Supporting Statement

FERC-725L, Mandatory Reliability Standards for the Bulk-Power System: MOD Reliability Standards

(Three-year extension requested)

The Federal Energy Regulatory Commission (FERC or Commission) requests that the Office of Management and Budget (OMB) review and renew the information collection requirements in FERC-725L under OMB Control No. 1902-0261. This supporting statement covers the requirements of the FERC-725L information collection. The reporting requirements in the FERC-725L are also contained in FERC's regulations in 18 Code of Federal Regulations (CFR) Part 40.

1. CIRCUMSTANCES THAT MAKE THE COLLECTION OF INFORMATION NECESSARY

On August 8, 2005, The Electricity Modernization Act of 2005, which is Title XII of the Energy Policy Act of 2005 (EPAct 2005), was enacted into law. EPAct 2005 added a new Section 215 to the Federal Power Act (FPA), which requires a Commission-certified Electric Reliability Organization (ERO) to develop mandatory and enforceable Reliability Standards, which are subject to Commission review and approval. Once approved, the Reliability Standards may be enforced by the ERO, subject to Commission oversight. In 2006, the Commission certified the North American Electric Reliability Corporation (NERC) as the ERO pursuant to FPA section 215.¹

On May 30, 2013, the North American Electric Reliability Corporation (NERC) filed a petition explaining that the reliability of the Bulk-Power System benefits from "good quality simulation models of power system equipment," and that "model validation ensures the proper performance of the control systems and validates the computer models used for stability analysis." NERC further stated that the Reliability Standards will enhance reliability because the tests performed to obtain model data may reveal latent defects that could cause "inappropriate unit response during system disturbances." Subsequently, on March 20, 2014,² the Commission approved Reliability Standards MOD-025-2, MOD-026-1, and MOD-027-1. RD20-4 is modifying two standards for this renewal: Reliability Standard MOD 31-3 (formerly 31-2) and Reliability Standard MOD 33-2 (formerly 33-1). These Standards are intended to address generator

¹ North American Electric Reliability Corp., 116 FERC ¶ 61,062, order on reh'g & compliance, 117 FERC ¶ 61,126 (2006), aff'd sub nom. Alcoa, Inc. v. FERC, 564 F.3d 1342 (D.C. Cir. 2009). 2 Final Rule in Docket No. RM13-16-000;

https://www.nerc.com/FilingsOrders/us/FERCOrdersRules/Order%20No.%20796%20Generator%20Ver fication.pdf

verifications needed to support Bulk-Power System reliability that would also ensure that accurate data is verified and made available for planning simulations.³

On May 1, 2014,⁴ the Commission approved Reliability Standards MOD-032-1 and MOD-033-2. These Standards were to address "system-level modeling data and validation requirements necessary for developing planning models and the Interconnection-wide cases that are integral to analyzing the reliability of the Bulk-Power System".

MOD-025-2, MOD-026-1, MOD-027-1, MOD-031-3, MOD-032-1 and MOD-033-2 are all currently approved within the FERC-725L information collection.

MOD Reliability Standards ensure that generators remain in operation during specified voltage and frequency excursions, properly coordinate protective relays and generator voltage regulator controls, and ensure that generator models accurately reflect the generator's capabilities and equipment performance.

2. HOW, BY WHOM, AND FOR WHAT PURPOSE THE INFORMATION IS TO BE USED AND THE CONSEQUENCES OF NOT COLLECTING THE INFORMATION

The FERC-725L information collection contains six reliability standards:

- MOD-025-2;
- MOD-026-1;
- MOD-027-1;
- MOD-031-3;
- MOD-032-1; and
- MOD-033-2.

The Commission approved MOD-025-2, MOD-026-1, and MOD-027-1 Reliability Standards in the Final Rule in Docket RM13-16-000⁵. The purpose of these generator verification Reliability Standards⁶ is to ensure:

generators remain in operation during specified voltage and frequency excursions;
 properly coordinate protective relays and generator voltage regulator controls; and

³ Letter Order for Approval of two Proposed Reliability Standards MOD-031-3, MOD-033-2 October 20, 2020. https://www.nerc.com/FilingsOrders/us/FERCOrdersRules/RD20-4-000_AD_Signature.pdf

⁴ Order in Docket No. RD14-5-000

https://www.nerc.com/FilingsOrders/us/FERCOrdersRules/May_1_2014_Order_Aprpving_MO D B Standards.pdf

⁵ Order No. 796 issued on 3/20/2014 (published at 79 FR 17011, 3/27/2014).

⁶ In conjunction with Reliability Standards PRC-019-1 and PRC-024-1. The reporting requirements for PRC-019-1 and PRC-024-1 Reliability Standards are contained in the FERC-725G information collection (OMB Control No. 1902-0252).

• generator models accurately reflect the generator's capabilities and equipment performance.

Reliability Standard MOD-025-2 Requirements

- **R1.** Each Generator Owner shall provide its Transmission Planner with verification of the Real Power capability of its applicable Facilities as follows:
- **1.1.** Verify the Real Power capability of its generating units in accordance with Attachment 1.
- **1.2.** Submit a completed Attachment 2 (or a form containing the same information as identified in Attachment 2) to its Transmission Planner within 90 calendar days of either (i) the date the data is recorded for a staged test; or (ii) the date the data is selected for verification using historical operational data.
- **R2.** Each Generator Owner shall provide its Transmission Planner with verification of the Reactive Power capability of its applicable Facilities as follows
- **2.1.** Verify, in accordance with Attachment 1, (i) the Reactive Power capability of its generating units and (ii) the Reactive Power capability of its synchronous condenser units.
- **2.2.** Submit a completed Attachment 2 (or a form containing the same information as identified in Attachment 2) to its Transmission Planner within 90 calendar days of either (i) the date the data is recorded for a staged test; or (ii) the date the data is selected for verification using historical operational data.
- **R3.** Each Transmission Owner shall provide its Transmission Planner with verification of the Reactive Power capability of its applicable Facilities as follows:
- **3.1.** Verify, in accordance with Attachment 1, the Reactive Power capability of its synchronous condenser units.
- **3.2.** Submit a completed Attachment 2 (or a form containing the same information as identified in Attachment 2) to its Transmission Planner within 90 calendar days of either (i) the date the data is recorded for a staged test; or (ii) the date the data is selected for verification using historical operational data.

Measures

- **M1.** Each Generator Owner will have evidence that it performed the verification, such as a completed Attachment 2 or the Generator Owner form with the same information or dated information collected and used to complete attachments, and will have evidence that it submitted the information within 90 days to its Transmission Planner; such as dated electronic mail messages or mail receipts in accordance with Requirement R1.
- **M2.** Each Generator Owner will have evidence that it performed the verification, such as a completed Attachment 2 or the Generator Owner form with the same information, or dated information collected and used to complete attachments and will have evidence that it submitted the information within 90 days to its Transmission Planner; such as dated electronic mail messages or mail receipts in accordance with Requirement R2.

Reliability Standard MOD-031-3 purpose is to provide authority for applicable entities to collect Demand, energy and related data to support reliability studies and assessments and to enumerate the responsibilities and obligations of requestors and respondents of that data. Provides planners

and operators access to actual and forecast demand and energy data as needed to perform resource adequacy studies.

M3. Each Transmission Owner will have evidence that it performed the verification, such as a completed Attachment 2 or the Transmission Owner form with equivalent information or dated information collected and used to complete attachments, and will have evidence that it submitted the information within 90 days to its Transmission Planner; such as dated electronic mail messages or mail receipts in accordance with Requirement R3.

Evidence Retention

The following evidence retention periods identify a period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention specified below is shorter than the time since the last compliance audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The Generator Owner and Transmission Owner shall each keep the data or evidence to show compliance as identified below, unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

- The Generator Owner shall retain the latest MOD-025 Attachment 2 and the data behind Attachment 2 or Generator Owner form with equivalent information and submittal evidence for Requirements R1 and R2, Measures M1 and M2 for the time period since the last compliance audit.
- The Transmission Owner shall retain the latest MOD-025 Attachment 2 and the data behind Attachment 2 or Transmission Owner form with equivalent information and submittal evidence for Requirement R3, Measure M3 for the time period since the last compliance audit. If a Generator Owner or Transmission Owner is found noncompliant, it shall keep information related to the noncompliance until mitigation is complete or for the time specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

Reliability Standard MOD 26-1

Requirements

R1. Each Transmission Planner shall provide the following requested information to the Generator Owner within 90 calendar days of receiving a written request:

- Instructions on how to obtain the list of excitation control system or plant volt/var control function models that are acceptable to the Transmission Planner for use in dynamic simulation,
- Instructions on how to obtain the dynamic excitation control system or plant volt/var control function model library block diagrams and/or data sheets for models that are acceptable to the Transmission Planner, or

