

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

North American Electric Reliability Corporation : Docket No. **RM10-10**
:

**COMMENTS
ON
PROPOSED RELIABILITY STANDARD
BAL-502-RFC-02: PLANNING RESOURCE ADEQUACY ANALYSIS,
ASSESSMENT AND DOCUMENTATION
SUBMITTED ON BEHALF OF
THE PUBLIC UTILITIES COMMISSION OF OHIO**

December 27, 2010

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY	2
COMMENTS.....	4
I. FERC lacks authority to adopt the proposed standard under Section 215 of the Federal Power Act.	4
II. The proposed standard unduly infringes on the authority of state utility regulatory commissions.	8
III. The Petitioner has not demonstrated that the proposed standard is just and reasonable.....	12
A. Petitioner has not demonstrated that the proposed “one in ten year” planning criterion achieves a reliability goal effectively and efficiently.....	14
B. Petitioner has not demonstrated that the proposed planning standard is clear and unambiguous in what is required.....	19
C. Petitioner has not demonstrated that the proposed planning criterion is not unduly discriminatory and has no undue negative effect on competition.	20
CONCLUSION	22

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

North American Electric Reliability Corporation : Docket No. **RM10-10**
:

**COMMENTS
ON
PROPOSED RELIABILITY STANDARD
BAL-502-RFC-02: PLANNING RESOURCE ADEQUACY ANALYSIS,
ASSESSMENT AND DOCUMENTATION
SUBMITTED ON BEHALF OF
THE PUBLIC UTILITIES COMMISSION OF OHIO**

The Public Utilities Commission of Ohio (Ohio Commission or PUCO) submits the following comments both on the Petition of the North American Electric Reliability Corporation (NERC or Petitioner) to approve under Section 215(d)(1) of the Federal Power Act an electric reliability standard proposed by Reliability First Corporation (RFC), BAL-502-RFC-02: Planning Resource Adequacy Analysis, Assessment and Documentation (Proposed Standard), and on the Federal Energy Regulatory Commission (FERC) Notice of Proposed Rulemaking (NOPR) of October 21, 2010 in the above titled docket.

EXECUTIVE SUMMARY

The Ohio Commission appreciates the efforts of NERC and RFC to ensure the reliable operation of the nation's bulk power system. We value their technical assessments of the system's capabilities. However, the Ohio Commission does not support adoption of the Proposed Standard, BAL-502-RFC-02. The Proposed Standard creates two requirements. First, it would require planning coordinators to analyze and document resource adequacy in their planning areas and for transmission-constrained sub-areas. Second, it would require planning coordinators to plan to a "one day in ten year" loss of load criterion. Section 215 of the Federal Power Act carefully defines FERC's authority to adopt reliability standards. It does not grant the Commission authority to mandate the use of a uniform resource adequacy planning criterion. Selecting the appropriate balance between planning for additional resources and the risk of shortages is an economic and policy judgment, not a Section 215 reliability issue. The Proposed Standard improperly infringes on the authority of the States to remain the ultimate arbiter of decisions regarding how to balance capacity investments against the risk of curtailments.

Moreover, even if one assumed the Commission had authority to adopt such a standard, the Petitioner has failed to demonstrate that mandating the use of the "one day in ten year" loss of load criterion is just and reasonable, not unduly discriminatory, and consistent with the public interest. And, NERC has failed to meet the general factors that

it is required to meet in Order 672.¹ It has not demonstrated – and in some instances has not even sought to show – how the selection of the proposed criterion is effective and efficient, is clear and unambiguous in what is required, and would not negatively impact competition particularly with respect to the development of Price Responsive Demand.

The PUCO encourages FERC to hold a technical conference and invite participation from state regulatory commissions, economists, and stakeholders who are involved in issues related to resource adequacy, but who may not typically participate in the development of engineering standards for the reliable operation of the bulk power system. Such a technical conference would broaden the discussion of how resource adequacy can best be assessed on a going forward basis. The Ohio Commission recommends that the Proposed Standard be remanded to RFC and that any revised proposal avoid mandating in a Section 215 standard the use of a specific resource adequacy planning criterion.

