



## NORTH AMERICAN ENERGY STANDARDS BOARD

801 Travis, Suite 1675 • Houston, Texas 77002 • Phone: (713) 356-0060 • Fax: (713) 356-0067  
email: [naesb@naesb.org](mailto:naesb@naesb.org) • Web Site Address: [www.naesb.org](http://www.naesb.org)

---

June 14, 2012  
Filed Electronically

The Honorable Kimberly D. Bose  
Secretary  
Federal Energy Regulatory Commission  
888 First Street N.E., Room 1A  
Washington, D.C. 20585

RE: Standards for Business Practices and Communication Protocols for Public Utilities (Docket No. RM05-5-020)

Dear Ms. Bose:

The North American Energy Standards Board (NAESB) herewith submits this report regarding the Notice of Proposed Rulemaking in Docket No. RM05-5-020, in which the Federal Energy Regulatory Commission (Commission) is proposing to amend its regulations at 18 CFR 38.2 to incorporate by reference the NAESB Wholesale Electric Quadrant (“WEQ”) Measurement and Verification of Energy Efficiency Products business practice standards. This report is submitted voluntarily.

The report is being filed electronically in Adobe Acrobat® Portable Document Format (.pdf). All of the documents are also available on the NAESB web site ([www.naesb.org](http://www.naesb.org)). Should you have need of the filing in editable format, we can provide it in Microsoft® Word® 2003. Please feel free to call me at (713) 356-0060 or refer to the NAESB website ([www.naesb.org](http://www.naesb.org)) should you have any questions or need additional information regarding the errata to the NAESB WEQ Measurement and Verification of Energy Efficiency Products business practice standards or any other NAESB work products.

Respectfully submitted,

*Jonathan Booe*

Mr. Jonathan Booe  
Deputy Director, North American Energy Standards Board



## **NORTH AMERICAN ENERGY STANDARDS BOARD**

801 Travis, Suite 1675 • Houston, Texas 77002 • **Phone:** (713) 356-0060 • **Fax:** (713) 356-0067

**email:** [naesb@naesb.org](mailto:naesb@naesb.org) • **Web Site Address:** [www.naesb.org](http://www.naesb.org)

---

cc without enclosures:

Chairman Jon Wellinghoff, Federal Energy Regulatory Commission  
Commissioner Philip D. Moeller, Federal Energy Regulatory Commission  
Commissioner John R. Norris, Federal Energy Regulatory Commission  
Commissioner Cheryl A. LaFleur, Federal Energy Regulatory Commission

Mr. Joseph McClelland, Director, Office of Electric Reliability, Federal Energy  
Regulatory Commission

Mr. Michael Bardee, General Counsel of the Commission, Federal Energy Regulatory  
Commission

Mr. Michael Goldenberg, Senior Attorney, Office of General Counsel, Federal Energy  
Regulatory Commission

Ms. Jamie Simler, Director, Office of Energy Policy and Innovation, Federal Energy  
Regulatory Commission

Mr. Mason Emmett, Associate Director, Office of Energy Policy and Innovation, Federal  
Energy Regulatory Commission

Mr. Michael Desselle, Chairman and CEO, North American Energy Standards Board

Ms. Rae McQuade, President, North American Energy Standards Board

Mr. William P. Boswell, General Counsel, North American Energy Standards Board



## NORTH AMERICAN ENERGY STANDARDS BOARD

801 Travis, Suite 1675 • Houston, Texas 77002 • Phone: (713) 356-0060 • Fax: (713) 356-0067  
email: [naesb@naesb.org](mailto:naesb@naesb.org) • Web Site Address: [www.naesb.org](http://www.naesb.org)

---

### UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

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

Docket No. RM05-5-020 et al

### REPORT OF THE NORTH AMERICAN ENERGY STANDARDS BOARD

The North American Energy Standards Board (“NAESB”) is voluntarily submitting this report in reference to the Notice of Proposed Rulemaking in Docket No. RM05-5-020 (NOPR)<sup>1</sup>, in which the Federal Energy Regulatory Commission (Commission) is proposing to amend its regulations at 18 CFR 38.2 to incorporate by reference the business practice standards adopted by the Wholesale Electric Quadrant (“WEQ”) of NAESB that pertain to the measurement and verification of demand response and energy efficiency resources participating in organized wholesale electricity markets.