- Model data for any of the Generator Owner's existing applicable unit specific excitation control system or plant volt/var control function contained in the Transmission Planner's dynamic database from the current (in-use) models, including generator MVA base.
- **R2.** Each Generator Owner shall provide for each applicable unit, a verified generator excitation control system or plant volt/var control function model, including documentation and data (as specified in Part 2.1) to its Transmission Planner in accordance with the periodicity specified in MOD-026.
- **R3.** Each Generator Owner shall provide a written response to its Transmission Planner within 90 calendar days of receiving one of the following items for an applicable unit:
 - Written notification from its Transmission Planner (in accordance with Requirement R6) that the excitation control system or plant volt/var control function model is not usable,
 - Written comments from its Transmission Planner identifying technical concerns with the verification documentation related to the excitation control system or plant volt/var control function model, or
 - Written comments and supporting evidence from its Transmission Planner indicating that the simulated excitation control system or plant volt/var control function model response did not match the recorded response to a transmission system event.

The written response shall contain either the technical basis for maintaining the current model, the model changes, or a plan to perform model verification3 (in accordance with Requirement R2).

- **R4.** Each Generator Owner shall provide revised model data or plans to perform model verification4 (in accordance with Requirement R2) for an applicable unit to its Transmission Planner within 180 calendar days of making changes to the excitation control system or plant volt/var control function that alter the equipment response characteristic.
- **R5.** Each Generator Owner shall provide a written response to its Transmission Planner, within 90 calendar days following receipt of a technically justified unit request from the Transmission Planner to perform a model review of a unit or plant that includes one of the following:
 - Details of plans to verify the model (in accordance with Requirement R2), or
 - Corrected model data including the source of revised model data such as discovery of manufacturer test values to replace generic model data or updating of data parameters based on an on-site review of the equipment.
- **R6.** Each Transmission Planner shall provide a written response to the Generator Owner within 90 calendar days of receiving the verified excitation control system or plant volt/var control function model information in accordance with Requirement R2 that the model is usable (meets the criteria specified in Parts 6.1 through 6.3) or is not usable.
- **6.1.** The excitation control system or plant volt/var control function model initializes to compute modeling data without error,
- **6.2.** A no-disturbance simulation results in negligible transients, and
- **6.3.** For an otherwise stable simulation, a disturbance simulation results in the excitation control and plant volt/var control function model exhibiting positive damping.

If the model is not usable, the Transmission Planner shall provide a technical description of why the model is not usable.

Measures

M1. The Transmission Planner must have and provide the dated request for instructions or data, the transmitted instructions or data, and dated evidence of a written transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) as evidence that it provided the request within 90 calendar days in accordance with Requirement R1.

M2. The Generator Owner must have and provide dated evidence it verified each generator excitation control system or plant volt/var control function model according to Part 2.1 for each applicable unit and a dated transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) as evidence it provided the model, documentation, and data to its Transmission Planner, in accordance with Requirement R2.

M3. Evidence for Requirement R3 must include the Generator Owner's dated written response containing the information identified in Requirement R3 and dated evidence of transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) of the response.

M4. Evidence for Requirement R4 must include, for each of the Generator Owner's applicable units for which system changes specified in Requirement R4 were made, a dated revised model data or plans to perform a model verification and dated evidence (e.g., electronic mail message, postal receipt, or confirmation of facsimile) it provided the revised model and data or plans within 180 calendar days of making changes.

M5. Evidence for Requirement R5 must include the Generator Owner's dated written response containing the information identified in Requirement R5 and dated evidence (e.g., electronic mail message, postal receipt, or confirmation of facsimile) it provided a written response within 90 calendar days following receipt of a technically justified request.

M6. Evidence of Requirement R6 must include, for each model received, the dated response indicating the model was usable or not usable according to the criteria specified in Parts 6.1 through 6.3 and for a model that is not usable, a technical description; and dated evidence of transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) that the Generator Owner was notified within 90 calendar days of receipt of model inform

Data Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The Generator Owner and Transmission Planner shall each keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

• The Transmission Planner shall retain the information/data request and provided response evidence of Requirements R1 and R6, Measures M1 and M6 for three calendar years from the date the document was provided.

- The Generator Owner shall retain the latest excitation control system or plant volt/var control function model verification evidence of Requirement R2, Measure M2.
- The Generator Owner shall retain the information/data request and provided response evidence of Requirements R3 through R5, and Measures M3 through M5 for three calendar years from the date the document was provided.

If a Generator Owner or Transmission Planner is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete or approved or for the time specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

Reliability Standard for MOD 27-1

The purpose is to verify that the turbine/governor and load control or active power/frequency control model and the model parameters, used in dynamic simulations that assess Bulk Electric System (BES) reliability, accurately represent generator unit real power response to system frequency variations.

Requirements

R1. Each Transmission Planner shall provide the following requested information to the Generator Owner within 90 calendar days of receiving a written request:

- Instructions on how to obtain the list of turbine/governor and load control or active
 power/frequency control system models that are acceptable to the Transmission Planner
 for use in dynamic simulation,
- Instructions on how to obtain the dynamic turbine/governor and load control or active power/frequency control function model library block diagrams and/or data sheets for models that are acceptable to the Transmission Planner, or
- Model data for any of the Generator Owner's existing applicable unit specific turbine/governor and load control or active power/frequency control system contained in the Transmission Planner's dynamic database from the current (in-use) models.
- **R2.** Each Generator Owner shall provide, for each applicable unit, a verified turbine/governor and load control or active power/frequency control model, including documentation and data (as specified in Part 2.1) to its Transmission Planner in accordance with the periodicity specified in MOD-027 Attachment 1.
- **R3.** Each Generator Owner shall provide a written response to its Transmission Planner within 90 calendar days of receiving one of the following items for an applicable unit.
 - Written notification, from its Transmission Planner (in accordance with Requirement R5) that the turbine/governor and load control or active power/frequency control model is not "usable,"
 - Written comments from its Transmission Planner identifying technical concerns with the verification documentation related to the turbine/governor and load control or active power/frequency control model, or

Written comments and supporting evidence from its Transmission Planner indicating that
the simulated turbine/governor and load control or active power/frequency control
response did not approximate the recorded response for three or more transmission
system events.

The written response shall contain either the technical basis for maintaining the current model, the model changes, or a plan to perform model verification (in accordance with Requirement R2).

R4. Each Generator Owner shall provide revised model data or plans to perform model verification (in accordance with Requirement R2) for an applicable unit to its Transmission Planner within 180 calendar days of making changes to the turbine/governor and load control or active power/frequency control system that alter the equipment response characteristic.

R5. Each Transmission Planner shall provide a written response to the Generator Owner within 90 calendar days of receiving the turbine/governor and load control or active power/frequency control system verified model information in accordance with Requirement R2 that the model is usable (meets the criteria specified in Parts 5.1 through 5.3) or is not usable.

Measures

- **M1.** The Transmission Planner must have and provide the dated request for instructions or data, the transmitted instruction or data, and dated evidence of a written transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) as evidence that it provided the request within 90 calendar days in accordance with Requirement R1.
- **M2.** The Generator Owner must have and provide dated evidence it verified each generator turbine/governor and load control or active power/frequency control model according to Part 2.1 for each applicable unit and a dated transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) as evidence it provided the model, documentation, and data to its Transmission Planner, in accordance with Requirement R2.
- **M3.** Evidence for Requirement R3 must include the Generator Owner's dated written response containing the information identified in Requirement R3 and dated evidence of transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) of the response.
- **M4.** Evidence for Requirement R4 must include, for each of the Generator Owner's applicable units for which system changes specified in Requirement R4 were made, dated revised model data or dated plans to perform a model verification and dated evidence of transmittal (e.g., electronic mail message, postal receipt, or confirmation of facsimile) within 180 calendar days of making changes.
- **M5.** Evidence of Requirement R5 must include, for each model received, the dated response indicating the model was usable or not usable according to the criteria specified in Parts 5.1 through 5.3 and for a model that is not useable, a technical description is the model is not usable, and dated evidence of transmittal (e.g., electronic mail messages, postal receipts, or confirmation of facsimile) that the Generator Owner was notified within 90 calendar days of receipt of model information in accordance with Requirement R5

Data Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

The Generator Owner and Transmission Planner shall each keep data or evidence to show compliance as identified below unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation:

- The Transmission Planner shall retain the information/data request and provided response evidence of Requirements R1 and R5, Measures M1 and M5 for 3 calendar years from the date the document was provided.
- The Generator Owner shall retain the latest turbine/governor and load control or active power/frequency control system model verification evidence of Requirement R2, Measure M2.
- The Generator Owner shall retain the information/data request and provided response evidence of Requirements R3, and R4 Measures M3 and M4 for 3 calendar years from the date the document was provided.

If a Generator Owner or Transmission Planner is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved or for the time specified above, whichever is longer.

The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

MOD-031-3 contains four requirements:

- **R1.** 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.
- **1.1.** A list of Transmission Planners, Balancing Authorities, and Distribution Providers that are required to provide the data ("Applicable Entities").
- **1.2.** A timetable for providing the data. (A minimum of 30 calendar days must be allowed for responding to the request).
- **1.3.** A request to provide any or all of the following actual data, as necessary:
- **1.3.1.** Integrated hourly Demands in megawatts for the prior calendar year.
- **1.3.2.** Monthly and annual integrated peak hour Demands in megawatts for the prior calendar year.
- **1.3.2.1.** 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.
- **M1.** The Planning Coordinator or Balancing Authority shall have a dated data request, either in hardcopy or electronic format, in accordance with Requirement R1.

- **R2.** 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.
- **M2.** Each Applicable Entity shall have evidence, such as dated e-mails or dated transmittal letters that it provided the requested data in accordance with Requirement R2.
- **R3.** 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. **M3.** Each Planning Coordinator or Balancing Authority, shall have evidence, such as dated e-
- **M3.** Each Planning Coordinator or Balancing Authority, shall have evidence, such as dated emails or dated transmittal letters that it provided the data requested by the applicable Regional Entity in accordance with Requirement R3.
- **R4.** 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.

This 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.
- **4.1**. 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 emails 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.

Evidence Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit.

• The Applicable Entity shall keep data or evidence to show compliance with Requirements R1 through R4, and Measures M1 through M4, since the last audit, unless

directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation.

- If an Applicable Entity is found non-compliant, it shall keep information related to the non-compliance until mitigation is complete and approved, or for the time specified above, whichever is longer.
- The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

Reliability Standards MOD-032-1 and MOD-033-3 were approved by the Commission in an Order in Docket No. RD14-5-000⁷. Both standards were designed to replace, consolidate and improve upon existing MOD standards, "in addressing system-level modeling data and validation requirements necessary for developing planning models and the Interconnection-wide cases that are integral to analyzing the reliability of the Bulk-Power System."

MOD-032-1 Reliability Standard contains four requirements:

- Requirement R1 mandates that 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;
- Requirement R2 mandates that 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;
- Requirement R3 mandates that 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:
 - Provide either updated data or an explanation with a technical basis for maintaining the current data;
 - O 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.
- Requirement R4 mandates that 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.

MOD-033-2 Reliability Standard contains two requirements:

⁷ Approved by the Commission in the Order in Docket No. RD14-5-000 (issued 5/1/2014). 8 NERC Petition for MOD-032-1 at paragraph 2.

Purpose is 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.

- **R1.** Each Planning Coordinator shall implement a documented data validation process that includes the following:
- **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.
- **M1.** Each Planning Coordinator shall provide evidence that it has a documented validation process according to Requirement R1 as well as evidence that demonstrates the implementation of the required components of the process.
- **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.
- **M2.** Each Reliability Coordinator and Transmission Operator shall provide evidence, such as email notices or postal receipts showing recipient and date that it has distributed the requested data or written response that it does not have the data, to any Planning Coordinator performing validation under Requirement R1 within 30 days of a written request in accordance with Requirement R2; or a statement by the Reliability Coordinator or Transmission Operator that it has not received notification regarding data necessary for validation by any Planning Coordinator.

Evidence Retention

The following evidence retention periods identify the period of time an entity is required to retain specific evidence to demonstrate compliance. For instances where the evidence retention period specified below is shorter than the time since the last audit, the Compliance Enforcement Authority may ask an entity to provide other evidence to show that it was compliant for the full time period since the last audit. The applicable entity shall keep data or evidence to show compliance with Requirements R1 through R2, and Measures M1 through M2, since the last audit, unless directed by its Compliance Enforcement Authority to retain specific evidence for a longer period of time as part of an investigation. If an applicable entity is found non-compliant, it

shall keep information related to the non-compliance until mitigation is complete and approved, or for the time specified above, whichever is longer. The Compliance Enforcement Authority shall keep the last audit records and all requested and submitted subsequent audit records.

3. DESCRIBE ANY CONSIDERATION OF THE USE OF IMPROVED INFORMATION TECHNOLOGY TO REDUCE THE BURDEN AND TECHNICAL OR LEGAL OBSTACLES TO REDUCING BURDEN

This collection does not require industry to file the information with the Commission. However, FERC-725L does contain information collection and record retention requirements for which using current technology is an option.

The information technology to meet the information collection requirements is not specifically covered in the Reliability Standard.

4. DESCRIBE EFFORTS TO IDENTIFY DUPLICATION AND SHOW SPECIFICALLY WHY ANY SIMILAR INFORMATION ALREADY AVAILABLE CANNOT BE USED OR MODIFIED FOR USE FOR THE PURPOSE(S) DESCRIBED IN INSTRUCTION NO. 2

The Commission periodically reviews filing requirements concurrent with OMB review or as the Commission deems necessary to eliminate duplicative filing and to minimize the filing burden. The Commission is unaware of any other source of information related to bulk-electric system physical security.

5. METHODS USED TO MINIMIZE THE BURDEN IN COLLECTION OF INFORMATION INVOLVING SMALL ENTITIES

In general, small entities may reduce their burden by taking part in a joint registration organization or a coordinated functional registration. These options allow a small entity to share the compliance burden with other entities and, thus, to minimize their own compliance burden. Detailed information regarding these options is available in NERC's Rule of Procedure at Sections 507 and 5089.

6. CONSEQUENCE TO FEDERAL PROGRAM IF COLLECTION WERE CONDUCTED LESS FREQUENTLY

⁹ NERC's Rule of Procedure

The Reliability Standard provides consistent documentation and information sharing practices for demand and energy data while promoting efficient planning practices across industry and supporting identification of necessary system reinforcements. As stated earlier, all of this would be hindered if this collection of information were discontinued or conducted less frequently.

7. EXPLAIN ANY SPECIAL CIRCUMSTANCES RELATING TO THE INFORMATION COLLECTION

There are no special circumstances related to the FERC-725L information collection.

8. DESCRIBE EFFORTS TO CONSULT OUTSIDE THE AGENCY: SUMMARIZE PUBLIC COMMENTS AND THE AGENCY'S RESPONSE

The ERO process to establish Reliability Standards is a collaborative process with the ERO, Regional Entities, and other stakeholders developing and reviewing drafts and providing comments.¹⁰ The NERC-approved Reliability Standards were then submitted by NERC to the FERC for review and approval.

In accordance with OMB requirements, the Commission published a 60-day notice¹¹ and a 30-day notice¹² to the public regarding this information collection on July 29, 2024 and October 10, 2024 respectively. Within the public notices, the Commission noted that it would be requesting a three-year extension of the public reporting burden. The Commission received no comments from the public in response to the 60-day notice regarding the FERC-725L information collection.

9. EXPLAIN ANY PAYMENT OR GIFTS TO RESPONDENTS

There are no payments or gifts to respondents associated with this collection.

10. DESCRIBE ANY ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS

According to the NERC Rule of Procedure¹³, "…a Receiving Entity shall keep in confidence and not copy, disclose, or distribute any Confidential Information or any part thereof without the permission of the Submitting Entity, except as otherwise legally required." This serves to protect confidential information submitted to NERC or Regional Entities.

¹⁰ Details of the ERO standards development process are available on the NERC website at http://www.nerc.com/pa/Stand/Documents/Appendix 3A StandardsProcessesManual.pdf.

^{11 89} FR 60888

^{12 89} FR 82233

¹³ Section 1502, Paragraph 2, available at NERCs website.

Responding entities do not submit the information collected under these Reliability Standards to FERC. Rather, they maintain it internally and provide information collected to applicable Regional Entities. Since there are no submissions made to FERC, FERC provides no specific provisions in order to protect confidentiality.

11. PROVIDE ADDITIONAL JUSTIFICATION FOR ANY QUESTIONS OF A SENSITIVE NATURE, SUCH AS SEXUAL BEHAVIOR AND ATTITUDES, RELIGIOUS BELIEFS, AND OTHER MATTERS THAT ARE COMMONLY CONSIDERED PRIVATE.

There are no questions of a sensitive nature in the reporting requirements.

12. ESTIMATED BURDEN OF COLLECTION OF INFORMATION

The burden for the FERC-725L information collection includes estimates related to each of the six previously approved Reliability Standards.

*Estimate of Annual Burden*¹⁴: The Commission estimates the annual public reporting burden¹⁵ and cost for the information collection as:

MOD-025-2 (Verification and Data Reporting of Generator Real and Reactive Power								
Capability and Synchronous Condenser Reactive Power Capability)								
					Total			
		Annual	Total	Average	Annual			
		Number of	Number	Burden	Burden			
		Responses	of	& Cost	Hours &	Cost per		
	Number of	per	Response	Per	Total	Responde		
	Respondent	Responde	S	Respons	Annual	nt		
	s ¹⁶	nt	(1)*(2)=(e	Cost	(\$)		
	(1)	(2)	3)	(4)	(3)*(4)=(5)	(5)÷(1)		

^{14 &}quot;Burden" is defined as the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. For further explanation of what is included in the information collection burden, reference 5 Code of Federal Regulations 1320.3.

16 The number of respondents for MOD-025-2/ MOD-026-1/ MOD-027-1/ MOD-31-3/ MOD-032-/ MOD-033-2 are from the NERC compliance registry April 16, 2024.

¹⁵ Each of the five MOD standards in the FERC-725L information collection previously contained "one-time" components to their respondent burden. These one-time burden categories consisted primarily of activities related to establishing industry practices and developing data validation procedures tailored toward these reliability standards and their reporting requirements. None of the one-time burdens apply any longer, so they are being removed from the FERC-725L information collection.

Attachment	1210 (GO)	1	1210	6 hrs.;	7,260 hrs.;	\$463.74
2				\$463.7	\$561,125.4	
				4 ¹⁷	0	
Evidence	1210	1	1210	1 hr.;	1210 hrs.;	\$39.58
Retention	(GO)			\$39.58 ¹⁸	\$47,891.80	
TOTAL					8,470 hrs.;	
					\$609,017.2	
					0	

MOD-026-1 (V	MOD-026-1 (Verification of Models and Data for Generator Excitation Control System or Plant Volt/Variance Control Functions)							
	Number of Responden ts (1)	Annual Number of Responses per Responde nt (2)	Total Number of Response s (1)*(2)=(3)	Average Burden & Cost Per Respons e (4)	Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)	Cost per Responde nt (\$) (5)÷(1)		
Instructions for obtaining excitation control system or plant voltage/varian ce control function model	203 (TP)	1	203	8 hrs.; \$618.32	1,624 hrs.; \$125,518.9 6	\$618.32		
Documentatio n on generator verification	605 (GO)	1	605	8 hrs.; \$618.32	4,840 hrs.; \$374,083.6 0	\$618.32		
Evidence Retention	808 (GO and TOP)	1	808	1 hr.; \$39.58	808 hrs.; \$31,948.32	\$39.58		
TOTAL					7,272 hrs.; \$531,550.8 8			

¹⁷ The estimated hourly cost (salary plus benefits) based on the Bureau of Labor Statistics (BLS), as of 2023, for an Electrical Engineer (17-2071) \$77.29/hr.

¹⁸ The estimated hourly cost (salary plus benefits) based on the Bureau of Labor Statistics (BLS), as of 2023 Information and Record Clerk (43-4199) \$39.58/hr.

MOD-027-1 (Verification of Models and Data for Turbine/Governor and Load Control							
	or Activ	e Power/Free	quency Cont	rol Function	, , , , , , , , , , , , , , , , , , ,		
		Annual			Total		
		Number	Total	Average	Annual		
		of _	Number	Burden	Burden		
		Responses	of	& Cost	Hours &	Cost per	
	Number of	per .	Response	Per	Total	Responde	
	Responden	Responde	S	Respons	Annual	nt	
	ts	nt	(1)*(2)=(e	Cost	(\$)	
	(1)	(2)	3)	(4)	(3)*(4)=(5)	(5)÷(1)	
Instructions	203	1	203	8 hrs.;	1,624 hrs.;	\$618.32	
for obtaining	(TP)			\$618.32	\$125,518.9		
excitation					6		
control system							
or plant							
voltage/varian							
ce control							
function							
model							
Documentatio	605	1	605	8 hrs.;	4,840 hrs.;	\$618.32	
n on generator	(GO) ¹⁹			\$618.32	\$374,083.6		
verification					0		
Evidence	808	1	808	1 hr.;	808 hrs.;	\$39.58	
Retention	(GO and			\$39.58	\$31,980.64		
	TP)						
TOTAL					7,272 hrs.;		
					\$531,583.2		
					0		

MOD-031-3	MOD-031-3 (Demand and Energy Data), included in FERC-725L								
					Total				
		Annual	Total	Avg.	Annual				
	Number	Number	Number	Burden	Burden				
	and Type	of	of	& Cost	Hours &				
Reliability	of	Responses	Response	Per	Total	Cost per			
Standard	Responden	per	S	Respons	Annual	Responde			
MOD-031-	ts	Responde	(1)*(2)=(e ²⁰	Cost	nt			
3	(1)	nt (2)	3)	(4)	(3)*(4)=(5)	(5)÷(1)			

¹⁹ It is estimated that the applicable numbers of generator owner respondents used to calculate the public reporting burden for these standards MOD-026-1, MOD-027- 1, MOD-031-3, MOD-032-1 and MOD-033-1 is half of total numbers of GO (605=1210/2) due to the higher applicability threshold for those Reliability Standards.

20 The estimated hourly cost (salary plus benefits) based on the Bureau of Labor Statistics (BLS), as of 2023, for an Electrical Engineer (17-2071) \$77.29/hr.

