

# ELCON REPORT

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**The Electricity Consumers Resource Council (ELCON) is the national association of large industrial electricity consumers. Issues addressed in this issue of the ELCON Report include:**

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## **NEW BES DEFINITION LEAVES UNANSWERED QUESTIONS**

**Although FERC has approved the new definition of the Bulk Electric System**

**(BES) drafted by the North American Electric Reliability Corporation (NERC), the question of how the new definition will be used by NERC in enforcing reliability standards – and what its impact will be on many industrial facilities – remains largely unanswered.**



**Michael Bardee, the director of FERC's Office of Electric Reliability who in essence will be FERC's point person in the implementation process, spoke at ELCON's Spring Seminar and outlined how**



**FERC's Michael Bardee he saw the issue. He emphasized that being identified as part of the BES does not necessarily place a facility on NERC's Compliance Registry. The new BES, he explained, "identifies candidates for the Compliance Registry." The crucial determinant to being placed on the Registry, he emphasized, is each**

facility's potential impact on grid reliability.

**“The facts of the case and the facts of electrical topography really do matter,” he stated. He did not anticipate a quick resolution of the issue. Noting that there will probably be lots of cases to analyze, he said “it will take us some time to work through them, especially the messy ones.”**

**Tom Burgess, who serves as NERC's Vice President and Director of Reliability Assessment and Performance Analysis, discussed why a new definition of the BES was necessary. He said that compliance with NERC standards used to differ significantly in each of NERC's Regional Entities. “We need to reconcile this,” he asserted, in order to eliminate “regional discretion.” But when NERC's President, Gerry Cauley spoke later, he added a note of caution. “There is no hard line,” he said. “Every company is different.”**

**NERC's objectives is to set thresholds for inclusion in the BES and NERC wants to “find thresholds that make some sense.” He did not foresee a lot of changes in downstream registration.**

**NERC is also striving to make its auditing more uniform and more efficient. According to Jerry Hedrick, NERC's associate director of compliance operations and regional entity oversight, NERC has taken what used to be eight Regional Implementation Plans – several of them quite lengthy, according to Hedrick – and merged them into one Plan which is only eight pages long. Hedrick emphasized that compliance was NERC's prime objective. He pledged that the auditing process would contain “no surprises” and he**

**likened it to an “open book test.” Controls, he said, “do not equal compliance.”**

## **SUPPLY ISSUES ARE ALWAYS IMPORTANT**

**In FERC Commissioner Tony Clark's view, the Commission's primary focus has to be on resource adequacy. He wants to be sure that there is enough supply, especially given the anticipated retirement of numerous coal and nuclear generation facilities. In his comments to ELCON's Spring Workshop, he also posed the question of whether enough power would be available if the U.S. should experience an industrial renaissance.**



**FERC Commissioner Tony Clark who spoke at the ELCON Members-Only Workshop**

**In order to ensure an adequate supply, Michael Hogan of the Regulatory Assistance Project urged that “the system be more flexible.” He cautioned that “a lot of gas-fired generation is not as firm as we think it is” and predicted that demand response would increase “as the value of resource flexibility gains.” Capacity markets, he believes “will decline in importance” as more resources become available.**

**Clark and Hogan agreed that resource adequacy is no longer simply a summertime issue. With events of this past winter's polar vortex fresh in everybody's mind, Clark observed that we "need to be just as concerned with winter peaks" as the peaks historically found in the summer months.**

**An added concern about adequate supply is the impact of a spate of environmental regulations. Eric Holdsworth, director of climate programs for the Edison Electric Institute (EEI), voiced the utilities' fears about future environmental mandates. He said that EEI (which represents the investor-owned utilities) projects a 30 percent growth in energy demand over the next 30 years. This will require new generation facilities, new transmission lines, and expanded distribution systems. But he saw a number of regulations from the Environmental Protection Agency – including those on water, air, waste and land use – as constraining the ability of the utility industry to meet predicted demand. He was especially concerned about the New Source Performance Standards (NSPS) for existing and new facilities (pursuant to sections 111(d) and 111(b) of the Clean Air Act respectively). He foresaw no new coal plants constructed for generation, because the mandated emission levels require coal capture and storage (CCS) technologies that are not readily available. And, for existing facilities, he stated that emission requirements would force numerous retirements and retrofits. All of which, he concluded, meant high compliance costs for utilities and higher costs for consumers.**

