$\S25.55(c)(1)(E)$ and (c)(2)(E), Weather critical component lists.

To more efficiently facilitate the inspection process for ERCOT, the commission has added new §25.55(c)(1)(E) and (c)(2)(E) which require generation entities to create lists of all cold and hot weather critical components to be reviewed by ERCOT and to update these lists annually or as necessary.

Proposed $\S25.55(c)(3)$ – Declaration of preparedness

Proposed §25.55(c)(3) delineates the requirements for a resource filing a declaration of preparedness,

TPPA requested the commission permit a generation entity to submit its declaration of preparedness under proposed §25.55(c)(3) confidentially and require ERCOT to maintain confidentiality for such declarations.

Commission Response

The commission agrees with TPPA regarding the confidentiality of utility's submitted declarations of preparedness. An entity may confidentially submit its declaration of weather preparedness under §25.55(c)(3) or (f)(3), as applicable, and ERCOT will maintain the confidentiality of such declarations. The commission revises the rule to require ERCOT to designate declarations of preparedness as Protected Information as defined in the ERCOT protocols.

Proposed $\S25.55(c)(3)(A)(iii)$ and (c)(3)(B)(iii) — Declaration of preparedness pertaining to minimum ambient temperature by a generation entity

Proposed §25.55(c)(3)(A)(iii) and (c)(3)(B)(iii) respectively requires a generation entity to provide within its declaration of preparedness the minimum and maximum ambient temperature at which each resource has experienced sustained operations.

Vistra stated that if the commission adopts its recommendation to strike the ambient temperature standard in the rule, then proposed §25.55(c)(3)(A)(iii) and (c)(3)(B)(iii) should be deleted as there would also be no reason to require generation entities to attest to that standard under "sustained operations." Vistra provided draft language consistent with its recommendations.

APA and ACP commented that proposed §25.55(c)(3)(A)(iii) and (c)(3)(B)(iii) lacks an explicit timeframe for determining the ambient temperature standard and that implying the 72-hour standard from the ERCOT historical weather study standard applies would be inappropriate as the provisions are discrete. APA and ACP noted the lack of an explicit timeframe could be interpreted as a "significantly shorter duration of time" applicable to the ambient temperature standard.

TEC commented that proposed §25.55(c)(3)(A)(iii) and (c)(3)(B)(iii) are administratively burdensome as entities may not currently be recording historical data in the manner the proposed rule indicates. Accordingly, TEC requested the ambient temperature requirements be future-oriented and recommended "with measurements beginning in 2023" be appended to the end of proposed §25.55(c)(3)(A)(iii) and (c)(3)(B)(iii).

Commission Response

The commission did not adopt Vistra's recommendation to remove the summer ambient temperature standard from the rule. Accordingly, the commission declines to adopt Vistra's recommendation to remove the requirement that the attestations include historical information on summer ambient temperatures from the rule as well. Further, the commission does not remove the requirement to report the minimum ambient temperature the resource or facility has sustained operation through, because this information is useful for data analysis purposes.

The commission disagrees with APA's and ACP's suggestions to revise proposed §25.55(c)(3)(A)(iii) and (c)(3)(B)(iii) to define sustained operations as a 72-hour period. "Sustained operations" is not a defined term in this rule because it is used throughout to imply the "reasonably expected" capability of a resource to operate during most weather conditions. With regard to the specific value that should be reported in an entity's declaration, an entity should provide the minimum and maximum temperatures at which the resource has experienced sustained operations.

The commission disagrees with TEC that this requirement is administratively burdensome because some entities are not currently recording ambient temperature levels. The rule specifically allows the use of data available at the nearest weather station.

Proposed $\S25.55(c)(3)(A)(iv)$ — Declaration of preparedness pertaining to additional information required by the ERCOT protocols by a generation entity

Proposed §25.55(c)(3)(A)(iv) requires that a generation entity include any additional information required by the ERCOT protocols.

TPPA recommended the deletion of proposed §25.55(c)(3)(A)(iv), because such a requirement could make compliance more difficult, given that it would split the obligations for the declarations of weather preparedness between two regulatory bodies. TPPA recommended that the commission subsequently address any insufficiencies the declarations may have for ERCOT under the proposed rule via a notice and comment rulemaking.

LCRA noted that ERCOT protocols are subject to change frequently. Thus, LCRA requested that the rule be clarified as to which section of ERCOT protocols could potentially require the inclusion of additional information as a part of the generation entity's declaration of preparedness and a timeframe by which such protocols must be in effect to require the submission of additional information as a part of that season's declaration.

LCRA further recommended a requirement that ERCOT issue a market notice and make a timely filing at the commission notifying affected market participants of any such changes.

Commission Response

The commission declines to delete proposed §25.55(c)(3)(A)(iv) and disagrees with TPPA's conclusion that it would make compliance more difficult. Utilities have historically been obligated to comply with both commission rules and ERCOT protocols. In implementing

weather preparedness measures, it is foreseeable that ERCOT may adopt additional filing or administrative requirements to facilitate the submission and review of hundreds of attestations. Therefore, §25.55(c)(3)(A)(iv) is necessary to permit flexibility in ERCOT's implementation of the rule and to certify that the regulated utilities have taken all necessary weatherization preparedness measures.

The commission also modifies §25.55(c)(3)(A)(iv) and (c)(3)(B)(iv) to clarify which version of the protocols an entity must consider when determining what information to include in its declarations of winter and summer weather preparedness.

Proposed $\S25.55(c)(3)(A)(v)$ - Declaration of preparedness pertaining to attestation of documents filed by a generation entity

Proposed §25.55(c)(3)(A)(v) requires a generation resource to includes a notarized attestation sworn to by its highest-ranking representative, attesting to the completion of all applicable requirements and to the accuracy and veracity of the information provided by it.

TIEC and Vistra recommended broadening the provisions addressing who may sign a notarized attestation under this rule. Vistra recommended revising proposed §25.55(c)(3)(A)(v) and (c)(3)(B)(v), which respectively require a notarized attestation to winter and summer preparedness, to permit a representative, official, or officer responsible for the generation resource's operations to sign the attestation. Vistra stated that such an individual responsible for the operations of the resource would be better suited to attest to the technical requirements of the rule than a chief executive officer who oversees a business' entire operations.

TIEC noted that many of its members own and operate a generation resource but are not primarily in the power generation business. Because of this, TIEC stated that many of its members' CEOs

would not know details about on-site generation at specific facilities. TIEC expressed preference for broadening the provisions addressing who may execute the attestation to be consistent with compliance requirements under ERCOT Nodal Protocols and requested the commission consider allowing any officer or executive with authority to bind a generation entity to attest to the declaration of preparedness. In the alternative, TIEC requested that the commission create a process where generation entities can request pre-approval to have a different representative execute the attestations.

TCPA recommended the revision of proposed §25.55(c)(3) to conform to ERCOT protocols and, accordingly, the removal of the requirement for the highest ranking official to attest to winter and summer preparedness.

TPPA commented that proposed §25.55(c)(3)(A)(v) is ambiguous as applied to municipally owned utilities (MOUs), as it could reasonably be construed as requiring "the attestation of a utility general manager, a city mayor, or a city council acting as a whole." TPPA also stated that, for non-MOUs, the requirement could require the signature of a CEO of a corporate parent not located within Texas. Lastly, TPPA argued that the commission should permit the attestation to be "based on personal knowledge or by reliance on others with personal knowledge due to the broad nature of the attestation."

