



DR/EE Standards categorize wholesale electricity products and services in which demand response and energy efficiency resources can participate and provide M&V criteria for these resources in ISO/RTO wholesale electric markets. Specifically, the NAESB DR/EE Standards consist of the “Phase II” demand response standards (the “Phase II Demand Response M&V Standards”) and business practice standards for the M&V of energy efficiency resources in organized wholesale electricity markets (the “Wholesale Energy Efficiency M&V Standards”). The latter standards create standardized methods for quantifying energy reductions from energy efficiency measures, including six new definitions and 63 business practices.

The IRC supports the incorporation in the Commission’s regulations of the NAESB DR/EE Standards. IRC members provided significant resources to NAESB to facilitate the development of these standards, and the IRC believes they provide an appropriate level of detail for purposes of national standards. In addition, the standards provide transparency to market participants, reduce barriers to participation, improve market efficiency, and enhance operation of the bulk power system.

The NOPR poses the question as to whether further efforts at developing M&V standards should be pursued and, if so, whether NAESB or another entity should be assigned this task. Having now applied considerable effort to assist NAESB’s development of Phase I and Phase II M&V standards, the IRC believes that the industry may have reached a point of diminishing returns, at least at this stage, in undertaking further work on uniform national M&V standards through the NAESB process or other national forums. The NAESB process, although helpful, required a considerable commitment of time and resources from personnel of the ISOs and RTOs. Given the different stages of development and unique differences among the organized markets in their capacity markets - and to a

lesser degree, in their energy markets - the IRC believes that further efforts at uniformity would collide with the differences in market design which the Commission has approved, most recently in the Commission's order on the design of MISO capacity requirements.<sup>3</sup> The IRC participants have observed throughout the NAESB Phase I and II process that some industry participants have attempted to use the standards development process as a market design mechanism, rather than establishing minimum criteria in Business Practice Standards. The IRC believes that market design should remain within the ISO/RTOs' regional stakeholder forums. Moreover, time is needed for the markets to further catch up and address M&V experience gained in recent periods. Indeed, in certain areas, Commission action may be needed to address market-specific issues.

For all of these reasons, the IRC requests that the Commission not press for additional standardization at this time. Should the Commission nevertheless require additional processes, the IRC believes that the inclusiveness and flexibility of the NAESB process is preferable to creating a new institutional process and respectfully requests detailed guidance from the Commission on the nature of further efforts.

## **II. BACKGROUND**

On April 15, 2010, the Commission issued Order No. 676-F,<sup>4</sup> incorporating by reference an initial set of NAESB-developed business practice standards to categorize various demand response products and services and to support the M&V of these products and services in organized wholesale electricity markets (the "Phase I Demand Response M&V Standards"). The Commission stated in that order that additional substantive

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<sup>3</sup> See *Midwest Independent Transmission System Operator, Inc.*, 139 FERC ¶ 61,199 (issued June 11, 2012).

<sup>4</sup> See *Standards for Business Practices and Communication Protocols for Public Utilities*, Order No. 676-F, FERC Stats. & Regs. ¶ 31,309 (2010) ("Order No. 676-F").

standards would appear to be beneficial in creating transparent and consistent M&V of demand response products and services in wholesale electric markets.<sup>5</sup> The Commission anticipated that NAESB efforts to develop “Phase II” M&V standards would accomplish this goal.<sup>6</sup>

### **III. COMMENTS**

The IRC provides the following comments for the Commission’s consideration.

**A. The Phase I Demand Response M&V Standards Have Proven Useful, and the Phase II Demand Response M&V Standards Build Effectively on the Phase I Standards**

The Commission seeks comment on its proposal to incorporate by reference into its regulations the Phase II Demand Response M&V Standards and associated terms used in the WEQ-015 glossary. IRC members actively participated in the development of the Phase II Demand Response M&V Standards. Over 10 formal NAESB meetings were held on these standards. The IRC members estimate that they collectively provided over 1000 hours of staff time providing support for the NAESB process.

