

**Reliability Standard Audit Worksheet[[1]](#footnote-1)**

# MOD-031-2 – Demand and Energy Data

***This section to be completed by the Compliance Enforcement Authority.***

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| **Audit ID:** | Audit ID if available; or REG-NCRnnnnn-YYYYMMDD |
| **Registered Entity:** | Registered name of entity being audited |
| **NCR Number:** | NCRnnnnn |
| **Compliance Enforcement Authority:** | Region or NERC performing audit |
| **Compliance Assessment Date(s)[[2]](#footnote-2):** | Month DD, YYYY, to Month DD, YYYY |
| **Compliance Monitoring Method:** | Audit |
| **Names of Auditors:** | Supplied by CEA |

# **Applicability of Requirements**

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| **R1** | X |  |  |  |  |  | X[[3]](#footnote-3) |  |  |  |  |  |  |  |
| **R2** | X | X |  |  |  | X |  |  |  |  |  |  | X |  |
| **R3** | X |  |  |  |  |  | X3 |  |  |  |  |  |  |  |
| **R4** | X | X |  |  |  | X |  |  |  |  |  |  | X |  |

Findings

**(This section to be completed by the Compliance Enforcement Authority)**

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| **Req.** | **Finding** | **Summary and Documentation** | **Functions Monitored** |
| **R1** |  |  |  |
| **R2** |  |  |  |
| **R3** |  |  |  |
| **R4** |  |  |  |

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| **Req.** | **Areas of Concern** |
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| **Req.** | **Recommendations** |
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| **Req.** | **Positive Observations** |
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Subject Matter Experts

Identify Subject Matter Expert(s) responsible for this Reliability Standard. (Insert additional rows if necessary)

**Registered Entity Response (Required):**

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| **SME Name** | **Title** | **Organization** | **Requirement(s)** |
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R1 Supporting Evidence and Documentation

1. 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:
   1. A list of Transmission Planners, Balancing Authorities, Load Serving Entities, and Distribution Providers that are required to provide the data (“Applicable Entities”).
   2. A timetable for providing the data. (A minimum of 30 calendar days must be allowed for responding to the request).
   3. A request to provide any or all of the following actual data, as necessary:
      1. Integrated hourly Demands in megawatts for the prior calendar year.
      2. Monthly and annual integrated peak hour Demands in megawatts for the prior calendar year.
         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.
      3. Monthly and annual Net Energy for Load in gigawatthours for the prior calendar year.
      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).
   4. A request to provide any or all of the following forecast data, as necessary:
      1. Monthly peak hour forecast Total Internal Demands in megawatts for the next two calendar years.
      2. Monthly forecast Net Energy for Load in gigawatthours for the next two calendar years.
      3. Peak hour forecast Total Internal Demands (summer and winter) in megawatts for ten calendar years into the future.
      4. Annual forecast Net Energy for Load in gigawatthours for ten calendar years into the future.
      5. Total and available peak hour forecast of controllable and dispatchable Demand Side Management (summer and winter), in megawatts, under the control or supervision of the System Operator for ten calendar years into the future.
   5. A request to provide any or all of the following summary explanations, as necessary:
      1. The assumptions and methods used in the development of aggregated peak Demand and Net Energy for Load forecasts.
      2. The Demand and energy effects of controllable and dispatchable Demand Side Management under the control or supervision of the System Operator.
      3. How Demand Side Management is addressed in the forecasts of its Peak Demand and annual Net Energy for Load.
      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.
      5. How the peak Demand forecast compares to actual Demand for the prior calendar year with due regard to any relevant weather-related variations (e.g., temperature, humidity, or wind speed) and, if applicable, how the assumptions and methods for future forecasts were adjusted.
2. The Planning Coordinator or Balancing Authority shall have a dated data request, either in hardcopy or electronic format, in accordance with Requirement R1.

**Registered Entity Response (Required):**

**Question: Has the entity identified a need for the data specified in Requirement R1 during the compliance monitoring period? ☐ Yes ☐ No**

**Provide an explanation in the Compliance Narrative section.**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requested[[4]](#footnote-4):

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| **Provide the following evidence, or other evidence to demonstrate compliance.** |
| Copies of entity’s data requests developed and issued in accordance with Requirement R1. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** | | | | | |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to MOD-031-2, R1

***This section to be completed by the Compliance Enforcement Authority***

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|  | (Part 1.1) For entity data requests selected by auditor for audit testing, review and verify the request included applicable entities described in Requirement R1 part 1.1 |
|  | (Part 1.2) For entity data requests selected by auditor for audit testing, review and verify the request included a timetable of at least 30 calendar days. |
|  | Items listed in Requirement R1 parts 1.3 through 1.5 are optional and are included in the data request as necessary. |
| **Note to Auditor:** | |

Auditor Notes:

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R2 Supporting Evidence and Documentation

1. Each Applicable Entity identified in a 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.
2. Each Applicable Entity shall have evidence such as dated e-mails or dated transmittal letters that it provided the data requested in accordance with Requirement R2.

**Registered Entity Response (Required):**

**Question: Has Applicable Entity been requested to provide data specified in Requirement R1 during the compliance monitoring period? ☐ Yes ☐ No**

**Provide an explanation in the Compliance Narrative section.**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| Provide the following evidence, or other evidence to demonstrate compliance. |
| A list of all relevant requests for data received in the compliance monitoring period for Requirement R2. |
| Dated e-mails or dated transmittal letters that the Applicable Entity provided the data requested in Requirement R1. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** | | | | | |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to MOD-031-2, R2

***This section to be completed by the Compliance Enforcement Authority***

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|  | Review evidence to verify that entity responses to Planning Coordinator or Balancing Authority’s data request(s) were made in accordance with the timetable established in Requirement R1 part 1.2, and, |
|  | Review evidence to verify that entity responses to Planning Coordinator or Balancing Authority’s data request(s) were made in accordance with Requirement R1 part 1.3-1.5, as necessary |
| **Note to Auditor:** Based on the language in the requirement and the purpose of the standard, which is to facilitate the sharing of data to support reliability studies, the auditor should not only verify that the data was delivered within the timeframe(s) specified, but also verify that the data delivered met the requirements of the request. Perform sampling of data requests as necessary.  Auditors at their discretion may communicate with Planning Coordinators or Balancing Authorities to determine if data requests made of entity under audit were delivered within the timeframe(s) specified and met the requirements of the request. | |

Auditor Notes:

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R3 Supporting Evidence and Documentation

1. The Planning Coordinator or the Balancing Authority shall provide the data listed under Requirement R1 Parts 1.3 through 1.5 for their area to the applicable Regional Entity within 75 calendar days of receiving a request for such data, unless otherwise agreed upon by the parties.
2. 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.

**Registered Entity Response (Required):**

**Question: Has the applicable Regional Entity requested the entity to provide data listed under Requirement R1 Parts 1.3 through 1.5 for their area during the compliance monitoring period? ☐ Yes ☐ No**

**Provide an explanation in the Compliance Narrative section.**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| Provide the following evidence, or other evidence to demonstrate compliance. |
| A list of all relevant requests for data received in the compliance monitoring period for Requirement R3. |
| Dated e-mails or dated transmittal letters that the entity provided the data requested by the applicable Regional Entity in accordance with Requirement R3 and within the timetable established. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** | | | | | |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to MOD-031-2, R3

***This section to be completed by the Compliance Enforcement Authority***

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|  | Review evidence to verify that the entity provided responses to Regional Entity’s data request(s) in accordance with Requirement R3, and |
|  | Within 75 days from the receipt date of the data request or a date agreed upon by the parties |
| **Note to Auditor:** Auditor should communicate with entity’s Regional Entity to determine whether the Regional Entity had made a data request to the entity under audit. In the instance where the Planning Coordinator or the Balancing Authority collected additional data beyond Requirement R1 Part 1.3 through Part 1.5 from Applicable Entities, the additional information may be provided to the Regional Entity. | |

Auditor Notes:

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R4 Supporting Evidence and Documentation

1. 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:

* shall not be required to alter the format in which it maintains or uses the data.
* shall provide the requested data within 45 calendar days of the written request, subject to part 4.1 of this requirement; unless providing the requested data would conflict with the Applicable Entity’s confidentiality, regulatory, or security requirements
  1. If the Applicable Entity does not provide data requested 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.

**Registered Entity Response (Required):**

**Question: Has the Applicable Entity received any requests from entities specified in Requirement R4 for data included in parts 1.3-1.5 of Requirement R1 during the compliance monitoring period? ☐ Yes ☐ No**

**Provide an explanation in the Compliance Narrative section.**

**Compliance Narrative:**

Provide a brief explanation, in your own words, of how you comply with this Requirement. References to supplied evidence, including links to the appropriate page, are recommended.

Evidence Requestedi:

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| Provide the following evidence, or other evidence to demonstrate compliance. |
| A list of all relevant requests for data received in the compliance monitoring period for Requirement R4. |
| Dated e-mails or dated transmittal letters that the entity provided the data requested within the requested timeframe or provided a written response specifying the data that is not being provided and the basis for not providing the data in accordance with Part 4.1 within the specified timeframe. |

Registered Entity Evidence (Required):

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| **The following information is requested for each document submitted as evidence. Also, evidence submitted should be highlighted and bookmarked, as appropriate, to identify the exact location where evidence of compliance may be found.** | | | | | |
| **File Name** | **Document Title** | **Revision or Version** | **Document Date** | **Relevant Page(s) or Section(s)** | **Description of Applicability of Document** |
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Audit Team Evidence Reviewed (This section to be completed by the Compliance Enforcement Authority):

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Compliance Assessment Approach Specific to MOD-031-2, R4

***This section to be completed by the Compliance Enforcement Authority***

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|  | Review evidence (documented date of request and reply) to verify if entity responses to Requirement R1 part 1.3-1.5 data request(s) were made in accordance with Requirement R4 and within 45 calendar days of the date of the written request, or, |
|  | (Part 4.1) Review dated evidence of a response specifying the data that is not being provided and the basis for not providing the data in accordance with either: |
|  | 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 |
|  | (Part 4.1) Verify the response is within 30 days of the date of the written request. |
| **Note to Auditor:** Based on the language in the requirement and the purpose of the standard, which is to facilitate the sharing of data to support reliability studies, the auditor should not only verify that the data was delivered within the timeframe(s) specified, but also verify that the data delivered met the requirements of the request.  Auditors, at their discretion, may communicate with the requesting Planning Coordinators, Balancing Authorities, Transmission Planners, and Resource Planners to determine if responses to data requests were appropriate in accordance with this Requirement. | |

Auditor Notes:

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Additional Information:



Reliability Standard

The full text of MOD-031-2 may be found on the NERC Web Site (www.nerc.com) under “Program Areas & Departments”, “Reliability Standards.”

In addition to the Reliability Standard, there is an applicable Implementation Plan available on the NERC Web Site.

In addition to the Reliability Standard, there is background information available on the NERC Web Site.

Capitalized terms in the Reliability Standard refer to terms in the NERC Glossary, which may be found on the NERC Web Site.

Sampling Methodology

Sampling is essential for auditing compliance with NERC Reliability Standards since it is not always possible

or practical to test 100% of either the equipment, documentation, or both, associated with the full suite of enforceable standards. The Sampling Methodology Guidelines and Criteria (see NERC website), or sample guidelines, provided by the Electric Reliability Organization help to establish a minimum sample set for monitoring and enforcement uses in audits of NERC Reliability Standards.

Regulatory Language

On November 13, 2015, FERC approved MOD-031-2 (Demand and Energy Data), the proposed implementation plan, and the retirement of MOD-31-1.[[5]](#footnote-5)Reliability Standard MOD-031-2 clarifies the compliance obligations related to providing data to Regional Entities and responding to a request for data subject to confidentiality restrictions. Further, NERC also states that the improvements to the Reliability Standard are consistent with the Commission directives in Order No. 804.[[6]](#footnote-6)

In Order No. 804, the Commission approved Reliability Standard MOD-031. Nonetheless, the Commission also directed NERC develop a modification to Reliability Standard MOD-031-1 to clarify that Planning Coordinators and Balancing Authorities must provide demand and energy data upon request of a Regional Entity, as necessary to support NERC’s development of seasonal and long-term reliability assessments.[[7]](#footnote-7)

Selected Glossary Terms

The following Glossary terms are provided for convenience only. Please refer to the NERC web site for the current enforceable terms.

**Demand:** 1. The rate at which electric energy is delivered to or by a system or part of a system, generally expressed in kilowatts or megawatts, at a given instant or averaged over any designated interval of time.

2. The rate at which energy is being used by the customer.

**Demand-Side Management:** The term for all activities or programs undertaken by Load-Serving Entity or its customers to influence the amount or timing of electricity they use.

**Net Energy for Load**: Net Balancing Authority Area generation, plus energy received from other Balancing Authority Areas, less energy delivered to Balancing Authority Areas through interchange. It includes Balancing Authority Area losses but excludes energy required for storage at energy storage facilities.

**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.

Revision History for RSAW

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| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | 1/5/16 | NERC Compliance Assurance, RSAW Task Force | New Document |
| 2 | 7/7/16 | NERC Compliance Assurance, RSAW Task Force | Revised for consistency with the final approved Standard. |
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1. NERC developed this Reliability Standard Audit Worksheet (RSAW) language in order to facilitate NERC’s and the Regional Entities’ assessment of a registered entity’s compliance with this Reliability Standard. The NERC RSAW language is written to specific versions of each NERC Reliability Standard. Entities using this RSAW should choose the version of the RSAW applicable to the Reliability Standard being assessed. While the information included in this RSAW provides some of the methodology that NERC has elected to use to assess compliance with the requirements of the Reliability Standard, this document should not be treated as a substitute for the Reliability Standard or viewed as additional Reliability Standard requirements. In all cases, the Regional Entity should rely on the language contained in the Reliability Standard itself, and not on the language contained in this RSAW, to determine compliance with the Reliability Standard. NERC’s Reliability Standards can be found on NERC’s website. Additionally, NERC Reliability Standards are updated frequently, and this RSAW may not necessarily be updated with the same frequency. Therefore, it is imperative that entities treat this RSAW as a reference document only, and not as a substitute or replacement for the Reliability Standard. It is the responsibility of the registered entity to verify its compliance with the latest approved version of the Reliability Standards, by the applicable governmental authority, relevant to its registration status.

   The NERC RSAW language contained within this document provides a non‑exclusive list, for informational purposes only, of examples of the types of evidence a registered entity may produce or may be asked to produce to demonstrate compliance with the Reliability Standard. A registered entity’s adherence to the examples contained within this RSAW does not necessarily constitute compliance with the applicable Reliability Standard, and NERC and the Regional Entity using this RSAW reserves the right to request additional evidence from the registered entity that is not included in this RSAW. Additionally, this RSAW includes excerpts from FERC Orders and other regulatory references. The FERC Order cites are provided for ease of reference only, and this document does not necessarily include all applicable Order provisions. In the event of a discrepancy between FERC Orders, and the language included in this document, FERC Orders shall prevail. [↑](#footnote-ref-1)
2. Compliance Assessment Date(s): The date(s) the actual compliance assessment (on-site audit, off-site spot check, etc.) occurs. [↑](#footnote-ref-2)
3. This proposed standard combines “Planning Authority” with “Planning Coordinator” in the list of applicable functional entities. The NERC Functional Model lists “Planning Coordinator” whiles the registration criteria lists “Planning Authority,” and they are not yet synchronized. Until that occurs, the proposed standard applies to both Planning Authority and Planning Coordinator. [↑](#footnote-ref-3)
4. Items in the Evidence Requested section are suggested evidence that may, but will not necessarily, demonstrate compliance. These items are not mandatory and other forms and types of evidence may be submitted at the entity’s discretion. [↑](#footnote-ref-4)
5. *Petition of the North American Electric Reliability Corporation for Approval of Proposed Reliability Standard MOD-031-2*, Docket No. RD16-1-000 (2015). [↑](#footnote-ref-5)
6. *Demand and Energy Data Reliability Standard,* 150 FERC ¶ 61, 109 (Order No. 804) (2015). [↑](#footnote-ref-6)
7. Order No. 804, 150 FERC ¶ 61, 109 at PP 14-15. [↑](#footnote-ref-7)