

**Exhibit A**

**Proposed Reliability Standard**

## A. Introduction

1. **Title: Demand and Energy Data**
2. **Number: MOD-031-1**
3. **Purpose:** To provide authority for applicable entities to collect Demand, energy and related data to support reliability studies and assessments and to enumerate the responsibilities and obligations of requestors and respondents of that data.

4. **Applicability:**

- 4.1. **Functional Entities:**

- 4.1.1 Planning Authority and Planning Coordinator (hereafter collectively referred to as the “Planning Coordinator”)

This proposed standard combines “Planning Authority” with “Planning Coordinator” in the list of applicable functional entities. The NERC Functional Model lists “Planning Coordinator” while the registration criteria list “Planning Authority,” and they are not yet synchronized. Until that occurs, the proposed standard applies to both “Planning Authority” and “Planning Coordinator.”

- 4.1.2 Transmission Planner

- 4.1.3 Balancing Authority

- 4.1.4 Resource Planner

- 4.1.5 Load-Serving Entity

- 4.1.6 Distribution Provider

5. **Effective Date**

- 5.1. MOD-031-1 shall become effective on the first day of the first calendar quarter that is twelve months after the date that this standard is approved by applicable regulatory authorities or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is twelve months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

6. **Background:**

To ensure that various forms of historical and forecast Demand and energy data and information is available to the parties that perform reliability studies and assessments, authority is needed to collect the applicable data.

The collection of Demand, Net Energy for Load and Demand Side Management data requires coordination and collaboration between Planning Authorities (Planning Coordinators), Transmission and Resource Planners, Load-Serving Entities and

Distribution Providers. Ensuring that planners and operators have access to complete and accurate load forecasts – as well as the supporting methods and assumptions used to develop these forecasts – enhances the reliability of the Bulk Electric System. Consistent documenting and information sharing activities will also improve efficient planning practices and support the identification of needed system reinforcements. Furthermore, collection of actual Demand and Demand Side Management performance during the prior year will allow for comparison to prior forecasts and further contribute to enhanced accuracy of load forecasting practices.

## B. Requirements and Measures

- R1.** Each Planning Coordinator or Balancing Authority that identifies a need for the collection of Total Internal Demand, Net Energy for Load, and Demand Side Management data shall develop and issue a data request to the applicable entities in its area. The data request shall include: *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*
- 1.1.** A list of Transmission Planners, Balancing Authorities, Load Serving Entities, and Distribution Providers that are required to provide the data (“Applicable Entities”).
  - 1.2.** A timetable for providing the data. (A minimum of 30 calendar days must be allowed for responding to the request).
  - 1.3.** A request to provide any or all of the following actual data, as necessary:
    - 1.3.1.** Integrated hourly Demands in megawatts for the prior calendar year.
    - 1.3.2.** Monthly and annual integrated peak hour Demands in megawatts for the prior calendar year.
      - 1.3.2.1.** If the annual peak hour actual Demand varies due to weather-related conditions (e.g., temperature, humidity or wind speed), the Applicable Entity shall also provide the weather normalized annual peak hour actual Demand for the prior calendar year.
    - 1.3.3.** Monthly and annual Net Energy for Load in gigawatthours for the prior calendar year.
    - 1.3.4.** Monthly and annual peak hour controllable and dispatchable Demand Side Management under the control or supervision of the System Operator in megawatts for the prior calendar year. Three values shall be reported for each hour: 1) the committed megawatts (the amount under control or supervision), 2) the dispatched megawatts (the amount, if any, activated for use by the System Operator), and 3) the realized megawatts (the amount of actual demand reduction).
  - 1.4.** A request to provide any or all of the following forecast data, as necessary:



- R3.** The Planning Coordinator or the Balancing Authority shall provide the data collected under Requirement R2 to the applicable Regional Entity within 75 calendar days of receiving a request for such data, unless otherwise agreed upon by the parties.  
*[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*
- M3.** Each Planning Coordinator or Balancing Authority, shall have evidence, such as dated e-mails or dated transmittal letters that it provided the data requested by the applicable Regional Entity in accordance with Requirement R3.
- R4.** Any Applicable Entity shall, in response to a written request for the data included in parts 1.3-1.5 of Requirement R1 from a Planning Coordinator, Balancing Authority, Transmission Planner or Resource Planner with a demonstrated need for such data in order to conduct reliability assessments of the Bulk Electric System, provide or otherwise make available that data to the requesting entity. This requirement does not modify an entity's obligation pursuant to Requirement R2 to respond to data requests issued by its Planning Coordinator or Balancing Authority pursuant to Requirement R1. Unless otherwise agreed upon, the Applicable Entity: *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*
- shall provide the requested data within 45 calendar days of the written request, subject to part 4.1 of this requirement; and
  - shall not be required to alter the format in which it maintains or uses the data.
- 4.1.** If the Applicable Entity does not provide data requested under this requirement because (1) the requesting entity did not demonstrate a reliability need for the data; or (2) providing the data would conflict with the Applicable Entity's confidentiality, regulatory, or security requirements, the Applicable Entity shall, within 30 calendar days of the written request, provide a written response to the requesting entity specifying the data that is not being provided and on what basis.
- M4.** Each Applicable Entity identified in Requirement R4 shall have evidence such as dated e-mails or dated transmittal letters that it provided the data requested or provided a written response specifying the data that is not being provided and the basis for not providing the data in accordance with Requirement R4.

## C. Compliance

### 1. Compliance Monitoring Process

#### 1.1. Compliance Enforcement Authority

As defined in the NERC Rules of Procedure, “Compliance Enforcement Authority” means NERC or the Regional Entity in their respective roles of monitoring and enforcing compliance with the NERC Reliability Standards.

#### 1.2. Evidence Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The Applicable Entity shall keep data or evidence to show compliance with Requirements R1 through R4, and Measures M1 through M4, since the last audit, unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation.

If an Applicable Entity is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved, or for the time specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

#### 1.3. Compliance Monitoring and Assessment Processes:

Compliance Audit

Self-Certification

Spot Checking

Compliance Investigation

Self-Reporting

Complaint

#### 1.4. Additional Compliance Information

None

Table of Compliance Elements

R #	Time Horizon	VRF	Violation Severity Levels			
			Lower VSL	Moderate VSL	High VSL	Severe VSL
R1	Long-term Planning	Medium	N/A	N/A	N/A	The Planning Coordinator or Balancing Authority developed and issued a data request but failed to include either the entity(s) necessary to provide the data or the timetable for providing the data.
R2	Long-term Planning	Medium	The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide all of the data requested in Requirement R1 part 1.5.1 through part 1.5.5  OR The Applicable Entity, as defined in the data request developed in Requirement R1, provided the data requested in Requirement R1, but Requirement R1, but	The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide one of the requested items in Requirement R1 part 1.3.1 through part 1.3.4  OR The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide one of the requested items in Requirement R1 part 1.3.1 through part 1.3.4  OR The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide one of the requested items in Requirement R1 part 1.3.1 through part 1.3.4	The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide two of the requested items in Requirement R1 part 1.3.1 through part 1.3.4  OR The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide two of the requested items in Requirement R1 part 1.3.1 through part 1.3.4  OR The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide two of the requested items in Requirement R1 part 1.3.1 through part 1.3.4	The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide three or more of the requested items in Requirement R1 part 1.3.1 through part 1.3.4  OR The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide three or more of the requested items in Requirement R1 part 1.4.1 through part 1.4.5

