



[Registered Entity Name]

NERC ID: [NCRXXXXX]

**MOD-032-1 - Data for Power System Modeling and Analysis,
Requirements 1, 2, 3 and 4**

3rd Quarter 2018 Self-Certification



Instructions

1. Populate the cover page by adding your entity's name and NERC identification number.
2. Complete the tasks listed under **Assessment Guidance, for the Requirements listed in the MRO 3rd Quarter 2018 Self-Certification Process and Notification.**
3. Log into **webCDMS** and complete your self-certification response.
4. Submit via the MRO EFT Encrypted [FTP2](#) Site:
 - a. This completed Worksheet; and
 - b. Specific evidence requested within this document. Please make sure to use unique file names for each evidence file submitted, and identify within your narratives which specific evidence files support each conclusion made. These references and the use of unique file names helps facilitate and expedite MRO's review of the Self-Certification work that has been performed.



Scope

MOD-032-1 - Data for Power System Modeling and Analysis – R1

- R1.** *Each Planning Coordinator and each of its Transmission Planners shall jointly develop steady-state, dynamics, and short circuit modeling data requirements and reporting procedures for the Planning Coordinator's planning area that include: [Violation Risk Factor: Lower] [Time Horizon: Long-term Planning]*
- 1.1.** *The data listed in Attachment 1.*
- 1.2.** *Specifications of the following items consistent with procedures for building the Interconnection-wide case(s):*
- 1.2.1.** *Data format;*
- 1.2.2.** *Level of detail to which equipment shall be modeled;*
- 1.2.3.** *Case types or scenarios to be modeled; and*
- 1.2.4.** *A schedule for submission of data at least once every 13 calendar months.*
- 1.3.** *Specifications for distribution or posting of the data requirements and reporting procedures so that they are available to those entities responsible for providing the data.*
- M1.** *Each Planning Coordinator and Transmission Planner shall provide evidence that it has jointly developed the required modeling data requirements and reporting procedures specified in Requirement R1.*
- R2.** *Each Balancing Authority, Generator Owner, Load Serving Entity, Resource Planner, Transmission Owner, and Transmission Service Provider shall provide steady-state, dynamics, and short circuit modeling data to its Transmission Planner(s) and Planning Coordinator(s) according to the data requirements and reporting procedures developed by its Planning Coordinator and Transmission Planner in Requirement R1. For data that has not changed since the last submission, a written confirmation that the data has not changed is sufficient. [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*
- M2.** *Each registered entity identified in Requirement R2 shall provide evidence, such as email records or postal receipts showing recipient and date, that it has submitted the required modeling data to its Transmission Planner(s) and Planning Coordinator(s); or written confirmation that the data has not changed.*
- R3.** *Upon receipt of written notification from its Planning Coordinator or Transmission Planner regarding technical concerns with the data submitted under Requirement R2, including the technical basis or reason for the technical concerns, each notified Balancing Authority, Generator Owner, Load Serving Entity, Resource Planner, Transmission Owner, or Transmission Service Provider shall respond to the notifying Planning Coordinator or Transmission Planner as follows: [Violation Risk Factor: Lower] [Time Horizon: Long-term Planning]*
- 3.1.** *Provide either updated data or an explanation with a technical basis for maintaining the current data;*
- 3.2.** *Provide the response within 90 calendar days of receipt, unless a longer time period is agreed upon by the notifying Planning Coordinator or Transmission Planner.*
- M3.** *Each registered entity identified in Requirement R3 that has received written notification from its Planning Coordinator or Transmission Planner regarding technical concerns with the data submitted*



under Requirement R2 shall provide evidence, such as email records or postal receipts showing recipient and date, that it has provided either updated data or an explanation with a technical basis for maintaining the current data to its Planning Coordinator or Transmission Planner within 90 calendar days of receipt (or within the longer time period agreed upon by the notifying Planning Coordinator or Transmission Planner), or a statement that it has not received written notification regarding technical concerns with the data submitted.

R4. *Each Planning Coordinator shall make available models for its planning area reflecting data provided to it under Requirement R2 to the Electric Reliability Organization (ERO) or its designee to support creation of the Interconnection-wide case(s) that includes the Planning Coordinator's planning area. [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]*

M4. *Each Planning Coordinator shall provide evidence, such as email records or postal receipts showing recipient and date, that it has submitted models for its planning area reflecting data provided to it under Requirement R2 when requested by the ERO or its designee.*



Purpose:

To establish consistent modeling data requirements and reporting procedures for development of planning horizon cases necessary to support analysis of the reliability of the interconnected transmission system.

Applicability:

4.1. Functional Entities:

4.1.1 Balancing Authority (R2, R3)

4.1.2 Generator Owner (R2, R3)

4.1.3 Load Serving Entity (R2, R3)

4.1.4 Planning Authority and Planning Coordinator (hereafter collectively referred to as “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. (R1, R4)

4.1.5 Resource Planner (R2, R3)

4.1.6 Transmission Owner (R2, R3)

4.1.7 Transmission Planner (R1)

4.1.8 Transmission Service Provider (R2, R3)



Assessment Guidance

Requirement 1

1. Each Planning Coordinator and each of its Transmission Planners shall jointly develop steady-state, dynamics, and short circuit modeling data requirements and reporting procedures for the Planning Coordinator’s planning area. As either a Planning Coordinator or a Transmission Planner, please provide your steady-state, dynamics, and short circuit modeling data requirements and reporting procedures.

Document(s) Requested	
Filename(s)	
Comments	

2. Do your modeling data requirements and reporting procedures include all parts of Requirement 1?

Yes, respond “Compliant” for R1 to the Self-Certification in webCDMS. Include a comment summary and upload supporting documentation to the [FTP2](#) server.

No, respond “Not Compliant” for R1 to the Self-Certification in webCDMS. Include a comment summary based on potential issues and upload supporting documentation to the [FTP2](#) server.

If the entity does not meet the applicability requirements, respond “Not Applicable” for R1 to the Self-Certification in webCDMS. Include comments supporting the “Not Applicable” response and upload supporting documentation to the [FTP2](#) server.

Requirement 2

1. Provide a list of all modified and new facilities (within the previous three years). If the entity does not own applicable facilities or this requirement is not applicable to the entity, skip to step 5.

Modified and New Facilities	
Filename	
Comments	

2. Select a random sample from your modified and new facilities population identified in step 1 using the following sampling logic. (A random sample can be selected using statistical functions available in Microsoft Excel or through use of RAT-STATS, a free sampling tool available from the U.S. Department of Health & Human Services Office of Inspector General.)

From the population:

- a. Select at least 10% of the population (maximum number sampled 10) making sure at least five are sampled (e.g. if fewer than 50 exist in your population, select at least five).
- b. If five or fewer total exist in the population, select the whole population.



Also provide supporting evidence of the sampling process used including: (1) modified and new facilities population, (2) samples selected, and (3) output from the statistical function used to perform the sampling (e.g. RAT-STATS output).

<i>File(s) Contents</i>	<i>File Name / Page(s)</i>
Full Population	
Samples Selected	
Statistical Function Output	
Comments	

- For all of the sampled facilities listed in step 2, provide evidence to show that all the modeling data was provided to the Transmission Planner(s) and Planning Coordinator(s). Also, provide the date this modeling data was due and the date it was actually submitted. If more rows are needed, then add them below.

Submission of each sample facility	
Facility #1 (Name(s))	
Submission of Attachment #2 (Filename(s))	
Due Date	
Date of Submission	
Facility #2 (Name(s))	
Submission of Attachment #2 (Filename(s))	
Due Date	
Date of Submission	
Facility #3 (Name(s))	
Submission of Attachment #2 (Filename(s))	
Due Date	
Date of Submission	
Facility #4 (Name(s))	



Submission of Attachment #2 (Filename(s))	
Due Date	
Date of Submission	

4. Was all the modeling data for the sampled facilities in step 2 submitted according to the data requirements and reporting procedures developed by the Planning Coordinator and Transmission Planner? Submit either “Yes” or “No” below and then skip step 5.
 - Yes, respond “Compliant” for R2 to the Self-Certification in webCDMS. Include a comment summary and upload supporting documentation to the [FTP2](#) server.
 - No, respond “Not Compliant” for R2 to the Self-Certification in webCDMS. Include a comment summary based on potential issues and upload supporting documentation to the [FTP2](#) server.

5. If a registered entity does not own any applicable facilities or the registered entity believes this requirement is not applicable to it, submit either “Do not own” or “Not Applicable” below.
 - If the entity does not own, respond “Do Not Own” for R2 to the Self-Certification in webCDMS. Include comments supporting the “Do Not Own” response and upload supporting documentation to the [FTP2](#) server.
 - Do not meet the applicability requirements, respond “Not Applicable” for R2 to the Self-Certification in webCDMS. Include comments supporting the “Not Applicable” response and upload supporting documentation to the [FTP2](#) server.

Requirement 3

1. As a Balancing Authority, Generator Owner, Load Serving Entity, Resource Planner, Transmission Owner, or Transmission Service Provider has the registered entity received any written notification from its Planning Coordinator or Transmission Planner regarding technical concerns with the data submitted under the NERC reliability standard MOD-032-1 Requirement R2?

If the registered entity did not receive a written notification or the registered entity is not a Balancing Authority, Generator Owner, Load Serving Entity, Resource Planner, Transmission Owner, or Transmission Service Provider, skip to step 4.

If the registered entity received any written notifications, please provide these notifications in the table below. Please add rows if needed.

Received Notification(s)	
Notification #1 Filename(s)	
Date Received	
Comments	



Notification #2 Filename(s)	
Date Received	
Comments	
Notification #3 Filename(s)	
Date Received	
Comments	

2. Provide the response to the notifications listed in step 1. If the response was made within 90 days after the receipt of the notification, indicate that in the “comment” row and provide evidence to show that either the Planning Coordinator or the Transmission Planner agreed to a longer response period; also, list this evidence filename in the “comment” row.

Response(s) to Notification(s)	
Response(s) to Notification #1 Filename(s)	
Response Date	
Comments	
Response(s) to Notification #2 Filename(s)	
Response Date	
Comments	
Response(s) to Notification #3 Filename(s)	
Response Date	
Comments	

3. Were all notifications responded to in accordance with Requirement R3? Submit either “Yes” or “No” below.

Yes, respond “Compliant” for R3 to the Self-Certification in webCDMS. Include a comment summary and upload supporting documentation to the [FTP2](#) server.

No, respond “Not Compliant” for R3 to the Self-Certification in webCDMS. Include a comment summary based on potential issues and upload supporting documentation to the [FTP2](#) server.



4. If a registered entity did not receive any written notification or the registered entity is not a Balancing Authority, Generator Owner, Load Serving Entity, Resource Planner, Transmission Owner, or Transmission Service Provider, submit “Not Applicable” below.

 The entity does not meet the applicability requirements, respond “Not Applicable” for R3 to the Self-Certification in webCDMS. Include comments supporting the “Not Applicable” response and upload supporting documentation to the [FTP2](#) server.

Requirement 4

1. As a Planning Coordinator, has the registered entity received modeling data submitted under the NERC reliability standard MOD-032-1 Requirement R2 and then made that modeling data available for its planning area to the Electric Reliability Organization (ERO) or its designee to support creation of the Interconnection-wide case(s)?

 No, if the registered entity did not receive data submitted under the NERC reliability standard MOD-032-1 Requirement R2 or this requirement is not applicable to the entity, skip to step 2.

 Yes, if the registered entity did receive data submitted under the NERC reliability standard MOD-032-1 Requirement R2 and then made this modeling data available to the Electric Reliability Organization (ERO) or its designee to support creation of the Interconnection-wide case(s).
2. If the registered entity did not receive data submitted under the NERC reliability standard MOD-032-1 Requirement R2 or the registered entity is not a Planning Coordinator, submit “Not Applicable” below.

 The entity does not meet the applicability requirements, respond “Not Applicable” for R4 to the Self-Certification in webCDMS. Include comments supporting the “Not Applicable” response and upload supporting documentation to the [FTP2](#) server.



Document Submittals

MRO requires copies of the following be submitted with the self-certification response:

- a) This worksheet; and
- b) Supporting documentation referenced in the Assessment Guidance.

Please make sure to use unique file names for each evidence file submitted, and identify within your responses to the steps above which specific evidence files support each conclusion made. These references and the use of unique file names helps facilitate and expedite MRO's review of the Self-Certification work that has been performed.

All other data related to the registered entity's analysis and self-certification response are to be retained for at least 180 days after the submission date. MRO staff may request submission of additional information at a later date to verify accuracy of self-certification submittals.