

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Smart Grid Policy

Docket No. PL09-4-000

**COMMENTS OF THE
ELECTRICITY CONSUMERS RESOURCE COUNCIL
("ELCON")**

The Electricity Consumers Resource Council ("ELCON") offers the following comments on FERC's March 19, 2009 Proposed Policy Statement and Action Plan (the "Proposed Policy Statement") on the development of a national Smart Grid.¹ ELCON supports FERC's efforts to promote development and, ultimately, implementation of Smart Grid technologies, which among other benefits can serve to enhance opportunities for demand response. However, one key component of the Proposed Policy Statement – the proposed Interim Rate Policy that would give special incentive and expedited rate treatment for Smart Grid investments – is premature and ill advised. FERC should wait until the major cybersecurity, connectivity and other technical hurdles to Smart Grid deployment have been resolved and final standards have been implemented before it applies full throttle to Smart Grid investments.

DESCRIPTION OF ELCON

ELCON is an association of industrial consumers of electricity organized to promote the development of coordinated and rational federal and state policies that will assure an adequate, reliable, and efficient electricity supply for all users at competitive rates. ELCON member companies produce a wide range of products from virtually every segment of the manufacturing

¹ 74 Fed. Reg. 13,152 (Mar. 27, 2009).

community. ELCON supports the general objectives of Smart Grid interoperability and the complementary need to upgrade, expand and modernize the bulk-power system in a cost-effective manner.

SUMMARY

ELCON encourages the development and implementation of Smart Grid technologies and welcomes the increased opportunities for demand response that the Smart Grid will provide. Still, at this early juncture in the development of Smart Grid technologies, it would be premature to establish special incentives for Smart Grid investments before the substantial and complex technical issues outstanding have been resolved, and comprehensive unified standards have been developed. ELCON recommends a measured approach to Smart Grid deployment that will give the relevant agencies and standard setting organizations time to overcome these major technical issues – especially those relating to cyber-security and connectivity. Once these technical issues have been resolved and standards have been developed, FERC should take the time necessary to carefully weigh the potential costs and benefits of any proposed Smart Grid investments.

ELCON is concerned that the proposed Interim Rate Policy, if unmodified, could result in wasted investments and, therefore, in higher rates for consumers without sufficient offsetting benefits. Single-issue ratemaking is disfavored under FERC practice absent exceptional circumstances and, experience shows, presents an undue risk for abuse and manipulation. Simply put, FERC has not demonstrated why it is necessary to abandon standard ratemaking criteria and procedures before the substantial issues associated with Smart Grid technologies have been resolved.

COMMENTS

I. ELCON SUPPORTS THE PROPOSED POLICY STATEMENT’S GOAL OF RESOLVING THE CHALLENGES OF SMART GRID IMPLEMENTATION

ELCON supports much of the Proposed Policy Statement – in particular FERC’s efforts to promote the development and implementation of Smart Grid technologies. Under the Energy Independence and Security Act of 2007 (“EISA”),² FERC has a considerable role to play in the development of policies and standards relevant to Smart Grid technologies. The sections of the Proposed Policy Statement on “Urgency of Achieving Certain Smart Grid Functionalities” and “Development of Key Interoperability Standards”³ together represent a sound first step.

A. Smart Grid Technology Has Considerable Potential, Particularly in Relation to Demand Response

Smart Grid technologies have considerable potential to improve the efficiency of the grid and to promote demand response. Enhancing demand response is a key objective of the EISA, which identifies the “[d]evelopment and incorporation of demand response, demand-side resources, and energy-efficiency resources” as important components of the Smart Grid.⁴ Of particular relevance to the Proposed Policy Statement, the EISA provides that the Smart Grid Interoperability Framework that is to be developed under the auspices of the National Institute of Standards and Technology (“NIST”) must “enable all electric resources, including demand-side resources, to contribute to an efficient, reliable electricity network.”⁵

² Energy Independence and Security Act of 2007, Pub. L. No. 110- 140, 121 Stat. 1492 (2007).

