

Standard Development Timeline

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. The SAR and supporting package were posted for comment (July 2013).
2. First posting of the draft standard for a 45-day comment period and parallel ballot (July/August 2013).
3. Second posting of the draft standard for a 45-day comment period and parallel ballot (October/November 2013)

Description of Current Draft

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

Anticipated Actions	Anticipated Date
45-day Comment Period with Parallel Ballot	February-March 2014
Final ballot	April 2014
BOT adoption	May 2014

Effective Dates

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.

Version History

Version	Date	Action	Change Tracking
1	TBD	Adopt MOD-031-1	

Definitions of Terms Used in Standard

This section includes all newly defined or revised terms used in the proposed standard. Terms already defined in the Reliability Standards Glossary of Terms are not repeated here. New or revised definitions listed below become approved when the proposed standard is approved. When the standard becomes effective, these defined terms will be removed from the individual standard and added to the Glossary.

Demand Side Management (DSM): All activities or programs undertaken by any applicable entity to achieve a reduction in~~request that~~ Demand ~~be reduced~~. ~~Examples of DSM may include, but are not limited to, Direct Control Load Management, Interruptible Load, critical peak pricing (CPP) with control, and Load as capacity resources.~~

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

When this standard has received ballot approval, the text boxes will be moved to the Application Guidelines Section of the 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 ~~for the collection of Demand and energy data to support reliability studies and assessments.~~
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 ~~the purpose of this standard may be carried out~~ various forms of historical and forecast Demand and energy data and information ~~is~~ must be available

to the parties that perform the studies and assessments, authority is needed to collect the applicable data needed to ensure the adequacy of the Bulk Electric System (BES) and to be able to validate past events. The fundamental test for determining the adequacy of the BES is to determine the amount of resources and the certainty of these resources to be available to serve peak demand while maintaining sufficient margin to address operating events. This test requires the collection and aggregation of demand forecasts on a normalized basis. This is defined as a forecast that has been adjusted to reflect normal weather conditions, and is expected on a 50% probability basis — also known as a 50/50 forecast (i.e. there is a 50% probability that the actual peak realized will be either under or over the projected peak). This forecast can then be used to test against more extreme conditions.

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 – will ultimately 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

Rationale for R1: To ensure when Planning Coordinators (PCs) or Balancing Authorities (BAs) request data (R1), they must identify the entities to provide the data (Applicable Entity in part 1.1), and that the entities providing the data must know what they are to provide (parts 1.3 – ~~R~~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.

- R1.** Each Planning Coordinator or Balancing Authority that identifies a need may develop and issue a data request, as necessary, for the collection of Total Internal Demand, Net Energy for Load, and Demand Side Management data from shall develop and

issue a data request to the applicable entities in their 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 ~~Total Internal~~ Demands in megawatts for the prior calendar year.

1.3.2. Monthly and annual integrated peak-hour ~~actual Total Internal~~ Demands in megawatts for the prior calendar year.

~~1.3.1.1.1.3.2.1.~~ 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.

~~1.3.2.1.3.3.~~ Monthly and annual Net Energy for Load in gigawatthours for the prior calendar year.

~~Annual peak hour weather normalized actual Total Internal Demand in megawatts for the prior year.~~

~~1.3.3.1.3.4.~~ Monthly and annual peak hour ~~deployed and realized controllable and dispatchable Demand Side Interruptible Load and Direct Control Load~~ 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:

1.4.1. Monthly peak hour forecast Total Internal Demands in megawatts for the next two calendar years.

1.4.2. Monthly forecast Net Energy for Load in gigawatthours for the next two calendar years.

[†]For the Balancing Authority, “their area” encompasses their Balancing Authority Area as defined in the NERC Glossary of Terms. For the Planning Coordinator, “their area” encompasses the facilities for which the Planning Coordinator coordinates and integrates transmission facilities, service plans, resource plans, and protection systems.

- 1.4.3. Peak hour forecast Total Internal Demands (summer and winter) in megawatts for ten calendar years into the future.
 - 1.4.4. Annual forecast Net Energy for Load in gigawatthours for ten calendar years into the future.
 - 1.4.5. ~~Peak hour forecasts of program~~ Total and available peak hour forecast of Interruptible Load and controllable and dispatchable Demand Side Management Direct Control Load Management (summer and winter), in megawatts, under the control or supervision of the System Operator for ~~up to ten~~ calendar years into the future, ~~as requested, for summer and winter peak system conditions.~~
- 1.5. A request to provide any or all of the following a summary explanations, ~~as of the following, if necessary, about:~~
- 1.5.1. The assumptions and methods used in the development of aggregated ~~P~~peak Demand and Net Energy for Load forecasts.
 - 1.5.2. The Demand and energy effects of controllable and dispatchable Demand Side Management Interruptible and Direct Control Load Management under the control or supervision of the System Operator.
 - 1.5.3. How Demand Side Management is addressed in the forecasts of its Peak Demand and annual Net Energy for Load.
 - 1.5.4. How the controllable and dispatchable Demand Side Management forecast compares to actual controllable and dispatchable Demand Side Management for the prior calendar year and, if applicable, how the assumptions and methods for future forecasts were adjusted.
 - 1.5.4.1.5.5. How the peak load forecast compares to actual load for the prior calendar year with due regard to any relevant weather-related controllable and dispatchable Demand Side Management and load,² temperature and humidity variations (e.g., temperature, humidity, or wind speed) and, if applicable, how the assumptions and methods for future forecasts were adjusted.
- M1. The Planning Coordinator or Balancing Authority shall have a dated data request, either in hardcopy or electronic format, in accordance with Requirement R1.