¹ *Rules Concerning Certification of the Electric Reliability Organization; Procedures for the Establishment, Approval and Enforcement of Electric Reliability Standards, FERC Stats. & Regs.*, ¶ 31,204 (Order 672), order on reh'g, *FERC Stats. & Regs.* ¶ 31,212 (2006) (Order 672-A).

COMMENTS

I. FERC lacks authority to adopt the proposed standard under Section 215 of the Federal Power Act.

This is a petition under Section 215(d)(1) of the Federal Power Act. The adoption of a resource adequacy planning criterion, such as the proposed “one day in ten year” loss of load objective, is outside FERC’s carefully defined Section 215 authority. Under Section 215, “reliability standard means a requirement, approved by the Commission under this section, to provide for the reliable operation of the bulk-power system.”² And, “reliable operation” is defined as follows:

The term ‘reliable operation’ means operating the elements of the bulk-power system within equipment and electric system thermal, voltage, and stability limits so that instability, uncontrolled separation, or cascading failures of such system will not occur as a result of a sudden disturbance, including a cybersecurity incident, or unanticipated failure of system elements.³

In Order 672, the Commission adopted these statutory definitions.⁴ Any lack of adequate resources to serve all “firm” load at current prices does not lead to “instability, uncontrolled separation, or cascading failures” in the bulk power system. It does not produce a “sudden disturbance” or “unanticipated failure.” It leads to planned, mandatory shedding or curtailment of “firm” load. Section 215 does not provide FERC

² Federal Power Act, Section 215(a)(3), 16 U.S.C. §824o(a) (3).

³ Federal Power Act, Section 215(a)(4), 16 U.S.C. §824o(a) (4).

⁴ Order 672 at ¶866; 18 C.F.R. §39.1

jurisdiction to adopt a reliability standard to avoid the shedding or curtailment of “firm” load based on a failure to plan to a specific resource adequacy objective.

While the Petitioner has conflated resource adequacy with reliable operation of the Bulk Power System, Congress clearly did not. The definition of “reliability standard” continues as follows:

The term [reliability standard] includes requirements for the operation of existing bulk-power system facilities, including cybersecurity protection, and the design of planned additions or modifications to such facilities to the extent necessary to provide for reliable operation of the bulk-power system, but the term does not include any requirement to enlarge such facilities or to construct new transmission capacity or generation capacity.⁵

Congress explicitly distinguishes between how a facility might be designed or operated, which may be the subject of a reliability standard “to the extent necessary to provide for the reliable operation of the bulk-power system,” as “reliable operation” is defined in Section 215(a)(4), and the enlargement of facilities and construction of new capacity, the subjects of resource adequacy planning. Congress could have incorporated resource adequacy in the definition of “reliable operation,” but did not do so. Instead, it maintained a

⁵

Federal Power Act, Section 215(a)(3), 16 U.S.C. §824o(a) (3).

bright line found throughout the Federal Power Act which prohibits FERC from compelling an enlargement of generation facilities.⁶ While RFC removed from an earlier version of the proposed standard a requirement that entities must “secure the resources needed to meet the resource planning reserve requirement,”⁷ this change does not bring the Proposed Standard under FERC’s Section 215 authority. Given that Congress expressly distinguished “reliable operation” from building transmission and generation capacity, the definition of “reliable operation” cannot be enlarged and manipulated to include planning to build such capacity. In this instance, Congress’ intent to distinguish “reliable operation” of the bulk-power system and resource adequacy is unmistakable.

⁶ Section 201(b)(1) states: “The Commission ... shall not have jurisdiction, . . . over facilities used for the generation of electric energy.” 16 U.S.C. § 824(b)(1) (2000) (emphasis added). Federal Power Act Sections 202(b) and 207 specifically prohibit the FERC from compelling the enlargement of generating facilities in certain instances. *See generally* Section 202(b) provides: “Whenever the Commission, upon application of any State commission or of any person engaged in the transmission or sale of electric energy, and after notice to each State commission and public utility affected and after opportunity for hearing, finds such action necessary or appropriate in the public interest, it may by order direct a public utility (if the Commission finds that no undue burden will be placed upon such public utility thereby) to establish physical connection of its transmission facilities with the facilities of one or more other persons engaged in the transmission or sale of electric energy, to sell energy to or exchange energy with such persons: Provided, that the Commission shall have no authority to compel the enlargement of generating facilities for such purposes, . . .” 16 U.S.C. § 824a (2000) (emphasis added); Section 207 says: “Whenever the Commission, upon complaint of a State commission, after notice to each State commission and public utility affected and after opportunity for hearing, shall find that any interstate service of any public utility is inadequate or insufficient, the Commission shall determine the proper, adequate, or sufficient service to be furnished, and shall fix the same by its order, rule, or regulation: Provided, that the Commission shall have no authority to compel the enlargement of generating facilities for such purposes, . . .” 16 U.S.C. 824g (2000) (emphasis added).

⁷ PJM Staff, 2008 PJM Reserve Requirement Study (October 8, 2008) at Appendix C; Petition at 6 and Petition Attachment C at 120 of the overall filing.

“FERC is a creature of statute, and the agency has only those authorities conferred upon it by Congress.”⁸ And, FERC was cognizant in Order 672 that not all “reliability” concerns fell within the parameters of Section 215 of the Federal Power Act. Thus, the Commission held that before a standard could be adopted by the Commission, “The proposed Reliability Standard must address a reliability concern that falls within the requirements of section 215 of the FPA. That is, it must provide for the reliable operation of Bulk-Power System facilities. It may not extend beyond reliable operation of such facilities or apply to other facilities.”⁹ As indicated above, no specific resource adequacy planning criterion is needed for the “reliable operation” of the bulk-power system facilities as defined in Section 215.

This distinction between resource adequacy and reliable operation is consistent with the structure and purpose of Section 215. The selection of a resource adequacy planning objective is fundamentally different from other reliability standards. By proposing planning for up to one loss of load event per decade, the Proposed Standard effectively recognizes that it would be prohibitively expensive to eliminate all risk of shortages. Whether an economic regulator or a planner chooses to plan to the proposed “one in ten year” criterion, a “one in five year” or a “one in twenty-five year” objective, or a metric which is not expressed in terms of Loss of Load Expectation (LOLE), but defined

⁸ *Transmission Agency of Northern California v. FERC*, 495 F. 3d 663 (D.C. Cir. 2007). See also: *Bonneville Power Administration v. FERC*, 422 F. 3d 908 (D.C. Cir. 2005); *Columbia Gas Transmission Corp. v. FERC*, 404 F.3d 459 (D.C. Cir. 2005); *Atlantic City Elec. Co. v. FERC*, 295 F.3d 1, 3 (D.C. Cir. 2002); and, see also: *Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001).

⁹ Order 672 at ¶ 331.

in completely different terms, is an economic and policy choice. Selection of an appropriate balance between planning for additional resources and the risk of shortages is not a reliability engineering issue. An Electric Reliability Organization (ERO), such as RFC, has “technical expertise” in bulk power system operations. And, it may be able to play a valuable role in developing methodologies to conduct technical assessments of the likelihood that shortages may occur. If the Petitioner had proposed simply that planning coordinators prepare periodic assessments of the likelihood that shortages may be encountered, this would be a different proceeding. The Ohio Commission would review any such proposal on its merits. However, that is not the Proposed Standard before the Commission. The Proposed Standard seeks to address the foundational issue of how to balance costs and risks and select a resource adequacy planning objective. Making that selection is not within FERC’s Section 215 authority, but is a core competency of state utility regulatory commissions.

II. The proposed standard unduly infringes on the authority of state utility regulatory commissions.

The Petition indicates that the proposed standard “has wide support from ... regulatory agencies.”¹⁰ The Petition includes detailed record of the proposal’s development and adoption. However, there is nothing in this record supporting the statement that

¹⁰

Petition at 6.

the Proposed Standard has been supported by state Commissions.¹¹ Indeed, the Proposed Standard is in direct conflict with the established position of the National Association of Regulatory Utility Commissioners (NARUC) that, FERC “should not establish policies which might have the effect of mandating or standardizing any aspect of a regulated utility’s resource planning” and “should acknowledge the jurisdiction, practices, and expertise of the States in the planning ... process.”¹²

