

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

**Standards for Business Practices and
Communication Protocols for Public Utilities**

Docket No. RM05-5-020

**COMMENTS OF INDUSTRIAL ENERGY CONSUMERS OF AMERICA
ON NOTICE OF PROPOSED RULEMAKING (“NOPR”), 18 CFR Part 38**

The Industrial Energy Consumers of America (“IECA”) submits the following Comments on the proposed rules issued pursuant to the Notice of Proposed Rulemaking (“NOPR”) of the Federal Energy Regulatory Commission (the “Commission”) in the above-referenced docket.

While IECA recommends that the Commission adopt the North American Energy Standards (NAESB), IECA claims the NAESB proposal simply fosters discriminatory business practices against globally competitive manufacturers in organized electricity markets. Because of the discrimination, IECA recommends that the FERC take direct control and initiate new proceedings to expeditiously develop Demand Response and Energy Efficiency Measurement and Verification standards.

I. BACKGROUND

The Industrial Energy Consumers of America is a nonpartisan association of leading manufacturing companies with \$700 billion in annual sales and with more than 650,000 employees nationwide. It is an organization created to promote the interests of manufacturing companies through research, advocacy, and collaboration for which the availability, use and cost of energy, power or feedstock play a significant role in their ability to compete in domestic and world markets. IECA membership represents a diverse set of manufacturing companies from NAICS 31, 32, 33 i.e , industries including: chemicals, plastics, cement, paper, food processing, brick, fertilizer, steel, glass, industrial gases, pharmaceutical, aluminum and brewing. The

manufacturing sector employs 12 million people directly and indirectly an additional 5 million. In 2011, we accounted for 86.1 percent of exports totaling \$1.27 trillion. IECA members have experience in the subject matter of this rulemaking and have a direct interest in the outcome of this proceeding.

IECA members participate in Demand Response (DR) directly and through service providers in a range of reliability-based demand response programs, price response programs, and ancillary services as available in electricity markets across the country. Demand response lowers manufacturing company costs thereby improving competitiveness, jobs and exports. Until now, the IECA has not participated in the resource intensive, time consuming, and long running NAESB process supporting this docket; and to its knowledge, no IECA member has participated directly in the underlying NAESB process. IECA notes that only a handful of industrial users have participated in the NAESB process, yet data show that the largest potential participation in DR programs as a class is industrials.

About one-third of electricity and of natural gas is consumed by the industrial sector. Currently, utilities have announced the retirement of nearly 25,000 MW of coal-fueled electric generating capacity “due” to EPA regulations plus another 9,000 MWs for other reasons. Total projected retirements vary greatly adding significant uncertainty to reliability. Associated EPA driven coal-fueled retirements are estimated by the North American Electric Reliability Council between 33 GW to 77 GW, while FERC estimates 81 GW. Additionally, a NERA consulting study estimates that the Utility MACT rule will cause the loss of 180,000 to 215,000 jobs by 2015. With reliability concerns rising in organized markets, industrial DR and EE opportunities should become a high priority as a cost-effective option to help resolve those concerns. However, market barriers such as failure to establish national baseline standards for industrial DR and EE undermine cost-effect achievement of reliability, U.S. manufacturer global competitiveness, and job loss mitigation.

IECA notes that DR aggregators (aka DR Supporters) have long devoted the resources and have long participated in the underlying NAESB process of two phases over several years, but with mounting frustration over highly limited results and lengthy process. IECA finds that this is an extraordinarily important issue that is timely. It is for this reason we offer the following comments.

II. COMMENTS

The NOPR addresses a long-neglected and high need for industrials to increase participation in DR programs and services by removing regulatory barriers that will allow greater consistency across electricity markets. Addressing these needs will allow the demand response (DR) “programs” to increase and evolve to DR “markets,” allowing greater industrial facility participation to their global competitive benefit and to the benefit of the wider electricity end-user communities in which they operate. Public benefits include: comparatively lower electricity prices, more reliable electricity service, lower emissions, and a more competitive tradable economy. However, NASEB standards fall dramatically short of full DR market access particularly to industrials with High-Variable Loads (HVLs).

In summary, IECA supports the adoption of the proposed NAESB standards, but requests the Commission to initiate a process to *expeditiously* develop DR M&V standards common at least for all *energy markets* of jurisdiction available to all DR providers whether industrials or aggregators. Additionally, IECA requests the Commission to initiate a process designed to develop DR M&V standards for industrial HVLs. Expansion of Commission process to directly develop the full range of industrial DR M&V standards across all services (energy, capacity, reserves and regulation) should be considered.

Likewise, IECA supports adoption of Energy Efficiency (EE) M&V standards for energy markets, but requests the Commission to initiate a process to expeditiously develop streamlined, cost-effective application of factors for simple conversion of energy use to peak reduction. Unfortunately, the standards proposed for adoption by the rulemaking allow RTOs to maintain another costly study barrier to manufacturer participation in the market. The standards allow for use of coincidence factors for simple conversion to peak reduction. *But RTOs require the coincidence factors to be validated for each project, despite the fact that industry developed values exist for a range of project types and circumstances.* RTO acceptance of industry developed coincidence factors would have a large positive effect on the amount of EE available for capacity purposes.

NAESB stakeholder processes, dominated by resourceful organized markets, traditional utilities and merchant power, are a demonstrated obstacle, to responsive and responsible development of basic and consistent universal DR and EE market rules in the nature of straight-forward business practices and standards.

A. The IECA supports adoption of the proposed NAESB standards, with certain clarifications.

- 1. The proposed standards are directionally correct, but with little or no forward movement in the development of greater standardization and development of “best practices” for the measurement and verification of DR, the process discriminates against manufacturers.**

IECA supports the Commission’s proposal to incorporate by reference, in its regulations, the business practices adopted by the NAESB Wholesale Electric Quadrant (WEQ) (collectively “Phase II Standards”). IECA understands that the Phase II Standards categorize various demand response products and services and support the measurement and verification of these products and services in wholesale electricity markets. Adoption supports the goal of greater standardization and best practice development that the Commission recognizes. The Phase II Standards enhance the framework developed in Phase I to allow wholesale demand response measurement and verification (“M&V”) to be discussed in a common way.

However, as the Commission noted, the Phase II Standards: “consistently replaced references to the “System Operator” with the term “Governing Documents” throughout most of the standards.” The Commission also noted that there were a few other changes such as: a meter data reporting deadline; “advance notification of one day maximum to the demand response resource that its capacity product category will be required;” establishment of “a telemetry interval” to submit data to the system operator; a “tightening of the requirement for meter accuracy for after-the-fact metering;” and “defining an adjustment window of four hours for calculating baseline adjustments.”¹ In short, the changes made over the past four years were minimal.

But there is a reason for such a mismatch of power sector and globally competitive manufacturer business practice expectations. According to NAESB, the Phase II Standards merely “provide a framework that may be used to develop performance evaluation methodologies for specific Demand Response services; they do not specify detailed characteristics of performance evaluation methodologies.”² The dozens of references in Phase II

¹ Phase II NOPR at 10

² 2010 WEQ AP Item 4(a) and 4(b) Final Action at 12 (ratified Mar. 21, 2011).

Standards to determinations to be “specified by the governing documents” simply scatter the development of diverse details on operation or application of business practices to many regions. The framework obviously contemplates the development of detailed standards – additional “phases” that develop the necessary detail to become objective industry standards. In other words, the Phase II standards by constant reference to “governing documents” totally defers to existing diversity of ISO/RTO rules or rulemaking processes. After many years of interminable, incremental administrative process, the status quo reigns. The Phase I “framework” did not evolve to Phase II “standards.” Phase II is at best a “minimalist enhancement” of Phase I.

Additionally and importantly, none of the five NAESB DR baseline performance evaluations are suitable for industrials characterized by High-Variable Loads (HVL). The IECA supports Commission adoption of Phase II “standards,” but the IECA also supports Commission re-articulation of the NAESB view that the “real standards” are those yet to be developed to reduce transaction costs and facilitate broad access to the electricity markets by DR providers, whether manufacturers or aggregators.³

2. The Commission should immediately initiate a proceeding to create nationwide standards for DR M&V.

The Commission has posed several questions concerning the NAESB DR M&V standards including: adequate transparency; need for more prescriptive detail; need for broad market consistency; sufficiency of experience to identify best practices (e.g., baseline calculations). The Commission questions the need for more substantive M&V standards broadly applicable, and if so, the Commission asks whether NAESB or a Commission-led, or other process should perform the task.

IECA addresses each of these questions below:

- a. Do the Phase II standards provide enough detail for transparent measurement and verification among regions? No.**

³ Phase I NOPR at 7

The NAESB Phase II standards routinely defer to the “governing documents” of each ISO/RTO and do not change the status quo of transparency in those documents. Phase I standards did nothing to advance consistency or standardization and Phase II standards do little more to advance consistency or standardization to the manner in which a demand response market offers and competitive business requires. Because Phase II standards provide no detail regarding measurement and verification, they fail to provide transparency.

b. Is more detail or prescriptiveness appropriate? Yes.

IECA finds more detail or prescriptiveness appropriate for the measurement and verification of *energy*. Capacity markets pose a greater challenge, but should be explored for cost-effective industrial DR M&V approaches.

Energy markets are amenable to the adoption of more consistent M&V approaches than capacity markets. Order 745 has forced all of the jurisdictional wholesale markets to address common issues associated with demand response participation in wholesale energy markets. Despite the fact that each ISO/RTO has concluded that energy should be measured differently, the similarities in approach are far greater than for capacity markets.

Common approaches followed under baseline-type I methodology in all markets exist. These include: exclusion of event or economic settlement days; in-day adjustment; and protections against “stale” baselines. All markets claim accuracy approaches on which all transactions depend.

Yet, DR providers (industrials or their aggregators) who operate, or could operate nationally, are forced to adapt to the multiple market idiosyncrasies with complex and expensive transaction systems. The maintenance of the plethora of current DR market management preferences thwarts cost-effective operation of globally competitive industrial facilities.

For the DR providers (manufacturer or aggregator), increased costs include additional software systems and employees needed to cover intricacies of each ISO/RTO. Other costs result from confusion and frustration created from application of differing methodologies across multiple markets. Without common and broad-based methodology, the status quo continues to discriminate against manufacturers that could provide the greatest benefit to demand response - large loads that operate throughout multiple ISO/RTO markets.

- c. Will more consistency among markets reduce costs for customers and market participants, or otherwise increase market access by end users? Yes.**

The IECA finds that the answer is obviously, yes.

IECA members typically have many facilities operating across several organized markets. But unlike the ISO/RTO, IECA members compete globally. To be successful global competitors, IECA members must control energy costs. For some these costs are a large, if not an enormous proportion of revenue, and these costs can spell the difference between facility operation and closure. Anything that can reasonably be done to control energy costs can and must be done; including fostering of DR markets with pragmatic DR measurement and verification standards.

Failure to foster DR market access means lost competitive advantage. The unnecessary transactional costs of diverse multiple market requirements translate into market barriers that reduce DR competition among DR providers and lost global competitive advantage for industrials.

- d. Is demand response experience adequate to identify M&V best practices for performance evaluation such as baseline calculations? Yes, for DR M&V for energy.**

Each ISO/RTO has developed common, but slightly different, energy M&V rules. IECA does not see how any one of these could be materially harmful to any market. The benefits of a common DR M&V rule for energy across markets would outweigh the costs. Organized markets should be tasked to prove otherwise.

Among the DR M&V “best practices” widely adopted are the following: baseline in-day adjustment for accuracy of M&V; baseline adjustment for planned dispatch; baseline adjustment for event or economic offer days; and a mechanism to prevent stale baselines.

However, for industrial HVLs there is no common approach for baseline determinations. Though more suitable for commercial load purposes, none of the five existing NAESB baseline performance evaluation methods are suited to a large proportion of industrial HVLs. Industrial HVLs tend to have business-as-usual schedules that are more responsive to the forces of market

conditions, rather than more predictable institutional, weather, or seasonal demand of the commercial customer. For industrials, production and maintenance schedules change and historical meter data become irrelevant to business-as-usual consumption. The Commission should initiate a process to move organized markets toward responsive and responsible development of industrial HVL, DR M&V standards.

e. Is further development of substantive M&V standards broadly applicable to RTOs and ISOs required? Unequivocally, yes.

The status quo is unjust, unreasonable or unduly discriminatory. The lack of common DR M&V standards creates a market barrier of high magnitude that reverberates in industrial global competitiveness.

Generation is measured under common protocols and equipment everywhere in the world including the U.S. Demand response is not. There is little or no reason to support the status quo of balkanized market rules in DR M&V. By law, the Commission has embarked on a path to bring generation and demand response to comparable competitive treatment in wholesale markets. However, evolution of DR M&V standards is a clear departure from that path and poses a barrier to U.S. manufacturer global competitiveness.

f. Should a Commission-led process carry out the task? Yes.

The NAESB process has proven its limits in setting Phase II Standards. Only a Commission-led process will produce results significantly more useful than NAESB has provided. It is obvious after more than four years that NAESB is ill-suited to the task.

NAESB is a consensus-based organization with long and deep roots in traditional utility ratemaking culture. Standards require a two-thirds affirmative vote of its multi-sector Executive Committee, with additional requirements that there is broad support across sectors. NASEB confirms that multiple ISO/RTO stakeholder processes trump NAESB efforts to adopt necessary levels of detailed DR M&V standards. NAESB's history and governance, steeped in natural monopoly, simply cannot accommodate game-changing market policy (e.g., FERC Order No.

745) particularly the entry of global competition from manufacturing and the overriding economic realities that this represents.

The NAESB impasse in evolution of DR M&V standards should come as no surprise to policy makers. DR has begun to successfully compete against conventional generation in PJM, for example. Consequently, revenue has shifted to DR from what traditionally would have been generation. There is good reason that this trend should continue. But unless barriers embodied in NAESB DR M&V standards are fully removed, DR growth will be stunted and domestic and global industrial competitiveness will be retarded.