Develop	607	1	607	8 hrs.;	4,856hrs.;	\$618.32
summary in	(DP, TP			\$618.32	\$375,320.2	
accordance	and/or BA)				4	
with						
Requireme						
nt R1,						
Subparts						
1.5.4 and						
1.5.5.						
New Total					4,856 hrs. ;	
for MOD-					\$375,320.2	
031-3 for					4	
Renewal						

MOD-032-1	MOD-032-1 (Verification of Models and Data for Turbine/Governor and Load Control or Active Power/Frequency Control Functions)								
	Number of Responden ts (1)	Annual Number of Responses per Responde nt	Total Number of Response s (1)*(2)=(Average Burden & Cost Per Respons e (4)	Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)	Cost per Responde nt (\$)			
Data Submittal	2,126 (BA, GO, PA/PC, RP, TO, TP, and TSP)	(2) 1	2,126	8 hrs.; \$618.32	17,008 hrs.; \$1,314,548.3 2	(5)÷(1) \$618.32			
Evidence Retention	2,126 (BA, GO, PA/PC, RP, TO, TP, and TSP)	1	2,126	1 hr.; \$39.58	2,126hrs.; \$84,147.08	\$39.58			
TOTAL					19,134 hrs.; \$1,398,695.4 0				

MOD-033-2 (formerly MOD-033-1) (Steady-State and Dynamics System Model Validation)

	Number of Responden ts (1)	Annual Number of Responses per Responde nt (2)	Total Number of Response s (1)*(2)=(3)	Average Burden & Cost Per Respons e (4)	Total Annual Burden Hours & Total Annual Cost (3)*(4)=(5)	Cost per Responde nt (\$) (5)÷(1)
Data Submittal	177 (RC and TOP)	1	177	8 hrs.; \$618.32	1,416 hrs.; \$109,442.6 4	\$618.32
Evidence Retention	239 (PA/PC, RC, and TOP)	1	239	1 hr.; \$39.58	239 hrs.; \$9,459.62	\$39.58
New Total for MOD- 033-2 Renewal					1,655 hrs.; \$118,902.2 6	

13. ESTIMATE OF THE TOTAL ANNUAL COST BURDEN TO RESPONDENTS

There are no non-labor costs currently associated with the FERC-725L.

All of the costs are associated with burden hours (labor) and described in #12 and 15.

14. ESTIMATED ANNUALIZED COST TO FEDERAL GOVERNMENT

The Regional Entities and NERC do most of the data processing, monitoring and compliance work for Reliability Standards; the burden and cost are included under the FERC-725 collection (OMB Control No. 1902-0225) and are not part of this request or package. Any involvement by the Commission is covered under the FERC-725 collection (OMB Control No. 1902-0225) and is not part of this request or package.

The estimated annualized cost to the Federal Government for FERC-725L follows:

	Number of Employees (FTE)	Estimated Annual Federal
		Cost
FERC-725L Analysis and		
Processing of filings	0	\$0

PRA ²¹ Administrative Cost	\$8,396
FERC Total	\$8,396

Responding entities do not submit the information collected under these Reliability Standards to FERC. Rather, they maintain it internally and provide information collected to applicable Regional Entities. Since there are no submissions made to FERC, the Commission estimates no federal costs associated with analysis and processing of filings.

The PRA Administrative Cost is a Federal Cost associated with preparing, issuing, and submitting materials necessary to comply with the Paperwork Reduction Act (PRA) for rulemakings, orders, or any other vehicle used to create, modify, extend, or discontinue an information collection. This average annual cost includes requests for extensions, all associated rulemakings, and other changes to the collection.

15. REASONS FOR CHANGES IN BURDEN INCLUDING THE NEED FOR ANY INCREASE

The burden for the FERC-725L information collection is experiencing both reductions and increases.

• The reliability standards had increases to their respective annual burdens due to adjustments to the number of affected respondents (due to normal industry fluctuations, e.g., companies entering/leaving the industry, or merging/splitting).

FERC-725L	Total Request	Previously Approved	Change due to Adjustment in Estimate	Change Due to Agency Discretion
Annual Number of Responses	5,736	4,767	969	0
Annual Time Burden (Hr.)	48,659	38,284	10,375	0
Annual Cost Burden (\$)	0	0	0	0

16. TIME SCHEDULE FOR PUBLICATION OF DATA

FERC does not publish any data associated with this collection.

17. DISPLAY OF EXPIRATION DATE

²¹ Paperwork Reduction Act of 1995 (PRA).

The PRA information (including expiration dates and OMB Control Nos.) is posted at http://www.ferc.gov/docs-filing/efiling.asp

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18. EXCEPTIONS TO THE CERTIFICATION STATEMENT

There are no exceptions.