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NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

MOD-026-2

Industry Webinar

Milestone 3 Projects 2020-06

FERC Order 901

Industry Webinar

August 6, 2025

RELIABILITY | RESILIENCE | SECURITY

It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition. It is the responsibility of every NERC participant and employee who may in any way affect NERC's compliance with the antitrust laws to carry out this commitment.

Participants are reminded that this meeting is public. Notice of the meeting was widely distributed. Participants should keep in mind that the audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.

NERC

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Verifications of Models and Data for Generators MOD-026-2

Project 2020-06

Project 2020-06 Drafting Team
Industry Webinar
August 6, 2025

RELIABILITY | RESILIENCE | SECURITY

	Ballot
Standard	Quorum / Approval
MOD-026-2 (245 Votes)	89.42% / 34.47%
Implementation Plan (241 Votes)	88.93% / 40.22%

Terms:

Model Verification: The process of confirming that model structure and parameter values are representative of the equipment or facility design and settings by reviewing equipment or facility design and settings documentation.

Model Validation: The process of comparing simulation results with measurements to assess how closely a model's behavior matches the measured behavior.

Redline to last posted

- R1.** Each Transmission Planner and its Planning Coordinator shall jointly develop dynamic model ~~verification~~ requirements ~~and processes~~. The dynamic model ~~verification~~ requirements ~~and processes~~ shall be made available to Generator Owner(s) and Transmission Owner(s) by the Transmission Planner and shall include at a minimum the following: *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning and Long-term Planning]*
- 1.1.** Positive sequence dynamic model ~~specifications developed under MOD-032 for applicable facilities, specifically identified within the applicable table requirements, including requirements for the models and functions listed in Attachment 1:~~
- 1.1.1.** ~~Specify the~~ Specification of which limiting and protective functions listed within Attachment 1 Table 1.1 ~~that~~ are required to be represented in the model;²
- 1.2.** For the facilities listed in Applicability Sections 4.2.5 and 4.2.6 (Inverter-Based Resources), 4.2.3.2 (FACTS devices), 4.2.4.1 (LCC HVDC), and 4.2.4.2 (VSC HVDC):
- 1.2.1.** ~~Identify~~ Identification of which legacy¹ facilities for which electromagnetic transient (EMT) model(s) are required under Requirement R3; and
- 1.2.2.** ~~Specify~~ Specification of acceptable EMT models, format, and level of detail.

- ~~1.4.1.3. Process for Generator Owner(s) or Transmission Owner(s) to provide R1 Parts 1.1 and 1.2 used to assess the acceptability of submitted dynamic models and accompanying documentation of Model Verification and. If no such additional requirements exist, the Transmission Planner shall document that none are applicable models to its Transmission Planner;~~
- ~~1.5. Process for submitting documentation of Model Verification and applicable model(s) to the applicable Planning Coordinator after the model(s) meets acceptance criteria of Requirement R1 Part 1.3; and~~
- ~~1.6. Process for Generator Owner(s) or Transmission Owner(s) to obtain current (in-use) model data from its Transmission Planner for an existing facility owned by~~

¹ A legacy facility for the purpose of this standard is any facility with an in-service date prior to the effective date of MOD-026-2.

² The acceptance criteria may overlap with or may augment data reporting and model submittal specifications set in place by the Transmission Planner and Planning Coordinator under MOD-032 Requirement R1.

³ Model submittal requirements needed by the Transmission Planner may include, but are not limited to, required data files and inclusions needed in the model report.

Redline to last posted

- R2.** Each Generator Owner or Transmission Owner shall provide: ~~documentation of Model Verification of a~~ to its Transmission Planner: positive sequence dynamic model(s) with associated parameters, any information pertaining to changes to the model(s) or its parameters, and ~~the verified model(s)~~ ⁴ to its Transmission Planner that accompanying documentation, in accordance with the periodicity requirements of Attachment 2, including the following: [Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]
- 2.1.** ~~Verifies that the~~ Positive sequence dynamic model represents(s) representing the in-service equipment of the facility ~~according to~~ including, at the minimum, each of the applicable models and functions listed in Attachment 1 in accordance with the requirements and process developed in Requirement R1;
- 2.2.** ~~Verifies~~ Documentation of Model Verification demonstrating that the configurable, site-specific parameters of the model(s) represent parameters of the in-service equipment of the facility, ~~for those parameters that can be confirmed by the Generator Owner or Transmission Owner;~~
- 2.3.** ~~Verifies that the model includes at a minimum each of the information described in Attachment 1; and~~
- 2.4.** ~~Is updated within the applicable periodicity timeline outlined in the Periodicity table in Attachment 2.~~
- 2.2.1.** For any parameters that cannot be verified, its applicable Generator Owner or Transmission Owner shall provide a written statement to the Transmission Planner detailing any such parameters and reasons they cannot be verified.