The inclusion of a resource adequacy planning criterion in the proposed rule infringes on state regulatory authority. As the Commission has previously held, “Resource adequacy is a matter that has traditionally rested with the states, and it should continue to rest there.”¹³ Where FERC has approved resource adequacy programs for regional markets, it has done so based on ratemaking considerations that are not present in this proceeding. And, it has sought to take a “balanced jurisdictional approach,” “not establishing planning reserve requirements, but instead ... adopting those set by state and Local Regulatory Authorities in the first instance.”¹⁴ With respect to the Midwest ISO,

¹¹ During the development of the Proposed Standard and particularly starting in July 2008, the Ohio Commission contacted RFC and made a number requests for a meeting to discuss the Proposed Standard. Finally, after the Proposed Standard had been voted on and passed in RFC, RFC Staff met with the PUCO in December 2008. At that meeting, PUCO Commissioners expressed concerns regarding the proposal. There is no indication in the Petition that the concerns expressed in that meeting have been addressed.

¹² NARUC, *Resolution Relating to the Federal/State Jurisdictional Boundaries in Resource Planning and Procurement by Electric Utilities* (February 16, 2005).

¹³ *Devon Power LLC, et al.*, 109 FERC ¶ 61,154 (Order on Rehearing and Clarification at 47) (Nov. 8, 2004).

¹⁴ *California Independent System Operator*, 116 FERC ¶ 61,274 at ¶ 1118 (September 21, 2006).

this Commission has said that, “the Commission's role with regard to resource adequacy is a supporting one and that state and local governments must take the lead.”¹⁵ Within the Midwest ISO, a major portion of RFC’s footprint, states are permitted to select alternative resource adequacy objectives. And, the Commission has approved as just and reasonable the Midwest ISO’s resource adequacy tariff which provides that, “If a state regulatory body establishes a [Planning Reserve Margin (PRM)] that is higher or lower than the PRM determined by the Transmission Provider, then the state-established PRM will apply to the [Load Serving Entity’s] Demand under that state’s jurisdiction.”¹⁶ If a uniform resource adequacy planning criterion were necessary, the Midwest ISO’s tariff would not have been found just and reasonable. Clearly there is nothing which requires a uniform planning criterion. While each state must live with the costs and risks of its chosen resource adequacy objective, this is appropriately a choice that can and should be made by State Commissions. State regulators are closer to both the required investment decisions and the potential impacts on consumers.

Historically, Ohio participated in ECAR which did not have a resource adequacy standard. Resource planning standards were set by the states in the region. Ohio requires its electric utilities to file long-term demand and resource forecasts and reviews their integrated resource plans.¹⁷ The Ohio Commission does not believe that a uniform

¹⁵ *Midwest Independent Transmission System Operator, Inc.*, 103 FERC ¶ 61,210, (Order on Requests for Rehearing and Directing Compliance Filing) (May 21, 2003).

¹⁶ Midwest ISO, Tariff: Module E Resource Adequacy, §68.1 (Effective: 7/28/2010).

¹⁷ Ohio Administrative Code, Chapter 4901:5-5 (West 2010).

resource adequacy objective should be mandated by FERC. While Ohio and the other states permit their utilities to participate in RTOs with resource adequacy criteria, the reasonableness of each utility's voluntary participation in an RTO remains subject to state authority. Including a planning objective in the reliability rules compromises the authority of state Commissions to remain the ultimate arbiter of economic decisions regarding how to balance capacity investments against the risk of curtailments.¹⁸

In Order 672, the Commission recognized that, "states have important reliability responsibilities and these generally include, and are not necessarily limited to, requiring franchise utilities to make adequate investment in new generation, distribution, and transmission infrastructure, and in many cases to develop adequate demand response as needed to help keep generation and load in balance." At that time, the Commission declined to generically address transmission and resource planning roles. However, the Commission emphasized that, "we intend to continue to respect states' roles in these areas."¹⁹ The Proposed Standard does not represent the cooperative approach envisioned by Order 672 or the cooperation broadly enjoyed between FERC and State Commissions.

The Petitioner has not justified the fundamental shift in jurisdiction inherent in its proposal. Resource planning for virtually the entire RFC region is being done by the Midwest ISO and PJM. And, the PUCO has observed significant cooperation between

¹⁸ It would be unreasonable for Petitioner to maintain that planning coordinators could plan to one criterion and use a different criterion to determine what resources should be acquired. Acquiring resources based on a different objective would make planning to the criterion in the Proposed Standard a waste of time and resources.