Commission Response

The commission declines to modify the requirement that the attestation be made by the highest-ranking representative, official, or officer with binding authority over the generation entity, as requested by Vistra, TIEC, TCPA, and TPPA. The highest-ranking individual

must complete the attestation to ensure that generation entities prioritize weather preparedness and that the accountability for weather preparedness starts at the top. Regarding concern that this requirement is ambiguous for MOUs, the commission expects each entity to use its best judgment in identifying the highest-ranking individual appropriately. The commission clarifies that fulfilling this requirement does not require a vote from entities that are governed by elected boards or signoff from an elected official such as a mayor.

Proposed §25.55(c)(3)(C) - Declaration of preparedness pertaining to mothballed, outaged, decommissioned, new, or repowered resources

Proposed §25.55(c)(3)(C) requires a generation entity to submit the appropriate declaration of preparedness to ERCOT prior to returning a mothballed or decommissioned resource to service during the winter or summer season.

TPPA requested that the commission modify proposed §25.55(c)(3)(C), which requires a generator to submit a declaration of preparedness to ERCOT prior to returning a mothballed or decommissioned resource to service during the winter or summer. This would clarify that a generator is not required to file the declaration and may resume operations when approved to do so by ERCOT if a weather emergency occurs. TPPA commented that the current language may prevent a mothballed or decommissioned resource from timely returning to serve the grid during a potential emergency.

Commission Response

In response to TPPA's comments regarding proposed §25.55(c)(3)(C), the commission maintains that the purpose of the rule is to ensure the preparedness of resources and transmission facilities for reliable operations during weather events. A generation entity that considers returning a mothballed resource to service must acknowledge that the resource must perform as reliably as any other resource and, therefore, is required to submit a declaration in the manner prescribed by the rule. The commission therefore declines to revise §25.55(c)(3)(C) in accordance with TPPA's recommendation.

Proposed $\S25.55(d)$ and (d)(1) - ERCOT inspection of resources

Proposed §25.55(d) contains requirements applicable to ERCOT in conducting inspections of resources and requires ERCOT to issue a written report to the commission regarding its inspections.

Vistra requested that the commission provide clarity on how the costs of ERCOT inspections would be recovered. Vistra recommended adding subsection §25.55(d)(3), which would provide for "the cost of ERCOT inspections to be recovered through ERCOT's system administration fee." Vistra provided draft language consistent with its recommendation.

Commission Response

The funding of inspection costs is outside the scope of this rulemaking project. The commission declines at this time to specify the allocation of these costs.

TPPA recommended that the commission add language to proposed §25.55(d)(1) requiring ERCOT to publicly post the checklist used for inspection of generators and TSPs. LCRA supported TPPA's recommendation for proposed §25.55(d)(1).

Commission Response

The commission declines to revise §25.55(d)(1) to require ERCOT to publicly post its inspection checklist as it may reveal critical energy infrastructure information and may vary depending on the resource being inspected.

$\S25.55(d)(1) - ERCOT$ inspection of resources; initial requirements

Proposed §25.55(d)(1) contains initial requirements for ERCOT while conducting inspections of resources.

TCPA commented that the ERCOT inspection under §25.55(d)(1) should be limited to weather related issues, as the purpose of the rule is to determine a specific standard of weather emergency preparation. TCPA further stated that the term "other vulnerabilities" is overly broad and recommended that issues beyond a resource's control, such as fuel issues, should not be subject to inspection.

Commission Response

The commission declines to limit §25.55(d)(1), and by extension (g)(1), to inspection of weather-related issues, as this clarification is unnecessary. Subsection (d)(2) clarifies that ERCOT's inspection report is to specifically address whether the entity has complied with the requirements of §25.55(c)(1) and (2) of this rule.

The commission also disagrees with TCPA that the phrase "other vulnerabilities" is overly broad. Both provisions require ERCOT to prioritize inspections based on factors including "other vulnerabilities related to weather emergency conditions." This language appropriately confines the scope of "other vulnerabilities." It is neither productive nor necessary to exhaustively list what such vulnerabilities are or to remove the requirement completely. Adopted §25.55(d)(1) and (g)(1) provide a non-exhaustive list of factors ERCOT may consider when prioritizing inspections.

The commission also declines to adopt specific language clarifying that only issues within the entity's control are subject to inspection. ERCOT will inspect each resource's level of compliance with the rule. If an entity believes it does not have control over something that is leading to compliance issues, that can be addressed during the determination of a reasonable cure period or, if necessary, as a part of an enforcement investigation.

TCPA recommended that any checklist developed by ERCOT be adopted through the stakeholder process and ERCOT protocols for transparency and industry input. TCPA provided draft language consistent with its recommendations. Vistra similarly recommended revising proposed §25.55(d)(1) to explicitly state that "ERCOT must establish in its protocols or other binding documents" the winter and summer inspection checklists.

Commission Response

The commission declines to implement Vistra's and TCPA's recommendation to revise §25.55(d)(1), and by extension §25.55(g)(1), to require ERCOT to establish its inspection checklists in its protocols or other binding documents. Inspection checklists are for the benefit of ERCOT inspectors and contractors. The lists will also provide information to the commission and the entity under review about the ERCOT-conducted inspections.

TPPA commented that the three-year ERCOT inspection cycle under proposed §25.55(d)(1) is too short and that the commission would benefit from more detailed inspections by ERCOT over a longer time frame. Specifically, TPPA recommended the adoption of a seven-year inspection cycle as such a timeframe would capture the intent of SB 3 for independent assessments for repeated or major failures.

Broad Reach recommended amending the rule to allow for an exception to the three-year inspection if there is a showing that selected resources in a fleet are identical in design and build. Broad Reach explained that such an exception would help save time and resources, and reduce the administrative burden on ERCOT, commission staff, and resource owners.

TEC stated that the three-year inspection cycle under proposed §25.55(d)(1) may be burdensome on ERCOT inspection teams due to the number of smaller units—such as energy storage facilities—expected to come online in the next few years, and that inspections will incur unnecessary charges on utilities. TEC recommended that the rule "include a minimum capacity threshold of 10 MW for any inspected resource, in addition to the current considerations around

the impact on reliability and past history of major or repeated weather-related forced interruption[s] of service." TEC provided draft language that would revise proposed §25.55(d)(1) to limit the requirement to resources "with a nameplate capacity over 10 megawatts."

Commission Response

The commission declines to adopt TPPA's recommendation to increase ERCOT's inspection cycle from three years to seven years. A longer cycle does not necessarily result in a more detailed inspection of weather preparedness than can be accomplished within a three-year cycle. More frequent inspections better accomplish the objective of the rule.

The commission also declines to adopt Broad Reach's request to permit exceptions to the three-year inspection for the same reasons. Similarity in design or build of one resource to others in the fleet does not necessarily translate to identical weather preparation requirements. Geographic diversity may reasonably call for differences in weather preparation requirements. Similarly, different generation resources may have been maintained with different levels of diligence. Regardless of similarities between resources, it is important for ERCOT to perform inspections to ensure that preparedness measures have been undertaken for each resource.