³ See Proposed Policy Statement §§ II.A., II.B.

⁴ EISA § 1301(4).

⁵ EISA § 1305(a) (emphasis added).

The Proposed Policy Statement properly identifies “encouraging increased reliance on demand response” as a key Smart Grid objective⁶ and correctly observes that “Smart Grid enabled demand response is a priority because of its potential to help address several of the bulk power system challenges”⁷ ELCON agrees that demand response is an important topic to be addressed in the development of Smart Grid policy. ELCON has long promoted the development of demand response as an accessible, efficient, reliable and energy-friendly resource.⁸ Demand response capabilities of many industrial loads can often provide grid operators with greater value compared to the typical generator, and demand response warrants fair compensation, taking into account the compensation given to generation and other system resources. Because Smart Grid technologies are projected to make access to demand easier and more economical, there are important synergies between Smart Grid technologies and demand response that offer the potential to significantly expand the utilization of demand response.⁹

Expedited development of Smart Grid standards, therefore, can assist in achieving the benefits of demand response that FERC has recognized such as: reduction of wholesale prices and wholesale price volatility; flattening of a area’s load profile and thereby shifting the distribution of generator types toward lower-cost base load generation; and reducing generator

⁶ Proposed Policy Statement ¶ 12.

⁷ Proposed Policy Statement ¶ 37.

⁸ *See, e.g.* Comments of the Electricity Consumers Resource Council, et al., Docket RM07-19-000 and AD07-7-000 (April 21, 2008); ELCON Presentation at FERC Technical Conference on Demand Response and Advanced Metering (January 25, 2006); ELCON Presentation at FERC Conference on Competition in Wholesale Markets, (May 8, 2007).

⁹ *See, e.g.*, Kenneth R. Nahigian, The Smart Alternative: Securing and Strengthening Our Nation’s Vulnerable Electric Grid 11, (June 30, 2008), http://www.reforminstitute.org/uploads/publications/Smart_Grid_Final.pdf; Patrick Mazza, Powering Up the Smart Grid 8 (July 2005), <http://www.climatesolutions.org/solutions/reports/powering-up-the-smart-grid-a-northwest-initiative-for-job-creation-energy-security-and-clean-affordable-electricity/PoweringUpTheSmartGrid.pdf>.

market power.¹⁰ ELCON encourages FERC to promote Smart Grid standards that recognize the unique issues raised by demand response thus furthering the expansion of this valuable resource.

B. The Proposed Policy Statement Properly Emphasizes Cybersecurity and Other Hurdles to Smart Grid Implementation

Notwithstanding the anticipated benefits of Smart Grid implementation, the nascent state of the technology presents considerable challenges that must be overcome before the Smart Grid is ready for prime time. Cybersecurity is a particularly significant concern. Recognizing the centrality of this issue, the EISA requires the Department of Energy to produce a study, due in mid 2009, that will address among other things “[w]hat risks must be taken into account that smart grid systems may, if not carefully treated and managed, create vulnerability to security threats of any sort, and how such risks may be mitigated.”¹¹

ELCON appreciates that the Proposed Policy Statement highlights “the need for full cybersecurity for Smart Grid projects . . . ,”¹² that it would “make consistency with cybersecurity and reliability standards a precondition to its adoption of Smart Grid standards,”¹³ and that it would advise NIST “to take the necessary steps to assure that its process for the development of any interoperability standards and protocols leaves no gaps in cyber or physical security unfilled.”¹⁴ ELCON further agrees with the Proposed Policy Statement that Smart Grid technologies must address, among other considerations, “the authentication of communications,”

¹⁰ Advance Notice of Proposed Rulemaking, Docket No. RM07-18, at ¶¶ 36-39. *See also* FERC Staff Report, Assessment of Demand Response and Advance Metering, Docket No. AD06-2-000 (Aug. 2006); Department of Energy, Benefits of Demand Response in Electricity Markets and Recommendations for Achieving Them” (Feb. 2006).

¹¹ EISA § 1309(a)(4).