Since the ratification by NAESB, and the Commission’s incorporation in its regulations, of the Phase I Demand Response M&V Standards, ISOs and RTOs, through their stakeholder processes, have continued to incorporate the substance of the standards into their respective market rules and tariffs. The wholesale standards developed through the NAESB process have also provided the basis for the development of retail demand response M&V standards which have enjoyed the strong support of the NAESB membership.

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<sup>5</sup> Order No. 676-F at P 32.

<sup>6</sup> *Id.*

In addition, the North American Electric Reliability Corporation (“NERC”) has relied regularly on the Phase I Demand Response M&V Standards and terminology in the development of the Demand Response Availability Data System (“DADS”), which is now a mandatory submission process for NERC-registered entities in several wholesale and retail electric service categories. Finally, the Smart Grid standards development initiative of the National Institute of Standards and Technology (“NIST”) - actively supported by the ISOs and RTOs - has also adopted numerous terms and communications standards from the Phase I Demand Response M&V Standards.

The IRC believes that the Phase II Demand Response M&V Standards and associated terms build effectively upon the Phase I Demand Response M&V Standards, and will further enhance participation in wholesale market demand response products and services. Accordingly, the IRC supports the Commission’s proposal to incorporate by reference into its regulations the NAESB Phase II M&V Standards and associated terms used in the WEQ-015 glossary.

**B. The Phase II Demand Response M&V Standards Meet the Commission’s Objectives in Requesting More Detailed Technical Standards, and the Commission Should Not Press For Additional Standardization At This Time**

The NOPR invites comments as to whether the Phase II Demand Response M&V Standards “are sufficiently detailed to provide transparent measurement and verification among regions, and whether greater detail or prescriptiveness would be appropriate,” and seeks comment “on the degree to which encouraging greater consistency among markets

and regions would reduce costs for customers and market participants or otherwise facilitate participation by end users in multiple markets.”<sup>7</sup>

As the Commission notes in the NOPR, the Phase II standards make numerous substantive improvements to the original Phase I standards:

In the Phase II Demand Response M&V Standards, NAESB consistently replaced references to the “System Operator” with the term “Governing Documents” throughout most of the standards. Other changes include adding a meter data reporting deadline (103 days for the energy and capacity product categories and 55 days for reserve and regulation product categories); specifying an advanced notification of one day maximum to the demand response resource that its capacity product category will be required; establishing a telemetry interval of six seconds for the provider of the regulation product category to submit data to the system operator; tightening the requirement for meter accuracy for after-the-fact metering for all four product categories; and defining an adjustment window of four hours for calculating baseline adjustments for the baseline type-I and baseline type-II performance evaluation types.<sup>8</sup>

The Phase II Demand Response M&V Standards do not specify a standard performance evaluation methodology for wholesale demand response M&V. As the Commission recognizes in the NOPR, NAESB acknowledged that the standards as submitted “set forth a generalized performance evaluation methodology that lacks specific provisions or detailed requirements.”<sup>9</sup> The IRC contends that further efforts at developing a universal, standardized demand response M&V methodology - including a standard performance evaluation methodology - will not be productive at this time, for the following reasons:

- The Commission has approved a variety of market designs with fundamentally different approaches, particularly for capacity markets. The Phase II Demand Response M&V Standards, the development of which

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<sup>7</sup> NOPR at P 17.

<sup>8</sup> NOPR at P 13.

<sup>9</sup> NOPR at P 17.

required considerable resources, represent the realistic level of uniformity that can be achieved given these differences in underlying market design, as well as the inherent differences in the needs of the particular regions given the different types of state regulation and other factors.