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		did so after the date indicated in the timetable provided pursuant to Requirement R1 part 1.2 but prior to 6 days after the date indicated in the timetable provided pursuant to Requirement R1 part 1.2.	1.4.1 through part 1.4.5 OR The Applicable Entity, as defined in the data request developed in Requirement R1, provided the data requested in Requirement R1, but did so 6 days after the date indicated in the timetable provided pursuant to Requirement R1 part 1.2.	1.4.1 through part 1.4.5 OR The Applicable Entity, as defined in the data request developed in Requirement R1, provided the data requested in Requirement R1, but did so 11 days after the date indicated in the timetable provided pursuant to Requirement R1 part 1.2 but prior to 15 days after the date indicated in the timetable provided pursuant to Requirement R1 part 1.2.	OR The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide the data requested in the timetable provided pursuant to Requirement R1 prior to 16 days after the date indicated in the timetable provided pursuant to Requirement R1 part 1.2.
R3	Long-term Planning	Medium	The Planning Coordinator or Balancing Authority, in response to a request by the Regional Entity, made available the data collected under Requirement R2, but	The Planning Coordinator or Balancing Authority, in response to a request by the Regional Entity, made available the data collected under Requirement R2, but	The Planning Coordinator or Balancing Authority, in response to a request by the Regional Entity, failed to make available the data collected under Requirement R2 prior to 91



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R4	Long-term Planning	Medium	<p>did so after 75 days from the date of request but prior to 81 days from the date of the request.</p> <p>The Applicable Entity provided or otherwise made available the data to the requesting entity but did so after 45 days from the date of request but prior to 51 days from the date of the request</p> <p>OR</p> <p>The Applicable Entity that is not providing the data requested provided a written response specifying the data that is not being provided and on what basis but did so after 30 days of the written request but prior to 36 days of the written request.</p>	<p>did so after 80 days from the date of request but prior to 86 days from the date of the request.</p> <p>The Applicable Entity provided or otherwise made available the data to the requesting entity but did so after 50 days from the date of request but prior to 56 days from the date of the request</p> <p>OR</p> <p>The Applicable Entity that is not providing the data requested provided a written response specifying the data that is not being provided and on what basis but did so after 35 days of the written request but prior to 41 days of the written request.</p>	<p>did so after 85 days from the date of request but prior to 91 days from the date of the request.</p> <p>The Applicable Entity provided or otherwise made available the data to the requesting entity but did so after 55 days from the date of request but prior to 61 days from the date of the request</p> <p>OR</p> <p>The Applicable Entity that is not providing the data requested failed to provide a written response specifying the data that is not being provided and on what basis within 45 days of the written request.</p>	<p>days or more from the date of the request.</p> <p>The Applicable Entity failed to provide or otherwise make available the data to the requesting entity within 60 days from the date of the request</p> <p>OR</p> <p>The Applicable Entity that is not providing the data requested failed to provide a written response specifying the data that is not being provided and on what basis within 45 days of the written request.</p>
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**D. Regional Variances**

None.

**E. Interpretations**

None.

**F. Associated Documents**

None.

**Version History**

Version	Date	Action	Change Tracking
1	May 6, 2014	Adopted by the NERC Board of Trustees.	

## Application Guidelines

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### Rationale

During development of this standard, text boxes were embedded within the standard to explain the rationale for various parts of the standard. Upon Board of Trustees approval, the text from the rationale text boxes was moved to this section.

#### Rationale for R1:

Rationale for R1: To ensure that when Planning Coordinators (PCs) or Balancing Authorities (BAs) request data (R1), they identify the entities that must provide the data (Applicable Entity in part 1.1), the data to be provided (parts 1.3 – 1.5) and the due dates (part 1.2) for the requested data.

For Requirement R1 part 1.3.2.1, if the Demand does not vary due to weather-related conditions (e.g., temperature, humidity or wind speed), or the weather assumed in the forecast was the same as the actual weather, the weather normalized actual Demand will be the same as the actual demand reported for Requirement R1 part 1.3.2. Otherwise the annual peak hour weather normalized actual Demand will be different from the actual demand reported for Requirement R1 part 1.3.2.

Balancing Authorities are included here to reflect a practice in the WECC Region where BAs are the entity that perform this requirement in lieu of the PC.

#### Rationale for R2:

This requirement will ensure that entities identified in Requirement R1, as responsible for providing data, provide the data in accordance with the details described in the data request developed in accordance with Requirement R1. In no event shall the Applicable Entity be required to provide data under this requirement that is outside the scope of parts 1.3 - 1.5 of Requirement R1.

#### Rationale for R3:

This requirement will ensure that the Planning Coordinator or when applicable, the Balancing Authority, provides the data requested by the Regional Entity.

#### Rationale for R4:

This requirement will ensure that the Applicable Entity will make the data requested by the Planning Coordinator or Balancing Authority in Requirement R1 available to other applicable entities (Planning Coordinator, Balancing Authority, Transmission Planner or Resource Planner) unless providing the data would conflict with the provisions outlined in Requirement R4 below. The sharing of documentation of the supporting methods and assumptions used to develop forecasts as well as information-sharing activities will improve the efficiency of planning practices and support the identification of needed system reinforcements.

**Exhibit B**  
**Implementation Plan**

## Implementation Plan

### Project 2010-04 Demand and Energy Data

#### Implementation Plan for MOD-031-1 – Demand and Energy Data

##### ***Approvals Required***

MOD-031-1 – Demand and Energy Data

##### ***Prerequisite Approvals***

There are no other standards that must receive approval prior to the approval of this standard.

##### ***Revisions to Glossary Terms***

**Demand Side Management:** All activities or programs undertaken by any applicable entity to achieve a reduction in Demand.

**Total Internal Demand:** The Demand of a metered system, which includes the Firm Demand, plus any controllable and dispatchable DSM Load and the Load due to the energy losses incurred within the boundary of the metered system.

The defined term “Demand Side Management” is incorporated in the NERC approved standards listed in Attachment 1 of this document. After reviewing the standards incorporating the term “Demand Side Management,” it is not anticipated that the proposed revision will have any effect on the standards.

##### ***Applicable Entities***

Planning Coordinator and Planning Authority

Transmission Planner

Resource Planner

Balancing Authority

Load-Serving Entity

Distribution Provider

##### ***Applicable Facilities***

N/A

***Conforming Changes to Other Standards***

None

***Effective Dates***

MOD-031-1 shall become effective as follows:

The first day of the first calendar quarter that is twelve months after the date that this standard is approved by applicable regulatory authorities or as otherwise provided for in a jurisdiction where approval by an applicable governmental authority is required for a standard to go into effect. Where approval by an applicable governmental authority is not required, the standard shall become effective on the first day of the first calendar quarter that is twelve months after the date the standard is adopted by the NERC Board of Trustees or as otherwise provided for in that jurisdiction.

***Justification***

The 12-month implementation period will provide sufficient time for the applicable entities to develop the necessary process to implement this standard.

***Retirements***

MOD-016-1.1, MOD-017-0.1, MOD-018-0, MOD-019-0.1, and MOD-021-1 shall be retired at 11:59:59 p.m. of the day immediately prior to the effective date of MOD-031-1 in the particular jurisdiction in which the new standard is becoming effective.

The current definition of Demand Side Management (DSM) in the NERC Glossary of Terms shall be retired at 11:59:59 p.m. of the day immediately prior to the effective date of MOD-031-1 in the particular jurisdiction in which the new standard is becoming effective.