- 2.3.** Documentation of Model Validation comparing the behavior of the model(s) to the measured behavior during a staged test or system disturbance for:

⁴The development of a “verified model” includes both Model Verification and Model Validation activities performed by the Generator Owner or Transmission Owner.

MOD-026-2 – Verification and Validation of Dynamic Models and Data

- 2.3.1.** A dynamic reactive power or voltage excursion event to validate generators, excitation control, reactive power control, and voltage control models, as applicable;⁵ and
- 2.3.2.** A dynamic active power or frequency excursion event to validate governor control, active power, and frequency control models, as applicable.⁶

Table 1.1 Redline to last posted:

Attachment 1: ~~Applicability~~

Table 1.1 Applicability: Facility Sections 4.2.1 or 4.2.2 Synchronous Condenser identified in Facility Section 4.2.3.1			
Generator Model	Excitation Control	Governor Control	Additional Limiting and Protective Functions
1. Manufacturer, model number (if available), and type of generator/synchronous condenser; 2. Models representing the generator/synchronous condenser; 3. Model Validation of the positive sequence dynamic model(s) of this Table 1.1 response using the recorded response of a dynamic event from either a staged test or using a measured system disturbance.** 4.2.	1. Manufacturer, model number (if available), and type of excitation system hardware; 2. Model(s) representing the excitation system including voltage regulator, impedance compensation (such as droop, line drop, differential compensation), power system stabilizer, and outer-loop controls which impact dynamic volt/volt-ampere reactive (VAR) performance; 3.2. Model Validation of the positive sequence dynamic model(s) of this Table 1.1 response using the recorded response of a dynamic reactive power or voltage event from either a staged test or using a measured system disturbance.	1. Manufacturer, model number (if available), and type of prime mover, governor, and control; 2. Model(s) representing the prime mover, governor control system, and any other controls which impact the dynamic active power or frequency performance due to a system disturbance (e.g., load controller), but excluding Automatic Generation Control; 3.2. Model Validation of the positive sequence dynamic model(s) of this Table 1.1 response using the recorded response of a dynamic active power or frequency event from a staged test or using a measured system disturbance in which perceived frequency	If required by its Transmission Planner under Requirement R1, Part <u>1.1.1</u> , Generator Owner(s) or Transmission Owner(s) shall submit: <ol style="list-style-type: none"> Model(s) representing enabled excitation limiters; Model(s) representing AC over-voltage, AC under-voltage, enabled over-frequency, under-frequency, over-speed, under-speed, Volts per Hertz protective functions, out of step protection that trip the excitation system, the prime mover, or generator/synchronous condenser either directly or via lockout or auxiliary tripping relays.

~~** Generator Model Validation shall be completed in conjunction with excitation system Model Validation and governor control Model Validation.~~

Draft 2 of MOD-026-2
August 2025

Page 21 of 29

MOD-026-2 Verification and Validation of Dynamic Models and Data

		deviates per Attachment 2, Note 1.	
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Table 1.2 Redline to last posted:

Table 1.2 Applicability: Facility Sections 4.2.5 and 4.2.6 FACTS Devices identified in Facility Section 4.2.3.2 HVDC Systems identified in Facility Section 4.2.4			
The facility	Volt/VAR Control	Frequency/ Power Control ¹⁶	Additional Limiting and Protective Functions
1. Manufacturer 2. Model Number 3. Software/Firmware versions for applicable facility's a. IBR unit(s) b. FACTS device(s) c. VSC HVDC d. LCC HVDC e. Power plant controller	1. Model(s) representing associated reactive power/voltage control as applicable for the specific facility or equipment. a. In the case of IBR, the model shall include: i. IBR unit(s) electronic control ii. The facility's power plant control iii. Supplemental reactive power resources b. Other equipment which impacts facility voltage and reactive power dynamic response. 2. Model Validation of the positive sequence dynamic model(s) above in Table 1.2 Volt/Var 1, response using the recorded response of a dynamic reactive power or	1. Model(s) representing the associated active power/frequency control including the specific facility or equipment. a. In the case of the IBR the model shall include: i. IBR unit(s) electronic control ii. The facility's power plant control b. Other equipment which impacts facility active power or grid frequency dynamic response. c. b. Model Validation of the positive sequence dynamic model of Table 1.2 Frequency/Power Control response using the recorded response of a dynamic active	1. Model(s) representing enabled limiting functions, which limit active or reactive output of the IBR unit or facility. Limiting functions include active or reactive power limiting, active or reactive current limiting, or other limiting functions as may be involved in active or reactive power prioritization, ramping, disturbance ride-through and post-disturbance recovery behaviors. 2. Model(s) representing enabled protection functions that directly trip IBR unit(s) or facility, to include AC over-voltage and under-voltage

