

## 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.

### 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	

### 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:** The term for all activities or programs undertaken by any applicable entity to influence the amount or timing of electricity they use.

*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 Data**
- 2. Number: MOD-031-1**
- 3. Purpose:** To ensure that actual and forecast Demand data necessary for assessment and validation of past events and to support future system assessment is reported.

- 4. Applicability:**

- 4.1. Functional Entities:**

- 4.1.1** Planning Authority/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 “Planning Authority or 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. Background:**

The fundamental test for determining the adequacy of the Bulk Power System (BPS) 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 projections requires coordination and collaboration between Planning Authorities (Planning Coordinators), Transmission and Resource Planners, and Load-Serving Entities. 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 enhance the reliability of the BPS. 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 (PC) or Balancing Authorities request data (R1), they identify the entities to provide the data (responsible entity in R1.1), that the entities providing the data know what they are to provide (R 1.3 – R 1.7) and the due dates (R 1.2) for the requested data.

- R1.** The Planning Coordinator or Balancing Authority, as identified by the Regional Entity in a data request, shall develop and issue a data reporting request associated with a data request issued by the Regional Entity. This data reporting request shall include, at a minimum: [*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 Entity”).
  - 1.2.** A schedule detailing the timetable for providing the data. (A minimum of 30-days must be allowed for responding to the request).
  - 1.3.** The original data request from the Regional Entity.
  - 1.4.** A request for the following actual data<sup>1</sup>:
    - 1.4.1.** Integrated hourly demands in megawatts (MW) for the prior year.
    - 1.4.2.** Monthly and annual peak hour actual demands in MW and Net Energy for Load in gigawatthours (GWh) for the prior year.
    - 1.4.3.** Monthly and annual peak hour weather normalized actual demands in MW for the prior year.
    - 1.4.4.** Monthly and annual peak hour deployed Interruptible Load and Direct Control Load Management in MW for the prior year.
  - 1.5.** A request for the following forecast data<sup>1</sup>:
    - 1.5.1.** Monthly peak hour forecast demands in MW and Net Energy for Load in GWh for the next two years.
    - 1.5.2.** Peak hour forecast demands (summer and winter) in MW and annual Net Energy for load in GWh for ten years into the future.

---

<sup>1</sup> This could include data reported in the Long Term Reliability Assessment (LTRA) and the EIA 411.

- 1.5.3. 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.
- 1.6. A requirement for Applicable Entities to identify registered entities that are within their footprint but are not a member of the requesting Region, and identify the Region where the data for that registered entity is reported.
- 1.7. A requirement for Applicable Entities to provide:
  - 1.7.1. The assumptions and methods used in the development of aggregated peak demand and Net Energy for Load forecasts.
  - 1.7.2. The Demand and energy effects of Interruptible and Direct Control Load Management.
  - 1.7.3. How DSM measures are addressed in the forecasts of its Peak Demand and annual Net Energy for Load.
  - 1.7.4. How the peak load forecast compares to actual load for the prior year with due regard to controllable load<sup>2</sup>, temperature and humidity variations and, if applicable, how the assumptions and methods for future forecasts were adjusted.
- M1. The Planning Coordinator or Balancing Authority as identified by the Regional Entity in its data request, shall have a dated data reporting request, either in hardcopy or electronic format, in accordance with Requirement R1.

Rationale for R2: This will ensure that entities identified in Requirement R1, that are responsible for providing data, provide the data in accordance with the details described in the data reporting procedure developed in Requirement R1. 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.

- R2. Each Applicable Entity shall provide the data in accordance with the data reporting request in Requirement R1 to the Planning Coordinator or Balancing Authority or any other entity (such as Load Serving Entity, Planning Coordinator or Resource Planner) on request. [*Violation Risk Factor: Medium*] [*Time Horizon: Long-term Planning*]
- M2. Each Applicable Entity shall have evidence such as dated e-mail or dated transmittal letters that it provided the data requested in accordance with Requirement R2.

Rationale for R3: This will ensure that the Planning Coordinator or when applicable, the Balancing Authority, provides the data requested by the Regional Entity.

---

<sup>2</sup> For the purpose of this standard, the term “controllable load” means both interruptible load and direct control load management as referenced in FERC Order 693 Para 1267.

**R3.** The entity identified by the Regional Entity in its data request, shall report the Applicable Entity's data as requested by the Regional Entity within the timeframe specified in the Regional Entity's request. [*Violation Risk Factor: Medium*] [*Time Horizon: Long-term Planning* ]

**M3.** Each entity identified by the Regional Entity in its data request, shall have evidence such as dated e-mail or dated transmittal letters that it provided the data requested in accordance with Requirement R3.

## **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 R3, and Measures M1 through M3, 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:**

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	<p>The Planning Coordinator or Balancing Authority, as identified by the Regional Entity, developed a data reporting procedure but failed to address one of the items listed in Requirement R1, Part 1.6 or Part 1.7.1 through Part 1.7.4.</p>	<p>The Planning Coordinator or Balancing Authority, as identified by the Regional Entity, developed a data reporting procedure but failed to address two of the items listed in Requirement R1, Part 1.6 or Part 1.7.1 through Part 1.7.4.</p> <p>OR</p> <p>The Planning Coordinator or Balancing Authority, as identified by the Regional Entity, developed a data reporting procedure but failed to address one of the items listed in Requirement R1, Part 1.1 through Part 1.3, Part 1.4.1, Part 1.4.2 or Part 1.5.1 through Part 1.5.3.</p>	<p>The Planning Coordinator or Balancing Authority, as identified by the Regional Entity, developed a data reporting procedure but failed to address three of the items listed in Requirement R1, Part 1.6 or Part 1.7.1 through Part 1.7.4.</p> <p>OR</p> <p>The Planning Coordinator or Balancing Authority, as identified by the Regional Entity, developed a data reporting procedure but failed to address two of the items listed in Requirement R1, Part 1.1 through Part 1.3, Part 1.4.1, 1.4.2 or Part 1.5.1 through Part 1.5.3.</p>	<p>The Planning Coordinator or Balancing Authority, as identified by the Regional Entity, did not develop a data reporting procedure.</p> <p>OR</p> <p>The Planning Coordinator or Balancing Authority, as identified by the Regional Entity, developed a data reporting procedure but failed to issue the data reporting request to the Applicable Entities identified in Requirement R1 Part 1.1.</p> <p>OR</p> <p>The Planning Coordinator or Balancing Authority as identified by the Regional Entity, developed a data reporting procedure but failed to address any of the items listed in Requirement R1, Part 1.6 or Part 1.7.1 through Part 1.7.4.</p> <p>OR</p>



**MOD-031-1 — Demand Data**

						The Planning Coordinator or Balancing Authority as identified by the Regional Entity, developed a data reporting procedure but failed to address three or more of the items listed in Requirement R1, Part 1.1 through 1.3, Part 1.4.1, Part 1.4.2, or Part 1.5.1 through Part 1.5.3.
R2	Long-term Planning	Medium	N/A	N/A	N/A	The Applicable Entity, as defined in the data reporting request developed in Requirement R1, failed to provide the data requested to the requesting entity as defined in Requirement R1.
R3	Long-term Planning	Medium	N/A	N/A	N/A	The entity as identified by the Regional Entity in its data request, failed to provide the data requested by the Regional Entity.

**D. Regional Variances**

None.

**E. Interpretations**

None.

**F. Associated Documents**

None.

## **Application Guidelines**

---

### **Guidelines and Technical Basis**

**Requirement R1:**

**Requirement R2:**

**Requirement R3:**