**Attachment 1**  
**Approved Standards Incorporating the Term “Demand-Side Management”**

BAL-502-RFC-02 — Planning Resource Adequacy Analysis, Assessment and Documentation  
EOP-002-3.1 — Capacity and Energy Emergencies  
IRO-006-EAST-1 — TLR Procedure for the Eastern Interconnection  
MOD-016-1.1 — Actual and Forecast Demands, Net Energy for Load, Controllable DSM  
MOD-017-0.1 — Aggregated Actual and Forecast Demands and Net Energy for Load  
MOD-018-0 — Reports of Actual and Forecast Demand Data  
MOD-019-0.1 — Forecasts of Interruptible Demands and DCLM Data  
MOD-020-0 — Providing Interruptible Demands and DCLM Data  
MOD-021-1 — Accounting Methodology for Effects of DSM in Forecasts

**Approved Standards Pending Regulatory Approval Incorporating the Term “Demand-Side Management”**

BAL-002-WECC-2 — Contingency Reserve  
TPL-001-2 — Transmission System Planning Performance Requirements  
TPL-001-3 — System Performance Under Normal Conditions  
TPL-001-4 — Transmission System Planning Performance Requirements  
TPL-002-2b — System Performance Following Loss of a Single BES Element  
TPL-003-2a — System Performance Following Loss of Two or More BES Elements  
TPL-003-2b — System Performance Following Loss of Two or More BES Elements  
TPL-004-2 — System Performance Following Extreme BES Events  
TPL-004-2a — System Performance Following Extreme BES Events  
TPL-006-0 — Assessment Data from Regional Reliability Organizations  
TPL-006-0.1 — Assessment Data from Regional Reliability Organizations

**Exhibit C**  
**Order No. 672 Criteria**



## EXHIBIT C

### Order No. 672 Criteria

In Order No. 672,<sup>1</sup> the Commission identified a number of criteria it will use to analyze Reliability Standards proposed for approval to ensure they are just, reasonable, not unduly discriminatory or preferential, and in the public interest. The discussion below identifies these factors and explains how the proposed Reliability Standard has met or exceeded the criteria:

**1. Proposed Reliability Standards must be designed to achieve a specified reliability goal and must contain a technically sound means to achieve that goal.<sup>2</sup>**

Proposed Reliability Standard MOD-031-1 achieves the specific reliability goal of ensuring that Demand and energy data necessary to support reliability assessments conducted by the ERO and Bulk-Power System planners and operators is available to such entities. The proposed Reliability Standard enumerates the responsibilities of applicable entities with respect to the provision and/or collection of Demand and energy data. By providing for consistent documentation and information sharing practices for the collection and aggregation of such data, proposed Reliability Standard MOD-031-1 promotes efficient planning practices and supports the identification of needed system reinforcements. Furthermore, the requirement in the proposed Reliability Standard to report historical Demand, Net Energy for Load and Demand-Side Management data will allow for comparison to prior forecasts and further contribute to enhanced accuracy of load forecasting practices. These activities ultimately enhance the reliability of the Bulk Electric System.

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<sup>1</sup> *Rules Concerning Certification of the Electric Reliability Organization; and Procedures for the Establishment, Approval, and Enforcement of Electric Reliability Standards*, Order No. 672, FERC Stats. & Regs. ¶ 31,204, *order on reh'g*, Order No. 672-A, FERC Stats. & Regs. ¶ 31,212 (2006).

<sup>2</sup> Order No. 672 at PP 321, 324.

**2. Proposed Reliability Standards must be applicable only to users, owners and operators of the bulk power system, and must be clear and unambiguous as to what is required and who is required to comply.<sup>3</sup>**

The proposed Reliability Standard is clear and unambiguous as to what is required and who is required to comply, in accordance with Order No. 672. The proposed Reliability Standard applies to Planning Coordinators, Transmission Planners, Balancing Authorities, Resource Planners, Load Serving Entities and Distribution Providers. The proposed Reliability Standard clearly articulates the actions that such entities must take to comply with the standard.

**3. A proposed Reliability Standard must include clear and understandable consequences and a range of penalties (monetary and/or non-monetary) for a violation.<sup>4</sup>**

The Violation Risk Factors (“VRFs”) and Violation Severity Levels (“VSLs”) for the proposed Reliability Standard comport with NERC and Commission guidelines related to their assignment. The assignment of the severity level for each VSL is consistent with the corresponding requirement and the VSLs should ensure uniformity and consistency in the determination of penalties. The VSLs do not use any ambiguous terminology, thereby supporting uniformity and consistency in the determination of similar penalties for similar violations. For these reasons, the proposed Reliability Standard includes clear and understandable consequences in accordance with Order No. 672.

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<sup>3</sup> Order No. 672 at PP 322, 325.

<sup>4</sup> Order No. 672 at P 326.

**4. A proposed Reliability Standard must identify clear and objective criterion or measure for compliance, so that it can be enforced in a consistent and non-preferential manner.<sup>5</sup>**

The proposed Reliability Standard contains measures that support each requirement by clearly identifying what is required to demonstrate compliance. These measures help provide clarity regarding the manner in which the requirements will be enforced, and help ensure that the requirements will be enforced in a clear, consistent, and non-preferential manner and without prejudice to any party.

**5. Proposed Reliability Standards should achieve a reliability goal effectively and efficiently — but do not necessarily have to reflect “best practices” without regard to implementation cost or historical regional infrastructure design.<sup>6</sup>**

The proposed Reliability Standard achieves the reliability goal effectively and efficiently in accordance with Order No. 672. The proposed Reliability Standard clearly enumerates the responsibilities of applicable entities with respect to the provision and/or collection of Demand and energy data necessary to support reliability assessments. Proposed MOD-031-1 consolidates and streamlines the Existing MOD C Standards to more efficiently address the collection and aggregation of Demand and energy data.

**6. Proposed Reliability Standards cannot be “lowest common denominator,” *i.e.*, cannot reflect a compromise that does not adequately protect Bulk-Power System reliability. Proposed Reliability Standards can consider costs to implement for smaller entities, but not at consequences of less than excellence in operating system reliability.<sup>7</sup>**

The proposed Reliability Standard does not reflect a “lowest common denominator” approach. To the contrary, the proposed Reliability Standard contains significant benefits for the

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<sup>5</sup> Order No. 672 at P 327.

<sup>6</sup> Order No. 672 at P 328.

<sup>7</sup> Order No. 672 at P 329-30.

Bulk-Power System. The requirements of the proposed Reliability Standard help ensure that entities that conduct reliability assessments, which are fundamental to analyzing the reliability of the grid, have access to complete and accurate data necessary to conduct those assessments.

**7. Proposed Reliability Standards must be designed to apply throughout North America to the maximum extent achievable with a single Reliability Standard while not favoring one geographic area or regional model. It should take into account regional variations in the organization and corporate structures of transmission owners and operators, variations in generation fuel type and ownership patterns, and regional variations in market design if these affect the proposed Reliability Standard.<sup>8</sup>**

The proposed Reliability Standard applies throughout North America and does not favor one geographic area or regional model. In fact, the proposed Reliability Standard supports the various ways in which Demand and energy data is collected across the continent.

**8. Proposed Reliability Standards should cause no undue negative effect on competition or restriction of the grid beyond any restriction necessary for reliability.<sup>9</sup>**

The proposed Reliability Standard has no undue negative impact on competition. The proposed Reliability Standard requires the same performance by each of the applicable Functional Entities in the provision or collection of Demand and energy data. The standard does not unreasonably restrict the available transmission capability or limit use of the Bulk-Power System in a preferential manner.

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<sup>8</sup> Order No. 672 at P 331.

<sup>9</sup> Order No. 672 at P 332. As directed by section 215 of the FPA, FERC itself will give special attention to the effect of a proposed Reliability Standard on competition. The ERO should attempt to develop a proposed Reliability Standard that has no undue negative effect on competition. Among other possible considerations, a proposed Reliability Standard should not unreasonably restrict available transmission capability on the Bulk-Power System beyond any restriction necessary for reliability and should not limit use of the Bulk-Power System in an unduly preferential manner. It should not create an undue advantage for one competitor over another.

**9. The implementation time for the proposed Reliability Standard is reasonable.<sup>10</sup>**

The proposed effective date for the standard is just and reasonable and appropriately balances the urgency in the need to implement the standard against the reasonableness of the time allowed for those who must comply to develop necessary procedures, software, facilities, staffing or other relevant capability. This will allow applicable entities adequate time to ensure compliance with the requirements. The proposed effective date is explained in the proposed Implementation Plan, attached as Exhibit B.

**10. The Reliability Standard was developed in an open and fair manner and in accordance with the Commission-approved Reliability Standard development process.<sup>11</sup>**

The proposed Reliability Standard was developed in accordance with NERC's Commission-approved, ANSI- accredited processes for developing and approving Reliability Standards. Exhibit F includes a summary of the Reliability Standard development proceedings, and details the processes followed to develop the Reliability Standards. These processes included, among other things, comment and balloting periods. Additionally, all meetings of the drafting team were properly noticed and open to the public. The initial and additional ballots achieved a quorum and exceeded the required ballot pool approval levels.

**11. NERC must explain any balancing of vital public interests in the development of proposed Reliability Standards.<sup>12</sup>**

NERC has identified no competing public interests regarding the request for approval of the proposed Reliability Standard. No comments were received that indicated the proposed Reliability Standard conflicts with other vital public interests.

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<sup>10</sup> Order No. 672 at P 333.

<sup>11</sup> Order No. 672 at P 334.

<sup>12</sup> Order No. 672 at P 335.

**12. Proposed Reliability Standards must consider any other appropriate factors.<sup>13</sup>**

No other negative factors relevant to whether the proposed Reliability Standard is just and reasonable were identified.

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<sup>13</sup> Order No. 672 at P 323.

**Exhibit D**  
**Mapping Document**

## Project 2010-04 Mapping Document

Transition of MOD-016-1.1, MOD-017-0.1, MOD-018-0, MOD-019-0.1, and MOD-021-1 to MOD-031-1

Standard: MOD-016-1.1 – Documentation of Data Reporting Requirements for Actual and Forecast Demands, Net Energy for Load, Controllable Demand-Side Management		
Requirement in Approved Standard	Transitions to the below Requirement in New Standard or Other Action	Description and Change Justification
MOD-016-1a R1	Requirement R1	The pro forma standard requires the Planning Coordinator or Balancing Authority to develop and issue a data request as necessary.
MOD-016-1a R1.1	Requirement R1	MOD-010 through MOD-015 does not depend on these standards for their data (they collect the data needed). TPL-005 and TPL-006 are not FERC approved standards but the data is available for their use. The standard will require the Planning Coordinator or Balancing Authority to identify the format for providing data.
MOD-016-1a R2	Requirement R1	See comments on Requirement R1.
MOD-016-1a R2.1	Requirement R1 part 1.2	The standard requires the Planning Coordinator or Balancing Authority to provide a timeline for providing the data.
MOD-016-1a R3	Requirement R1	See comments on Requirement R1.
MOD-016-1a R3.1	Requirement R3	The Planning Coordinator or Balancing Authority must respond within the time allotted by the Electric Reliability Organization (ERO) or Regional Entity (RE).



Standard: MOD-017-0.1 – Aggregated Actual and Forecast Demands and Net Energy for Load		
Requirement in Approved Standard	Transitions to the below Requirement in New Standard or Other Action	Description and Change Justification
MOD-017-0.1 R1	Requirements R2 and R4	Requirements R2 and R4 of the standard will require entities to provide data as outlined in Requirement R1 parts 1.1 through 1.5.
MOD-017-0.1 R1.1	Requirement R1 part 1.3.1	The standard will require entities to provide integrated hourly demands in megawatts (MW) for the prior year.
MOD-017-0.1 R1.2	Requirement R1 part 1.3.2	The standard will require entities to provide monthly and annual peak hour actual demands in MW and Net Energy for Load in gigawatthours (GWh) for the prior year.
MOD-017-0.1 R1.3	Requirement R1 part 1.4.1	The standard will require entities to provide monthly peak hour forecast demands in MW and Net Energy for Load in GWh for the next two years.
MOD-017-0.1 R1.4	Requirement part R1 part 1.4.2	The standard will require entities to provide peak hour forecast demands (summer and winter) in MW and annual Net Energy for load in GWh for ten years into the future.

Standard: MOD-018-0 – Treatment of Nonmember Demand Data and How Uncertainties are Addressed in the Forecasts of Demand and Net Energy for Load		
Requirement in Approved Standard	Transitions to the below Requirement in New Standard or Other Action	Description and Change Justification
MOD-018-0 R1	Omitted	This requirement serves no direct purpose other than as a bridge to the sub-requirements below.
MOD-018-0 R1.1	Omitted	This is no longer need now that all registered entities within each region is a member of that region.
MOD-018-0 R1.2	Requirement R1 part 1.5.1	The standard will require entities to provide the assumptions and methods used in the development of aggregated peak demand and Net Energy for Load forecasts.
MOD-018-0 R1.3	Requirement R1	This is now a part of the data reporting request developed in Requirement R1.
MOD-018-0 R2	Requirements R2 and R4	The standard will require entities to provide the data requested in Requirement R1 parts 1.1 through 1.5.

Standard: MOD-019-0.1 – Reporting of Interruptible Demands and Direct Control Load Management		
Requirement in Approved Standard	Transitions to the below Requirement in New Standard or Other Action	Description and Change Justification
MOD-019-0.1 R1	Requirements R1 part 1.4.3	The standard will require entities to provide forecasts of Interruptible Load and Direct Control Load Management (DCLM) for at least five years and up to ten years into the future, as requested, for summer and winter peak system conditions.

Standard: MOD-021-1 – Documentation of the Accounting Methodology for the Effects of Demand-Side Management in Demand and Energy Forecasts		
Requirement in Approved Standard	Transitions to the below Requirement in New Standard or Other Action	Description and Change Justification
MOD-021-1 R1	Requirements R1 part 1.5.2	The standard will require entities to provide the Demand and energy effects of Interruptible and Direct Control Load Management.
MOD-021-1 R2	Requirements R1 part 1.5.3	The standard will require entities to provide how DSM measures are addressed in the forecasts of its Peak Demand and annual Net Energy for Load.
MOD-021-1 R3	Requirements R1 part 1.2	The standard will require entities to provide the requested data by a certain date.

**Exhibit E**

**Analysis of Violation Risk Factors and Violation Security Levels**

## Violation Risk Factor and Violation Severity Level Justifications MOD-031-1 – Demand and Energy Data

This document provides the Standard Drafting Team's (SDT) justification for assignment of violation risk factors (VRFs) and violation severity levels (VSLs) for each requirement in MOD-031-1 – Demand and Energy Data. Each requirement is assigned a VRF and a VSL. These elements support the determination of an initial value range for the Base Penalty Amount regarding violations of requirements in FERC-approved Reliability Standards, as defined in the Electric Reliability Organizations (ERO) Sanction Guidelines. The SDT applied the following NERC criteria and FERC Guidelines when proposing VRFs and VSLs for the requirements under this project.

### **NERC Criteria - Violation Risk Factors High Risk Requirement**

A requirement that, if violated, could directly cause or contribute to Bulk Electric System instability, separation, or a cascading sequence of failures, or could place the Bulk Electric System at an unacceptable risk of instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly cause or contribute to Bulk Electric System instability, separation, or a cascading sequence of failures, or could place the Bulk Electric System at an unacceptable risk of instability, separation, or cascading failures, or could hinder restoration to a normal condition.

### **Medium Risk Requirement**

A requirement that, if violated, could directly affect the electrical state or the capability of the Bulk Electric System, or the ability to effectively monitor and control the Bulk Electric System. However, violation of a medium risk requirement is unlikely to lead to Bulk Electric System instability, separation, or cascading failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor, control, or restore the Bulk Electric System. However, violation of a medium risk requirement is unlikely, under emergency, abnormal, or restoration conditions anticipated by the preparations, to lead to Bulk Electric System instability, separation, or cascading failures, nor to hinder restoration to a normal condition.

### **Lower Risk Requirement**

A requirement that is administrative in nature and a requirement that, if violated, would not be expected to adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor and control the Bulk Electric System; or, a requirement that is administrative in nature and a requirement in a planning time frame that, if violated, would not, under the emergency, abnormal, or restorative conditions anticipated by the preparations, be expected to adversely affect the electrical state or capability of the Bulk Electric System, or the ability to effectively monitor, control, or restore the Bulk Electric System.

### **FERC Violation Risk Factor Guidelines**

#### **Guideline (1) – Consistency with the Conclusions of the Final Blackout Report**

The Commission seeks to ensure that Violation Risk Factors assigned to Requirements of Reliability Standards in these identified areas appropriately reflect their historical critical impact on the reliability of the Bulk-Power System. In the VSL Order, FERC listed critical areas (from the Final Blackout Report) where violations could severely affect the reliability of the Bulk-Power System:

- Emergency operations
- Vegetation management
- Operator personnel training
- Protection systems and their coordination
- Operating tools and backup facilities
- Reactive power and voltage control
- System modeling and data exchange
- Communication protocol and facilities
- Requirements to determine equipment ratings
- Synchronized data recorders
- Clearer criteria for operationally critical facilities
- Appropriate use of transmission loading relief.

**Guideline (2) – Consistency within a Reliability Standard**

The Commission expects a rational connection between the sub-Requirement Violation Risk Factor assignments and the main Requirement Violation Risk Factor assignment.

**Guideline (3) – Consistency among Reliability Standards**

The Commission expects the assignment of Violation Risk Factors corresponding to Requirements that address similar reliability goals in different Reliability Standards would be treated comparably.

**Guideline (4) – Consistency with NERC’s Definition of the Violation Risk Factor Level**

Guideline (4) was developed to evaluate whether the assignment of a particular Violation Risk Factor level conforms to NERC’s definition of that risk level.

**Guideline (5) – Treatment of Requirements that Co-mingle More Than One Obligation**

Where a single Requirement co-mingles a higher risk reliability objective and a lesser risk reliability objective, the VRF assignment for such Requirements must not be watered down to reflect the lower risk level associated with the less important objective of the Reliability Standard.

**NERC Criteria - Violation Severity Levels**

Violation Severity Levels (VSLs) define the degree to which compliance with a requirement was not achieved. Each requirement must have at least one VSL. While it is preferable to have four VSLs for each requirement, some requirements do not have multiple “degrees” of noncompliant performance and may have only one, two, or three VSLs.



Violation severity levels should be based on NERC’s overarching criteria shown in the table below:

Lower VSL	Moderate VSL	High VSL	Severe VSL
The performance or product measured almost meets the full intent of the requirement.	The performance or product measured meets the majority of the intent of the requirement.	The performance or product measured does not meet the majority of the intent of the requirement, but does meet some of the intent.	The performance or product measured does not substantively meet the intent of the requirement.

### FERC Order of Violation Severity Levels

FERC’s VSL guidelines are presented below, followed by an analysis of whether the VSLs proposed for each requirement in the standard meet the FERC Guidelines for assessing VSLs:

#### Guideline 1 – Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance

Compare the VSLs to any prior levels of non-compliance and avoid significant changes that may encourage a lower level of compliance than was required when levels of non-compliance were used.

#### Guideline 2 – Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties

A violation of a “binary” type requirement must be a “Severe” VSL. Do not use ambiguous terms such as “minor” and “significant” to describe noncompliant performance.

#### Guideline 3 – Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement

VSLs should not expand on what is required in the requirement.

#### Guideline 4 – Violation Severity Level Assignment Should Be Based on a Single Violation, Not on a Cumulative Number of Violations

... unless otherwise stated in the requirement, each instance of non-compliance with a requirement is a separate violation. Section 4 of the Sanction Guidelines states that assessing penalties on a per violation per day basis is the “default” for penalty calculations.

VRF Justification – MOD-031-1 Requirement R1	
Proposed VRF	Medium
NERC VRF Discussion	<p>Consistent with NERC’s VRF Guidelines.</p> <p>A VRF of medium is consistent with the NERC VRF definition. Requirement R1 prescribes data that may be collected for analysis.</p> <p>Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.</p>
FERC VRF G1 Discussion	<p>Guideline 1 – Consistency with Blackout Report:</p> <p>It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading. NERC staff believes that the Medium VRF assignment was appropriate.</p>
FERC VRF G2 Discussion	<p>Guideline 2 – Consistency within a Reliability Standard:</p> <p>All of the parts within Requirement R1 are consistent with one another and considered a medium VRF.</p>
FERC VRF G3 Discussion	<p>Guideline 3 – Consistency among Reliability Standards:</p> <p>The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the standard.</p>
FERC VRF G4 Discussion	<p>Guideline 4 – Consistency with NERC Definitions of VRFs:</p> <p>The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the BES.</p>
FERC VRF G5 Discussion	<p>Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:</p> <p>This VRF has one objective – to collect data.</p>

<b>VSL Justification – MOD-031-1 Requirement R1</b>	
<p>NERC VSL Guidelines</p> <p>FERC VSL G1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance</p> <p>FERC VSL G2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties</p> <p>Guideline 2a: The single VSL assignment category for “Binary” Requirements is not consistent</p> <p>Guideline 2b: VSL Assignments that contain ambiguous language</p> <p>FERC VSL G3:</p>	<p>Consistent with NERC’s VSL Guidelines. The Requirement is binary and therefore has one VSL.</p> <p>The current level of compliance is not lowered with the proposed VSL.</p> <p>The proposed VSL is written to ensure uniformity and consistency in the determination of penalties.</p> <p>Guideline 2a: The proposed VSL is binary and therefore has on VSL, severe.</p> <p>Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the determination of similar penalties for similar violations.</p> <p>The proposed VSL is consistent with the corresponding requirement.</p>

<p>Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	
<p>FERC VSL G4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>The proposed VSL is not based on a cumulative number of violations.</p>

<p><b>VRF Justification – MOD-031-1 Requirement R2</b></p>	
<p><b>Proposed VRF</b></p>	<p><b>Medium</b></p>
<p>NERC VRF Discussion</p>	<p>Consistent with NERC’s VRF Guidelines. A VRF of medium is consistent with the NERC VRF definition. Requirement R2 ensures that once data is collected, it is passed on to the appropriate entity. Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.</p>
<p>FERC VRF G1 Discussion</p>	<p>Guideline 1 – Consistency with Blackout Report: It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading.</p>
<p>FERC VRF G2 Discussion</p>	<p>NERC staff believes that the Medium VRF assignment was appropriate. Guideline 2 – Consistency within a Reliability Standard:</p>

	All of the parts within Requirement R2 are consistent with one another and considered a medium VRF.
FERC VRF G3 Discussion	Guideline 3 – Consistency among Reliability Standards:  The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the standard.
FERC VRF G4 Discussion	Guideline 4 – Consistency with NERC Definitions of VRFs:  The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the BES.
FERC VRF G5 Discussion	Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:  This Requirement has one objective – to ensure that data is collected.