The commission also declines to revise §25.55(d)(1) to limit inspection of resources exceeding a 10-megawatt nameplate capacity. Subsections (d)(1) and (g)(1) already include rule language authorizing ERCOT to prioritize inspections based on factors including "whether a resource is critical for electric grid reliability." The generating capacity of a resource may

be a consideration in making this determination. Therefore, further limitations are unnecessary.

OPUC requested the modification of proposed §25.55(d)(1) to require ERCOT to consider the length of time since the generation resource or transmission facility was last inspected when prioritizing which entities to inspect.

Commission Response

The commission agrees with OPUC's recommendation to revise §25.55(d)(1) to require ERCOT to consider the most recent time a resource or transmission facility was inspected when prioritizing inspections. The commission amends each provision accordingly. PURA §35.0021 and §38.075 require ERCOT to prioritize inspection based on risk level; a greater period of time between inspections may represent a relevant risk factor for reliability.

Proposed $\S25.55(d)(1)(A)$ – Notice of ERCOT inspection (generation entity)

Proposed §25.55(d)(1)(A) requires ERCOT to provide to a generation entity a 48-hour notice of an inspection and requires the generation entity to grant access to its facility to ERCOT and commission staff, including contractors.

Broad Reach explained that its battery energy storage system facilities are in remote areas and largely unmanned on a daily basis. Broad Reach requested modifying the rule to require 72 hours

of notice prior to an inspection in order for entities to have enough time to dispatch a technician to meet the inspector to facilitate the inspection.

TSPA recommended revising proposed §25.55(d)(1)(A) to give an entity a notice of inspection from 48 hours to five business days prior to an inspection, as some facilities may require more time because of security clearances, safety standards, and necessary training to access certain parts of a facility. TSPA argued that a notice of five business days permits more flexible scheduling and better provides for appropriate weatherization engineers to assist the ERCOT inspector.

TCPA recommended increasing the inspection notice under proposed §25.55(d)(1)(A) to two weeks as 48 hours is an insufficient timeframe to prepare for an inspection and conform to standard industry practice.

Commission Response

The commission agrees with Broad Reach, TSPA, and TCPA that the 48-hour notice period in the proposed rule is insufficient and adopts Broad Reach's recommendation to increase the notice requirement to 72 hours in §25.55(d)(1)(A). The commission also makes a conforming change to §25.55(g)(1)(A). The commission also revises §25.55(d)(1)(A) and (g)(1)(A) to respectively require entities to provide the inspection team all requirements for facility access within 24 hours of receiving the notice of inspection. This will allow time for the inspection team to obtain any specialized equipment prior to the inspection.

TPPA and LCRA recommended revising the requirement for ERCOT to provide advance notice of inspections under proposed §25.55(d)(1)(A) to "include the names of all ERCOT employees, Commission Staff, or designated contractors expected to conduct, oversee, or observe the inspection" to better ensure security of generation assets and that only those authorized individuals are performing inspections.

Commission Response

The commission agrees with TPPA and LCRA that advance notice of inspections provided by ERCOT under adopted §25.55(d)(1)(A) must, for security purposes, identify ERCOT employees, commission staff, or designated contractors participating in the inspection. The commission modifies the provision accordingly.

Proposed $\S25.55(d)(1)(B)$ – ERCOT inspection; requirements for a generating entity and inspection team

Proposed §25.55(d)(1)(B) specifies the extent of access a generation entity is required to provide to ERCOT and commission staff and prescribes the measures the inspection team may undertake as part of the inspection.

Constellation and TCPA expressed concern for the safety of commission staff and other employees in the inspection process and proposed language that would allow an entity to restrict access to certain areas of a resource or facility for safety reasons. NRG similarly noted that proposed §25.55(d)(1)(B) grants commission staff access to "any part of the facility" and recommended

revising this language to account for portions of a facility that may be inaccessible to commission staff for safety reasons.

TEC recommended modifying proposed §25.55(d)(1)(A) and (d)(1)(B) to clarify that access to generation facilities by ERCOT inspection teams is not permitted when such access would violate any NERC or Texas Regional Entity, Inc. requirements, Nuclear Regulatory Commission regulations, or other pertinent federal regulatory rules or laws. TCPA recommended proposed §25.55(d)(1)(B) exclude control rooms and require ERCOT and commission staff to comply with all facility safety protocols. Constellation similarly recommended revising the rule to expressly state that ERCOT and commission staff must comply with all facility safety and security protocols.

Commission Response

The commission disagrees with Constellation, TCPA, TEC, and NRG that the rule should include language uniformly restricting the inspection team from certain areas of a resource or facility on the basis of safety and security regulations. However, the commission generally agrees with commenters regarding safety and security measures and revises §25.55(d)(1)(B) and (g)(1)(B) to include a requirement that ERCOT, commission staff, and designated contactors must comply with all applicable safety and security regulations during the inspection.

TPPA commented on proposed §25.55(d)(1)(B), which requires that a utility's staff be available to answer questions by the ERCOT inspection team. TPPA requested clarification as to whether

the provision requires a utility to ensure that all staff is available for questions or only that a representative for utility staff be available for questions.

Commission Response

In response to TPPA's request for clarification, under the adopted rule an entity must have representative staff available on site for questions from the inspection team but is not required to have all of an entity's staff be available on site. However, the representative staff selected to answer questions must have sufficient knowledge of the resource and the weather preparedness measures implemented to be able to respond with authority to the inspection team's questions.

NRG further noted that §25.55(d)(1)(B) allows commission staff to "take photographs or video recordings of any part of [a] facility" and requested that the rule expressly make confidential and exempt from disclosure any documents, photographs, or video recordings collected or generated by commission staff during or related to an inspection.

APA and ACP, Constellation, TCPA, and TPPA similarly recommended proposed §25.55(d)(1)(B) include confidentiality protections for photographs, video recordings, and interviews with facility personnel to protect commercially sensitive information and facility personnel's privacy. TPPA alternatively recommended revising the provisions to permit the personnel of the utility take the appropriate photographs or videos and send them to ERCOT employees and commission staff after an internal safety and security review. Constellation and

TCPA specifically recommended that the rule be revised to prevent photographing and video recording of control rooms.

Commission Response

The commission agrees with NRG, APA and ACP, Constellation, TCPA, and TPPA that documents, photographs, and video recordings produced during the inspection or are otherwise related to the inspection should be treated as confidential information under applicable state laws or regulations. The commission revises §25.55(d)(1)(B) and (g)(1)(B) in accordance with these recommendations. The commission notes that the retention and disposal of confidential records is governed by the procedures of the Central Records division as approved by the Texas State Library and Archives Commission. The commission declines to adopt TPPA's alternative proposal for confidential information.

The commission agrees with Constellation and TCPA that photographs and videos of the control room should be explicitly prohibited in the rule and revises §25.55(d)(1)(B) and (g)(1)(B) accordingly.

OPUC noted that the requirement of a minimum 48-hour notice is appropriate under most circumstances but requested adding an additional subparagraph to allow for inspections without notice when an entity has been the subject of two or more repeated forced outages or other weather-related failures within the last calendar year.

Commission Response

The commission declines to adopt OPUC's recommendation to add provisions to the rule permitting ERCOT to inspect a resource or transmission facility without notice. Prior notice is essential to provide adequate time for entities to have the necessary employees available to the inspection team and to provide safe and efficient access to equipment and records. Some facilities are unmanned or may have minimal staff present or available. Seventy-two hours is a relatively short period of time that would generally be insufficient to make meaningful changes to an entity's preparation. Therefore, the language as proposed strikes an appropriate balance between granting enough time to provide the necessary records and safe access to equipment and the features of a no-notice inspection.

Proposed $\S25.55(d)(2)$ and (d)(2)(A) - ERCOT inspection report of a generation entity

Proposed §25.55(d)(2) and (d)(2)(A) delineate requirements applicable to ERCOT when providing a generation entity with its inspection report and requirements related to curing of identified deficiencies in the inspection report.

TPPA recommended revising proposed §25.55(d)(2)(A) to explicitly require the ERCOT inspection report be "written" to ensure consistency and accountability.

Commission Response

The commission agrees with TPPA that §25.55(d)(2)(A) should specify that the ERCOT inspection report be written and amends the provision accordingly.

TCPA recommended revising proposed §25.55(d)(2)(A) to require the inspection report be "detailed" and that the inspection report "must also provide meaningful information on which resource has been assessed."

Commission Response

The commission declines to revise §25.55(d)(2)(A) as recommended by TCPA to specifically require the ERCOT inspection report to be "detailed" and maintains that existing rule language already requires the report to provide sufficient information on the assessed resource or facility.

Proposed $\S25.55(d)(2)(B)$ – ERCOT inspection report; deficiency cure period for a generation entity

Proposed §25.55(d)(2)(B) requires ERCOT to provide the generation entity subject to inspection a reasonable period to cure the identified deficiencies if one or more requirements of the rule have not been complied with.

Constellation noted that rule language of proposed §25.55(d)(2)(B) did not contain a good cause exception and requested it for older resources that may mothball or retire because they are unable to meet certain standards.

Commission Response

The commission declines to add a good cause exception to this provision for reasons discussed above in responses to general comments and elsewhere. Under PURA and the adopted rule, all resources that intend to operate in the winter and summer seasons must be prepared to operate reliably.

TPPA recommended reference to a "final" cure period in proposed §25.55(d)(2)(B) be omitted from the provisions. TPPA instead recommended that proposed §25.55(d)(2)(B) allow for a "revised" cure period "if the generation entity can adequately provide documentation supporting the request." TPPA also requested that the provisions include language that states that an entity may appeal the "revised" cure period to the commission itself. TPPA further recommended that proposed §25.55(d)(2)(B) explicitly prohibit commission staff that "would be involved in any enforcement action stemming from weather preparation inspections from participating in the setting of a 'revised' cure period" as it would inappropriately mix the commission's policymaking and enforcement functions.

Commission Response

The commission disagrees with TPPA and declines to implement a means of appealing a cure period to the commission or a prohibition on commission enforcement staff from weighing in on the cure period, because these changes are unnecessary.

The "final" cure period determination by ERCOT does not "bind" the commission in the manner TPPA states. For purposes of whether the commission "shall impose an administrative penalty" under PURA for failure to remedy a violation in a reasonable

amount of time, the commission has the authority to determine whether the cure period provided by ERCOT was reasonable, as provided by §22.246(g). Accordingly, an additional means of appeal would unnecessarily complicate and lengthen the process for implementing weather preparedness measures. However, to prevent confusion, the commission does modify the rule to replace "final" with "revised" in both subsections (d) and (g).

Finally, because the commission ultimately determines whether the cure period was reasonable, it is unnecessary to prohibit commission enforcement staff from being involved in setting the deadlines for a cure period. This restriction would imply a conflict of interest where none exists and would make inefficient use of commission resources.

TSPA requested that the commission specify what constitutes a "reasonable period" of time to cure deficiencies under proposed §25.55(d)(2)(B) due to the high penalties associated with a failure to comply with the weatherization standards provided by the proposed rule. TPPA similarly recommended that proposed §25.55(d)(2)(B) include "a firm timeline for when the 'revised' cure period must be established" and specifically proposed "requiring a response within five business days from the receipt of the request for a modified cure period" from the generation entity to expedite the curing of deficiencies.

Commission Response

The commission declines to revise §25.55(d)(2)(B) to specify what a "reasonable period" of time is to cure the deficiencies identified by the ERCOT inspection report as recommended by TSPA. What constitutes a "reasonable period" to cure is a fact-specific determination

that will vary between inspections as each resource and transmission facility is different and may require a variety of measures that differ in the amount of time required to implement such measures. Accordingly, the nature of the inspection does not lend itself to defining by rule the "reasonable period" to cure. Under the adopted rule such a determination will be left to the discretion of ERCOT and will afford the entity the opportunity to provide input on what that reasonable timeframe should be. For the same reasons, the commission declines to adopt TPPA's recommendation to require a response from ERCOT within five business days from the receipt of the request for a modified cure period.

Proposed $\S25.55(d)(2)(D)$ – ERCOT inspection report; enforcement investigation of a generation entity

Proposed §25.55(d)(2)(D) states that a generation entity that does not remedy a violation during the cure period will be reported by ERCOT to commission staff and will be subject to enforcement investigation. This subparagraph also specifies that a violation of the rule is a Class A violation with a maximum penalty of \$1,000,000 per violation, per day.

TEC and Vistra recommended modifying proposed §25.55(d)(2)(D) to state that a violation "may be determined to be" a Class A violation as it is possible that a violation of §25.55 may not be a violation of PURA §35.0021, while violations of PURA §35.0021 are violations of §25.8. Vistra explained that PURA §35.0021 is concerned around actual weather preparedness standards and therefore a technical or procedural violation, such as a late submission, may not be appropriate for a Class A violation.

TEC argued that an entity should be provided an opportunity to provide evidence and rebut the allegation. Accordingly, TEC provided redline edits to proposed §25.55(d)(2)(D) indicating that such a violation "may" be a Class A violation.

Commission Response

The commission disagrees with TEC's and Vistra's recommendation that violations of this rule "may" be Class A violations. SB 3 requires any violation associated with weather preparedness to carry a potential administrative penalty *ceiling* of \$1,000,000 per day, per violation. Due to the size of the potential penalty and severity associated with the violation, weather preparedness violations are appropriately classified as Class A violations, which are the highest tier of violations under commission rules. Accordingly, all weather preparedness violations are Class A violations under §25.8, relating to Classification System for Violations of Statutes, Rules, and Orders Applicable to Electric Service Providers, and beyond the scope of this rulemaking.

However, ERCOT reporting a deficiency is not by default a determination that an entity has violated the rule. Under the adopted rule, an ERCOT referral is a trigger for an enforcement investigation by commission staff. During the investigation and subsequent litigation or settlement process, an entity has every right to provide evidence and information that would mitigate either the finding of a violation or the amount of any recommended penalty. Ultimately, it will be the commission, not ERCOT or the commission staff, that determines whether a violation has occurred.

TPPA argued that the rule is unclear as to when an entity is in violation of the rules under proposed §25.55(d)(2)(D) and, therefore, potentially liable for a \$1 million penalty. TPPA stated that the proposed rule covers a sequence of behaviors but is not clear at what point in the sequence an entity is in violation. TPPA requested clarification on this point.

Commission Response

The commission disagrees with TPPA that proposed §25.55(d)(2)(D) is ambiguous. Under PURA §35.0021(g) the commission "shall impose an administrative penalty on an entity, including a municipally owned utility or an electric cooperative, that violates [this rule] and does not remedy that violation within a reasonable period of time." Accordingly, §25.55(g)(2)(D) serves to alert generation entities that if ERCOT notifies commission staff that a generation entity has not remedied a violation, commission staff will initiate an enforcement investigation. However, to answer TPPA's question directly about when a violation occurs, a violation occurs when any entity subject to this rule fails to comply with any provision of this rule – just like with any other rule. The issue of when the commission has discretionary authority to issue penalties for violations of this rule and when it is required to issue penalties is discussed at length in the final order in Project Number 52312 and is directly addressed by the §22.246(g)(5)(C).

Final determinations as to whether a violation has occurred, whether that violation was remedied in a reasonable amount of time, and whether a penalty is appropriate, are made by the commission in accordance with all due process requirements owed to the entity under investigation.

Proposed §25.55(e) – Weather-related failures by a generation entity to provide service

Proposed §25.55(e) requires a generation entity with a resource that experiences repeated or major weather-related forced interruptions of service to contract with a qualified professional engineer to assess its weather emergency preparation measures, plans, procedures, and operations.

Constellation requested revising proposed §25.55(e) so that it does not apply to an outage of a wind resource due to freezing of turbines because their freezing does not require any special level of engineering expertise and there are no practical engineering solutions that would prevent their freezing.

Commission response

The commission maintains that all generation resources and transmission facilities must utilize a qualified professional engineer to address major or repeat weather-related forced interruptions of service. The assessment by the qualified professional engineer is intended to be a uniform requirement for the assessed entity, ERCOT, and the commission to understand the capabilities of the resource or facility to enhance its ability to operate through most winter or summer weather emergency conditions. The commission therefore declines to adopt Constellation's recommendation to exempt wind resources from a potential qualified professional engineer assessment under §25.55(e).

TCPA and Vistra recommended that proposed §25.55(e) include a requirement for ERCOT "to provide notice to a resource owner after each weather-related incident that is counted toward the three in which an audit is required" and that the provision incorporate an appeal process when there is disagreement between the resource and the ERCOT inspection team. TCPA also recommended that ERCOT be required to send a notice to a resource owner when an audit has been triggered, and specifying "which incidences were triggering events, and outlining the process by which a resource owner may appeal such a finding if it disagrees with the triggering events."

Commission Response

The commission disagrees with TCPA and Vistra that §25.55(e) should include an appeal process for the assessment by a qualified professional engineer. An appeal process would unnecessarily delay the assessment when a reasonable basis exists for performing the assessment. The commission has refined the definitions of repeated and major weather-related forced interruptions of service to specify additional relevant criteria for those terms. The commission agrees that §25.55(e) should include a notice provision and has revised §25.55(h) to require ERCOT to notify a generation resource and commission staff of a repeated or major weather-related forced interruption of service.

Constellation, TCPA, TSPA, and Vistra recommended deleting the language excluding an engineer that has performed an assessment of an entity from performing future assessments because repeat assessments are not an indication of bias and because of the potentially limited availability of skilled engineers that are eligible to perform the assessment. Vistra elaborated,

stating the limitation as proposed is "unnecessarily restrictive given the limited pool of qualified professional engineers with the relevant expertise and also exceeds the statutory requirement" that only requires a professional engineer not be an employee of the generation entity. Vistra provided draft language consistent with its recommendations.

TPPA commented that proposed §25.55(e), which prohibits a qualified professional engineer that has participated in previous assessments, is overbroad. Accordingly, TPPA recommended revising proposed §25.55(e) to specifically apply the prohibition on future assessments to the identified engineer. TPPA also noted that proposed §25.55(e) does not include a timeframe for the report to be submitted to the commission and ERCOT and proposed adding a nine-month deadline beginning from the repeated or major weather-related forced interruption that prompted the independent assessment.

TSPA commented that an owner or operator of a generation facility "has every incentive to comply with weatherization requirements, given the very high potential administrative penalties and the cost of being short in the ERCOT market when conditions are tight" and that an engineer who understands modern solar facilities may sometimes be unavailable. TSPA commented that a third-party engineer unfamiliar with a solar resource may make recommendations the generator strenuously disagrees with. TSPA stressed that an engineer employed by the generation entity is generally best suited to assess the resource due to experience with the relevant technology and facility. TSPA provided draft language consistent with its recommendation as well as alternative language if the commission chooses to retain the third-party requirement.

Broad Reach noted that there are only a limited number of professional engineers that possess energy storage knowledge and experience, particularly relative to the new battery storage technologies Broad Reach's fleet utilizes. Accordingly, Broad Reach stated that the requirement

to use a professional engineer that has not participated in previous assessments for the resource in the last five years would represent a significant burden for Broad Reach. Broad Reach further noted that the exception provided in the rule for this requirement does not provide enough guidance on what constitutes a "qualified engineer" which can cause confusion. As such, Broad Reach recommended striking the requirement and exception language from the rule.

Commission Response

The commission disagrees with Constellation, TCPA, TSPA, Vistra, and Broad Reach and declines to remove the prohibition on a qualified professional engineer from performing a repeat assessment within a five-year period under §25.55(e). A resource or transmission facility must be independently reviewed by fresh eyes after repeat failures of the resource to ensure any chronic issues are accurately identified. An entity may provide documentation for an exception to the prohibition when there is a dearth of independent qualified professionals. Further, the prohibition does not disqualify entire engineering firms. To address commenter's concerns on timing, the commission revises §25.55(e) to require a generation entity to submit the qualified professional engineer's assessment to the commission and ERCOT within 15 calendar days of receiving the assessment to clearly delineate the timeframe for submission.

Proposed §25.55(f), (f)(1), and (f)(2) – Weather emergency preparedness reliability standards for a TSP

Proposed §25.55(f) contains the weather emergency reliability standards TSPs must maintain to comply with §25.55. Proposed §25.55(f)(1) contains winter-specific weather preparedness measures that a TSP must comply with by December 1 of each year. Proposed §25.55(f)(2) contains summer-specific weatherization preparedness measures that a TSP must comply with by June 1 of each year.

AEP recommended that proposed §25.55(f)(1) be retitled to "weather emergency preparation measures for a TSP" to align with the requirement that TSP's implement winter and summer season "preparation measures."

Commission Response

The commission declines to retitle §25.55(f)(1) as requested by AEP, because it is unnecessary.

TNMP noted that proposed §25.55(f)(2) as currently written would require a TSP to "complete" preparations listed for summer operations by June 1 each year, but some of the preparations would have to be ongoing. TNMP recommended changing this language to require these operations be "initiated" by that date.

AEP and CenterPoint noted that proposed §25.55(f)(1) and (f)(2) require winter and summer season weather preparedness measures to be complete prior to the start of the season but some

measures are executed on an ongoing basis. AEP and CenterPoint recommended proposed §25.55(f)(1) and (f)(2) be revised to replace the word "complete" with the word "implement" as the new rule requires winter and summer season weather preparedness measures on an ongoing basis.

Sharyland requested that the commission clarify the intent of the requirement to maintain weatherization preparedness measures throughout the summer and winter seasons, under \$25.55(f)(1) and (f)(2) as the rule does not specify how often a TSP must perform these tasks.

Commission Response

The commission declines to modify the word "complete," as requested by AEP, CenterPoint, and TNMP. Instead, the commission modifies the rule to clarify that any ongoing requirements must be completed at the appropriate time.

In response to Sharyland's comment, the requirement to "maintain" the enumerated weather preparations measures means to take additional actions, as appropriate, to ensure that the level of weather preparedness does not decline over the course of the winter or summer season.

TNMP recommended replacing "facilities" and "facility" with "cold weather critical components" in §25.55(f)(2) or "components" to more accurately reflect the equipment to which temperature parameters will apply.

Commission Response

The commission declines to narrow the language of §25.55(f)(2) to only require entities to implement measures to ensure the sustained operation of cold weather components. A TSP needs to prepare for its entire facility to sustain operations and identifying components that are vulnerable during the relevant season is a part of that preparation. However, TSPs should adopt a holistic approach to seasonal preparations.

Proposed §25.55(f)(1)(A) and (f)(2)(A) – Weather emergency preparation measures reasonably expected to ensure sustained operations of cold and hot weather critical components (TSP)

Proposed §25.55(f)(1)(A) and (f)(2)(A) respectively require a TSP to implement weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of all cold and hot weather critical components during winter and summer weather conditions. The provisions indicate that, where appropriate, such measures may be implemented using either personnel or automated systems and provides a non-exhaustive list of measures, as appropriate for the facility.

TPPA noted that proposed subparagraph §25.55(f)(1)(A) would require the implementation of measures that are "reasonably expected" to ensure sustained operations. TPPA requested clarification as to whether the commission has revised its compliance standard from an intention or design standard to a reasonability standard, or whether the term "reasonably expected" should be read as synonymous with an intention or design standard.

Commission Response:

In response to TPPA's comments regarding §25.55(f)(1)(A), the commission's intent is to provide generation resources and transmission facilities with flexibility while still maintaining a preparedness standard for grid reliability. This rule does not contain a design standard. The commission's intended standard is one of reasonableness in carrying out preparations for the winter and summer seasons.

CenterPoint commented that the mixed use of the terms "monthly basis" and "regular basis" under proposed §25.55(f)(2)(A) is ambiguous and that the term "regular basis" be used because inspection best practice for hot weather critical components is dependent on "various conditions and factors that cannot be adequately accounted for in a rule."

Commission Response

The commission disagrees with CenterPoint's recommendation to modify §25.55(f)(2)(A) by replacing "monthly basis" with "regular basis" and maintains that the use of those terms is not ambiguous. The term "regular basis" is intended to provide flexibility in implementation for certain requirements while the term "monthly basis" is more stringent to ensure an appropriate level of maintained preparedness throughout the applicable seasons. As the usage of those terms is deliberate, the commission declines to alter the provisions in which those terms appear.

SMEC noted that proposed §25.55(f)(1)(A) would require that a TSP "maintain these measures throughout the winter season." SMEC recommends that the commission provide clarification that the verification of proper oil quality may be maintained by a TSP prior to the winter season, and recommended language to provide that clarity. Sharyland restated its previous comments and requests that the commission clarify how often a TSP is to verify acceptable oil quality.

Commission Response

Winter preparations must be completed by December 1st and maintained, as appropriate for the implementation measure, throughout the season. If this can be accomplished prior to the start of the season, it meets the requirement.

Consistent with its recommendation for the proposed definition of "transmission facility" under §25.55(b)(9), EDF, TCA, and ASC recommended proposed §25.55(f)(2)(A) related to transformer readiness be expanded to account for the age, condition, and remaining lifespan of a transformer, not just the readiness of its cooling equipment. EDF, TCA, and ASC further recommended the commission revise proposed §25.55(f)(2)(A) to direct TSPs to report on their individual readiness and planning for replacement of failed transformers with spares in the event of high heat or load level, or terrorist attack.

Commission Response

In response to EDF, TCA and ASC, the rule gives TSP's the flexibility to make reasonable adjustments based on the specifics of their equipment and facilities. TSPs are expected to have spare transformers as part of good utility practice. Currently, it is not necessary to have a specific spare transformer requirement as part of this rule.

TPPA recommended the commission revise proposed §25.55(f)(2)(A) to require the implementation of measures that are "reasonably expected" to ensure sustained operations. TPPA also requested clarification as to whether the commission has revised its compliance standard from an intention or design standard to a reasonability standard, or whether the term "reasonably expected" should be read as synonymous with an intention or design standard.

Commission Response

In response to TPPA's comments regarding the rule's compliance standard, the commission's intent is to provide generation resources and transmission facilities flexibility while still maintaining a preparedness standard for grid reliability. This rule does not contain a design standard but requires a utility to implement weatherization preparedness measures "that could reasonably be expected to ensure the sustained operation," as "appropriate for the facility" in accordance with the temperature standards prescribed by the rule.

Consistent with changes made in §25.55(c), §25.55(f) is modified with new (f)(1)(E) and (f)(2)(E) which require TSPs beginning in 2023, to create a list of all hot and cold weather critical components prior to the beginning of their appropriate season.

Proposed $\S25.55(f)(1)(A)(i)$ – Cold weather critical components; systems and subsystems (TSP)

Proposed §25.55(f)(1)(A)(i) requires a TSP to confirm the operability of all systems and subsystems containing all cold weather critical components, as appropriate for the facility.

TEC commented that proposed §25.55(f)(1)(A)(i) relating to confirmation of operability of systems and subsystems containing all cold weather critical components is vague as it imposes a strict liability requirement. Specifically, TEC contended that a TSP would be deemed noncompliant if it "did not identify or recognize a part of its system as vulnerable to cold or hot temperatures and such part unexpectedly fails during a weather emergency." TEC accordingly recommended proposed §25.55(f)(1)(A)(i) be modified to not include a strict liability standard as the imposed requirements and threat of enforcement action would only incur unnecessary overinvestment and increased costs to ratepayers.

Commission Response

The commission disagrees that the requirement to confirm the operability of systems and subsystems containing cold weather equipment is vague or imposes a strict liability requirement. The requirement is phrased broadly, because the commission cannot by rule

identify each component for each type of facility for which the operability must be confirmed. The commission acknowledges TEC's concerns regarding the ambiguity of proposed §25.55(f)(1)(A)(i), the subjectivity inherent in the rule is necessary as the commission cannot specifically identify what components are critical on every TSP's system. The commission also does not agree that the rule imposes strict liability. Confirming the operability of a component requires diligently checking to make sure the component performs its function during preparations. It does not impose a performance standard. If a component does fail, that failure may prompt an investigation into what measures were taken to confirm its operability, but the failure itself is not a violation of this rule.

 $\S25.55(f)(2)(A)(i)$ – Emergency weather preparation measures; inspecting transformer cooling systems

TEC requested the commission clarify its references to "coolers" under proposed §25.55(f)(2)(A)(i) which requires TSPs to inspect and clean transformer coolers regularly during the summer. TNMP noted that "cooler" is not a recognized term for the transformer cooling systems it employs. TNMP and Oncor recommended changing the term to "cooling systems."

Commission Response

Regarding TEC's concern regarding coolers, §25.55(f)(2)(A)(i) states that the measures to be implemented are those that are "reasonably expected to ensure the sustained operation" of weather critical components. The TSP has the flexibility to determine the cooling equipment necessary to maintain sustained operation of its transformers and have them cleaned on a

regular basis "as appropriate for the facility." The commission agrees with TNMP and Oncor regarding the use of terms consistent with industry usage and will reference "cooling systems" instead of "cooler" in the adopted rule language.