¹⁶ Not applicable for FACTS Devices identified in Facility Section 4.2.3.2

Draft 2 of MOD-026-2
August 2025

Page 22 of 29

MOD-026-2 Verification and Validation of Dynamic Models and Data

	voltage event from either a staged test or using a measured system disturbance. a. b.	power or frequency event from either a staged test or using a measured system disturbance in which the power plant controller's or some other facility's active power controller's perceived frequency deviates per Attachment 2, Note 1.	protection, and over-frequency and under-frequency protection.
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R3. For facilities ~~identified under~~listed in the Applicability Sections 4.2.3.2, 4.2.4, 4.2.5, and 4.2.6, excluding legacy facilities where the original equipment manufacturer⁷ no longer supports EMT model(s) for the facility and legacy facilities not identified by the Transmission Planner under Requirement R1 Part 1.2.1, each Generator Owner or Transmission Owner shall provide ~~a verified~~to its Transmission Planner EMT model(s)⁸ with associated parameters, any information pertaining to changes to the model(s) or its parameters, and accompanying ~~information that represent the documentation, in-~~service equipment of the facility to its Transmission Planner according to the ~~accordance with the periodicity~~ requirements ~~and processes developed by its~~ Transmission Planner and Planning Coordinator in Requirement R1 Part 1.2 of Attachment 2, within the timeframe specified in Attachment 2. The verified model(s) and accompanying information shall include at a minimum including the following:
[Violation Risk Factor: Medium] [Time Horizon: Long-term Planning]

3.1. ~~Test⁹ result(s) demonstrating a comparison of the facility's response and the facility's EMT model response for large signal disturbances. For an IBR, the Generator Owner shall test and compare only the IBR unit.¹⁰ If test results are not obtainable, the Generator Owner or Transmission Owner shall document the reason;~~

Footnotes

⁵ Unit Model Validation frequency excursion criteria: " ≥ 0.05 hertz deviation" (nadir point) from scheduled frequency for the Eastern Interconnection with the applicable facility operating in a frequency responsive mode. " ≥ 0.10 hertz deviation" (nadir point) from scheduled frequency for the ERCOT and Western Interconnections with the applicable facility operating in a frequency responsive mode.

⁶ Not applicable for FACTS Devices identified in Facility Section 4.2.3.2

⁷ If the original equipment manufacturer that commissioned the facility was acquired, merged, or operating under a different name, the new company would be considered the original equipment manufacturer.

⁸ The development of a "verified EMT model" includes both Model Verification and Model Validation activities performed by the Generator Owner or Transmission Owner.

⁹ A hardware specific test may include a factory type test, hardware in the loop test, or other manufacturer test to ensure the EMT model's large signal response emulates the supplied equipment to the extent possible.

¹⁰ For purposes of this standard, the phrase "IBR unit" refers to an individual device, or a grouping of multiple devices, that uses a power electronic interface(s), such as an inverter or converter, is capable of exporting Real Power from a primary energy source or energy storage system, and that connects at a single point on the collector system.

Redline to last posted

~~3.2. Documentation of Model Verification demonstrating that the configurable, site-specific parameters of the submitted facility model(s) represent parameters of the in-service equipment of the facility, for those parameters that can be confirmed by the Generator Owner or Transmission Owner;~~

~~3.3.3.1. A facility EMT model with associated parameters representing the applicable HVDC, FACTS devices, IBR unit(s), collector system, auxiliary control devices, device(s),¹¹ power plant controller, generator step-up transformer, (s), and main power transformer(s) shall include that includes;~~

~~3.3.1.3.1.1. Enabled protections that directly trip the IBR unit(s) or facility;¹² and~~

~~3.3.2.3.1.2. Limiting functions that limit active/reactive output of the IBR unit(s) or facility.¹³~~

~~3.2. Documentation of Model Verification demonstrating that the configurable, site-specific parameters of the model(s) represent parameters of the in-service equipment of the facility:~~

~~3.2.1. For any parameters that cannot be verified, the applicable Generator Owner or Transmission Owner shall provide a written statement to the Transmission Planner explaining why any such parameters cannot be verified.~~

~~3.4.3.3. Documentation of Model Validation of comparing the facility EMT model response using to the recorded response of a dynamic reactive power or voltage event from either during a staged test or a measured system disturbance; for:~~

~~3.3.1. Documentation of Model Validation of the facility EMT model response using the recorded response of A dynamic reactive power or voltage excursion event; and~~

~~3.4.1.3.3.2. A dynamic active power or frequency excursion event from either a staged test or a measured system disturbance in which the power plant controller's or other facility active power controller's perceived frequency deviations are in accordance with Attachment 2, Note 1; and Footnote 2.~~

~~3.4. Test result(s) demonstrating a comparison of the facility's response and the facility's EMT model response for large signal disturbances. For an IBR, the Generator Owner shall document the comparison only for the IBR unit. If test~~

~~results are not obtainable, the Generator Owner or Transmission Owner shall document the reason; and~~

~~3.5. Documentation comparing large signal disturbance the response of the facility positive sequence dynamic model(s) provided in Requirement R2 to the response of the facility EMT model- for large signal disturbances as defined by the Transmission Planner.~~

Redline to last posted

R4. Each Generator Owner or Transmission Owner, within 180 calendar days, or as mutually agreed upon with the Transmission Planner, after making a hardware, software, firmware, control mode, or setting change(s) to ~~any in-service equipment specified in Requirement R2 or Requirement R3~~ an applicable unit or facility that alters the ~~applicable equipment's~~ dynamic response characteristic(s),¹⁴ shall provide its Transmission Planner with ~~one of the following, within the timeframe described in Attachment 2:~~ updated model(s) and accompanying documentation as described in Requirement R2 Parts 2.1 through 2.3 and, if applicable, Requirement R3 Parts 3.1 through 3.5. *[Violation Risk Factor: Medium] [Time Horizon: Operations Planning]*

- ~~An updated verified model(s) in accordance with Requirement R2 and Requirement R3 reflecting applicable change(s) being made; or~~
- ~~A plan to provide the verified model(s) and associated information in accordance with Requirement R2 or Requirement R3.~~

Redline to last posted

- R5. Each Transmission Planner, within 90 calendar days after receiving ~~the submitted~~ model(s) and accompanying information from the applicable documentation provided by a Generator Owner or Transmission Owner, shall ~~review each submission in~~ accordance with the process evaluate if the model(s) and accompanying documentation meet the dynamic model requirements developed ~~in~~ under Requirement R1 and provide ~~a written response to the submitter within the timeframe in Attachment 2. The written response shall include one of the following either:~~ *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*
- ~~Notification of Acceptance: the model and accompanying information meet the acceptance criteria established in Requirement R1, Part 1.3; or~~
 - ~~Notification of Denial: A written notification to the Generator Owner or Transmission Owner that the model(s) and accompanying documentation are acceptable, and either a written notification or the accepted model(s) and accompanying documentation to its Planning Coordinator; or~~
 - A written notification to the Generator Owner or Transmission Owner that the model(s) and accompanying information does documentation are not meet acceptance criteria established in Requirement R1, Part 1.3, or information submitted is incomplete. The notification of denial shall include acceptable, along with an explanation and any supporting evidence demonstrating the issue(s).

Redline to last posted

R6. Each Generator Owner or Transmission Owner, within 90 calendar days after receiving a notification of ~~denial~~unacceptability under Requirement R5 ~~or (or within 180 calendar days, or as mutually agreed upon with the Transmission Planner) after receiving~~ a request from its ~~applicable~~ Transmission Planner ~~for to perform~~ a model review due to identified model or accompanying information documentation deficiencies, shall provide a ~~written~~ response to its ~~applicable~~ Transmission Planner ~~within the timeframe in Attachment 2. The written response shall contain including~~ one of the following: *[Violation Risk Factor: Lower] [Time Horizon: Operations Planning]*