### VSL Justification – MOD-031-1 Requirement R2

NERC VSL Guidelines	Consistent with NERC’s VSL Guidelines. The VSL describes degrees of noncompliant performance in an incremental manner.
FERC VSL G1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The current level of compliance is not lowered with the proposed VSL.
FERC VSL G2:	The proposed VSL is written to ensure uniformity and consistency in the determination of penalties.

<p>Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties</p> <p>Guideline 2a: The single VSL assignment category for “Binary” Requirements is not consistent</p> <p>Guideline 2b: VSL Assignments that contain ambiguous language</p>	<p>Guideline 2a: The proposed VSL is not binary</p> <p>Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
<p>FERC VSL G3: Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSL is worded consistently with the corresponding requirement.</p>
<p>FERC VSL G4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>The proposed VSL is not based on cumulative number of violations.</p>

VRF Justification – MOD-031-1 Requirement R3	
Proposed VRF	Medium
NERC VRF Discussion	<p>Consistent with NERC’s VRF Guidelines.</p> <p>A VRF of medium is consistent with the NERC VRF definition. Requirement R3 ensures that once data is collected, it is passed on to the appropriate entity.</p> <p>Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.</p>
FERC VRF G1 Discussion	<p>Guideline 1 – Consistency with Blackout Report:</p> <p>It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading. NERC staff believes that the Medium VRF assignment was appropriate.</p>
FERC VRF G2 Discussion	<p>Guideline 2 – Consistency within a Reliability Standard:</p> <p>All of the parts within Requirement R3 are consistent with one another and considered a medium VRF.</p>
FERC VRF G3 Discussion	<p>Guideline 3 – Consistency among Reliability Standards:</p> <p>The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the standard.</p>
FERC VRF G4 Discussion	<p>Guideline 4 – Consistency with NERC Definitions of VRFs:</p> <p>The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the BES.</p>
FERC VRF G5 Discussion	<p>Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:</p> <p>This Requirement has one objective – to ensure that data is collected.</p>

VSL Justification – MOD-031-1 Requirement R3	
NERC VSL Guidelines	Consistent with NERC’s VSL Guidelines. The VSL describes degrees of noncompliant performance in an incremental manner.
FERC VSL G1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The current level of compliance is not lowered with the proposed VSL.
FERC VSL G2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	The proposed VSL is written to ensure uniformity and consistency in the determination of penalties.
Guideline 2a: The single VSL assignment category for “Binary” Requirements is not consistent	Guideline 2a: The proposed VSL is not binary
Guideline 2b: VSL Assignments that contain ambiguous language	Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the determination of similar penalties for similar violations.
FERC VSL G3: Violation Severity Level Assignment Should Be Consistent with the	The proposed VSL is worded consistently with the corresponding requirement.



<p>Corresponding Requirement</p> <p>FERC VSL G4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>The proposed VSL is not based on cumulative number of violations.</p>
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<p>VRF Justification – MOD-031-1 Requirement R4</p>	
<p>Proposed VRF</p>	<p>Medium</p>
<p>NERC VRF Discussion</p>	<p>Consistent with NERC’s VRF Guidelines.</p> <p>A VRF of medium is consistent with the NERC VRF definition. Requirement R4 ensures that neighboring entities have the ability to collect data.</p> <p>Additionally, the Medium VRF is consistent with the prior versions of this Requirement in the currently effective version of the standard.</p>
<p>FERC VRF G1 Discussion</p>	<p>Guideline 1 – Consistency with Blackout Report:</p> <p>It is difficult to argue that a failure to collect the data will directly lead to instability, separation, or Cascading. NERC staff believes that the Medium VRF assignment was appropriate.</p>
<p>FERC VRF G2 Discussion</p>	<p>Guideline 2 – Consistency within a Reliability Standard:</p> <p>All of the parts within Requirement R4 are consistent with one another and considered a medium VRF.</p>
<p>FERC VRF G3 Discussion</p>	<p>Guideline 3 – Consistency among Reliability Standards:</p> <p>The Medium VRF is consistent with the prior version of this Requirement in the currently effective version of the</p>

	standard.
FERC VRF G4 Discussion	<p>Guideline 4 – Consistency with NERC Definitions of VRFs:</p> <p>The VRF is consistent with the NERC definition. A violation of this requirement is unlikely to lead to Bulk Electric System (BES) instability, separation, or a cascading sequence of failures; or, a requirement in a planning time frame that, if violated, could, under emergency, abnormal, or restorative conditions anticipated by the preparations, directly and adversely affect the electrical state or capability of the bulk electric system, or the ability to effectively monitor, control, or restore the BES.</p>
FERC VRF G5 Discussion	<p>Guideline 5 – Treatment of Requirements that Co-mingle More Than One Obligation:</p> <p>This Requirement has one objective – to ensure that data is collected.</p>

VSL Justification – MOD-031-1 Requirement R4	
NERC VSL Guidelines	Consistent with NERC’s VSL Guidelines. The VSL describes degrees of noncompliant performance in an incremental manner.
FERC VSL G1: Violation Severity Level Assignments Should Not Have the Unintended Consequence of Lowering the Current Level of Compliance	The current level of compliance is not lowered with the proposed VSL.
FERC VSL G2: Violation Severity Level Assignments Should Ensure Uniformity and Consistency in the Determination of Penalties	<p>The proposed VSL is written to ensure uniformity and consistency in the determination of penalties.</p> <p>Guideline 2a: The proposed VSL is not binary</p>

<p>Guideline 2a: The single VSL assignment category for “Binary” Requirements is not consistent</p> <p>Guideline 2b: VSL Assignments that contain ambiguous language</p>	<p>Guideline 2b: The proposed VSL does not use ambiguous terms, supporting uniformity and consistency in the determination of similar penalties for similar violations.</p>
<p>FERC VSL G3: Violation Severity Level Assignment Should Be Consistent with the Corresponding Requirement</p>	<p>The proposed VSL is worded consistently with the corresponding requirement.</p>
<p>FERC VSL G4: Violation Severity Level Assignment Should Be Based on A Single Violation, Not on A Cumulative Number of Violations</p>	<p>The proposed VSL is not based on cumulative number of violations.</p>

**Exhibit F**

**Summary of Development History and Record of Development**

## **Summary of Development History**

The development record for proposed Reliability Standard MOD-031-1 is summarized below.

### **I. Overview of the Standard Drafting Team**

When evaluating a proposed Reliability Standard, the Commission is expected to give “due weight” to the technical expertise of the ERO.<sup>1</sup> The technical expertise of the ERO is derived, in part, from the standard drafting team. For this project, the standard drafting team consisted of industry experts, all a diverse set of experiences. A roster of the standard drafting team members is included in Exhibit F.

### **II. Standard Development History**

#### **A. Standard Authorization Request Development**

A Standard Authorization Request (“SAR”) was submitted to the Standards Committee (“SC”) on July 18, 2013 and accepted by the SC on July 18, 2013.