On May 30, 2012, our office received a request for minor correction MC12020<sup>2</sup>, which proposes to correct seven Measurement and Verification of Energy Efficiency Products (WEQ-021) business practice standards and one related Abbreviation and Acronym (WEQ-000). The purpose cited for the proposed minor correction is to create consistency between the WEQ and Retail Electric Quadrant version of the standard and to eliminate any potential issues that may occur due to the non-static reference included in the business practice standard. The minor correction recommends modifications to WEQ-000-1, WEQ-021-3.2.5, WEQ-021-3.6.1.1, WEQ-021-3.6.1.2, WEQ-021-3.6.1.3, WEQ-021-3.6.1.4, WEQ-021-3.6.2 and WEQ-021-3.11.1.12. The WEQ-021 designated standards are the subject of the NOPR cited above, for which comments are due June 25, 2012.

After no opposition to addressing the minor correction through the notational ballot process was presented by the WEQ Executive Committee (EC) members, the NAESB office distributed the minor correction for WEQ EC consideration and vote on June 8, 2012. The notational ballot period will end on June 15, 2012 and, if approved by meeting the required simple majority threshold, the minor correction will be posted for a two week comment period beginning on June 18, 2012 and ending on July 2, 2012. If no adverse comments are received that require WEQ EC consideration, the correction will be incorporated into the standard on July 16, 2012. For your convenience, the minor correction has been attached below.

We appreciate the opportunity to provide this report to the Commission. If there are any questions or additional information is required, do not hesitate to contact the NAESB office (713-356-0060, [naesb@naesb.org](mailto:naesb@naesb.org)).

---

<sup>1</sup> The FERC Notice of Proposed Rulemaking in Docket No. RM05-5-020 can be accessed from <http://www.gpo.gov/fdsys/pkg/FR-2012-04-24/html/2012-9809.htm>.

<sup>2</sup> The minor correction MC12020 can be accessed from the NAESB web site ([www.naesb.org](http://www.naesb.org)) or directly from the following link: [http://www.naesb.org/pdf4/weq\\_mc12020.docx](http://www.naesb.org/pdf4/weq_mc12020.docx).

---



## **NORTH AMERICAN ENERGY STANDARDS BOARD**

801 Travis, Suite 1675 • Houston, Texas 77002 • Phone: (713) 356-0060 • Fax: (713) 356-0067  
email: naesb@naesb.org • Web Site Address: www.naesb.org

---

# **MC12020**

## **North American Energy Standards Board**

### **Request for Minor Correction/Clarification of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction**

#### **NAESB Correction/Clarification Procedure**

##### **Minor Clarifications and Corrections to Standards**

Minor clarifications and corrections to existing standards include: (a) clarifications or corrections made by a regulatory agency to standards that are of a jurisdictional nature, or by the American National Standards Institute or its successor; (b) clarifications or corrections to the format, appearance, or descriptions of standards in standards documentation; (c) clarifications or corrections to add code values to tables; and (d) clarifications and corrections that do not materially change a standard. Any request for a minor clarification or correction to an existing standard should be submitted in writing to the executive director. This request shall include a description of the minor clarification or correction and the reason the clarification or correction should be implemented.

##### **1. Processing of Requests**

The executive director shall promptly notify the EC and any appropriate subcommittee(s) of the receipt of the request. The members of the applicable quadrant's EC shall promptly determine whether the request meets the definition of a minor clarification or correction. Through the decision of the vice chair of the applicable quadrant, this determination may be delegated to one of the quadrant's subcommittees, with the concurrence of the subcommittee chair, in which case the subcommittee shall make a prompt decision.

If the request is determined to meet the definition of minor clarification or correction, the applicable quadrant's EC, with input from any subcommittee(s) to which the request has been forwarded, shall act on the request within one month of its receipt. A meeting to discuss the request is not required; the decision may be made by notational vote. A simple majority of the votes received shall determine the outcome. The members of the applicable quadrant's EC shall be given at least three working days to consider and vote on the request.

##### **2. Public Notice**

The results of the vote on the request for a minor clarification or correction shall be posted on the NAESB website and the members of the applicable quadrant shall be notified of the request by e-mail. If the request has been approved by the applicable quadrant's EC, the notification shall include a brief description of the request, the contact name and number of the requester so that further information can be obtained, and the proposed effective date of the clarification or correction. Any interested party shall have an opportunity to comment on the request, and the comments shall be posted on the NAESB website. The comment period is two weeks.