¹⁹ Order 672 at ¶ 813-814.

these RTOs and among the State Commissions (Organization of MISO States with Organization of PJM States, Inc.) in their respective footprints. NERC and RFC have not demonstrated that adoption of the Proposed Standard produces any significant benefits beyond those provided by the more detailed resource adequacy planning practices already in place in the these two RTOs. Including the “one day in ten year” criterion (or any other particular planning objective) in a FERC reliability rule is very different from an RTO or planning coordinator electing to use that criterion. RTO planning objectives and related practices can be adjusted as conditions warrant and can be addressed through the RTO’s the stakeholder process. RTO planning objectives can be reviewed based on their economic as well as their reliability implications. Such a review does not appear to have occurred in the process for developing the Proposed Standard.

III. The Petitioner has not demonstrated that the proposed standard is just and reasonable.

When proposing a standard, an ERO is required to provide “a demonstration that the proposed Reliability Standard is just, reasonable, not unduly discriminatory or preferential, and in the public interest.”²⁰ In Order 672, the Commission identified a series of general factors that would be considered in determining whether a proposed standard meets the “just and reasonable” test. And, the Commission directed that, “The ERO should explain in its application for approval of a proposed Reliability Standard how well the proposal meets these factors and explain how the Reliability Standard balances con-

²⁰ 18 C.F.R. §39.5(a). *See also*: Federal Power Act Section 215(d)(2), 16 U.S.C. §824o(d) (2).

flicting factors, if any.”²¹ In this instance, the Petitioner has not shown that the proposed “one in ten year” resource adequacy planning criterion is just, reasonable, not unduly discriminatory, and in the public interest. And, the Petitioner has not appropriately taken into consideration the general factors identified in Order 672.

A “one in ten year LOLE” is a decades old heuristic. However, the fact that this rule of thumb has been referenced over a period of time does not make its use in a reliability standard just and reasonable. Pointing to historical usage is not the same as presenting actual data and lessons learned demonstrating that the criterion should be made mandatory on a going forward basis. The “one in ten year” objective came into widespread use when the industry was racing to build larger and larger power plants to meet rapidly growing demand. In that era, excess capacity in one year could be easily absorbed by demand growth in the next. Today we are seeking to accurately match smaller demand and supply resource additions with unique characteristics to modest demand growth. We have more sophisticated markets. And, modern planners have better data and modeling capabilities with which to improve on sixty year old practices.²²

There are significant questions regarding whether the “one in ten year” criterion is a reasonable or, in the long run, even a relevant standard for the future. Even though

²¹ Order 672 at ¶ 337.

²² The LOLE approach dates back to the late 1940s. See: G. Calabrese, “Determination of Reserve Capacity by the Probability Method,” *Transactions of the American Institute Electrical Engineers*, Vol. 69, No. 2, pp. 1681 – 1689 (Jan. 1950). And, a “one in ten year” planning objective came into general use during the subsequent period of capacity expansion which ended in the mid-1970s. M. L. Telson, “The Economics of Alternative Levels of Reliability for Electric Power Generation Systems.” *Bell Journal of Economics*, 6 (2): 679-694 (1975).

FERC lacks the authority to adopt the Proposed Standard, the Ohio Commission believes that RTOs, state regulators, and utility planners would benefit from an expanded dialogue on resource planning criteria. In this section, we discuss some of the key questions regarding the proposed “one in ten year” objective. We recommend that FERC convene a technical conference to address how regulators and resource planners can improve the definition of resource planning criteria.

A. Petitioner has not demonstrated that the proposed “one in ten year” planning criterion achieves a reliability goal effectively and efficiently.

The Petitioner asserts that use of the “one day in ten year” criterion provided adequate generating capacity to supply all customer firm loads.²³ However, NERC makes no claim that its use has done so in an efficient manner. The Petition asserts that the Proposed Standard is effective and efficient based only on its “providing a common framework for Resource Adequacy analysis, assessment, and documentation.”²⁴ NERC provides no actual data correlating use of the “one day in ten” criterion with standard indices of customer load interruption or examining the different ways in which “one in ten year” standards have been defined and applied.