**The "111(d) rule" for existing power plants, which EPA released in early June, will require a 30 percent cut in**

**carbon emissions from 2005 levels by 2030. Since roughly 600 coal plants will be affected, EPA expects an overwhelming number of comments from affected stakeholders and hopes to put out a final rule in 2015. Each state will have its own mandated carbon reduction and will have one to three years to submit a final plan.**

**The actual impact on both power plants and electricity consumers is uncertain, but according to ELCON President John Anderson "is sure to be significant for generating facilities and, by extension, electricity end users." ELCON's Technical Vice President, John Hughes, will be preparing a detailed analysis for ELCON members.**

**Energy efficiency enthusiasts paint a less gloomy picture. For example, Steven Nadel, executive director of the American Council for an Energy-Efficient Economy (ACEEE), pointed out that that 3.7 percent of total electricity sales can be saved through energy efficiency (EE). He suggested that when states need to address reduced emissions from existing power plants pursuant to section 111(d), "EE can be part of the state plan," adding that it would (1) be less expensive than new power plants, (2) reduce emissions, and (3) reduce compliance costs, because no new scrubbers would be necessary.**



**ACEEE's Steven Nadel**



ICF's Steve Fine

**Steve Fine of the consulting firm ICF outlined why a cap-and-trade approach to reducing emissions could have a negative impact on supply. He stated that**

**setting the emissions cap is especially difficult, because forecasting baselines is “most complicated.” In particular, he noted that load growth, fuel price and economic activity each contribute to demand, calling for multiple projections.**

## **GRID RELIABILITY – WHAT ARE WE ACTUALLY SEEKING?**

**Michael Hogan, senior advisor for the Regulator Assistance Program, summed up the reliability quandary quite simply.**

**“How much reliability do we want?” he asked, “and how much reliability will we pay for?”**

**Reliability has become a front burner issue of late due to belated press coverage of the attack (by gunfire) on the Metcalf substation in California in April 2013. Mike Smith from the Department of Energy said his office had been working on reducing “cyber risks to critical infrastructure” but, post-Metcalf, has now started a Physical Security Awareness Campaign to help utilities guard against physical attacks.**

**The responsibility for grid reliability, of course, falls to the North American Electric Reliability Corporation (NERC) which is authorized by FERC to be the Electric Reliability**

**Organization (ERO) designated in the Energy Policy Act of 2005. Janice Case, a member of NERC’s Board of Trustees, and Gerry Cauley, NERC’s president and CEO, both addressed the reliability issue at ELCON’s Spring Workshop. Case, who spent over 25 years with Florida Power/Florida Progress, described NERC’s Board as “very independent” and prone to get “into the weeds.” Her primary objective in serving on the board is to ensure that “enforcement is commensurate with risk” and she mentioned FERC’s Reliability Assurance Initiative (RAI) as an important step toward achieving that.**



Janice Case

**Cauley also discussed risk-based standards, adding that he has learned in his tenure at NERC that “you can’t do everything” and it is important to show that proposed standards are focused on where there is some reliability impact. NERC needs to be “more efficient,” he said, and “fix big reliability issues.”**



Gerry Cauley

**The NERC president also addressed the issue of whether increased use of renewable fuels could affect grid reliability. He stated that renewables reaching 20-25 percent of generation would cause “no threat to reliability,” citing the “laws of physics.”**

**Grid reliability can also be addressed by each “organized” wholesale market. One way to assist in maintaining grid reliability is coordination between ISOs. Joe Gardner and Stu Bresler, from MISO and PJM respectively, outlined the Joint Operating Agreement the two ISOs have used since 2004, allowing some transactions to take place across the “seam” that divides them. Bresler pointed out that the “focus is on real-time energy markets” which Gardner asserted “helps promote reliability.”**

## **ANDERSON: REGARDING NERC – STAY INFORMED**

**As the North American Electric Reliability Corporation (NERC) works to implement its new definition of the Bulk Electric System, or BES (see related article), ELCON President John Anderson warned industrial users “to stay informed” about what NERC is doing because, as he put it, “industrial electricity consumers should be concerned.”**