¹² Proposed Policy Statement ¶ 2.

¹³ Proposed Policy Statement ¶ 14.

¹⁴ Proposed Policy Statement ¶ 15.

“the physical protection of Smart Grid devices,” and “the potential impact of unauthorized use of these Smart Grid devices on the bulk-power system.”¹⁵

As FERC continues to develop standards and take other actions relating to Smart Grid technologies, ELCON encourages a continued focus on cybersecurity, with particular attention to the potential for collateral damage to industrial facilities resulting from threats targeted at critical energy infrastructure associated with the Smart Grid. Since the promulgation of the EISA and the issuance of the Proposed Policy Statement, there have been additional reports of cybersecurity threats to the electrical grid.¹⁶ Issues of cybersecurity and integrity of communications are particularly crucial for demand response providers, which may be more at risk than other stakeholders in the Smart Grid. Industrials must have complete assurance that their demand response is not dispatchable absent authorization by the demand response provider. Likewise, dispatch of on-site generation by industrials, such as cogeneration facilities, also must be protected from cyber attacks.

ELCON applauds FERC’s efforts through the Proposed Policy Statement to expedite resolution of these critical technical and policy issues, which are essential prerequisites to widespread investment in Smart Grid technologies.

C. FERC Smart Grid Policy and Standards Should Reflect the Purpose of the Grid to Serve Customers

FERC’s Smart Grid Policy and Standards should uniformly recognize the ultimate goal of the grid – reliable and cost-effective service for end-use customers. This point encompasses industrial customers – the Smart Grid should serve and enhance the commercial interests of

¹⁵ Proposed Policy Statement ¶ 30.

¹⁶ See, e.g., “Electricity Grid in U.S. Penetrated by Spies,” The Wall Street Journal (April 8, 2009).

industrial customers, and not force industrial customers to change their behavior for the convenience of suppliers and grid operators.

Accordingly, FERC should add language to the Policy Statement stating explicitly that Smart Grid implementation will be carried out in manner that complies with the traditional principles of a least-cost portfolio of resources and maintenance of reliability for customers. The standard-setting process should focus on development of workable and risk-free interfaces between customer facility systems and the grid systems, while managing fair cost recovery based on value to the customers. An important part of this effort, as noted above, is the reduction of technical and economic barriers to universally-deployable demand response capability. However, industrial customers must not be expected to make uncompensated commercial sacrifices to enable the integration of inherently intermittent and variable resources in to the grid. Likewise, industrial customers should not be expected to bear the costs of Smart Grid technologies until they can be assured that those technologies will result in more cost effective service and greater reliability. Smart Grid standards and policies that reflect these issues will facilitate a Smart Grid that ultimately achieves its promise of leading a grid that services its customers more effectively and efficiently.

II. THE PROPOSED INTERIM RATE POLICY IS UNJUSTIFIED AND UNNECESSARY

Section II.C. of the Proposed Policy Statement, entitled “Interim Rate Policy: Guidance for Smart-Grid Related Filings by Jurisdictional Entities” (the “Proposed Interim Rate Policy”), would allow utilities to seek rate recovery by means of expedited single-issue ratemaking and special rate incentives such as stranded cost recovery and accelerated depreciation. Simply put,

these extraordinary concessions to Smart Grid investments, before the technical hurdles have been resolved and the needed standards have been finalized, would put the cart before the horse.

There is an utter disconnect between the initial sections of the Proposed Policy Statement, which identifies potential cybersecurity security risks and emphasizes the many technical obstacles that must be overcome before Smart Grid technologies will be viable, and the Proposed Interim Rate Policy, which supports expedited investment in the same undeveloped technology. Indeed the Commission's stated concerns in relation to cyber-security and interoperability suggest that discretion is the better part of valor at this early stage of Smart Grid development. For all that, the Commission has not articulated a clear explanation as to why it is necessary or reasonable to deviate from its longstanding presumption in favor of standard ratemaking procedures. Nor has the Commission explained why it is necessary to invest heavily in technologies that are still under development and that lack unified standards.

Moreover, the Proposed Interim Rate Policy conflicts with the EISA, which properly contemplates a staged approach to laying the groundwork for Smart Grid investments: first, interoperability standards are to be developed under the auspices of NIST; and then, only after "the Institute's work has led to sufficient consensus in the Commission's judgment" is the Commission to "institute a rulemaking proceeding to adopt such standards and protocols as may be necessary to insure [sic] smart-grid functionality and interoperability in interstate transmission of electric power, and regional and wholesale electricity markets."¹⁷ Nothing in the EISA authorizes or promotes expedited interim rate treatment for Smart Grid investments or makes any change to the ratemaking criteria under Section 205 of the Federal Power Act. In fact, Commissioner Kelly recently testified that additional legislation would be necessary if Congress

¹⁷ EISA Sec. 1305(d).

wishes FERC to promote smart grid technology beyond its current Federal Power Act authorities.¹⁸

A. *Single-Issue Ratemaking is Unnecessary and Counter to FERC Practice*

FERC has a longstanding policy – supported by judicial interpretations of Section 205 of the FPA – against the use of “single-issue” or “spot adjustment” ratemaking absent extraordinary circumstances.¹⁹ This policy is rooted in a practical understanding of the difficulties inherent in ratemaking, particularly the difficulties inherent in accurately predicting future costs, and the risk that procedural shortcuts risk unjust and unreasonable rates. Standard ratemaking has the virtues of encouraging a broad view of a utility’s investments and taking into account the aggregated costs of many different investments²⁰ as well as any offsetting benefits such as improved efficiency, cost savings and enhanced revenues.

In the past, FERC has only chosen to deviate from standard ratemaking when extraordinary circumstances render that approach inappropriate. Here, by contrast, the Proposed Policy Statement identifies two reasons for allowing single-issue ratemaking, neither of which

¹⁸ Testimony of Commissioner Suedeem G. Kelly before the Committee on Energy and Natural Resources, United States Senate, March 3, 2009, <http://www.ferc.gov/EventCalendar/Files/20090303121917-09-03-03-testimony.pdf>.

¹⁹ See *Southwestern Pub. Serv. Co. v. FERC*, 952 F.2d 555 (D.C. Cir.1992); *Car. Power & Light Co. v. FERC*, 860 F.2d 1097 (D.C. Cir. 1988); *City of Westerville v. Columbus S. Power Co.*, 111 FERC ¶ 61,307, P 18 (2005); *Am. Elec. Power Serv. Corp.*, 111 FERC ¶ 61,305, P 15 (2005); *Williston Basin Interstate Pipeline Company*, 87 FERC ¶ 61,265 at 61,021 n.33 (1999); *Delmarva Power & Light Co.*, Opinion No. 262, 38 FERC ¶ 61,098 at 61,259 (1987), reh’g denied, Opinion No. 262-A, 43 FERC ¶ 61,520 (1988), aff’d mem.No. 88-1557 (D.C. Cir. 1989); *Public Service Company of Indiana*, 7 FERC ¶ 61,319 at 61,702, reh’g denied, 8 FERC ¶ 61,224 (1979); *Union Electric*, 47 FPC 144, 150 (1972).

²⁰ In *Carolina Power and Light v. FERC*, 860 F.2d 1097 (D.C. Cir. 1988), the D.C. Circuit discussed this rationale, stating:

[T]he Commission’s refusal to make a “spot adjustment” to established rates on the basis of discrete changes in one component of a utility’s costs appears rooted in two notions. First, the Commission appears to believe that wholesale rates should ordinarily be adjusted only upon a comprehensive review of cost-of-service data. Implicit in this view is the assumption that overstated estimates of a utility’s expenses are almost always accompanied by offsetting underestimates. Second, the Commission has not been blind to possible unfairness inherent in entertaining spot adjustments in the customers’ favor.

holds water. First, the Proposed Policy Statement suggests that utilities will only adopt Smart Grid technologies if they are permitted to recover the “costs of these deployments in regulated rates.”²¹ Second, the Proposed Policy Statement opines there is a “potential for stranded costs associated with legacy systems that are replaced by Smart Grid equipment.”²² Each is true in the case of any investment in modernized equipment, and neither justifies expedited single-issue ratemaking. If anything, the key distinction between Smart Grid investments and more traditional investments is that Smart Grid technology is at an early stage of development and that governing standards are still being developed. These circumstances call for measured consideration, not hasty incentives.

More generally, the Proposed Interim Rate Policy gives short shrift to the general ratemaking standards of Section 205 of the Federal Power Act. Under Section 205, utility investments must be “used and useful” and “prudently incurred” to be recovered via rates. FERC should explicitly reaffirm that utilities have the burden of establishing that any investments in Smart Grid technology will yield benefits to consumers that will outweigh the costs.²³ This will quite properly be a difficult showing to make for a costly and unproven technology that poses significant security risks and is not yet governed by definitive standards. FERC should focus these foundational technical and security issues before considering whether any departure from normal ratemaking practice is warranted.

There are three important circumstances that dictate for caution that would avoid wasteful spending, rather than expedited single-issue ratemaking.

²¹ Proposed Policy Statement ¶ 45.

²² *Id.*

²³ See e.g., *Public Utilities Comm’n of the State of California v. FERC*, 24 F.3d 275 (D.C. Cir. 1994); *Cities of Batavia, et al. v. FERC*, 672 F.2d 64 (D.C. Cir. 1982)

First, there is considerable risk that Smart Grid investments in the immediate term will be rendered obsolete when final standards are developed to address the significant cybersecurity, connectivity and other issues associated with Smart Grid technologies. FERC should not disregard the import of its own analysis in the majority of the Proposed Policy Statement by establishing incentives that would rush forward Smart Grid investments before relevant standards are in place. Unified and well thought out Smart Grid standards are prerequisites to minimizing cyber-security threat and maximizing the efficacy of investment in Smart Grid technology.

Second, Smart Grid demonstration projects either are already underway²⁴ or are soon to commence as a result of the recently passed American Recovery and Reinvestment Act of 2009 (“Recovery Act”).²⁵ The Recovery Act sets aside \$615 million for Smart Grid demonstration projects, as well as \$3.375 billion for a Smart Grid Investment Grant Program.²⁶ Within a short period of time²⁷, the programs will begin to yield valuable data that will assist NIST and other standard setting organizations as they develop Smart Grid standards. In view of these grants that Congress explicitly enacted to jump-start the Smart Grid, further incentives by FERC – which Congress has not authorized and did not include in the EISA – are not needed. Instead, FERC

²⁴ See, e.g. Stephanie Simon “The More You Know . . . : A groundbreaking ‘smart grid test in Boulder, Colo., is delivering some surprises for consumers and utilities ” The Wall Street Journal (February 9, 2009) (describing Xcel’s \$100 million Smart Grid demonstration project in Boulder, Colorado).

²⁵ American Recovery and Reinvestment Act of 2009, Pub. L. 111-5 (2009).

²⁶ The Department’s Smart Grid Investment Grant Program will provide grants ranging from \$500,000 to \$20 million for smart grid technology deployments, and grants of \$100,000 to \$5 million for the deployment of grid monitoring devices. In addition, the program provides matching grants of up to 50 percent for investments planned by electric utilities.

²⁷ The Department of Energy has already published a draft Funding Opportunity Announcement. See Draft Financial Assistance Funding Opportunity Announcement, Recovery Act – Smart Grid Demonstrations (April 16, 2009).

should await the results from these demonstration projects, which are likely to help define the nature and scope of prudent Smart Grid investments.

Third, ELCON believes that what constitutes Smart Grid technology and how it will interconnect with the grid is, at present, not well defined. As the Smart Grid is more of an aspiration than a concrete set of technologies, there is inherent flexibility in its meaning that opens the door to abuse. As the term “Smart Grid” is currently described in the Proposed Policy Statement,²⁸ a wide range of infrastructure improvements could be characterized as related to the Smart Grid. Single-issue ratemaking thus creates an incentive for wasteful one-off investments labeled as a Smart Grid projects. By what standards will the Commission determine whether a particular investment is Smart Grid related or simply an upgrade to existing technology?