- Given these inherent differences, further efforts at standardization may lead to “least common denominator” solutions that do not meet the particular needs of the individual markets. In contrast, the individual ISO/RTO stakeholder processes are able to build upon the base level of uniformity set forth in the Phase II Demand Response M&V Standards to meet the identified needs of the particular ISO/RTO.
- In certain cases, Commission action has provided critical guidance that can be more effective in providing direction than can be achieved by trying to reach “consensus” on admittedly difficult issues where there are inevitable winners and losers. Thus, future Commission issuances of guidance can avoid potentially unfruitful hours of debate among NAESB participants on forthcoming contentious M&V issues.
- While, as explained above, value has already been achieved in several forums, more time is needed for the Commission and stakeholders to gain and analyze their experience in implementing the Phase I and Phase II Demand Response M&V Standards.
- Stakeholders have expressed only limited support for launching an additional NAESB process, and it is not apparent that the benefit of such standardization would outweigh the additional costs that would be imposed on all market participants, and the ISOs/RTOs, to implement such standardization across all processes, rules, and systems.
- A single standardized methodology may reduce future innovation that could improve M&V business practices.

In particular, the IRC believes that the five performance evaluation methodology types defined in both the Phase I and Phase II NAESB standards provide ISOs and RTOs with the needed flexibility to enable accurate M&V for the wide variations in types of demand response resources, products and services that are present across ISO/RTO footprints and NERC Regions. Moreover, a flexible, regional approach to demand response M&V is crucial to ensuring the growth of demand response resources in wholesale electricity markets. The IRC believes that a detailed, standardized M&V

performance evaluation methodology, as is favored by a small minority of stakeholders, could reduce the accuracy of demand response M&V and exclude participation by resources with load shapes not conforming to the standard.<sup>10</sup>

**C. The IRC Supports Incorporation in the Commission’s Regulations of the Wholesale Energy Efficiency M&V Standards, With a Minor Adjustment**

In the NOPR, the Commission preliminarily finds that the Wholesale Energy Efficiency M&V Standards provide substantive detail to assure more effective evaluation of the performance of energy efficiency products and services, and that the standards: (i) provide a means for consistent and reliable evidence of reductions in electricity usage, (ii) provide for proper M&V of energy efficiency for compensation and persistence, and (iii) should help to ensure that energy efficiency is treated comparably to other electricity resources.<sup>11</sup>

The IRC agrees that the proposed standards have sufficient detail to achieve the level of confidence required for use in resource adequacy and planning analysis. The IRC also supports the level of detail and specificity included for M&V plan development, reporting requirements and data validation. These M&V criteria have been used successfully to measure and verify energy efficiency performance for qualification and compensation of resources participating in capacity markets in ISO-NE and PJM markets, thereby validating the current level of detail. The IRC believes that the methodological approaches included in the standard allow for flexibility in the implementation of M&V,

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<sup>10</sup> The Commission also asked (*see* NOPR at P 19), if further processes are required, which entity would be best suited to undertake such processes. Although for the reasons stated, the IRC requests that the Commission forbear from ordering additional processes at this time, should the Commission nevertheless require additional processes, the IRC believes that the inclusiveness and flexibility of the NAESB process is preferable to creating a new institutional process.

<sup>11</sup> NOPR at P 23.



thereby reducing overall costs for M&V and increasing participation in wholesale electricity markets.

Further, the IRC believes that the baseline conditions and criteria specified in the standard are appropriate and consistent with the current industry standards. The use of statistical sampling specified in the standard is appropriate for large utility-scale energy efficiency programs, and should not limit participation of performance-based energy services. Moreover, the level of precision and accuracy for statistically derived estimates of demand reduction and the requirements for monitoring frequency and duration are also appropriate for products used in wholesale electricity markets. Finally, the requirements for measurement parameters and measurement equipment meter specifications in the standard are sufficiently rigorous for verification of resource adequacy requirements, system planning and participation in wholesale electricity markets. The IRC supports the high level of rigor stipulated in these standards. Any lessening of that rigor would diminish the confidence required to operate the bulk power system reliably and efficiently.

The IRC believes that one adjustment is needed to the approach proposed in the NOPR.

Footnote 39 to the NOPR states:

We propose to incorporate by reference the following standards collectively identified by NAESB as 2010 Wholesale Electric Quadrant Annual Plan Item 4(d): Energy Efficiency Resource Use Criteria in Wholesale Markets - Section 021-3.1; General Measurement and Verification Plan Requirements - Section 021-3.2; Post Installation M&V Report Components - Section 021-3.3; Performance Reporting - Section 021-3.4; M&V Supporting Documents - Section 021-3.5; M&V Methodologies - Section 021-3.6; Energy Efficiency Baseline Conditions - Section 021-3.7; Statistical Significance - Section 021-3.8; Nominated Energy Efficiency Value Calculations/Demand Reduction Value Calculations - Section 021-3.9; Measurement and Monitoring - Section 021-3.10; Measurement Equipment Specifications - Section 021-3.11; and Data Validation - Section 021-3.12.

The IRC believes that the Introduction and Principles and Applicability sections identified in the Annual Plan item 4(d) as WEQ-021-1 and WEQ-021-2, respectively, should also be incorporated in the Commission's regulations. Specifically, the Introduction and Principles (Section WEQ-021-1) frame the context of the standards and are important to the user of the standards. Secondly, and more importantly, the Applicability section (WEQ-021-2): (i) limits the applicability of the standard to ISO/RTOs, (ii) establishes that governing documents take precedence over the standard where there is a conflict, (iii) clarifies that the standard does not establish requirements related to the compensation, design, operation, or use of energy efficiency products and services, and does not require the System Operator to offer energy efficiency products and services, and (iv) states that the standard includes the requirements on energy efficiency resource providers for the M&V of energy efficiency products and services offered into wholesale electricity markets. We believe it is critical to include these references to fulfill the intent of the stakeholders in the standard development process.

Finally, the IRC supports the ongoing NAESB effort to correct the ratified standards by removing references to the International Performance Measurement and Verification Protocols ("IPMVP") from some measurement and verification standard practices. Based on comments and concerns offered in the process of developing the NAESB Retail Electric Quadrant Business Practice Standards for Measurement and Verification of Energy Efficiency,<sup>12</sup> the reference to IPMVP inappropriately attributes the performance methodologies to IPMVP, when in fact the methodological approaches are not exactly the same. Removing the reference to IPMVP in the business practice standard does not

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<sup>12</sup> See comments of Alliance to Save Energy, U.S. Department of Energy, Efficiency Valuation Organization, and Northeast Energy Efficiency Partnerships at [http://www.naesb.org/pdf4/dsmee\\_retail\\_ee\\_041912w3.docx](http://www.naesb.org/pdf4/dsmee_retail_ee_041912w3.docx)

materially change any of the content of the measurement methodologies allowed in the standard, and avoids confusion that may result from attributing a business practice standard requirement to another guidance document that may be materially different from the NAESB standards.

In sum, the IRC supports the Commission's proposed incorporation by reference of the Wholesale Energy Efficiency M&V Standards, but with the inclusion of WEQ-021-1 and WEQ-021-2, as well as WEQ-021-3.

#### **IV. CONCLUSION**

The IRC supports (subject to the adjustments requested in Section III.C, above) the incorporation by reference in the Commission's regulations of the NAESB DR/EE Standards, and believes the level of detail in both standards is adequate to support the use of products in the ISO/RTO markets. The NAESB DR/EE Standards should provide transparency to market participants, reduce barriers to participation, improve market efficiency, and enhance operation of the bulk power system. For all of these reasons, the IRC requests that the Commission not press for additional standardization at this time. Should the Commission nevertheless require additional processes, the IRC believes that the inclusiveness and flexibility of the NAESB process is preferable to creating a new institutional process and respectfully requests detailed guidance from the Commission on

the nature of further efforts.

Respectfully submitted,

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