpoint. NERC's recent report cautions the EPA to consider the "time and scope of regulation" and to take into account effects "on bulk power system reliability." Concern with reliability also is widely shared by some 27 states as reflected in briefs filed in the deadline case regarding Utility MACT, letters from governors, and rulemaking comments filed by public service commissioners and other state officials. For example, attorneys general representing half the states noted that Utility MACT "has the potential to undermine significantly the reliability of our Nation's electrical supply and significantly increase the cost of electricity to the consumer." *Amer. Nurses Ass'n v. Jackson*, Civ. No. 1:08-CV-02198-RMC.
4. Of particular interest are the views of state public utility commissions – the frontline for reliability concerns – around the nation. The Pennsylvania Public Utility Commission found that the rule "could lead to expensive upgrades at greater cost to ratepayers or premature retirement of fossil units which could compromise system reliability." The Public Utilities Commission of Ohio wrote to EPA that, "The current and foreseeable economic environment indicates that Ohio's ratepayers will be hard-pressed to absorb rate-shock due to the implementation schedule advanced in the proposed rule." The Public Utility Commission of Texas found that if the rule had been in effect, "Texans would have experienced rolling outages and the risk of massive load curtailment" during the warm summer months. The Alabama Public Service Commission found that that "compliance obligations and timeline associated with the proposed rule will threaten the

reliability of the electric supply in Alabama with similar consequences resulting at the national level as well.”

5. Last, we are concerned with the frequent reference to use of emergency authorities to address potential reliability concerns. Reliance on emergency authorities fails to take into account the continued disagreements between EPA and the U.S. Department of Energy regarding whether or not emergency orders actually forestall Agency enforcement actions. The experience of Gen-On in this situation was also presented in testimony to FERC today at [http://www.ferc.gov/EventCalendar/Files/20111128081929-Raggio,%20GenOn%20Presentation%20\(Part%201\).pdf](http://www.ferc.gov/EventCalendar/Files/20111128081929-Raggio,%20GenOn%20Presentation%20(Part%201).pdf) and at [http://www.ferc.gov/EventCalendar/Files/20111128082217-Raggio,%20GenOn%20Presentation%20\(Part%202\).pdf](http://www.ferc.gov/EventCalendar/Files/20111128082217-Raggio,%20GenOn%20Presentation%20(Part%202).pdf) In any event, it is far better to address reliability concerns by ensuring proper timing and scope at the outset, rather than waiting for problems to materialize and hoping that emergency authorities will be sufficient.

MATERIALS REFERRED TO ABOVE

Past DOE Statements on Reliability in the Context of EPA Rules

DOE is already on record establishing just how challenging it is to maintain and build upon electric reliability in the United States. In October 2008, DOE’s Office of Electricity Delivery and Energy Reliability released a report looking at the reliability impacts of certain EPA rules. Here are some of those key findings. See www.netl.doe.gov/energy-analyses/pubs/Cooling_Tower_Report.pdf

A. DOE has found that the next 15 years will see significant threats to reserve margin.

“The U.S. electricity industry faces major challenges during the next 15 years to keep adequate reserve capacity margins of electricity generation available to meet peak demand growth, even if that peak demand growth is dampened by initiatives focused on demand-response, improved technology, and energy efficiency.” p.15.

B. Planners have to take into account pipeline and transmission challenges.

“Finally, a primary goal for electricity planners must include a continuation of providing reliable electricity to meet demand with an adequate reserve margin. Increasing reliance on just one or two new generation sources, such as natural gas and wind, will require careful planning to ensure that enough new pipeline and transmission facilities are completed in a timely manner.” p.16

C. National reliability assessments are not as relevant as particular regional impacts.

“The U.S. does not have a national electricity grid, but rather a series of large regional power grids. The amount of reduced generation capacity and its impact on regional reliability would vary from region to region... The overall impact of the decreased capacity margin could result in impaired reliability during critical periods (peak summer demand) in these already at-risk regions.” p.33.

D. Coal retirements will be significant when air and cooling tower regs are considered cumulatively.

“...it is clear that a significant number of base-load coal generation facilities will not be economic under the burden of the cumulative capital and operational costs of complying with new air emissions limitations in addition to the capital costs and energy penalties caused by a cooling tower mandate.” pp.33-34.

DOE Didn't Follow Recommendations in Assessing Reliability

We are concerned that DOE has not fully met the challenge of ensuring reliability threats are addressed as EPA seeks to finalize its power-sector rules. In March 2011, the DOE Electricity Advisory Committee (EAC) sent recommendations to Sec. Chu and to Asst. Sec. Hoffman stating that DOE should “act in concert” with FERC, NERC, EPA and state regulatory authorities “to ensure that the reliability of the nation’s power system will be maintained” as EPA regulations are developed and implemented. See http://energy.gov/sites/prod/files/oeprod/DocumentsandMedia/EAC_Memorandum_to_Secretary_Chu_and_Assistant_Secretary_Hoffman_3-11-11.pdf

The EAC also called upon DOE to “create a consultative process with EPA and FERC at the senior level in which the three agencies commit to communicate on these issues, while recognizing existing authorities of each agency.”

There is little evidence that the EAC recommendations have been followed. The FERC Technical Conference (at which Sec. Hoffman spoke today) is taking place so late in the game that it is not clear that any findings can be incorporated in the rule, which is already over at OMB for review. And yet, this appears to be the first cross-agency public conference that has addressed reliability. Further, as FERC staff stated to Senator Murkowski in August 2011, there has been no formal consultation between EPA and FERC on reliability. The majority of transmission organizations, grid operators, states, and formal reports that populate the EPA docket challenge EPA’s assumptions and raise serious concerns about reliability.

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