#### **B. First Posting**

Proposed Reliability Standard MOD-031-1 was posted for a 45-day formal comment period from July 24, 2013 through September 4, 2013. There were 45 sets of responses, including comments from approximately 110 different people from approximately 100 companies representing 8 of the 10 industry segments. The proposed Reliability Standards received a quorum of 81.96% and an approval of 55.76%.

The standard drafting team considered stakeholder comments regarding proposed Reliability Standard MOD-031-1 and made the following observations and modifications based on those comments:

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<sup>1</sup> Section 215(d) (2) of the Federal Power Act; 16 U.S.C. §824(d) (2) (2006).

## Purpose Statement and Definitions

- In response to comments on the NERC Glossary term “Demand Side Management,” the standard drafting team revised the definition to provide additional clarity.
- In response to comments that it was not clear as to what Demand data was subject to the proposed standard, the standard drafting team developed a definition for Total Internal Demand.
- A commenter stated that the purpose statement and the title of the proposed standard only referenced Demand data but the requirement also requested energy data. In response, the standard drafting team modified the title as well as the purpose statement to address their concern. The standard drafting team also modified the Purpose Statement to remove ambiguity and provide clarity that the intent of the standard is to define the responsibilities of both the requestor of the data and the respondent to the request as well as the data that could be requested.

## Requirement R1

- The standard drafting team modified the Requirement R1 to clarify the entities that may request data and the types of data such entities could request.
- A commenter stated that Requirement R1 was open ended such that the data being requested may not be able to be collected within the time allowed. In response, the standard drafting team modified the requirement to limit the data that could be collected to only that which was outlined in the sub-parts. The standard drafting team also modified the language to allow for “any or all” of the data to be requested.
- The standard drafting team modified the language in the sub-parts to provide additional clarity as to the type of data being requested.
- The standard drafting team removed the sub-requirement for an entity to identify entities within their footprint that were not part of their region.

## Requirement R2

- The standard drafting team modified Requirement R2 to clearly identify to whom the data owners should respond to for data requests developed under Requirement R1.
- The standard drafting team removed the language from Requirement R2 allowing other neighboring entities to request data as it was felt that there were ambiguity in the language concerning who was requesting data and what data could be requested. The standard drafting added a new requirement (Requirement R4) to

address this issue and clearly identify the neighboring entities that could request data.

### Requirement R3

- The standard drafting team modified the language in Requirement R3 to clearly state that the Planning Coordinator or Balancing Authority had an obligation to provide data collected to the Regional Entity when the Regional Entity requested the data.
- The standard drafting team added a minimum time frame for responding to a data request from a Regional Entity.

### Requirement R4

- The standard drafting team removed the language from Requirement R2 that dealt with allowing neighboring entities the right to request data and created Requirement R4 to allow for this situation.

## **C. Second Posting**

Proposed Reliability Standard MOD-031-1 was posted for a second 45-day formal comment period from October 9, 2013 through November 22, 2013. There were 43 sets of responses, including comments from approximately 144 different people from approximately 94 companies representing 9 of the 10 industry segments. The proposed Reliability Standards received a quorum of 80.54% and an approval of 57.59%.

The standard drafting team considered stakeholder comments regarding proposed Reliability Standard MOD-031-1 and made the following modifications based on those comments:

### Purpose Statement and Definitions

- In response to comments regarding the NERC Glossary term Demand Side Management (DSM), the standard drafting team revised the definition to provide clarity that DSM can be achieved through a request or other means such as incentive programs or a market signal/mechanism.
- The standard drafting team made modifications to the definition of Total Internal Demand to provide additional clarity.

- The standard drafting team modified the purpose statement to clarify the reliability purpose of the standard. Specifically, the standard drafting team modified the purpose statement to reflect that the standard provides authority for entities that may otherwise lack authority to collect the specific reliability data.

#### Requirement R1

- In response to comments concerning the use of the term “may” within the requirement, the standard drafting team modified the requirement.
- The standard drafting team modified the requirement to include the term “calendar year”.
- The standard drafting team removed the footnote related to PC/BA areas.
- The standard drafting team modified the requirement to clearly identify that only those entities whose Demand varies due to weather-related conditions would need to provide weather normalized data.

#### Requirement R2

- The standard drafting team modified Requirement R2 to clearly identify applicable Entities that would be responsible for responding to a data request.

#### Requirement R3

- In response to comments that the second sentence in the requirement did not provide any additional clarity, the standard drafting team modified the requirement and removed the sentence.

#### Requirement R4

- In response to comments disagreeing with having LSE or DP be compliant with Requirement R4, the standard drafting team modified the requirement. The standard drafting team revised the requirement to remove the LSE and DP from those entities that can request data but they would be required to provide data on request.

### **D. Third Posting**

Proposed Reliability Standard MOD-031-1 was posted for a 45-day public comment period from February 25, 2014 through April 10, 2014. There were 33 sets of comments, including comments from approximately 119 different people from approximately 73 companies



representing 9 of the 10 industry segments. The proposed Reliability Standards received a quorum of 76.92% and an approval of 83.40%.

The standard drafting team considered stakeholder comments and made no revisions to the proposed Reliability Standard MOD-031-1 based on those comments.

#### **E. Final Ballot**

Proposed Reliability Standard MOD-031-1 was posted for a 10-day final ballot period from April 25, 2014 through May 5, 2014. The proposed Reliability Standards received a quorum of 80.37% and an approval 90.00%.

#### **F. Board of Trustees Approval**

Proposed Reliability Standard (MOD C) MOD-031-1 was approved by NERC Board of Trustees on May 6, 2014.

## **Record of Development**

## Project 2010-04 Demand Data (MOD C)

Related Files

### Status:

A final ballot for **MOD-031-1 – Demand and Energy Data** concluded at **8 p.m. Eastern on Monday May 5, 2014**. The standard achieved a quorum and received sufficient votes for approval. Voting statistics can be found via the link below. The standard will be submitted to the Board of Trustees for adoption and then filed with the appropriate regulatory authorities.

### Background:

NERC Reliability Standards MOD-016, -017, -018, -019, and -021 (referred to herein as the “MOD C” standards), were approved in the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Order No. 693. Collectively, the MOD C standards pertain to the collection of data necessary to analyze the resource needs to serve peak demand while maintaining a sufficient margin to address operating events as follows:

- MOD-016-1.1 - Documentation of Data Reporting Requirements for Actual and Forecast Demands, Net Energy for Load, Controllable Demand-Side Management
  - Is the umbrella standard that contains the documentation required for the data collection requirements.
- MOD-017-0.1 - Aggregated Actual and Forecast Demands and Net Energy for Load
  - Provides for the data requirements for actual and forecast peak demand and net energy for load.
- MOD-018-0 - Treatment of Nonmember Demand Data and How Uncertainties are Addressed in the Forecasts of Demand and Net Energy for Load
  - Provides for the treatment of nonmember demand data and how uncertainties are addressed in the forecasts of demand and net energy for load.
- MOD-019-0.1 - Reporting of Interruptible Demands and Direct Control Load Management
  - Provides for the collection of interruptible demands and direct control load management.
- MOD-021-1 - Documentation of the Accounting Methodology for the Effects of Demand-Side Management in Demand and Energy Forecasts
  - Provides for the documentation of how Demand-Side Management demands are accounted for in demand and energy forecasts.

NERC initiated an informal development process to address directives in Order No. 693 to modify certain aspects of the MOD C standards. The first informal meeting was held in February 2013 at NERC’s Washington, D.C. office. Participants were industry subject matter experts (SMEs), NERC staff, and staff from FERC’s Office of Electric Regulation. The small ad hoc group of SMEs participated in discussions about the outstanding FERC directives and possible resolutions to address the directives. The group also discussed the six standards (MOD-016 through MOD-021) and identified issues with the present standards. The group very quickly identified MOD-020 as dealing with the operational time frame and concluded that it should not be addressed with the other standards at this time since they were applicable to the planning horizon.