B. Stranded Cost Recovery and Other Special Rate Incentives Also Are Unnecessary and Premature

Another aspect of the Proposed Interim Rate Policy’s favorable treatment of Smart Grid investments would be to permit “applicants to file for recovery of the otherwise stranded costs of legacy systems that are to be replaced by smart grid equipment,” on the condition that a mitigation plan has been developed.²⁹ Similarly, FERC proposes to “entertain requests for rate

²⁸ The Proposed Policy Statement simply references the EISA’s laundry list of elements that together are considered to characterize a Smart Grid: (1) Increased use of digital information and controls technology to improve reliability, security, and efficiency of the electric grid; (2) Dynamic optimization of grid operations and resources, with full cyber- security; (3) Deployment and integration of distributed resources and generation, including renewable resources; (4) Development and incorporation of demand response, demand-side resources, and energy-efficiency resources; (5) Deployment of ‘smart’ technologies (real-time, automated, interactive technologies that optimize the physical operation of appliances and consumer devices) for metering, communications concerning grid operations and status, and distribution automation; (6) Integration of ‘smart’ appliances and consumer devices; (7) Deployment and integration of advanced electricity storage and peak-shaving technologies, including plug-in electric and hybrid electric vehicles, and thermal-storage air conditioning; (8) Provision to consumers of timely information and control options; (9) Development of standards for communication and interoperability of appliances and equipment connected to the electric grid, including the infrastructure serving the grid; and (10) Identification and lowering of unreasonable or unnecessary barriers to adoption of smart grid technologies, practices, and services.

²⁹ Proposed Policy Statement ¶ 51.

treatments such as accelerated depreciation and abandonment authority”³⁰

For the same reasons that it opposes the Proposed Interim Rate Policy generally, ELCON also opposes these special rate incentives for utilities. It is premature to artificially promote Smart Grid investments until the significant technical and standard setting issues are resolved. Precipitous investments, particularly in this still-evolving area, are not likely to be prudent investments. As recent history shows, any proposal that allows for recovery of stranded costs must be viewed with considerable skepticism. Stranded cost recovery, once euphemistically called “competitive transition charges,” tends to disconnect the rates actually charged from the economic and competitive realities. Industrials and other consumers paid billions of dollars in excess charges for stranded costs during the restructuring of the electricity markets, much of which was caused by utilities’ poor investment decisions.

At this early stage of Smart Grid development, it would be premature and unwise for FERC to proceed with these flawed backward steps from competitive pricing. At a minimum, the Smart Grid standard setting process should be allowed to run its course, so there is some degree of assurance that Smart Grid investments will be prudently incurred.

CONCLUSION

Much of the Proposed Policy Statement is laudable. FERC should promote Smart Grid technologies that will be implemented in a fashion that promotes demand response and addresses cybersecurity, connectivity and other remaining technical hurdles. However, FERC should not finalize the Proposed Interim Rate Policy. At this early juncture in the development of Smart Grid technologies, it would be premature to establish special incentives for Smart Grid

³⁰ *Id.* at ¶ 52.

investments before the substantial and complex technical issues have been resolved and comprehensive unified standards have been developed. When the time comes for substantial Smart Grid investments, rate recovery should be based on standard ratemaking procedures. Indeed, based on longstanding practice, the burden lies with FERC to explain why it is necessary to take the unorthodox step of authorizing single-issue ratemaking and special rate incentives. Prior experience indicates that these practices will lead to wasteful and unnecessary investment to the detriment of ratepayers.

NOTICES AND COMMUNICATIONS

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Dated: May 11, 2009

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary of this proceeding.

Dated at Washington, D.C.: May 11, 2009

/s/ W. RICHARD BIDSTRUP
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