

**Project 2010-03 – Modeling Data (MOD B)**  
**Working Draft (July 9, 2013) of October 7, 2013**

Mapping Document Showing Translation of MOD-010-0, MOD -011-0, MOD-012-0, MOD-013-1, MOD-014-0, and MOD-015-0.1 to MOD-032-1 and MOD-033-1.

**Standard: MOD-010-0 – Steady-State Data for Modeling and Simulation of the Interconnected Transmission System**

Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
MOD-010-0 R1	MOD-032-1, R <del>23</del>	Changed to require submission of the data to Planning Coordinators and Transmission Planners
MOD-010-0 R2	MOD-032-1, R <del>23</del>	Changed to require submission of the data to Planning Coordinators and Transmission Planners

**Standard: MOD-011-0 – Maintenance and Distribution of Steady-State Data Requirements and Reporting Procedures**

Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
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Standard: MOD-011-0 – Maintenance and Distribution of Steady-State Data Requirements and Reporting Procedures		
Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
MOD-011-0 R1	MOD-032-1, R1	Changed to require Planning Coordinators, <del>in conjunction</del> with each of its Transmission Planners, to <u>jointly</u> develop the data requirements and reporting procedures for their planning areas instead of requiring RROs to develop such requirements and procedures for their respective interconnections. Rather than specify the required components in the requirement parts, MOD-032-1 leverages an attachment to detail each of the steady-state, dynamics, and short circuit <del>“at a minimum”</del> <u>data requirements</u> .
MOD-011-0 R2	MOD-032-1, R1 and R2	Changed to require Planning Coordinators, <del>in conjunction</del> with each of its Transmission Planners, to <u>jointly</u> develop the data requirements and reporting procedures for their planning areas instead of requiring RROs to develop such requirements and procedures for their respective interconnections. Rather than specify the required components in the requirement parts, MOD-032-1 leverages an attachment to detail each of the steady-state, dynamics, and short circuit <del>“at a minimum”</del> <u>data requirements</u> . MOD-032-1, Requirement R <del>12</del> , <u>Part 1.3’s inclusion of specifications for distribution</u> maps to the portion of MOD-011-0, Requirement R2 to “make the data requirements and reporting procedures available on request.”

Standard: MOD-012-0 – Dynamics Data for Modeling and Simulation of the Interconnected Transmission System

~~MOD-B~~Project 2010-03 – Modeling Data

Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
MOD-012-0 R1	MOD-032-1, R <del>2</del> <sup>3</sup>	Changed to require submission of the data to Planning Coordinators and Transmission Planners
MOD-012-0 R2	MOD-032-1, R <del>2</del> <sup>3</sup>	Changed to require submission of the data to Planning Coordinators and Transmission Planners

Standard: MOD-013-1 – Maintenance and Distribution of Dynamics Data Requirements and Reporting Procedures		
Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
MOD-013-1 R1	MOD-032-1, R1	Changed to require Planning Coordinators, <del>in conjunction</del> with each of its Transmission Planners, to <u>jointly</u> develop the data requirements and reporting procedures for their planning areas instead of requiring RROs to develop such requirements and procedures for their respective interconnections. Rather than specify the required components in the requirement parts, MOD-032-1 leverages an attachment to detail each of the steady-state, dynamics, and short circuit <del>“at a minimum”</del> <u>data</u> requirements.

Standard: MOD-013-1 – Maintenance and Distribution of Dynamics Data Requirements and Reporting Procedures		
Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
MOD-013-1 R2	MOD-032-1, R1	Changed to require Planning Coordinators, <del>in conjunction</del> with each of its Transmission Planners, to <u>jointly</u> develop the data requirements and reporting procedures for their planning areas instead of requiring RROs to develop such requirements and procedures for their respective interconnections. Rather than specify the required components in the requirement parts, MOD-032-1 leverages an attachment to detail each of the steady-state, dynamics, and short circuit <del>“at a minimum”</del> <u>data requirements</u> . MOD-032-1, Requirement <u>R1, Part 1.3’s inclusion of specifications for distribution</u> <del>R2</del> maps to the portion of MOD-013-1, Requirement R2 to “make the data requirements and reporting procedures available on request.”