Although a pure data reporting standard would be a candidate for retirement under Paragraph 81, the data being collected has a reliability purpose in the development of future assessments for resource adequacy. It was decided to present a pro forma standard that consolidates the remaining five MOD C standards into a single standard. Creating a single standard provides a means of ensuring data will be collected and shared among the necessary parties (LSEs, BAs, TPs, etc.) in both the United States and Canada.

If you have any questions, please contact [sarcomm@nerc.net](mailto:sarcomm@nerc.net).

Draft	Action	Dates	Results	Consideration of Comments
<p><b>MOD-031-1</b> Clean (59) Redline to last posting (60)</p>				
<p><b>Implementation Plan</b> Clean (61) Redline to last posting (62)</p>				
<p><b>Supporting Materials:</b></p>				
<p><b>Standard Authorization Request (63)</b></p>	<p>Final Ballot</p>		<p>Summary&gt;&gt; (72)</p>	
<p><b>Compliance Input (64)</b></p>	<p>Info&gt;&gt; (71)</p>	<p>04/25/14 - 05/05/14</p>	<p>Ballot Results&gt;&gt; (73)</p>	
<p><b>Technical White Paper</b> Clean (65) Redline to last posting (66)</p>	<p>Vote&gt;&gt;</p>			
<p><b>Mapping Document</b> Clean (67)  Redline to last posting (68)</p>				
<p><b>Draft Reliability Standard</b> Audit Worksheet MOD-031-1 (69)</p>				
<p><b>VRF and VSL Severity</b> Level Justifications (70)</p>				

<p><b>Draft Standard</b></p> <p><b>MOD-031-1</b>  <b>Clean (38) Redline to last posting (39)</b></p> <p><b>Implementation Plan</b>  <b>Clean (40) Redline to last posting (41)</b></p> <p><b>Supporting Materials:</b></p> <p><b>Unofficial Comment Form (Word) (42)</b></p> <p><b>Standard Authorization Request (43)</b></p> <p><b>Compliance Input (44)</b></p> <p><b>Technical White Paper</b>  <b>Clean (45) Redline to last posting (46)</b></p> <p><b>Mapping Document</b>  <b>Clean (47)  Redline to last posting (48)</b></p> <p><b>Draft Reliability Standard Audit Worksheet</b>  <b>MOD-031-1 (49)</b></p>	<p>Additional Ballot and Non-binding Poll</p> <p>Updated Info&gt;&gt;  <b>(51)</b></p> <p>Info&gt;&gt; <b>(52)</b></p> <p>Vote&gt;&gt;</p> <p>(Closed)</p> <p>Comment Period Info&gt;&gt; <b>(53)</b></p> <p>Submit Comments&gt;&gt;</p> <p>(Closed)</p>	<p>04/01/14 - 04/14/14</p> <p>(Extended an additional day)</p>	<p>Summary&gt;&gt; <b>(54)</b></p> <p>Ballot Results&gt;&gt; <b>(55)</b></p> <p>Non-Binding Poll Results&gt;&gt; <b>(56)</b></p>	
		<p>02/25/14 - 04/14/14</p>	<p>Comments Received&gt;&gt; <b>(57)</b></p> <p>Consideration of Comments&gt;&gt; <b>(58)</b></p>	

<p><b>VRF and VSL Severity Level Justifications (50)</b></p>				
<p><b>Draft Standard MOD-031-1 Clean (18)   Redline to last posting (19)</b></p> <p><b>Implementation Plan Clean (20)   Redline to last posting (21)</b></p> <p><b>Supporting Materials: Unofficial Comment Form (Word) (22)</b></p>	<p>Additional Ballot and Non-binding Poll</p> <p>Updated Info&gt;&gt; (30)</p> <p>Info&gt;&gt; (31)</p> <p>Vote&gt;&gt; (Closed)</p>	<p>11/13/13 - 11/22/13</p>	<p>Summary&gt;&gt; (33)</p> <p>Ballot Results&gt;&gt; (34)</p> <p>Non-Binding Poll Results&gt;&gt; (35)</p>	

<p><b>Standard Authorization Request (23)</b></p> <p><b>Compliance Input (24)</b></p>	<p>Comment Period</p> <p>Info&gt;&gt; (32)</p>	<p>10/09/13 - 11/22/13</p>	<p>Comments Received&gt;&gt; (36)</p>	<p>Consideration of Comments&gt;&gt; (37)</p>
<p><b>Technical White Paper Clean (25) Redline to last posting (26)</b></p>	<p>Submit Comments&gt;&gt; (Closed)</p>			
<p><b>Mapping Document Clean (27)  Redline to last posting (28)</b></p> <p><b>Draft Reliability Standard Audit Worksheet MOD-031-1 (29)</b></p>				

<p><b>Draft Standard MOD-031-1 (1)</b></p> <p><b>Implementation Plan (2)</b></p> <p><b>Standard Authorization Request (3)</b></p> <p><b>Supporting Materials: Unofficial Comment Form (Word) (4)</b></p> <p><b>Technical White Paper (5)</b></p> <p><b>Mapping Document (6)</b></p> <p><b>Compliance Input (7)</b></p> <p><b>Proposed Timeline for the Formal Development (8)</b></p>	<p>MOD-031-1</p> <p>Ballot and Non-binding Poll Updated Info&gt;&gt; (9)</p> <p>Vote&gt;&gt; Closed)</p> <p>Comment Period Info&gt;&gt; (10)</p> <p>Submit Comments&gt;&gt; (Closed)</p> <p>Join Ballot Pool&gt;&gt; (Closed)</p>	<p>08/26/13 - 09/04/13</p> <p>07/22/13 - 09/04/13</p> <p>07/22/13 - 08/20/13</p>	<p>Summary&gt;&gt; (13)</p> <p>Ballot Results&gt;&gt; (14)</p> <p>Non-binding Poll Results&gt;&gt; (15)</p> <p>Comments Received&gt;&gt; (16)</p>	<p>Consideration of Comments&gt;&gt; (17)</p>
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	<p>Nomination Period Info&gt;&gt; <b>(11)</b> Submit Nomination&gt;&gt; Unofficial Nomination Form&gt;&gt; <b>(12)</b> (Closed)</p>	<p>07/24/13 - 08/02/13</p>		
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## Standard Development Timeline

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*This section is maintained by the drafting team during the development of the standard and will be removed when the standard becomes effective.*

### Development Steps Completed

- 1.

### Description of Current Draft

This is the first posting of the proposed draft standard. This proposed draft standard will be posted for a 45-day formal comment period.

Anticipated Actions	Anticipated Date
45-day SAR Informal Comment Period	July/August 2013
45-day Comment Period with Parallel Initial Ballot	July/August 2013
Recirculation ballot	October 2013
BOT adoption	November 2013

### **Effective Dates**

MOD-031-1 shall become effective on the first day of the first calendar quarter that is twelve months beyond the date that this standard is approved by applicable regulatory authorities.

In those jurisdictions where regulatory approval is not required, MOD-031-1 shall become effective on the first day of the first calendar quarter that is twelve months beyond the date this standard is approved by the NERC Board of Trustees, or as otherwise made effective pursuant to the laws applicable to such ERO governmental authorities.

### **Version History**

<b>Version</b>	<b>Date</b>	<b>Action</b>	<b>Change Tracking</b>
1	TBD	Adopt MOD-031-1	