- ~~An updated verified~~Updated model(s) and accompanying information documentation as described in ~~accordance with~~ Requirement R2 Parts 2.1 through 2.3 and, if applicable Requirement R3;
- ~~A plan to submit the verified model and accompanying information in accordance with Requirement R2 and Requirement R3~~ Parts 3.1 through 3.5; or
- ~~A resubmission of the current model and accompanying information in accordance with Requirement R2 and Requirement R3, with additional~~A

~~technical justification and supporting evidence to address the notification of denial or request for model review from the Transmission Planner for maintaining the current model(s) and accompanying documentation.~~

Redline to last posted

R7. Each Transmission Planner shall provide the current (in-use) model(s) and accompanying documentation for an existing facility within 90 calendar days of receiving a written request for such data from the Generator Owner or Transmission Owner that owns the ~~timeframe in Attachment 2~~ facility. [Violation Risk Factor: Lower] [Time Horizon: Operations Planning]

Attachment 2: Periodicity

MOD-026-2 Attachment 2 Periodicity		
Row Number	ModelingTriggering Condition	Required Action
1	Establishing the initial verification date for an applicable facility. (Applies to Requirements R2 and Requirement R3)	For Requirement R2, transmit the verified -model(s) and accompanying information documentation meeting Requirement R2 Parts 2.1 through 2.3 to its Transmission Planner in accordance with the date(s) of the Implementation Plan. For Requirement R3, transmit the verified -model(s) and accompanying information documentation meeting Requirement R3 Parts 3.1 through 3.5 to its Transmission Planner in accordance with the date of the Implementation Plan or within 365 calendar days after the Transmission Planner identifies the facility as an applicable facility in accordance with Requirement R1, Part 1.2.1, whichever is later.

MOD-026-2 Attachment 2 Periodicity		
Row Number	ModelingTriggering Condition	Required Action
2	Initial verification for a newly commissioned facility. (Applies to Requirement R2 and Requirement R3)	Transmit the verified -model(s) and accompanying information documentation meeting Requirement R2 Parts 2.1 through 2.3 and, if applicable, Requirement R3 Parts 3.1 through 3.5 to its Transmission Planner within 365 calendar days after the commissioning commercial operation date.
3	Subsequent Model Validation and Model Verification for an applicable facility. (Applies to Requirement R2 and Requirement R3, Parts 3.2-3.6)	Transmit the verified -model(s) and accompanying information documentation meeting Requirement R2 Parts 2.1 through 2.3 and, if applicable, Requirement R3 Parts 3.1 through 3.5 to its Transmission Planner within 10 calendar years of the most recent transmittal. For the transmittal to reset the 10-year anniversary transmittal date for Requirement R2 and Requirement R3 (Model Validation and Model Verification Requirements) within 10 calendar years of the most recent transmittal, all model(s) and model parameters must be verified according to the applicable requirement(s) and included in the transmittal.
4	Applicable facility with installed and operating recording equipment does not experience a frequency excursion as applicable per Attachment 2, Note 1Footnote 2 by the date otherwise required to meet the dates per Attachment 2, Rows 1, 2, 3, 5, or 6. (Applies to Requirement R2 and Requirement R3)	Requirement R2 and Requirement R3 are met with a written statement transmitted to its Transmission Planner. Transmit the verified model model meeting Requirement R2 Parts 2.1 through 2.3 or Requirement R3 Parts 3.1 through 3.6 and accompanying information to its Transmission Planner on or before 365 calendar days after a frequency excursion per Attachment 2, Note 1Footnote 2 occurs and the recording equipment captures the applicable facility's Real Power response as expected.

MOD-026-2 Attachment 2 Periodicity		
Row Number	ModelingTriggering Condition	Required Action
65	For an existing applicable facility with a change to in-service equipment as described under Requirement R4. (Applies to Requirement R4)	Transmit the verified model (Model Validation and Model Verification components) and accompanying information or a plan for to provide a verified model to its Transmission Planner within 180 calendar days after the facility is returned to service subsequent to making a change to in-service equipment. If a plan to verify the model is provided to its Transmission Planner, then Row 7 also applies. In order for the transmittal to reset the 10-year anniversary transmittal date for Requirement R2 and Requirement R3 as described in Row 3, all model(s) and model parameters must be verified according to the applicable requirement(s) and included in the transmittal.
7	The Generator Owner or Transmission Owner has provided a plan to verify the model. (Applies to Requirements R4 and Requirement R6)	Transmit the updated verified model and accompanying information to its Transmission Planner within 365 calendar days after the submittal of the plan to verify the model.
8	The Transmission Planner has received model(s) and accompanying information submitted under Requirement R2, Requirement R3, or Requirement R6. (Applies to Requirement R5)	Transmission Planner provides a written response to the submitter within 120 calendar days from receiving each submission, per Requirement R5.
9	The Generator Owner or Transmission Owner receives a notification of denial under Requirement R5 or a request for model review from its Transmission Planner. (Applies to Requirement R6)	Provide a written response to its Transmission Planner within 120 calendar days of receiving a notification of denial or request for model review, per Requirement R6.