We are not aware of any recent analytical work to confirm that a “one day in ten year” criterion produces a reserve margin that reasonably balances the value of avoiding scarcity and the cost of maintaining the target reserve margin.

²³ Petition at 10.

²⁴ *Id.* at 15.

The selection of an appropriate resource adequacy planning criterion is primarily an economic and policy question. How should the cost of additional resources be balanced against the risk of supply shortages? However, a “one day in ten year” criterion is not an economic standard. It considers neither the cost of additional resources nor the value of energy to the consumers whose service would be interrupted in the event of a shortfall. To efficiently allocate scarce resources, it is essential that resource adequacy planning criteria consider economic and well as engineering factors. NERC’s Proposed Standard does not do so.

In selecting a reasonable resource adequacy planning objective it would be important to know:

- 1) Does the proposed objective provide a level of reliable service that consumers have indicated their willingness to pay for?
- 2) Does it reasonably balance the cost of supplying additional resources with the consumers’ preferences related to the risk of outages and/or shortage pricing?
- 3) In combination with efficient markets, would the proposed objective provide consumers transparent choices, create a foundation for efficient forward contracting, and produce incentives for suppliers to provide the resources when and where they are demanded by consumers?
- 4) Would the proposed standard lead to a reasonable balance of investments in different forms of generation, transmission, storage, demand response, and distribution?

It is not clear that a “one day in ten year” loss of load criterion produces an affirmative answer to any of these questions.

There are major gaps in the ability of a “one in ten year” criterion, even if implemented optimally, to produce efficient outcomes. These include:

- A “one in ten year” criterion does not identify the magnitude of any firm load shedding: The magnitude of load lost can vary substantially based on the size of the system analyzed, transmission constraints and system configuration, or the area’s load shape. However, using a loss of load frequency standard, the loss of load to single consumer in a 100,000 MW system would be treated the same as a 100MW event in 1,000 MW system.
- An LOLE based criterion does not consider the value of lost load to consumers: The purpose of a resource adequacy planning objective should be to create a system that benefits consumers. An LOLE based standard assumes that planners should be willing incur virtually any cost to achieve targeted resource levels. It further assumes that utilities and system operators should incur almost any cost to purchase energy if a shortage occurs and that shortage pricing will not be transparent to retail consumers. When viewed from a consumer’s or regulator’s perspective, the assumption that cost does not matter is unreasonable and unrealistic. Utilities today could select which circuits to interrupt so as to protect high value loads in the event of a shortage. And, with the deployment of advanced metering, utilities will have increasingly granular capabilities for doing so.

An LOLE criterion does not address the mix of differing generation options, transmission, storage, demand response, and distribution investments that could best provide the quality of service desired by consumers: An LOLE criterion does not facilitate placing resource adequacy planning in a

broader context of planning objectives. And, it provides no recognition to distribution investments which may have a much larger impact on reducing the loss of load for consumers.

A simple example can illustrate the potential for a “one in ten year” criterion to distort investment decisions. Making conservative assumptions, the Proposed Standard of a loss of load probability equal to 0.1 can be translated into the expected minutes of lost load that an average consumer might experience due to a lack of adequate resources.²⁵ Conservatively assuming a lack of sufficient resources could result in a significant outage of five hours duration affecting 4% of consumers in each hour, the Proposed Standard equates to an expected loss of service of 1.2 minutes per year.²⁶ In practice, the “one in ten year” criterion is often implemented conservatively resulting in even lower minutes per year of expected service interruptions for the average consumer. However, at 1.2 minutes per year the expected loss of load from lack of adequate resources is a small fraction of the total duration of service interruptions actually experienced by consumers. Considering only sustained interruptions (or more than five minutes duration) and excluding major events (e.g. could include major storm related outages), the average minutes of service interruption sustained by customers of Ohio utilities in 2009 were 121.79 minutes for American Electric Power customers, 64.19 minutes for Dayton Power and Light, 128.7 minutes for Duke Energy Ohio, and 97.9

²⁵ $\text{LOLE} * \text{Event Duration (Hours/Year)} * \text{Individual Consumers Impacted (\% per Hour)} * \text{Minutes / Hour} = \text{Expected Minutes of Service Interruption Due to Inadequate Resources.}$

²⁶ $0.1 \text{ LOLE} * 5 \text{ Hours} * 4\% \text{ of Consumers} * 60 \text{ Minutes per Hour} = 1.2 \text{ Minutes per Year of Expected Interruption of Service.}$

minutes for First Energy consumers.²⁷ And, when major events occur the average consumer's duration of lost service can be much higher.²⁸ Almost all of the service interruptions experienced by consumers are due to interruptions of distribution service. If we are building to meet a resource adequacy criterion that produces an expected loss of load of 1.2 minutes per year, while many consumers, in a good year, experience more than 100 minutes of service interruptions due to distribution faults, regulators and planners should be reexamining whether historical planning criteria will lead to a reasonable allocation of resources.

²⁷ System Average Interruption Duration Index (Sum of All Customer Interruption Durations / Total Number of Customers Served) (SAIDI) results derived from utility Annual Report Filings under Ohio Administrative Code §4901:1-10-10(C).

²⁸ SAIDI results including major events in 2008, when Ohio experienced outages due to Hurricane Ike, were: 2,072 minutes for American Electric Power consumers, 3,488 minutes for Dayton Power & Light, 1,416 minutes for Duke Energy Ohio, and 851 minutes for First Energy customers.

B. Petitioner has not demonstrated that the proposed planning standard is clear and unambiguous in what is required.

In practice, the “one in ten year” criterion has not been implemented in a consistent manner. Different organizations have defined this planning criterion differently.²⁹ And, the inputs to the calculation are inherently probabilistic and subject differing assumptions regarding the likelihood of future events. This can produce widely varying results. Aside from requiring planners to document their analysis, the Proposed Standard specifies little regarding how key inputs are to be developed or the analysis should be performed. This may be entirely appropriate given differences among power systems, the quality of available data, and state or utility policies. However, the differences in resource adequacy planning practices raises the question of whether this is an appropriate area in which to develop a reliability standard. As the Commission indicated in Order 672 a “proposed Reliability Standard should be clear and unambiguous regarding what is

²⁹ The specific resource adequacy target in the Proposed Standard is defined as follow:

Calculate a planning reserve margin that will result in the sum of the probabilities for loss of Load for the integrated peak hour for all days of each planning year analyzed (per R1.2) being equal to 0.1. (This is comparable to a “one day in 10 year” criterion).

However, the Petition does not include a demonstration that “the sum of the probabilities for loss of Load for the integrated peak hour for all days of each planning year ... being equal to 0.1” is mathematically “comparable” to a “one day in 10 year” criterion.

required.”³⁰ Variations in practice suggest this may not be an area that can be subject to meaningful standardization.

C. Petitioner has not demonstrated that the proposed planning criterion is not unduly discriminatory and has no undue negative effect on competition.

A growing number of states and utilities are exploring how best to implement dynamic retail prices and expand demand response to include all classes of consumers. Such Price Responsive Demand (PRD) is becoming key factor to enhancing competition in power markets.

The presence of PRD will improve reliability. High demand periods and outages will increase prices in balancing markets, causing an offsetting demand reduction from price responsive consumers. Given this relationship, PRD if properly accounted for, would tend to reduce the planning reserves required to meet an LOLE based criterion. Moreover, unlike large customer demand response, mass market PRD is the sum of responses by hundreds of thousands or millions of consumers. While a single large demand responder or generator may fail on a given day, the response of large numbers of consumers and devices is statistically likely to exhibit less variance. Additionally, advanced metering will provide access to more load data, providing the opportunity to enhance forecasting methodologies and reduce the uncertainty associated with load forecasts.

³⁰

Order 672 at ¶ 325.

Unfortunately, PRD is not directly accounted for in the Proposed Standard. PRD creates beneficial feedbacks. The outage of a generator or transmission line or a shortage of operating reserves will raise prices and lead to a reduction in peak demand. There is no consideration of these beneficial feedback effects in the Proposed Standard. The proposed approach would calculate reserve margins from the median forecast among a set of point forecasts for peak demand. Based on current practice, these forecasts would be developed based on historical data that do not include periods with significant dynamic pricing. With PRD, one cannot begin to develop a forecast of peak demand without asking: Peak demand at what price? This is not accounted for within the Proposed Standard.