The IECA recommends that the Commission initiate a separate proceeding to adopt a single baseline-type I measurement and verification approach for energy that any large industrial or aggregator DR provider would be permitted to use in any jurisdictional market. The Commission should not preclude, but encourage or perhaps require, development of new and innovative measurement and verification approaches. The Commission should initiate a process to require organized markets to develop DR M&V methodologies more suitable for industrial HVLs with the goal of moving towards a more broad-based standard. The Commission should initiate a process to consider other DR M&V standards, e.g., capacity, reserves and regulation.

B. NAESB Energy Efficiency M&V Standards should be adopted, but more is required.

IECA recognizes the need for a standard approach to Energy Efficiency Measurement and Verification (“EE M&V”). Again, IECA supports the efforts of the NAESB and FERC in this area because of the growing importance of EE. EE will be increasingly called upon because both industrial site and end-use EE is frequently identified as a low-cost solution to achieving emissions reductions in the utility sector. All forms of EE are increasingly important in making up for coal-fired base-load generation retirements caused by increasingly stringent U.S. EPA regulations or by declining natural gas prices.

As FERC proceeds, it is important to remember that EE M&V is a means to an end and not an end in and of itself. Accordingly, EE M&V should be sufficiently rigorous to achieve an appropriate level of accuracy and not require expensive features that contribute only to unneeded

precision. Also, in order for EE to make maximum contributions to emissions reductions and “generation,” all FERC-approved EE M&V methods must be transparent.

IECA has not been directly involved in the NAESB EE M&V process. We understand that the standard created by the NAESB committee for EE M&V in the wholesale electricity markets is based on the industry-recognized International Performance Measurement, and Verification Protocol (IPMVP), which provides several options for M&V approaches to EE projects.⁴ The IECA is concerned that simple adoption of NAESB standards by reference is not the answer for “program” to “market” evolution for globally competitive industrials with respect to EE M&V.

Energy Efficiency (“EE”) projects are a growing contributor to RTO reliability planning and related capacity markets. PJM has established rules permitting EE to bid into its Resource Planning Model (“RPM”) capacity construct. While PJM is already NAESB compliant, PJM’s processes could be improved.

Currently, PJM processes are overly prescriptive, resulting in M&V costs that exceed the potential benefit of manufacturer participation in an EE project. Those processes seem designed to achieve a high level of precision not really needed to accurately quantify energy savings. Many small projects simply aren’t cost-effective. This problem begins with the IPMVP standards which are designed for determination of reduction in energy use. IPMVP standards are not designed for determination of reduction in peak demand. The results of EE M&V determinations compliant with IPMVP and NAESB standards undertaken and applied to *energy use* for contractual purposes, are not applicable to *peak reduction* determinations. For peak reduction determinations, the EE M&V determinations must be repeated with consideration of the different goals – *at substantial cost*.

One simple remedy is use of coincidence factors to convert energy use reduction to peak demand reduction. The standards allow for application of coincidence factors. *But RTOs subject the coincidence factors to extensive validation for each project despite availability of industry demonstrated values for a range of project types and conditions.* RTO acceptance of industry developed coincidence factors would remove a substantial barrier to market access by many manufacturers to provide EE for capacity purposes.

⁴ IECA shares the concerns expressed by others that NAESB stripped out all references to the IPMVP at the very end of the process.

There are reasons for the extensive validation barriers, all of which challenge the interests of incumbent generators. With barrier removal the number of viable projects would increase dramatically. More projects mean more competition in capacity markets. More manufacturing EE projects mean more manufacturer competitiveness in global markets.

The IECA respectfully requests the Commission to initiate a process to expeditiously develop streamlined, cost-effective application of coincidence factors for simple conversion of energy use to peak demand reduction. The Commission should require RTOs to accept industry developed coincidence factors when evaluating EE M&V plans.

III. CONCLUSION

The IECA recommends adoption of the proposed NAESB DR and EE M&V standards.

The IECA requests the Commission initiate a proceeding to consider additional actions to further eliminate barriers to adoption of industrial energy efficiency and demand response associated with the lack of meaningful standards for measurement and verification.

IECA recommends that the Commission direct technical conferences be held as appropriate in this new proceeding.

Respectfully submitted,

On behalf of Industrial Energy Consumers of America

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CERTIFICATE OF SERVICE

I hereby certify that on July 30, 2012, I caused a copy of the foregoing document to be served electronically upon each person designated on the official service list compiled by the Secretary of the Federal Energy Regulatory Commission.

Lynn Schloesser
Industrial Energy Consumers of America