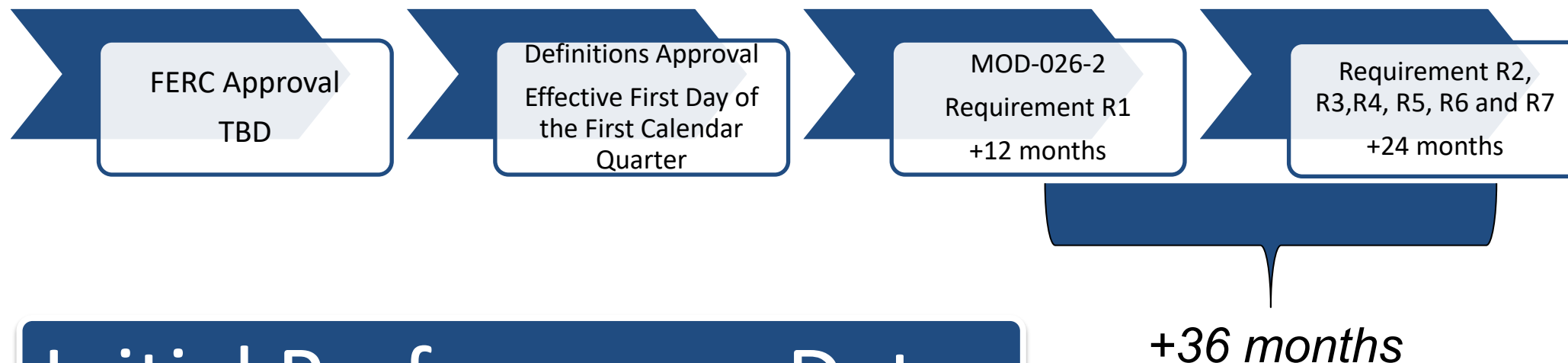
.blume@nerc.net) is signed in

MOD-026-2 Attachment 2 Periodicity		
Row Number	ModelingTriggering Condition	Required Action
106	Existing, new, or upgraded <u>synchronous</u> generating unit or synchronous condenser that is equivalent to other unit(s) at the same physical location. AND Each unit has the same MVA nameplate rating. AND The nameplate rating is ≤ 350 MVA. AND Each unit has the same components and settings. AND The model for one of these equivalent units has been verified. (Requirement R2, Attachment 1, Table 1.1)	Document circumstance with Provide a written statement explanation and include with the verified model, (s) and accompanying documentation, and data provided to its Transmission Planner for the verified equivalent unit. Verify the model(s) of Model Verification and Model Validation shall be performed for a different equivalent unit during each 10-year verification period.
117	Applicable facility is not responsive to voltage excursion events during normal operation. OR New or existing applicable Facility does not have an installed closed loop voltage or reactive power control function or has a disabled closed loop voltage or reactive power control system. (Requirement R2, Attachment 1, Table 1.1, column- Part 2; Attachment 1, Table 1.2, column 2; 3.1 or Requirement R3, Part 3.4 are 3.1 is met with a written statement to that effect transmitted to its Transmission Planner. Perform verification per the periodicity specified in Row 2 for a “Newly commissioned facility” (or new equipment) if the exemption verification condition no longer applies.	Requirement R2, Attachment 1, Table 1.1, column- Part 2; Attachment 1, Table 1.2, column 2; 3.1 or Requirement R3, Part 3.4 are 3.1 is met with a written statement to that effect transmitted to its Transmission Planner. Perform verification per the periodicity specified in Row 2 for a “Newly commissioned facility” (or new equipment) if the exemption verification condition no longer applies.



MOD-026-2 Attachment 2 Periodicity		
Row Number	ModelingTriggering Condition	Required Action
128	Applicable facility is not responsive to frequency excursion events during normal operation. (The applicable facility does not operate in a frequency control mode, except during normal start up and shut down, that would result in a prime mover/governor and load control or active power/frequency control mode response.) OR New or existing applicable facility does not have an installed frequency control system or has a disabled frequency control system. (Requirement R2, Attachment 1, Table 1.1, column 3; Attachment 1, Table 1. Part 2, column- 3; 2 or Requirement R3, Part 3.3.52) If the applicable facility is operating in a frequency control mode that is responsive to a frequency excursion event in only one direction (over- or under-frequency), then Requirement R2, Attachment 1, Table 1.1, column 3; Attachment 1, Table 1. Part 2, column- 3; 2 and Requirement R3, Part 3.3.52 are still applicable.	Requirement R2, Attachment 1, Table 1.1, column 3; Attachment 1, Table 1. Part 2, column- 3; 2 or Requirement R3, Part 3.3.4 are 2 is met with a written statement to that effect transmitted to its Transmission Planner. Perform verification per the periodicity specified in Row 2 for a “Newly commissioned facility” (or new equipment) if the exemption verification condition no longer applies.

MOD-026-2 Attachment 2 Periodicity		
Row Number	ModelingTriggering Condition	Required Action
139	Existing applicable unit or facility, <u>excluding synchronous condensers, FACTS devices, and HVDC facilities</u> , has a current average net capacity factor over the most recent three calendar years, beginning on January 1 and ending on December 31, of 5% or less. (Requirement R2 or Requirement R3 periodicity exemption of Row 3; does not exempt obligation under Requirement R4 or R6.)	Requirements R2 or Requirement R3 are met with a written statement to that effect transmitted to its Transmission Planner annually. If the current average net capacity factor over the most recent three calendar years exceeds 5%, then within 365 calendar days Model Verification must be performed to meet the required action of Row 3. For the definition of net capacity ¹⁷ factor refer to Appendix F of the GADS Data Reporting Instructions. ¹⁸
14	Commissioning date of the applicable legacy facility (before the effective date of MOD-026-2); OR The original equipment manufacturer (OEM) is no longer doing business in North America; OR The OEM no longer supports model(s) for in-service equipment at the Facility; (Requirement R3 exemption)	Requirement R3 is met with a written statement to that effect transmitted to its Transmission Planner. If the OEM that commissioned the Facility was acquired, merged, or operating under a different name, the new company would be considered the OEM.

MOD-026-2 Attachment 2 Periodicity		
Row Number	ModelingTriggering Condition	Required Action
NOTE 1: Unit Model Validation frequency excursion criteria: <ul style="list-style-type: none"> — ≥ 0.05 hertz deviation (nadir point) from scheduled frequency for the Eastern Interconnection with the applicable facility operating in a frequency responsive mode; — ≥ 0.10 hertz deviation (nadir point) from scheduled frequency for the ERCOT and Western Interconnections with the applicable facility operating in a frequency responsive mode; — ≥ 0.15 hertz deviation (nadir point) from scheduled frequency for the Quebec Interconnection with the applicable facility operating in a frequency responsive mode; 		



Initial Performance Dates

-  Requirement R1 revisions
+12 months after MOD-026-2 effective date
-  Current R2, R3, R4, R5, R6 and R7 Requirements
Must continue to comply during the phased-in compliance period

The NERC logo consists of the letters "NERC" in a bold, black, sans-serif font. A horizontal blue bar is positioned directly beneath the letters.

NORTH AMERICAN ELECTRIC
RELIABILITY CORPORATION

Reference to MOD-032

Project 2022-02

Project 2022-02 – Jordan Mallory, Senior Standard Developer
Industry Webinar
August 6, 2025

RELIABILITY | RESILIENCE | SECURITY

- Removed from MOD-026 and added to MOD-032
- Confirm relationship and consistency between the two standards.

2.2. If a functional entity is required to provide dynamic models, the functional entity shall provide the models accepted by the Transmission Planner under MOD-026, where such models are available.

- August 1 through 6 – Quality Review
- August 6 – DT to review QR Comments
- August 14 – Draft 2 comment and ballot period

- NERC Project 2020-06 Project Page ([link](#)).
- NERC Project 2020-06 Standards Authorization Request ([link](#)).
- Dynamic Modeling Recommendations ([link](#)).
- FERC Order 901 ([link](#)).
- Standards Development Work Plan in Response to FERC Order No. 901 ([link](#)).



Questions and Answers