²For the purpose of this standard, the term “controllable load” means both Interruptible Load and Direct Control Load Management as referenced in FERC Order 693 Paragraph 1267.

Rationale for R2: This requirement will ensure that entities identified in Requirement R1, ~~as that are~~ 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 ~~1.3.4-1.56~~ of Requirement R1.

R2. Each Applicable Entity, identified in the data request, shall provide the data requested by its Planning Coordinator or Balancing Authority in accordance with the data request issued pursuant to Requirement R1. *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning-]*

M2. Each Applicable Entity shall have evidence, such as dated e-mails or dated transmittal letters that it provided the requested data ~~requested~~ in accordance with Requirement

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.

R2.

R3. The Planning Coordinator or the Balancing Authority shall provide the data collected under Requirement R2 to the applicable Regional Entity upon request within. ~~In no event, however, shall the Planning Coordinator or the Balancing Authority be required to provide the data in less than~~ 75 days of receiving from the date it received at the data request for such data, unless otherwise agreed upon by the parties from the Regional Entity. *[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*

M3. Each Planning Coordinator or Balancing Authority entity identified by the Regional Entity in its data request, 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.

Rationale for R4: This requirement will ensure that the Applicable Entity will make provide the data requested by the Planning Coordinator or Balancing Authority in Requirement R1 available to other applicable entities a (Load Serving Entity, 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.

R4. Any Applicable Entity ~~Each Load Serving Entity, Planning Coordinator, Balancing Authority, Transmission Planner or Resource Planner~~ shall, in response to within 45 days of a written request for the data included in parts 1.3-1.5 of Requirement R1 from ~~any other Load Serving Entity~~, Planning Coordinator, Balancing Authority, Transmission Planner or Resource Planner with a demonstrated reliability need for such data in order to conduct reliability assessments of the Bulk Electric Sysytem, 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 ~~is not required to~~: [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]

- ~~shall provide the requested any data data not~~ within 45 calendar days of the written request, subject to part 4.1 of this requirement~~the scope of part 1.3-1.5 of Requirement R1; and~~
- ~~shall not be required to~~ alter the format in which it maintains or uses the data.; ~~and/or~~
- ~~provide data that conflicts with the Applicable Entity's confidentiality, regulatory, or security requirements.~~

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 Load Serving Entity, Planning Coordinator, Balancing Authority, Transmission Planner or Resource Planner~~ 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](#)

~~Refer to the NERC Rules of Procedure for the Compliance Monitoring and Assessment processes.~~

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	<p>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 1.5.54</p> <p>OR</p> <p>The Applicable Entity, as defined in the data request developed in Requirement R1, provided the data requested in</p>	<p>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 1.3.45</p> <p>OR</p> <p>The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide one of the requested items in</p>	<p>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 1.3.45</p> <p>OR</p> <p>The Applicable Entity, as defined in the data request developed in Requirement R1, failed to provide two of the requested items in</p>	<p>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 1.3.45</p> <p>OR</p> <p>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</p>

			<p>Requirement R1, but 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.</p>	<p>Requirement R1 part 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 but prior to 11 days after the date indicated in the timetable provided pursuant to Requirement R1 part 1.2.</p>	<p>Requirement R1 part 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.</p>	<p>1.4.1 through part 1.4.5 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.</p>
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	The Planning Coordinator or Balancing Authority, in response to a request by the Regional Entity, made available the data collected under	The Planning Coordinator or Balancing Authority, in response to a request by the Regional Entity, made available the data collected under	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

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			Requirement R2, but did so after 75 days from the date of request but prior to 81 days from the date of the request.	Requirement R2, but did so after 80 days from the date of request but prior to 86 days from the date of the request.	Requirement R2, but did so after 85 days from the date of request but prior to 91 days from the date of the request.	91 days or more from the date of the request.
R4	Long-term Planning	Medium	<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><u>OR</u></p> <p><u>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.-</u></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><u>OR</u></p> <p><u>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.</u></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><u>OR</u></p> <p><u>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 40 days of the written request but prior to 46 days of the written request.</u></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><u>OR</u></p> <p><u>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.</u></p>

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D. Regional Variances

None.

E. Interpretations

None.

F. Associated Documents

None.

Application Guidelines

Guidelines and Technical Basis

Requirement R1:

Requirement R2:

Requirement R3: