

[Registered Entity Name]

NERC ID: [NCRXXXXX]

MOD-033-2 – *Steady-State and Dynamic System Model Validation*

[QX] [20XX] Guided Self-Certification Worksheet

# Instructions

1. Populate the cover page by adding your Registered Entity name, NERC compliance registry (NCR) number, and the quarter and year indicated for the Guided Self-Certification in Align.
2. Complete the tasks listed under Assessment Guidance. Only complete tasks listed for the Requirements and Sections in scope.
3. Log into Align and complete your Guided Self-Certification response.
4. Submit the following to the Secure Evidence Locker (SEL):
	1. This completed worksheet; and
	2. 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 WECC’s review of the Self-Certification work that has been performed.
5. The Guided Self-Certification request in Align includes the monitoring period and the timeframe to perform the assessment and respond.

# Scope of the Self Certification

MOD-033-2 — Steady-State and Dynamic System Model Validation, R1 and R2

*Purpose:*

To establish consistent validation requirements to facilitate the collection of accurate data and building of planning models to analyze the reliability of the interconnected transmission system.

*Applicability:*

Planning Coordinator (PC) (R1)

Reliability Coordinator (RC) (R2)

Transmission Operator (TOP) (R2)

## Requirements

R1. Each Planning Coordinator shall implement a documented data validation process that includes the following attributes:

1.1. Comparison of the performance of the Planning Coordinator’s portion of the existing system in a planning power flow model to actual system behavior, represented by a state estimator case or other Real-time data sources, at least once every 24 calendar months through simulation;

1.2. Comparison of the performance of the Planning Coordinator’s portion of the existing system in a planning dynamic model to actual system response, through simulation of a dynamic local event, at least once every 24 calendar months (use a dynamic local event that occurs within 24 calendar months of the last dynamic local event used in comparison, and complete each comparison within 24 calendar months of the dynamic local event). If no dynamic local event occurs within the 24 calendar months, use the next dynamic local event that occurs;

1.3. Guidelines the Planning Coordinator will use to determine unacceptable differences in performance under Part 1.1 or 1.2; and

1.4. Guidelines to resolve the unacceptable differences in performance identified under Part 1.3.

R2. Each Reliability Coordinator and Transmission Operator shall provide actual system behavior data (or a written response that it does not have the requested data) to any Planning Coordinator performing validation under Requirement R1 within 30 calendar days of a written request, such as, but not limited to, state estimator case or other Real-time data (including disturbance data recordings) necessary for actual system response validation.

## Assessment Guidance

### Requirement 1 (PC)

Please provide the documented data validation process that includes all the sub requirements of R1.

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| **Document(s) Requested** |
| **Filename(s)** |  |
| **Comments** |  |

### Requirement 2 (RC, TOP)

Was actual system behavior data provided to a PC performing validation under Requirement R1(such as, but not limited to, state estimator case or other Real-time data (including disturbance data recordings) necessary for actual system response validation.)? If yes, please provide the request and the data provided to the PC.

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| **Document(s) Requested** |
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If no, was a written response provided to the Planning Coordinator performing validation under Requirement R1 within 30 calendar days of a written request?

## Document Submittals

WECC 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 WECC’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. WECC staff may request submission of additional information at a later date to verify accuracy of self-certification submittals.

# Assessment Guidance – Controls

## Controls Instructions:

In this section of the document, WECC asks you to identify/describe the internal controls your entity put in place to mitigate the risk(s) addressed by this Standard. When WECC asks you to "provide associated evidence," you should provide any evidence (examples include check lists, processes, procedures, training, sign-in sheets, *etc*.) demonstrating your entity *created* a control and *implemented* the control.

When WECC asks for the Quality Control/Quality Assurance (QC/QA) your entity used in connection with a risk assessment or control, please describe how your entity *verified* it performed an activity or verified an activity was performed *correctly* (examples include separation of duties, having a supervisor double-check someone’s work, *etc*.).

If you have any questions, please reach out to WECC at internalcontrols@wecc.org.

## Controls Questions:

1. (a) Describe how your entity developed its process for validating its planning model(s) to ensure it analyzes the reliability of its portion of the interconnected transmission system.

(b) What QC/QA does your entity perform to ensure it correctly analyzes the reliability of its portion of the interconnected transmission system?

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| Narrative  |
| Response:(a) (b)  |

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| Evidence (if available) |
| **File Name** | **Document Title** | **Revision/****Version** | **Document Date** | **Relevant Page(s) or Section(s)** |
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1. (a) Describe how your entity evaluates discrepancies between actual system behavior or response and expected system performance to determine whether a discrepancy is unacceptable.

(b) What QC/QA does your entity perform to ensure it identifies and correctly evaluates discrepancies between actual system behavior or response and expected system performance to determine whether a discrepancy is unacceptable?

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| Narrative  |
| Response:(a) (b)  |

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| Evidence (if available) |
| **File Name** | **Document Title** | **Revision/****Version** | **Document Date** | **Relevant Page(s) or Section(s)** |
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| Comments: |

1. (a) Describe how your entity ensures the state estimator case or other real-time data is taken as close to system peak as possible.

(b) What QC/QA does your entity perform to ensure the state estimator case or other real-time data is taken as close to system peak as possible?

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| Narrative  |
| Response:(a) (b)  |

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| Evidence (if available) |
| **File Name** | **Document Title** | **Revision/****Version** | **Document Date** | **Relevant Page(s) or Section(s)** |
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1. (a) Describe how your entity ensures it has the correct Subject Matter Experts (SMEs) performing data validation.

(b) Describe how your entity holds personnel responsible for performing data validation.

(c) Describe how your entity ensures the SMEs performing data validation know and understand how to validate the data.

(d) What QC/QA does your entity perform to ensure it has correctly validated the data?

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| Narrative  |
| Response:(a) (b) (c) (d) |

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| Evidence (if available) |
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1. (a) Describe how your entity determines whether the performance of its part of the interconnected transmission system successfully matches modeled performance.

(b) What QC/QA does your entity perform to ensure it has correctly determined whether the performance of its part of the interconnected transmission system successfully matches modeled performance?

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| Narrative  |
| Response:(a)(b) |

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| Evidence (if available) |
| **File Name** | **Document Title** | **Revision/****Version** | **Document Date** | **Relevant Page(s) or Section(s)** |
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| Comments: |

1. (a) Describe how your entity resolves unacceptable differences in performance with the data owner, and, if necessary, through MOD-032-1, Requirement R3 (i.e., technical concerns with the data).

(b) What QC/QA does your entity perform to ensure it timely resolves unacceptable differences in performance with the data owner?

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| Narrative  |
| Response:(a)(b) |

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| Evidence (if available) |
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