**Speaking to a meeting of the American Fuel and Petrochemical Manufacturers (AFPM), Anderson, who was recently elected chairman of NERC’s Member Relations Committee, described how NERC is comprised of eight “Regional Entities” whose boundaries do not correspond with ISOs and RTOs or any other geographic lines. These “REs” make the actual determinations as to which facilities are on NERC’s Compliance Registry and are therefore subject to NERC’s reliability standards. To date there have been significant differences in how each RE determines which facilities are included on the Registry.**

**Anderson said that in 2010 FERC directed NERC, in Order 743, to re-define the BES using a “bright line” threshold. Given the requirements first approved – all facilities operating at greater than 100 kV and all generators over 20 MW – Anderson believes that “many more industrial facilities would be subject to the ‘Compliance Registry.’”**

**And, as Anderson told the AFPM, which includes most of the refineries in the United States, “once a facility is placed on the registry, you will REALLY care about NERC.”**

**Although the bright line test has procedures for exclusions and inclusions, there is fear among many industrial users that many additional facilities (especially, but not limited to, those with inside-the-fence generation) will be affected. In response to concerns voiced by ELCON and others, FERC postponed implementation of the BES which will now take effect on July 1, 2014.**

**The ultimate impact is unclear. But as Anderson put it, “nearly all ‘bright line’ requirements bring unintended consequences,” and he expects “many” in this case.**

## **ELCON WORKING ON GRID SECURITY**

**For several years now, ELCON has been working with other major electricity industry stakeholders (public and private utilities, merchant generators, regulators, the organized markets and others) on the issue of grid security.**

**The alliance has meet with FERC, congressional staff, and Administration officials to ensure that**

there is a uniform, workable mechanism to protect the grid from cyber and physical threats.

“We believe that protecting the grid is a nonpartisan issue,” said Marc Yacker, ELCON’s vice president for government and public affairs, who has been the primary ELCON participant on the issue. “The first step is to ensure that public sector and private sector parties share information on what they know and what they should be doing. We recognize that 100 percent protection is not achievable, but we want as much protection as possible at a cost that is not outrageous. Any regulations should be risk-based and cover facilities with the greatest vulnerabilities and the greatest potential impact on total grid reliability. And we need to take advantage of existing expertise in government and in industry.”

## **ELCON JOINS DEMAND RESPONSE COALITION**

ELCON has recently joined the Advanced Energy Management Alliance (AEMA), a coalition created to advocate for Demand Response from the non-utility perspective.

The coalition is comprised of Demand Response aggregators, technology companies, and industrial and commercial end users. It will focus its efforts on the organized markets, as well as at the state and federal levels, when appropriate.

Marc Yacker, ELCON’s vice president for government and public affairs who is ELCON’s primary participant in AEMA, explained that “there are other so-called Demand Response organizations and coalitions, but they

are almost all driven by utilities and generators. The AEMA has a different focus. We want to be sure that FERC’s Order 745, which ELCON worked for over many years, is implemented the way FERC intended. The support for Order 745 is quite broad and the legal basis is sound. We have make sure that position is advocated in a coordinated fashion.”

AEMA is coordinating private sector efforts regarding the appeal of the DC Circuit Court’s recent ruling basically invalidating FERC Order 745. Many of AEMA’s members are party to the case and have standing to seek an appeal. In fact, ELCON was part of the AEMA contingent that met with three of the four FERC Commissioners, urging that FERC seek an *en banc* rehearing or some action. Shortly thereafter, Acting Chair Cheryl LaFleur announced that the Commission would, indeed, ask the circuit court to rehear the case.

Many fear that if the Court decision is not overturned – or if FERC later revisits the Demand Response issue and does not support the same compensation formula – Demand Response programs will result in lower prices for participants. That would likely result in less Demand Response at the same time that EPA’s recently “111(d) rule” for existing power plants relies heavily on increased demand side activity in wholesale markets, including Demand Response. Yacker warned that if reduced Demand Response is the end result, “many experts believe there could be a distinct impact on grid reliability.”



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