The failure to properly account for PRD in resource adequacy planning represents a potentially significant barrier to expanding the investments in the metering and technology which make PRD possible and to the realization of PRD benefits. If PRD is not counted, Load Serving Entities would have to carry capacity for demand that would not be present at higher prices. And, the presence of this additional capacity will suppress energy and ancillary services prices, further discouraging investment in advanced metering and the development of PRD. Thus, resource adequacy planning which fails to properly account for PRD could discriminate against price responsive consumers by requiring them to pay for capacity they do not need and negatively impact the competition benefits that PRD provides.

Over time, as PRD becomes common place, resource adequacy increasingly could become a matter of consumer choice. Regulators should be seeking to expand the range of meaningful choices that are available to consumers and should reconsider historical

approaches that represent potential barriers to providing consumers transparent choices regarding the cost and quality of their electric service.

CONCLUSION

The Ohio Commission urges FERC to find the standard as proposed is outside its Section 215 authority, not just and reasonable, and should not be adopted. The PUCO recommends that the Proposed Standard be remanded to RFC with the direction that any revised proposal should not include a mandate to use a “one in ten year” LOLE objective or any specific resource adequacy planning criterion.

This proposed standard has been developed with limited visibility to and involvement by many of those most involved in resource adequacy issues. State regulatory commissions, economists, and stakeholders involved in these issues often are not deeply involved in the development of engineering standards for the reliable operation of the bulk power system. The PUCO encourages FERC to hold a technical conference and invite participation from NERC and from these additional groups. Such a technical conference would foster needed dialogue regarding how resource adequacy planning by RTOs, utilities, and states can improved.

Respectfully submitted,

/s/ Thomas W. McNamee

Thomas W. McNamee

180 East Broad Street

Columbus, OH 43215-3793

614.466.4396 (telephone)

614.644.8764 (fax)

thomas.mcnamee@puc.state.oh.us

On behalf of

The Public Utilities Commission of Ohio

PROOF OF SERVICE

I hereby certify that the foregoing have been served in accordance with 18 C.F.R. Sec. 385.2010 upon each person designated on the official service list compiled by the Secretary in this proceeding.

/s/ Thomas W. McNamee

Thomas W. McNamee

Dated at Columbus, Ohio this December 27, 2010.

Your submission has been accepted

ECFS Filing Receipt - Confirmation number: 20101223736072**Proceedings**

Name	Subject
09-197	Telecommunications Carriers Eligible to Receive Universal Service Support
03-109	In the Matter of Lifeline and Link-Up

Contact Info

Name of Filer: Stephen A. Reilly
Email Address: stephen.reilly@puc.state.oh.us

Address

Address Line 1: 180 East Broad Street
Address Line 2: 6th Floor
City: Columbus
State: OHIO
Zip: 43215
+4: 3793

Details

Type of Filing: COMMENT

Document(s)

File Name	Custom Description	Size
Comments 122310.pdf	Comments submitted on behalf of the Staff of the Public Utilities Commission of Ohio	308 KB

Disclaimer

This confirmation verifies that ECFS has received and accepted your filing. However, your filing will be rejected by ECFS if it contains macros, passwords, redlining, read-only formatting, a virus, or automated links to other documents.

Filings are generally processed and made available for online viewing within one business day of receipt. You may use the link below to check on the status of your filing:

[http://fjallfoss.fcc.gov/ecfs/comment/confirm?
confirmation=20101223736072](http://fjallfoss.fcc.gov/ecfs/comment/confirm?confirmation=20101223736072)

For any problems please contact the Help Desk at 202-418-0193.

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

12/27/2010 3:11:22 PM

in

Case No(s). 93-7000-EL-FAD

Summary: Comments on Proposed Reliability Standard, BAL-502-RFC-02: Planning Resource Adequacy Analysis, Assessment and Documentation, submitted to the FERC by Thomas McNamee on December 27, 2010 to be filed in Docket No. RM10-10 on behalf of the Commission electronically filed by Kimberly L Keeton on behalf of Public Utilities Commission of Ohio