Standard: MOD-014-0 – Development of Steady-State System Models		
Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
MOD-014-0 R1	Deleted	The modeling data standard focuses on clarifying data submission requirements to support building the interconnection models and creates a framework in MOD-032-1, <u>Requirement R4</u> to support <del>submission of the data by</del> Planning Coordinators <u>making available the models reflecting data received from its data owners</u> for use in building their respective <del>interconnections</del> <u>Interconnection-wide case(s)</u> . The RRO functionality is not in the NERC functional model, and, as such, requiring them to coordinate to build an <del>interconnection model</del> <u>Interconnection-wide case</u> is no longer necessary.
MOD-014-0 R2	Deleted	The modeling data standard focuses on clarifying data submission requirements to support building the interconnection models and creates a framework in MOD-032-1, <u>Requirement R4</u> to support <del>submission of the data by</del> Planning Coordinators <u>making available the models reflecting data received from its data owners</u> for use in building their respective <del>interconnections</del> <u>Interconnection-wide case(s)</u> . The RRO functionality is not in the NERC functional model, and, as such, requiring them to coordinate to build an <del>interconnection model</del> <u>Interconnection-wide case</u> is no longer necessary.

Standard: MOD-015-0.1 – Development of Dynamics System Models		
Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
MOD-015-0.1 R1	Deleted	The modeling data standard focuses on clarifying data submission requirements to support building the interconnection models and creates a framework in MOD-032-1, <u>Requirement R4</u> to support <del>submission of the data by</del> Planning Coordinators <u>making available the models reflecting data received from its data owners</u> for use in building their respective <del>interconnections</del> <u>interconnection-wide case(s)</u> . The RRO functionality is not in the NERC functional model, and, as such, requiring them to coordinate to build an <del>interconnection model</del> <u>interconnection-wide case</u> is no longer necessary.
MOD-015-0.1 R2	Deleted	The modeling data standard focuses on clarifying data submission requirements to support building the interconnection models and creates a framework in MOD-032-1, <u>Requirement R4</u> to support <del>submission of the data by</del> Planning Coordinators <u>making available the models reflecting data received from its data owners</u> for use in building their respective <del>interconnections</del> <u>interconnection-wide case(s)</u> . The RRO functionality is not in the NERC functional model, and, as such, requiring them to coordinate to build an <del>interconnection model</del> <u>interconnection-wide case</u> is no longer necessary.

New Requirements not found in existing MOD standards		
Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
NEW	MOD-032-1, R <del>3</del> 4	<p>This requirement provides a feedback loop to support clarifying or correcting data that a Planning Coordinator or Transmission Planner identifies as having possible technical concerns.</p> <p>Furthermore, <del>part 3.2, which it</del> provides a mechanism to obtain more accurate information and data in cases where the initial data provided <del>has</del> <u>may have</u> technical or accuracy concerns, <u>and it</u> meets the directive under FERC Order 693, paragraph 1197, as clarified by FERC Order 693-A, paragraph 131, which stated “that ‘[a]chieving the most accurate possible picture of the dynamic behavior of the Interconnection requires the use of actual data,’” but acknowledges “that, in certain circumstances, actual data may not be initially available and only obtained through ‘verification of the dynamic models with actual disturbance data.’” In those cases, additional detail regarding the data may be necessary.</p>

New Requirements not found in existing MOD standards		
Requirement in Approved Standard	Translation to New Standard or Other Action	Description and Change Justification
NEW	MOD-032-1, R <del>4</del> 5	This is a new requirement that supports creation of a framework for submission of the data by Planning Coordinators for use in building their respective <del>interconnection-wide models</del> <u>Interconnection-wide case(s)</u> .
NEW	MOD-033-1, R1	This is a new standard that addresses validation, and it also meets several directives from FERC Order Nos. 890 and 693 regarding the validation of models to ensure that expected system behavior acceptably matches actual system response.
NEW	MOD-033-1, R1	The Planning Coordinator will need actual real time system data in order to perform the validations required in <u>MOD-033-1, Requirement R1</u> . The Reliability Coordinator <u>or Transmission Operator</u> may have this data. <u>Requirement R2</u> requires the Reliability Coordinator <u>or Transmission Operator</u> to supply real time data, if it has the data, to any requesting Planning Coordinator.