##### **3. Final Disposition of Approved Requests**

If no comments are received on an approved request, the standard shall be clarified or corrected as specified in the approved request on the effective date proposed. If comments are received, they shall be forwarded to the members of the

---



## **NORTH AMERICAN ENERGY STANDARDS BOARD**

801 Travis, Suite 1675 • Houston, Texas 77002 • **Phone:** (713) 356-0060 • **Fax:** (713) 356-0067

**email:** [naesb@naesb.org](mailto:naesb@naesb.org) • **Web Site Address:** [www.naesb.org](http://www.naesb.org)

---

applicable quadrant's EC for consideration. Each comment requires a public written response from the applicable quadrant's EC. The applicable quadrant's EC shall determine whether changes are necessary as a result of the comments. Members of the applicable quadrant's EC shall be given three working days to consider the comments and determine the outcome, which shall be decided by a simple majority of the votes received. A meeting to discuss the request is not required; the decision may be made by notational vote. The standard shall be clarified or corrected in accordance with the outcome of the vote, effective with the completion of voting, and notice thereof shall be posted on the NAESB website. In the case of minor corrections which are discovered during the editorial review process of publication of a new version and are categorized as clarifications under (b) or (c) above<sup>3</sup>, the proposed effective date may be (i) two weeks from the date of public notice, following simple majority approval by the applicable Quadrant(s) EC(s) of the shortened effective date, or (ii) one month from the date of the public notice. For all others, the proposed effective date of the minor clarification or correction shall normally be one month from the date of the public notice upon simple majority approval of the applicable Quadrant(s) EC(s).

---

<sup>3</sup> Minor clarifications and corrections to existing standards include: (a) clarifications or corrections made by a regulatory agency to standards that are of a jurisdictional nature, or by the American National Standards Institute or its successor; (b) clarifications or corrections to the format, appearance, or descriptions of standards in standards documentation; (c) clarifications or corrections to add code values to tables; and (d) clarifications and corrections that do not materially change a standard.

---



## NORTH AMERICAN ENERGY STANDARDS BOARD

801 Travis, Suite 1675 • Houston, Texas 77002 • Phone: (713) 356-0060 • Fax: (713) 356-0067  
email: [naesb@naesb.org](mailto:naesb@naesb.org) • Web Site Address: [www.naesb.org](http://www.naesb.org)

---

### MC12020

#### North American Energy Standards Board

#### Request for Minor Correction/Clarification of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction

Date of Request: May 30, 2012

1. Submitting Entity & Address:

ISO New England  
One Sullivan Road  
Holyoke, MA 01040

2. Contact Person, Phone #, Fax #, Electronic Mailing Address:

Name: Eric Winkler  
Title: Project Manager - Demand Resource Qualification  
Phone: 413-540-4513 (Office)  
413-530-9713 (Cell)  
Fax: 413-535-4310  
E-mail: <mailto:ewinkler@iso-ne.com>

3. Version and Standard Number(s) suggested for correction or clarification:

WEQ-000 Abbreviations, Acronyms, and Definition of Terms (Version 3.0)  
WEQ-021 Measurement and Verification of Energy Efficiency Products (Version 3.0)

2010 WEQ Annual Plan Item 4(d) Final Action: Business Practice Standards for Measurement and Verification of Energy Efficiency Products. - Ratified May 13, 2011

4. Description of Minor Correction/Clarification including redlined standards corrections:

<b>WEQ-000-1</b>	<b>ABBREVIATIONS AND ACRONYMS</b>
<del>IPMVP-</del>	<del>International Performance Measurement and Verification Protocol</del>
<b>WEQ- 021-3.2.5</b>	<b>Measurement and Verification Approach</b>

---



## NORTH AMERICAN ENERGY STANDARDS BOARD

801 Travis, Suite 1675 • Houston, Texas 77002 • Phone: (713) 356-0060 • Fax: (713) 356-0067  
email: naesb@naesb.org • Web Site Address: www.naesb.org

---

Plan should include justification of appropriate measurement methodology. Appropriate measurement methodology may include but is not limited to: the four International Performance standard M&V Protocol (IPMVP)<sup>†</sup> methodologies, at the measure level.

