

**Compliance Questionnaire and**

**Reliability Standard Audit Worksheet**

**MOD-012-0 — Dynamic Data for Modeling and Simulation of the Interconnected Transmission System**

**Registered Entity:** *(Must be completed by the Compliance Enforcement Authority)*

**NCR Number:** *(Must be completed by the Compliance Enforcement Authority)*

 **Applicable Function(s): TO, TP, GO and RP specified in the data requirements and reporting procedures of MOD-013-0\_R1**

**Auditors:**

**Disclaimer**

 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 at <http://www.nerc.com/page.php?cid=2|20>. 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.

# Subject Matter Experts

Identify your company’s subject matter expert(s) responsible for this Reliability Standard. Include the person's title, organization and the requirement(s) for which they are responsible. Insert additional lines if necessary.

**Response: *(Registered Entity Response Required)***

|  |  |  |  |
| --- | --- | --- | --- |
| **SME Name** | **Title** | **Organization** | **Requirement** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Reliability Standard Language

 **MOD-012-0 —Dynamics Data for Modeling and Simulation of the Interconnected Transmission System**

**Purpose:**

To establish consistent data requirements, reporting procedures, and system models to be used in the analysis of the reliability of the Interconnected Transmission Systems.

**Applicability:**

TO, TP, GO and RP specified in the data requirements and reporting procedures of MOD-013-0\_R1

**NERC BOT Approval Date: 2/8/2005**

**FERC Approval Date: 3/16/2007**

**Reliability Standard Enforcement Date in the United States: 6/18/2007**

**Requirements**:

**R1.** The Transmission Owners, Transmission Planners, Generator Owners, and Resource Planners (specified in the data requirements and reporting procedures of MOD-013-0\_R1) shall provide appropriate equipment characteristics and system data in compliance with the respective Interconnection-wide Regional dynamics system modeling and simulation data requirements and reporting procedures as defined in Reliability Standard MOD-013-0\_R1.

**Describe, in narrative form, how you meet compliance with this requirement: *(Registered Entity Response Required)***

# R1 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

|  |  |
| --- | --- |
|  |   **Provide the following:** **Document Title and/or File Name, Page & Section, Date & Version** |
| **Title** | **Date** | **Version** |
|  |  |  |
|  |  |  |
|  |  |  |
| *Audit Team: Additional Evidence Reviewed:* |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

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

**Compliance Assessment Approach Specific to MOD-012-0 R1.**

\_\_\_Verify the entity provided appropriate data in compliance with its respective Interconnection-wide Regional dynamic system modeling and simulation data requirements and reporting procedures shall include:

 \_\_\_Equipment characteristics

 \_\_\_System data

**Detailed notes:**

**R2.** The Transmission Owners, Transmission Planners, Generator Owners, and Resource Planners (specified in the data requirements and reporting procedures of MOD-013-0\_R1) shall provide dynamics system modeling and simulation data to its Regional Reliability Organization(s), NERC, and those entities specified within the applicable reporting procedures identified in Reliability Standard MOD-013-0\_R1. If no schedule exists, then these entities shall provide data on request (30 calendar days).

**Describe, in narrative form, how you meet compliance with this requirement: *(Registered Entity Response Required)***

# R2 Supporting Evidence and Documentation

**Response: *(Registered Entity Response Required)***

|  |  |
| --- | --- |
|  |   **Provide the following:** **Document Title and/or File Name, Page & Section, Date & Version** |
| **Title** | **Date** | **Version** |
|  |  |  |
|  |  |  |
|  |  |  |
| *Audit Team: Additional Evidence Reviewed:* |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

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

**Compliance Assessment Approach Specific to MOD-010-0 R2.**

\_\_\_Verify the entity provided appropriate data to the RRO, NERC and those entities specified within Reliability Standard MOD-013-0 R1.

**Detailed notes:**

# Supplemental Information

**Other ‑** The list of questions above is not all inclusive of evidence required to show compliance with the Reliability Standard. Provide additional information here**, as necessary that** demonstrates compliance with this Reliability Standard.

  **Entity** **Response: *(Registered Entity Response)***

# Compliance Findings Summary (to be filled out by auditor)

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Req.** | **C** | **PV** | **OEA** | **NA** | **Statement** |
| **1** |  |  |  |  |  |
| **2** |  |  |  |  |  |

**Excerpts From FERC Orders -- For Reference Purposes Only**

**Updated Through November 24, 2008**

**MOD-012-0**

 **Order 693**

 http://www.nerc.com/files/order\_693.pdf

 P1006 "The Modeling, Data and Analysis group of Reliability Standards is intended to

 standardize methodologies and system data needed for traditional transmission

 systemoperation and expansion planning, reliability assessment and the

 calculation of available transfer capability (ATC) in an open access environment.

 The 23 MOD Reliability Standards may be grouped into four distinct categories.

 The first category covers methodology and associated documentation, review

 and validation of Total Transfer Capability (TTC), ATC, Capacity Benefit

 Margin (CBM) and Transmission Reliability Margin (TRM) calculations.

 (Footnote 317: MOD‑001‑0 through MOD‑009‑0.) The second category covers

 steady‑state and dynamics data and models.(Footnote 318: MOD‑010‑0 through

 MOD‑015‑0.) The third category covers actual and forecast demand data.

 (Footnote 319: MOD‑016‑0 through MOD‑021‑0.) The fourth category covers

 verification of generator real and reactive power capability. (Footnote 320:

 MOD‑024‑1 through MOD‑025‑1.)"

 P1011 "We reject ISO/RTO Council and ISO‑NE’s request that we defer our approval

 of Reliability Standards from the MOD group that incorporate references to the

 13 fill‑inthe‑blank standards. While we understand ISO/RTO Council and

 ISO‑NE’s concern about cross‑referencing pending Reliability Standards, the

 data that is needed will be provided as described in the Common Issues section.

 In the interim, compliance with the pending Reliability Standards should

 continue on a voluntary basis, and the Commission considers compliance with

 them a matter of good utility practice."

 P1165 “The purpose of MOD‑012‑0 is to establish consistent data requirements,

 reporting procedures and system models for use in reliability analysis.

 MOD‑012‑0 requires transmission owners, transmission planners, generator

 owners and resource planners to provide dynamic system modeling and

 simulation data, such as equipment characteristics and system data, to the

 regional reliability organization, NERC and other specified entities.”

 P1177 “…Failure to provide the data needed for dynamics system modeling and

 simulation would halt regional reliability assessment processes and impede

 planners from accurately predicting future system conditions, which would be

 detrimental to system reliability. We therefore direct the ERO to use its

 authority pursuant to § 39.2(d) of our regulations to require users, owners and

 operators to provide to the Regional Entities the information related to data

 gathering, data maintenance, reliability assessments and other process type

 functions…”

 P1181 “…we determine that the data that a company considers confidential,

 market‑sensitive or security‑sensitive should be released in accordance with the

 CEII process or subject to confidentiality agreements…”

 P1183 “We agree … that the functional entity responsible for providing the fault and

 disturbance list should be the transmission planner, instead of the transmission

 owner, as proposed in the NOPR…”

**Revision History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Date** | **Reviewers** | **Revision Description** |
| 1 | 5/6/10 | Craig Struck | Added Revision History. Editorial change to compliance assessment approach for R2. |
| 1 | December 2010 | QRSAW WG | Revised Findings Table, modified Supporting Evidence tables. |
| 1 | January 2011 | Craig Struck | Reviewed for format consistency and content. |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |