NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Consideration of Directives from FERC June 2024 Order Approving EOP-012-2 and Directing Further Revisions

Project 2024-03 Revisions to EOP-012-2

Summary

This mapping document summarizes how the drafting team considered FERC's directives for further revisions to Reliability Standard EOP-012-2 in its June 27, 2024 approval order[1] when drafting proposed EOP-012-3.

Paragraph 47 – Address Ambiguities Regarding the term Generator Cold Weather Constraint and Criteria

Directive:

"Accordingly, we direct NERC, pursuant to section 215(d)(5) of the FPA, to develop and submit to the Commission for approval modifications to proposed Reliability Standard EOP-012-2 that address concerns related to the ambiguity of the newly defined Generator Cold Weather Constraint term and criteria. Specifically, we direct NERC to ensure that the Generator Cold Weather Constraint declaration criteria included within the proposed Reliability Standard are objective *and* sufficiently detailed so that applicable entities understand what is required of them. One approach to satisfy this directive could be to incorporate into the proposed Reliability Standard a limited and discrete list of circumstances that would qualify as acceptable constraints. We note that NERC's technical rationale document, created by NERC's Standard Drafting Team and included in NERC's filing, includes a list of technical constraints that could serve as a starting point for a list of circumstances that would qualify as acceptable constraints. To the extent that NERC continues to believe that the extent of industry adoption for winterization technologies should be a criterion for declaring a constraint, NERC should clearly explain in its filing how it will assess the extent of such adoption in a way that provides for consistent compliance and enforcement outcomes. Alternatively, NERC could establish a pre-approval process for all Generator Cold Weather Constraint declarations. While a clearly defined list may be preferable, a pre-approval process could be established to ensure entities' declared Generator Cold Weather Constraints are appropriate and can be supported and defended. Further, as part of the directive to develop and submit modifications to the Generator Cold Weather Constraint definition of proposed Reliability Standard

[1] *N. Am. Elec. Reliability Corp.*., 187 FERC ¶ 61,204 (2024) ("June 2024 Order"). In this document, internal citations included within the cited text of the FERC order are omitted.

EOP-012-2, we direct NERC, pursuant to section 215(d)(5) of the FPA, to remove the references to "cost," "reasonable cost," "unreasonable cost," and "good business practices" and replace them with criteria that are objective, unambiguous, and auditable. NERC may propose to develop modifications that address the Commission's concerns in an equally efficient and effective manner, however, NERC must explain how its proposal addresses the Commission's concerns."

Consideration of Directive

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
Generator Cold Weather Constraint - Any condition that would preclude a Generator Owner from implementing freeze protection measures on one or more Generator Cold Weather Critical Components using the criteria below. Freeze protection measures are not intended to be limited to optimum practices, methods, or technologies, but are also intended to include acceptable practices, methods, or technologies generally implemented by the electric industry in areas that experience similar winter climate conditions. Criteria used to determine a constraint include practices, methods, or technologies which, given the exercise of reasonable judgment in light of the facts known at the time the decision to declare the constraint was made: • Were not broadly implemented at generating units for comparable unit types in regions that experience similar winter climate conditions to provide reasonable assurance of efficacy;	**Generator Cold Weather Constraint** - Any condition that would preclude a Generator Owner from implementing freeze protection measures on one or more Generator Cold Weather Critical Components. *** **R8.** Each Generator Owner that declares a Generator Cold Weather Constraint in accordance with Attachment 1 shall: **8.1.** Submit its Generator Cold Weather Constraint declaration(s) to the CEA within 45 days of determining that the Generator Cold Weather Constraint is applicable. For Generator Cold Weather Constraints determined in accordance with Requirement R2 for generating unit(s) upon beginning commercial operation, submit the Generator Cold Weather Constraint declaration(s) no later than 15 days after commercial operation; **8.2.** Review any Generator Cold Weather Constraint declaration validated by the CEA	The DT removed all of the references to "reasonable cost," "unreasonable cost," "cost," and "good business practices" within the definition of Generator Cold Weather Constraint. The definition of Generator Cold Weather Constraint now refers generally to a condition that would preclude implementing freeze protection measures. Instead, the DT developed Attachment 1, referenced in Requirement R8, to define the criteria by which a valid Generator Cold Weather Constraint may exist. Attachment 1 consists of: 1. Pre-Approved Generator Cold Weather Constraints, consisting of circumstances which, if present and confirmed as valid by the Compliance Enforcement Authority, would constitute Generator Cold Weather Constraints; and 2. Case-by-case Determinations of Generator

Consideration of Directive in EOP-012-3		
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• Could not have been expected to accomplish the desired result; or Could not have been implemented at a reasonable cost consistent with good business practices, reliability, or safety. A cost may be deemed "unreasonable" when implementation of selected freeze protection measure(s) are uneconomical to the extent that they would require prohibitively expensive modifications or significant expenditures on equipment with minimal remaining life. *** **R8.** Each Generator Owner that creates a Generator Cold Weather Constraint declaration shall: **8.1**. Review the Generator Cold Weather Constraint declaration at least every five calendar years or as needed when a change of status to the Generator Cold Weather Constraint occurs; and **8.2**. Update the operating limitations associated with capability and availability under Requirement R1 Part R1.2 if applicable.	every 24 calendar months to determine if it remains valid under Attachment 1; **8.3** Update the operating limitations associated with capability and availability under Requirement R1 Part R1.2 if applicable; and **8.4** If the CEA determines the declared Generator Cold Weather Constraint is invalid, update its Corrective Action Plan(s) to require corrective actions be completed in accordance with the timetables in Requirement R6 Part 6.1 or Requirement R7 Part 7.1, to begin from the date the Generator Owner is notified that the Generator Cold Weather Constraint is invalid. *** **Attachment 1** (criteria for determining the applicability of a Generator Cold Weather Constraint) (*see draft standard*)	Cold Weather Constraints, consisting of situations which may constitute Generator Cold Weather Constraints, depending on the specific facts and circumstances. Only upon approval by the Compliance Enforcement Authority would these circumstances comprise a valid Generator Cold Weather Constraint under Requirement R8. Attachment 1 provides significant clarity on the conditions or issues that may constitute a valid Generator Cold Weather Constraint. The criteria are intended to be objective, unambiguous, and auditable. The standard retains flexibility to address potentially valid constraints that are not specifically defined in the standard through the Compliance Enforcement Authority review process.

Paragraph 54: Address Concerns Regarding the Need for a Timely Review and Evaluation of Declared Generator Cold Weather Constraints by NERC

Directive

"Accordingly, we again direct NERC, pursuant to section 215(d)(5) of the FPA, to modify proposed Reliability Standard so that NERC receives, reviews, evaluates, and confirms for validity the Generator Cold Weather Constraint declarations in a timely manner. We also direct NERC to include in its compliance filing, a plan to timely review such declarations to verify compliance with proposed Reliability Standard EOP-012-2 and its successors or obligations in a corrective action plan and take corrective action where necessary. For example, modifying Standard to require the generator owners to provide declarations (or changes to the declarations) to NERC within 45 days. It is up to NERC whether it would like to delegate this task to the relevant Regional Entities. NERC may propose to develop modifications that address the Commission's concerns in an equally efficient and effective manner, however, NERC must explain how its proposal addresses the Commission's concerns."

Consideration of Directive

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
R8. Each Generator Owner that creates a Generator Cold Weather Constraint declaration shall: **8.1**. Review the Generator Cold Weather Constraint declaration at least every five calendar years or as needed when a change of status to the Generator Cold Weather Constraint occurs; and **8.2**. Update the operating limitations associated with capability and availability under Requirement R1 Part R1.2 if applicable.	**R8.** Each Generator Owner that declares a Generator Cold Weather Constraint in accordance with Attachment 1 shall: **8.1.** Submit its Generator Cold Weather Constraint declaration(s) to the CEA within 45 days of determining that the Generator Cold Weather Constraint is applicable. For Generator Cold Weather Constraints determined in accordance with Requirement R2 for generating unit(s) upon beginning commercial operation, submit the Generator Cold Weather Constraint declaration(s) no later than 15 days after commercial operation;	Requirement R8 would require the Generator Owner declaring a Generator Cold Weather Constraint in accordance with Attachment 1 to submit that constraint to its Compliance Enforcement Authority within 45 days of determining that a Generator Cold Weather Constraint is applicable (for new units, this time is within 15 days of entering commercial operation). This requirement helps ensure the timely submission of constraints to the Compliance Enforcement Authority, which may be NERC or the Regional Entity, for review and approval.

Consideration of Directive in EOP-012-3		
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	8.2. Review any Generator Cold Weather Constraint declaration validated by the CEA every 24 calendar months to determine if it remains valid under Attachment 1; **8.3** Update the operating limitations associated with capability and availability under Requirement R1 Part R1.2 if applicable; and **8.4** If the CEA determines the declared Generator Cold Weather Constraint is invalid, update its Corrective Action Plan(s) to require corrective actions be completed in accordance with the timetables in Requirement R6 Part 6.1 or Requirement R7 Part 7.1, to begin from the date the Generator Owner is notified that the Generator Cold Weather Constraint is invalid. *** **Attachment 1** (criteria for determining the applicability of a Generator Cold Weather Constraint) (*see draft standard*)	Attachment 1 contains a list of pre-approved Generator Cold Weather Constraints as well as a list of situations, circumstances, and criteria that may constitute a Generator Cold Weather Constraint for which a Generator Owner must include documentation that defends and supports the declared constraint and also describes other compensating or mitigating freeze protection measures, if applicable, that the Generator Owner will apply to the CEA for approval. If the Generator Cold Weather Constraint is determined to be invalid by the CEA, the Generator Owner must update its Corrective Action Plan and implement according to the standard timelines, beginning from the date of notification. As NERC and the Regional Entities are not users, owners, nor operators of the BPS, provisions for the timeliness of CEA review are not included in EOP-012-3. Additional support and detail for how the CEA will review constraints in a timely manner consistent with the FERC directive is provided in the constraint review process.

Paragraph 68 - Address Concerns that Existing EOP-012-2 Requirement R7 Allows Too Long for Entities to Implement Corrective Actions for Existing or New Equipment or Freeze Protection Measures for those Generating Units that Experience a Generator Cold Weather Reliability Event

Directive:
"Accordingly, we direct NERC, pursuant to section 215(d)(5) of the FPA, to develop and submit modifications to Requirement R7 of proposed Reliability Standard EOP-012-2 to require shorter deadlines to implement corrective actions for existing or new equipment or the freeze protection measures for those generating units that experience a Generator Cold Weather Reliability Event. Based on compliance with Requirements R2 and R3, those generating units should have already had appropriate freeze protection measures implemented to be capable of operating at the generating units' respective Extreme Cold Weather Temperature. Therefore, we find that a shorter timeframe to implement corrective actions that address existing or new equipment or freeze protection measures is appropriate. For example, to satisfy this directive, NERC could require generator owners to implement corrective actions prior to the next winter season for generating units that experience a Cold Weather Reliability Event and to complete freeze protection measures on similar equipment on all of its fleet within 24 months of becoming aware of the freeze issue. For corrective action plans that involve larger and more complicated implementations, NERC could incorporate a staggered 48-month corrective action plan implementation deadline."

Consideration of Directive

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
R6. Each Generator Owner shall, for each generating unit that has a calculated Extreme Cold Weather Temperature at or below 32 degrees Fahrenheit (zero degrees Celsius) as determined in Requirement R1 and that self-commits or is required to operate at or below a temperature of 32 degrees Fahrenheit (zero degrees Celsius), develop a Corrective Action Plan when the generating unit experiences a Generator Cold Weather Reliability Event. The Corrective Action Plan shall be developed	**R6.** Each Generator Owner shall, for each generating unit that has a calculated Extreme Cold Weather Temperature at or below 32 degrees Fahrenheit (zero degrees Celsius) as determined in Requirement R1 and that self-commits or is required to operate at or below a temperature of 32 degrees Fahrenheit (zero degrees Celsius), develop and implement a Corrective Action Plan when the generating unit experiences a Generator Cold Weather Reliability Event. The Corrective Action Plan shall be developed before the first day	To address this directive, the drafting team revised Requirement R6 to specify shorter implementation timeframes at generating units experiencing a Generator Cold Weather Event, and removed references to this requirement under Requirement R7, which previously addressed all Corrective Action Plans developed under the EOP-012 standard. For Generator Owners experiencing a Generator Cold Weather Event, Corrective Action Plans

Consideration of Directive in EOP-012-3		
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within 150 days or by July 1, whichever is earlier, and contain at a minimum: **6.1.** A summary of the identified cause(s) for the Generator Cold Weather Reliability Event, where applicable, and any relevant associated data; **6.2.** A review of applicability to similar equipment at generating units owned by the Generator Owner; and **6.3.** An identification of operating limitations or impacts to the cold weather preparedness plan that would apply until execution of the corrective action(s) identified in the Corrective Action Plan. **R7**. Each Generator Owner, for each Corrective Action Plan developed pursuant to Requirements R1, R2, R3, or R6, shall: **7.1**. Include a timetable for implementing the selected corrective action(s) that shall: **7.1.1**. List the action(s) which address(es) existing equipment or freeze protection measures, if any, to be completed within 24 calendar months of completing development of the Corrective Action Plan; **7.1.2**. List the action(s) which require(s) new equipment or freeze protection measures, if any, to be completed within 48 calendar months of completing development of the Corrective Action Plan; and	of July, but not more than 150 days after the Generator Cold Weather Reliability Event. The Generator Owner shall: **6.1**. Ensure the Corrective Action Plan contains at a minimum: **6.1.1.**A summary of the identified cause(s) for the Generator Cold Weather Reliability Event, where applicable, and any relevant associated data; **6.1.2.** A list of actions to add new or remedy issues with existing freeze protection measures; **6.1.3.** An identification of operating limitations or impacts to the cold weather preparedness plan that would apply until execution of the corrective action(s) identified in the Corrective Action Plan; **6.1.4.** A description of the updates to the cold weather preparedness plan required under Requirement R4 to identify updates or additions to the Generator Cold Weather Critical Components and their freeze protection measures, if required; **6.1.5.** A timetable specifying that implementation of the Corrective Action Plan shall be completed prior to the first day of December following the Generator Cold Weather Reliability Event[fn10]; and **6.1.6.** A review of applicability to similar equipment freeze protection measures at	must specify implementation of corrective actions at the affected unit (i.e. the one experiencing the event) by no later of December 1 following the event. For events occurring early in the season (i.e. prior to December 1), corrective actions shall be implemented prior to December 1 of the year following the event. Recognizing that similar units may be subject to similar issues, Generator Owners must still perform a review of applicability to similar equipment at their other units. Revised Requirement R7 would allow the entity to perform this review and implement any corrective measures within 24 calendar months of the Generator Cold Weather Reliability Event. To the extent circumstances beyond the control of the Generator Owner prevent implementation within these timeframes, Requirement R6 Part 6.2 provides a process by which the Generator Owner may seek an extension from the CEA. This process is similar to that included in Requirement R7, discussed more fully in the following section.

Consideration of Directive in EOP-012-3		
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7.1.3. List the updates to the cold weather preparedness plan required under Requirement R4 to identify the updates or additions to the Generator Cold Weather Critical Components and their freeze protection measures; **7.2**. Implement the Corrective Action Plan in accordance with the specified timetables in Requirement R7 Part 7.1; **7.3**. Update the Corrective Action Plan action(s) and timetable(s), with justification, if corrective action(s) change or timetable(s) exceed the timelines in Requirement R7 Part 7.1; and **7.4**. Document in a declaration, with justification, any Generator Cold Weather Constraint that precludes the Generator Owner from implementing selected action(s) contained within the Corrective Action Plan.	generating units owned by the Generator Owner, with a specified timetable for corrective actions to be completed within 24 calendar months of the Generator Cold Weather Reliability Event; **6.2.** Update the Corrective Action Plan action(s) and timetable(s), with justification, and submit a Corrective Action Plan extension request to the Compliance Enforcement Authority (CEA) for approval where the timetable(s) for completing selected actions are projected to exceed the timelines in Part 6.1. The submitted Corrective Action Plan extension request shall include the following; **6.2.1.**Circumstances causing the delay and how those circumstances are beyond the control of the Generator Owner; **6.2.2.**Revisions to the selected actions in Part 6.1, if any, including utilization of Operating Procedures, if applicable; and **6.2.3.**Updated timetable for implementing the selected actions in Part 6.1. **6.3.** Document in a declaration, with justification, any Generator Cold Weather Constraint in accordance with Requirement R8, if applicable, that precludes the Generator Owner from implementing selected action(s) contained within the Corrective Action Plan.	

Consideration of Directive in EOP-012-3		
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	[10]: For events that occur early in the season, such as in October or November, the timetable shall specify completion prior to December 1 of the next calendar year. **R7.** Each Generator Owner, for each Corrective Action Plan developed pursuant to Requirements R1, R2, or R3 shall, as applicable: **7.1.** Include a timetable for implementing the selected corrective action(s) that shall: ****	

Paragraph 70: Address the Finding that Any Extensions of a Corrective Action Plan Implementation Deadline Beyond the Maximum Implementation Timeframe Provided by the Standard be Pre-Approved by NERC

Directive

"Therefore, we direct NERC, pursuant to section 215(d)(5) of the FPA, to develop and submit modifications to Requirement R7 of proposed Reliability Standard EOP-012-2 to ensure that any extension of a corrective action plan implementation deadline beyond the maximum implementation timeframe required by the proposed Reliability Standard is pre-approved by NERC. This approach is consistent with prior Commission action in Order No. 851 where the Commission directed NERC to require pre-approval for extensions beyond the timelines required in the Reliability Standard. In Order No. 851, the Commission explained that although case-by-case extension determinations may be more uncertain or have associated burdens, the more compelling imperative is that automatic extensions have the potential for abuse by unduly delaying mitigation, and would lead to delayed visibility for NERC."

See also P 3 (summarizing directives): "[W]e direct NERC to:… develop and submit modifications to Requirement R7 of proposed Reliability Standard EOP-012-2 to ensure that any extension of a corrective action plan implementation deadline beyond the maximum implementation timeframe required by the Standard is pre-approved by NERC and to ensure that the generator owner informs relevant registered entities of operating limitations in extreme cold weather during the period of the extension."

Consideration of Directive

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
R6. Each Generator Owner shall, for each generating unit that has a calculated Extreme Cold Weather Temperature at or below 32 degrees Fahrenheit (zero degrees Celsius) as determined in Requirement R1 and that self-commits or is required to operate at or below a temperature of 32 degrees Fahrenheit (zero degrees Celsius), develop a Corrective Action Plan when the generating unit experiences a Generator Cold Weather Reliability	**R6.** Each Generator Owner shall, for each generating unit that has a calculated Extreme Cold Weather Temperature at or below 32 degrees Fahrenheit (zero degrees Celsius) as determined in Requirement R1 and that self-commits or is required to operate at or below a temperature of 32 degrees Fahrenheit (zero degrees Celsius), develop and implement a Corrective Action Plan when the generating unit experiences a Generator	To address this directive, the drafting team has added new Requirement R6, Part 6.2, and Requirement R7 Part 7.3 to require any Generator Owner seeking to extend a Corrective Action Plan implementation deadline beyond the maximum implementation timeframe required by the standard seeks pre-approval of the extension by the Compliance Enforcement Authority. This language is similar to that used in

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Event. The Corrective Action Plan shall be developed within 150 days or by July 1, whichever is earlier, and contain at a minimum: **6.1.** A summary of the identified cause(s) for the Generator Cold Weather Reliability Event, where applicable, and any relevant associated data; **6.2.** A review of applicability to similar equipment at generating units owned by the Generator Owner; and **6.3.** An identification of operating limitations or impacts to the cold weather preparedness plan that would apply until execution of the corrective action(s) identified in the Corrective Action Plan. *** **R7**. Each Generator Owner, for each Corrective Action Plan developed pursuant to Requirements R1, R2, R3, or R6, shall: **7.1**. Include a timetable for implementing the selected corrective action(s) that shall: **7.1.1**. List the action(s) which address(es) existing equipment or freeze protection measures, if any, to be completed within 24 calendar months of completing development of the Corrective Action Plan; **7.1.2**. List the action(s) which require(s) new equipment or freeze protection measures, if any, to be completed within 48 calendar	Cold Weather Reliability Event. The Corrective Action Plan shall be developed before the first day of July, but not more than 150 days after the Generator Cold Weather Reliability Event. The Generator Owner shall: **6.1**. Ensure the Corrective Action Plan contains at a minimum: **6.1.1.**A summary of the identified cause(s) for the Generator Cold Weather Reliability Event, where applicable, and any relevant associated data; **6.1.2.** A list of actions to add new or remedy issues with existing freeze protection measures; **6.1.3.** An identification of operating limitations or impacts to the cold weather preparedness plan that would apply until execution of the corrective action(s) identified in the Corrective Action Plan; **6.1.4.** A description of the updates to the cold weather preparedness plan required under Requirement R4 to identify updates or additions to the Generator Cold Weather Critical Components and their freeze protection measures, if required; **6.1.5.** A timetable specifying that implementation of the Corrective Action Plan shall be completed prior to the first day of December following the Generator Cold Weather Reliability Event[fn10]; and	the TPL-007 standard, and the ERO Enterprise would follow a similar review process. With respect to that part of Paragraph 3 relating to "ensuring the generator owner informs relevant registered entities of operating limitations in extreme cold weather during the period of the extension": Under EOP-012-3 Requirement R6 Part 6.1.3, pertaining to units experiencing a Generator Cold Weather Event, the Generator Owner would be required to identify operating limitations that would apply until execution of the Corrective Action Plan. Under EOP-012-3 Requirements R2 and R3, a Corrective Action Plan would be required where the Generator Owner cannot meet the required operational capability for its unit. The TOP-003 and IRO-010 standards require the Transmission Operator, Balancing Authority, and Reliability Coordinator to maintain data specifications for their real-time and operational planning analyses that include provisions for notification of BES generating unit(s) status during local forecasted cold weather to include operating limitations based on capability and availability, among other factors. These