~~<sup>†</sup>“The International Performance Measurement and Verification Protocol (IPMVP) provides an overview of current best practice techniques available for verifying results of energy efficiency, water efficiency, and renewable energy projects in commercial and industrial facilities.” Efficiency Valuation Organization, 2010. <http://www.evo-world.org>. The IPMVP (EVO 10000—1:2010, © Efficiency Valuation Organization 2010), may be obtained from [EVO-world.org](http://www.evo-world.org) and may be periodically updated.~~

### 021-3.6.1.1

#### ~~IPMVP~~ **Option A: Partially Measured Retrofit Isolation/Stipulated Measurement.**

~~IPMVP~~ Option A may involve an equipment specific retrofit or replacement, new installation or a system level Measurement and Verification assessment. The approach is intended for measures where either performance factors (such as lighting wattage) or operational factors (such as operating hours) can be measured on a spot or short-term basis during baseline establishment and post-installation periods, or for measures for which a measured proxy variable, in combination with well-established algorithms and/or stipulated factors, can provide an accurate estimate of the Demand Reduction Value.

### 021-3.6.1.2

#### ~~IPMVP~~ **Option B: Retrofit Isolation/Metered Equipment.**

~~IPMVP~~ Option B involves a retrofit or system-level Measurement and Verification assessment. The approach is intended for retrofits with performance factors and operational factors that can be measured at the component or system level using interval electrical demand meters installed on the affected end-use.

### 021-3.6.1.3

#### ~~IPMVP~~ **Option C: Whole facility/Regression.**

~~IPMVP~~ Option C estimates Demand Reduction Values by analyzing the overall energy use in a facility and identifying the impact of the implemented measures on the total building or facility energy use patterns. The evaluation of whole-building or facility level metered data may be completed using techniques ranging from billing comparisons to multivariate regression analysis.

### 021-3.6.1.4

#### ~~IPMVP~~ **Option D: Calibrated Simulation.**

~~IPMVP~~ Option D involves calibrated computer simulation models of component or whole-building demand and energy usage to determine

---



## NORTH AMERICAN ENERGY STANDARDS BOARD

801 Travis, Suite 1675 • Houston, Texas 77002 • Phone: (713) 356-0060 • Fax: (713) 356-0067  
email: naesb@naesb.org • Web Site Address: www.naesb.org

---

measure demand and energy savings. Engineering simulation models (such as DOE-2) can be used to model both residential buildings (homes, apartments and condominiums) as well as more complex commercial buildings. Operational simulations can be used for industrial processes that take into account the specifics of the process addressed by the energy efficiency actions. Both engineering and operational simulations are made more powerful by calibrating these methods to actual MW and MWh data from the site or process being examined, even if these data are available for a monitoring period shorter than or different from the required performance hours. Short-term metering and monitoring are methods that produce data that can be used to adjust engineering simulations. This approach is generally termed "calibrated engineering simulations." Linking simulation inputs to baseline and post-installation conditions completes the calibration. Characterizing baseline and post-installation conditions may involve metering performance and operating factors both before and after the retrofit. Long-term whole-building energy use data may be used to calibrate the simulations.

### 021-3.6.2

#### **Alternative Acceptable M&V Methodologies.**

The EERP may propose alternative or supplemental methodologies to the ~~IPMVP-standard~~ options listed in the section WEQ-021-3.6.1. EERPs proposing alternative methodologies shall demonstrate that the alternative methodologies will be equivalent to one of the ~~IPMVP standard~~ methodologies described in section WEQ-021-3.6.1. Alternative or supplemental methodologies shall be appropriate to the measure type and sensitivity requirements of the measurement techniques. EERP will demonstrate justifiable need for deviation from the ~~IMPVP-standard~~ methodologies described in the Section above based on unique project requirements.

### 021-3.11.1.12

All measurement, monitoring and data recording equipment shall be calibrated by the EERP, independent calibration contractor, or designee, to meet or exceed ~~the IPMVP~~, the US DOE Federal Energy Management Program ("FEMP") M&V guidelines, applicable American Society of Heating, Refrigeration and Air Conditioning Engineers ("ASHRAE") standards, NIST, or equivalent standard for the equipment.

#### 5. Reason for of Minor Correction/Clarification:

International Performance Measurement and Verification Protocol (IPMVP) is a registered trademark. The Wholesale Electric Quadrant does not want to introduce confusion to the NAESB Business Practice Standard by referencing another organization's standard and protocols that may change and represents concepts differently than what the NAESB process

---



**NORTH AMERICAN ENERGY STANDARDS BOARD**

801 Travis, Suite 1675 • Houston, Texas 77002 • **Phone:** (713) 356-0060 • **Fax:** (713) 356-0067

**email:** [naesb@naesb.org](mailto:naesb@naesb.org) • **Web Site Address:** [www.naesb.org](http://www.naesb.org)

---

intended. This minor correction will also align the REQ and WEQ energy efficiency standards consistent with the Board directive.

---