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months of completing development of the Corrective Action Plan; and **7.1.3**. List the updates to the cold weather preparedness plan required under Requirement R4 to identify the updates or additions to the Generator Cold Weather Critical Components and their freeze protection measures; **7.2**. Implement the Corrective Action Plan in accordance with the specified timetables in Requirement R7 Part 7.1; **7.3**. Update the Corrective Action Plan action(s) and timetable(s), with justification, if corrective action(s) change or timetable(s) exceed the timelines in Requirement R7 Part 7.1; and **7.4**. Document in a declaration, with justification, any Generator Cold Weather Constraint that precludes the Generator Owner from implementing selected action(s) contained within the Corrective Action Plan.	**6.1.6.** A review of applicability to similar equipment freeze protection measures at generating units owned by the Generator Owner, with a specified timetable for corrective actions to be completed within 24 calendar months of the Generator Cold Weather Reliability Event; **6.2.** Update the Corrective Action Plan action(s) and timetable(s), with justification, and submit a Corrective Action Plan extension request to the Compliance Enforcement Authority (CEA) for approval where the timetable(s) for completing selected actions are projected to exceed the timelines in Part 6.1. The submitted Corrective Action Plan extension request shall include the following; **6.2.1.**Circumstances causing the delay and how those circumstances are beyond the control of the Generator Owner; **6.2.2.**Revisions to the selected actions in Part 6.1, if any, including utilization of Operating Procedures, if applicable; and **6.2.3.**Updated timetable for implementing the selected actions in Part 6.1. **6.3.** Document in a declaration, with justification, any Generator Cold Weather Constraint in accordance with Requirement R8, if applicable, that precludes the Generator Owner from implementing selected action(s) contained within the Corrective Action Plan.	standards require the Generator Owner to provide the requested data. After considering these standards, the drafting team determined that no additional requirement would be needed to ensure the "generator owner informs relevant registered entities of operating limitations in extreme cold weather" specifically during the period of Corrective Action Plan extension. To the extent a Transmission Operator, Balancing Authority, or Reliability Coordinator would find the additional detail useful, it may request this information as part of its data specifications, and the Generator Owner would be required to provide it.

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
	Fn10: For events that occur early in the season, such as in October or November, the timetable shall specify completion prior to December 1 of the next calendar year. **R7.** Each Generator Owner, for each Corrective Action Plan developed pursuant to Requirements R1, R2, or R3 shall, as applicable: **7.1.** Include a timetable for implementing the selected corrective action(s) that shall: **7.1.1.** List the action(s) which remedy(ies) issues with existing freeze protection measures, if any, to be completed within 24 calendar months of completing development of the Corrective Action Plan, regardless of any longer timelines in the Corrective Action Plan associated with new freeze protection measures; **7.1.2**. List the action(s) which require(s) new freeze protection measures, if any, to be completed within 48 calendar months of completing development of the Corrective Action Plan; and **7.1.3**. Describe the updates to the cold weather preparedness plan required under Requirement R4 to identify the updates or additions to the Generator Cold Weather Critical Components and their freeze protection measures.	

Consideration of Directive in EOP-012-3		
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	7.2. Complete all actions described in the Corrective Action Plan in accordance with the specified timetables in Part 7.1; **7.3**. Submit a Corrective Action Plan extension request, for the approval of the CEA, where the timetable(s) for completing selected actions are projected to exceed the timelines in Part 7.1. The submitted request shall: **7.3.1** Explain the circumstances causing the delay and how those circumstances are beyond the control of the Generator Owner; **7.3.2** Include, as applicable, revisions to the selected actions in Part 7.1, including utilization of Operating Procedures; and **7.3.3** Include an updated timetable for implementing the selected actions in Part 7.1. **7.4**. Document in a declaration, with justification, any Generator Cold Weather Constraint in accordance with Requirement R8 that precludes the Generator Owner from implementing selected action(s) contained within the Corrective Action Plan.	

Paragraph 72: Address the Finding that Generators that are First Commercially Operational on or after October 1, 2027, Should Have Freeze Protection Measures Either Designed into Their Generating Systems, or, if a Corrective Action Plan is Needed, then It Should be Completed by the Time that Such Generating Units Go into Commercial Operation.

Directive

"We thus find that generators that are commercially operational after October 1, 2027, should have freeze protection measures either designed into their generating systems, or, if a corrective action plan is needed, then it should be completed by the time that such generating units go into commercial operation. Accordingly, we direct NERC, pursuant to section 215(d)(5) of the FPA, to develop and submit modifications to Requirement R7 of proposed Reliability Standard EOP-012-2 to clarify that any Requirement R2 corrective action plans must be completed prior to the generating unit's commercial operation date."

Consideration of Directive

Consideration of Directive in EOP-012-3		
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R2. Applicable to generating units with a commercial operation date on or after October 1, 2027: Each Generator Owner, for each generating unit that has a calculated Extreme Cold Weather Temperature at or below 32 degrees Fahrenheit (zero degrees Celsius) as determined in Requirement R1, and that self-commits or is required to operate at or below a temperature of 32 degrees Fahrenheit (zero degrees Celsius), shall: • Implement freeze protection measures to protect Generator Cold Weather Critical Components that provide the capability to operate at the unit(s)' Extreme Cold Weather Temperature with sustained concurrent twenty (20) mph wind speed for (i) a period of not less than twelve (12) continuous hours, or (ii) the maximum	**R2.** Applicable to generating units which begin commercial operation on or after October 1, 2027: Each Generator Owner, for each generating unit that has a calculated Extreme Cold Weather Temperature at or below 32 degrees Fahrenheit (zero degrees Celsius) as determined in Requirement R1, and that self-commits or is required to operate at or below a temperature of 32 degrees Fahrenheit (zero degrees Celsius), shall: **2.1** For generating units for which the Generator Owner first contractually committed to design criteria relevant to this Requirement before February 16, 2023:	To address this directive, the drafting team revised Requirement R2 which pertains to units going into commercial operation after October 1, 2027 to separate requirements for units that are truly "new" and should have more robust capabilities designed in without need for corrective actions, and units that may have already been significantly far along in the design phase and for whom full compliance at the time of entering commercial operation (which may be after the in-service date) would represent a significant hardship. In considering this directive, the drafting team considered that the 2021-07 drafting team recommended this requirement apply to

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
operational duration for intermittent energy resources if less than twelve (12) continuous hours; or • Develop a Corrective Action Plan(s) to add new or modify existing or previously planned freeze protection measures to provide the capability to operate at the unit(s)' Extreme Cold Weather Temperature with a sustained concurrent twenty (20) mph wind speed for (i) a period of not less than twelve (12) continuous hours, or (ii) the maximum operational duration for intermittent energy resources if less than twelve (12) continuous hours.	• Implement freeze protection measures to protect Generator Cold Weather Critical Components that provide the capability to operate at the unit(s)' Extreme Cold Weather Temperature with sustained concurrent twenty (20) mph wind speed for (i) a period of not less than twelve (12) continuous hours, or (ii) the maximum operational duration for intermittent energy resources if less than twelve (12) continuous hours; or • Have a Corrective Action Plan(s) in place (to include any applicable Generator Cold Weather Constraint(s) upon beginning commercial operation, to add new or modify existing or previously planned freeze protection measures to provide the capability to operate at the unit(s)' Extreme Cold Weather Temperature with a sustained concurrent twenty (20) mph wind speed for (i) a period of not less than twelve (12) continuous hours, or (ii) the maximum operational duration for intermittent energy resources if less than twelve (12) continuous hours. **2.2** For generating units for which the Generator Owner first contractually committed to design criteria relevant to this Requirement on or after February 16, 2023:	generation going into service three (3) years after the effective date of EOP-012-1 (i.e., based on October 1, 2024 that date is October 1, 2027). The 2021-07 drafting team believed, and the Project 2024-03 agrees, that there needs to be allowances made for units that are far along in the development process. While not changing the October 1, 2027 date, the drafting team has proposed a means to accommodate these units while overall raising the bar for reliability. For units that were designed prior to February 2023, which is when the definition of ECWT was approved in EOP-012-1, entities may implement a Corrective Action Plan to meet the more stringent capability requirements applicable to new generation in Requirement R2. Prior to this time, entities would not have been on notice of their future obligations, and thus may not have accounted for it in their designs. A Corrective Action Plan would allow them to enter commercial operation and meet the more stringent requirements in accordance with the implementation timeframes in Requirement R7. For units that are or were designed after that point, entities must either meet the requirements or, if meeting the requirements is not possible, declare a Generator Cold Weather Constraint in accordance with Requirement R8.

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
	• Implement freeze protection measures to protect Generator Cold Weather Critical Components that provide the capability to operate at the unit(s)' Extreme Cold Weather Temperature with sustained concurrent twenty (20) mph wind speed for (i) a period of not less than twelve (12) continuous hours, or (ii) the maximum operational duration for intermittent energy resources if less than twelve (12) continuous hours; or • Document in a declaration, with justification, as applicable, a Generator Cold Weather Constraint in accordance with Requirement R8.	

Paragraph 76: To Address Concerns that EOP-012-2 Requirement R7 has Ambiguities in the Implementation Plan Timelines that Apply to Certain Generator Owners

Directive

"We believe that proposed Reliability Standard EOP-012-2, Requirement R7's corrective action plan implementation deadlines have remaining ambiguities that need to be addressed. As noted above, the Commission has previously expressed similar concerns regarding the vagueness and enforceability of Reliability Standards language. Specifically, we agree with the concerns raised by the ISO/RTO Council that Requirement R7 of proposed Reliability Standard EOP-012-2 does not provide clear direction as to the required corrective action plan implementation timeline that applies to certain generator owners. For example, it is unclear how the corrective action plan implementation timeline would apply if a generator owner had combinations of both existing and new equipment for freeze protection measures. Accordingly, we direct NERC, pursuant to section 215(d)(5) of the FPA, to develop and submit modifications to Requirement R7 of proposed Reliability Standard EOP-012-2 to address these ambiguities by expanding on Requirement R7.1.1 and 7.1.2 to make it clear which corrective action plan implementation deadline applies to which generator owner."

Consideration of Directive

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
R7. Each Generator Owner, for each Corrective Action Plan developed pursuant to Requirements R1, R2, R3, or R6, shall: **7.1**. Include a timetable for implementing the selected corrective action(s) that shall: **7.1.1**. List the action(s) which address(es) existing equipment or freeze protection measures, if any, to be completed within 24 calendar months of completing development of the Corrective Action Plan; **7.1.2**. List the action(s) which require(s) new equipment or freeze protection measures, if any, to be completed within 48 calendar	**R7.** Each Generator Owner, for each Corrective Action Plan developed pursuant to Requirements R1, R2, or R3 shall, as applicable: **7.1.** Include a timetable for implementing the selected corrective action(s) that shall: **7.1.1.** List the action(s) which remedy(ies) issues with existing freeze protection measures, if any, to be completed within 24 calendar months of completing development of the Corrective Action Plan, regardless of any longer timelines in the Corrective Action Plan associated with new freeze protection measures;	To address this directive, the drafting team added "regardless of any longer timelines in the Corrective Action Plan associated with new freeze protection measures" at the end of Requirement R7 Part 7.1.1.

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
months of completing development of the Corrective Action Plan; and **7.1.3**. List the updates to the cold weather preparedness plan required under Requirement R4 to identify the updates or additions to the Generator Cold Weather Critical Components and their freeze protection measures; ***	**7.1.2**. List the action(s) which require(s) new freeze protection measures, if any, to be completed within 48 calendar months of completing development of the Corrective Action Plan; and **7.1.3**. Describe the updates to the cold weather preparedness plan required under Requirement R4 to identify the updates or additions to the Generator Cold Weather Critical Components and their freeze protection measures. ***	

Paragraph 94: To address the concern that Generator Cold Weather Constraint Declarations Should be Reviewed More Frequently than Once Every Five Years to Ensure the Constraint Remains Valid

Directive

"We agree with the ISO/RTO Council that the proposed five-year review period for the declared Generator Cold Weather Constraints in Requirement R8.1 could delay the identification and adoption of new freeze protection measures and does not represent the current pace of technological advancements. We acknowledge that a more frequent review does impose some additional administrative burden to the generator owner to review the technological advancements that hindered its ability to winterize; nonetheless, a lengthy period between a Generator Cold Weather Constraint declaration review by the generator owner offers little incentive to timely adopt new freeze protection technologies. Accordingly, we direct NERC, pursuant to section 215(d)(5) of the FPA, to develop and submit modifications to Requirement R8, Part 8.1 of proposed Reliability Standard EOP 012-2 to implement more frequent reviews of Generator Cold Weather Constraint declarations to verify that the declaration remains valid. NERC may propose to develop modifications that address the Commission's concerns in an equally efficient and effective manner, however, NERC must explain how its proposal addresses the Commission's concerns."

Consideration of Directive

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
R8. Each Generator Owner that creates a Generator Cold Weather Constraint declaration shall: **8.1**. Review the Generator Cold Weather Constraint declaration at least every five calendar years or as needed when a change of status to the Generator Cold Weather Constraint occurs; and **8.2**. Update the operating limitations associated with capability and availability under Requirement R1 Part R1.2 if applicable.	**R8.**Each Generator Owner that declares a Generator Cold Weather Constraint in accordance with Attachment 1 shall: **8.1.**Submit its Generator Cold Weather Constraint declaration(s) to the CEA within 45 days of determining that the Generator Cold Weather Constraint is applicable. For Generator Cold Weather Constraints determined in accordance with Requirement R2 for generating unit(s) upon beginning commercial operation, submit the Generator Cold Weather Constraint declaration(s) no later than 15 days after commercial operation;	To address this directive, the drafting team revised Requirement R8 to require review of all validated Generator Cold Weather Constraints at least once every 24 calendar months to ensure the constraint remains valid. Language regarding reviews "as needed when a change of status" occurs was removed due to the more frequent periodicity.

Consideration of Directive in EOP-012-3		
Approved Definition/Standard	**Revisions in Definition/Standard or Other Action**	**Description and Change Justification**
	8.2. Review any Generator Cold Weather Constraint declaration validated by the CEA every 24 calendar months to determine if it remains valid under Attachment 1; *** **Attachment 1** (criteria for determining the applicability of a Generator Cold Weather Constraint) (*see draft standard*)	