AEP recommended proposed §25.55(f)(2)(A)(i) be revised to permit transformer cooler inspections be performed on a "regular" basis and not a "monthly basis." AEP recommended removing the May 1 through September 30 timeframe in proposed §25.55(f)(2)(A)(i) and (f)(2)(A)(ii). AEP provided draft language consistent with its recommendations.

Commission Response

The commission disagrees with AEP's recommendation to modify proposed §25.55(f)(2)(A)(i) by replacing "monthly basis" with "regular basis." The commission modifies the language to replace the references to months with "during the summer season" to maintain consistency in the language of the rule.

Proposed $\S25.55(f)(1)(A)(ii)$ – Cold weather critical components; sulfur hexafluoride (TSP)

Proposed §25.55(f)(1)(A)(ii) requires a TSP to confirm certain measures relating to sulfur hexafluoride gas in breakers, metering, and other electrical equipment and to assure functionality, as appropriate for the facility.

TEC noted that the annual inspection and maintenance requirement for breaker heaters in proposed §25.55(f)(1)(A)(ii) may contradict manufacturer recommended installation and maintenance procedures and therefore result in a loss of warranty coverage and reduced service life of certain components. TEC recommended the requirement for annual maintenance to be replaced with "an annual verification and attestation confirming that all heater breakers and supporting circuitry have been tested in accordance with the manufacturer's recommended maintenance schedule." TEC provided redline edits for proposed §25.55(f)(1)(A)(ii) regarding the same.

TEC also recommended proposed §25.55(f)(1)(A)(iii)(I) be deleted from the rule as it requires TSPs to inspect heaters in control cabinets "without regard as to whether there are any cold weather critical components in the control cabinets" and therefore provides no meaningful return for ratepayers.

TEC requested the commission clarify whether the phrase "verification of proper oil quality" in proposed §25.55(f)(1)(A)(iii)(V) is equivalent or additional to a TSP's regular review of oil test data, and if the requirement is equivalent to a TSP's regular review, whether the rule requires the TSP to conduct its regular review by December 1 of each year.

Commission Response

In response to TEC's concern regarding the maintenance requirement of breaker heaters, $\S25.55(f)(1)(A)$ states that these measures must be implemented "as appropriate for the facility." Changing the requirement in $\S25.55(f)(1)(A)(ii)$ from a testing standard to verification of functionality gives the intended flexibility to the TSP. The requirement under proposed $\S25.55(f)(1)(A)(iii)(I)$ should likewise be interpreted as to what is appropriate for

the facility to confirm the operability of power transformers and auto transformers during winter weather conditions. Regarding TEC's concern regarding the verification of oil quality under proposed §25.55(f)(1)(A)(iii)(V), the rule's reference to "verification" is not necessarily equivalent to this review of test data. The proper method of verification will vary according to what is appropriate for the facility.

TNMP noted that "cooler" is not a recognized term for the transformer cooling systems it employs. TNMP and Oncor recommended changing the term to "cooling systems." Similar to its recommendation for proposed §25.55(f)(2)(A)(i), Oncor further recommended proposed §25.55(f)(2)(A)(ii) to be revised to specify "cleaning or clearing transformer cooler systems" to fully encompass the activities that may be necessary to perform on transformer cooling systems.

Commission Response

The commission agrees with TNMP and Oncor and will reference "cooling systems" instead of "cooler" in the adopted rule language. The commission declines to modify the rule to refer to the clearing of transformer cooler systems, as requested by Oncor. If additional measures, such as clearing of transformer cooler systems, is appropriate for a facility, this rule does not prevent these additional preparation measures from being implemented.

SMEC noted that its current process for cleaning transformer coolers is in the spring, in anticipation of the summer season, and that SMEC does not usually clean transformer coolers

when the equipment is energized. Thus, SMEC requested that §25.55(f)(2)(A)(ii) be amended to permit service providers to clean their equipment prior to the summer season and suggested language that reflects that change.

Commission Response

In response to SMEC's request that the rule permit TSPs clean their equipment prior to the appropriate season, the rule makes no requirement or prohibition on specific maintenance practices outside of the seasons in question.

TNMP noted that the requirement to clean transformer coolers on a regular basis during the summer is not consistent with most TSP transformer cooling systems. TNMP recommended changing this language to require a TSP "maintain" the transformer cooling system so that it operates as intended during the summer season.

Commission Response

Responding to TNMP's request to modify rule language to "maintain" transformer cooling systems, the requirements of §25.55(f)(2)(A)(ii) are to be carried out "as appropriate for the facility" and thus the TSP may interpret the requirement in a way to "ensure the sustained operation" of transmission facilities.

Sharyland noted that cleaning transformer coolers would require an outage and Sharyland only cleans that equipment when inspections show it is necessary. Sharyland recommended modifying proposed §25.55(f)(2)(A)(ii), to replace "on a regular basis during the summer season" with "during the summer season consistent with good utility practice."

Commission Response

In response to Sharyland's concern that cleaning transformers would require outages, §25.55(f)(2)(A) is intended to be implemented to ensure sustained operation, not cause more interruptions of service. TSPs are to implement the rule "as appropriate for the facility" to ensure sustained operation during the summer weather season.

TPPA noted that proposed §25.55(f)(2)(A)(i) and (f)(2)(A)(ii), which require a TSP to clean transformer coolers on a regular basis during the summer season by June 1, are duplicative as the proposed rule "already requires both generation entities and TSPs to maintain the specified measures throughout the summer and winter seasons, so requiring annual testing and cleaning would not preclude maintenance during the winter or summer seasons."

Commission Response

The commission declines to revise $\S25.55(f)(2)(A)(i)$ and (f)(2)(A)(ii) as recommended by TPPA as there may be testing and cleaning requirements that do not entirely overlap with

ongoing maintenance requirements. Therefore, the rule should address all three requirements.

Proposed $\S25.55(f)(1)(A)(iii)$ – Cold weather critical components; transformers (TSP)

Proposed §25.55(f)(1)(A)(iii) requires a TSP to confirm the operability of power transformers and auto transformers in winter weather emergencies by implementing certain measures, as appropriate for the facility.

Oncor recommended that the verification requirement for oil quality under §25.55(f)(1)(A)(iii)(e) be removed as "moisture and dissolved gas levels of oil for cold weather critical components do not appreciably vary" based on cold (or hot) weather conditions. Oncor alternatively recommended the requirement be changed to an annual testing requirement specific to seasonal weather conditions to "better align with industry standards and operational experience."

Commission Response

In response to Oncor's comment regarding the verification of proper oil quality to ensure preparedness for winter weather conditions under proposed $\S25.55(f)(1)(A)(iii)(v)$, if the annual testing recommended by Oncor is sufficient to ensure operability of power transformers and auto transformers in winter weather emergencies then such testing will satisfy the preparation requirement. The commission notes that proposed $\S25.55(f)(1)(A)(iii)(v)$ is adopted as $\S25.55(f)(1)(A)(iii)(e)$.

Proposed §25.55(f)(2)(A)(iii) – Hot weather critical components; cooling fans and control pumps (TSP)

Proposed §25.55(f)(2)(A)(iii) requires a TSP to verify the proper functioning of cooling fans and pump controls, as appropriate for the facility.

Sharyland recommended modifying proposed §25.55(f)(2)(A)(iii) to read "verifying proper functioning of cooling fans and pump controls."

Commission Response

The commission agrees with Sharyland's revision to §25.55(f)(2)(A)(iii) as it more clearly captures the intent of the requirement and modifies the rule accordingly.

Proposed $\S25.55(f)(2)(A)(iv)$ – Hot weather critical components; availability of materials for sustained operations (TSP)

Proposed §25.55(f)(2)(A)(iv) requires a TSP to arrange and provide for the availability of sufficient chemicals, coolants, and other materials necessary for sustained operations during a summer weather emergency, as appropriate for the facility.

TPPA requested the commission clarify whether proposed §25.55(f)(2)(A)(iv) regarding the availability of sufficient materials necessary for sustained operation, require either an on-site stockpile or whether "supplier availability with a delivery guarantee or mutual aid agreements would be sufficient." TPPA noted that on-site stockpiles may be challenging for utilities to manage and would require monthly testing of oil freeze protection equipment from November 1 through March 31, yet require preparation measures be completed by December 1.

Commission Response

For proposed §25.55(f)(2)(A)(iv), the commission clarifies that there is not a requirement for on-site stockpiling. The generation entity will use its best judgement to determine what qualifies as "available".

Proposed §25.55(f)(2)(A)(v) – Hot weather critical components; protection of materials for sustained operations (TSP)

Proposed §25.55(f)(2)(A)(v) requires a TSP to confirm that sufficient chemicals, coolants, and other materials necessary for sustained operations during a summer weather emergency are protected from heat and drought, as appropriate for the facility.

Oncor recommended proposed §25.55(f)(2)(A)(v) be clarified to explicitly state the intent of the provision, which is to confirm a TSP retains sufficient materials that protect facilities "from adverse effects from heat and drought."

Commission Response

The commission declines to adopt Oncor's recommended change to $\S25.55(f)(2)(A)(v)$ as the revision is not necessary due to adopted subsection (f)(2) specifying the preparations are for the summer season.

Proposed $\S25.55(f)(1)(B)$ and (f)(2)(B) — Weather emergency preparation measures reasonably expected to ensure sustained operations of transmission facilities (TSP)

Proposed §25.55(f)(1)(B) requires, beginning in 2023, a TSP to implement weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of the TSP's transmission facilities during the lesser of the minimum ambient temperature at which the facility has experienced sustained operations or the 95th percentile minimum average 72-hour temperature reported in ERCOT's historical weather study for the weather zone in which the facility is located. Proposed §25.55(f)(2)(B) requires, beginning in 2023, a TSP to implement weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of the TSP's transmission facilities during the greater of the maximum ambient temperature at which the facility has experienced sustained operations or the 95th percentile maximum average 72-hour temperature reported in ERCOT's historical weather study for the weather zone in which the facility is located.

TNMP recommended replacing "facilities" and "facility" with "cold weather critical components" or "components" in proposed §25.55(f)(1)(B) to more accurately reflect the equipment to which temperature parameters will apply.

Commission Response

The commission declines to implement the changes recommended by TNMP for §25.55(f)(1)(B), as (f)(1)(A) already makes clear what actions are required and for what components to ensure the sustained operation of transmission facilities. Therefore, the rule is sufficiently clear in identifying what equipment is being referred to.

OPUC recommended adding a reporting provision to §25.55(f)(1)(B) and (f)(2)(B) to allow the commission to see the additional measures taken and which practices are common among TSPs.

Commission Response

The commission agrees with OPUC that the commission should have access to the preparation measures implemented by TSPs but declines to add a reporting provision. Information regarding best practices may be included in the compliance reports ERCOT files with the commission for summer and winter weather preparedness under adopted paragraphs $\S25.55(f)(4)$ and (f)(5).

SMEC recommended proposed §25.55(f)(1)(B) and (f)(2)(B) be revised to clarify the relevant timeframe for and what constitutes "sustained operations" under those provisions because ambient temperatures can vary and what is considered a period of sustained operations will impact the calculation of the appropriate ambient temperature.

Commission Response

As previously noted, the commission modifies the rule to remove the local ambient temperature standard for the winter months.

The commission disagrees with SMEC's recommendation to revise §25.55(f)(1)(B) and (f)(2)(B) to define sustained operations. "Sustained operations" is not a defined term in this rule because it is used throughout to imply the "reasonably expected" capability of a resource or facility to operate during the maximum ambient temperature standard or the ERCOT historical weather study standard. Defining the term could result in an interpretation requiring performance from resources or facilities rather than requiring preparation activities from entities. With regard to the specific value that should be reported in an entity's declaration, an entity should provide the maximum temperature at which the resource is known to have operated for more than a momentary amount of time with the understanding that the intent of this provision is to provide ERCOT and the commission with additional data by which it plans for reliable operations of the bulk power system.

Oncor commented that proposed $\S25.55(f)(1)(B)$ and (f)(2)(B) are ambiguous in "how facility ambient temperature measurements may be collected" as the provisions could be interpreted as

permitting measurements to be taken "either at the facility itself or at an appropriate measurement location within the weather zone in which the facility is located." Oncor also cautioned that historical weather data may be increasingly unavailable as facilities with on-site temperature measurement equipment diminish in number the further back in time the data is required for. Oncor provided draft language consistent with its recommendations. Oncor further recommended that proposed §25.55(f)(1)(B) and (f)(2)(B), proposed §25.55(f)(3)(A)(iii) and (f)(3)(B)(iii), and proposed §25.55(i) "establish a reasonable time period in which the historical analysis of minimum or maximum ambient temperatures must be analyzed" to prevent ambiguity in the compiling of data sets for past ambient temperatures based on a TSP's own measurements and ERCOT's historical weather study.

AEP and CenterPoint recommended the commission adopt a uniform standard for TSPs to rely on and recommended using only the "minimum and maximum ambient temperature reported by ERCOT, respectively, for the prior five years in the ERCOT weather zone in which the transmission facility is located." AEP recommended proposed §25.55(f)(1)(B) and (f)(2)(B) be revised to eliminate the "minimum ambient temperature at which the facility has experienced sustained operations" standard as AEP does not have historical temperature data for each of its facilities, and instead would rely on the "nearest National Weather Service" station data.

CenterPoint recommended the sections applying to TSPs regarding historical temperatures should be harmonized to avoid ambiguity with regard to the location the ambient temperature is to be measured. CenterPoint proposed that, if a TSP "has access to consistent weather station data going back beyond five years, the TSP should have the option to include such data in its report and analysis." CenterPoint provided redline edits for proposed §25.55(f)(1)(B) and (f)(2)(B) in accordance with its recommendations.

Commission Response

In response to Oncor's, AEP's, and CenterPoint's concern regarding the ambient temperature standard, the commission notes that the intention of the rule is to account for how the maximum temperature during the summer season at specific locations that may vary inside the larger geographic areas represented by the weather zones used in the historical ERCOT weather study. For the same reasons, the commission maintains that the ambient temperature is not ambiguous. It is also not necessarily true that the ambient temperature standard will always be used during the summer season, unless it genuinely is the case that the ambient temperature is higher than what is recorded by the historical ERCOT weather study. If local ambient temperature data is unavailable, an entity may use temperature data from the nearest National Weather Service station.

Sharyland noted that the current ERCOT historical weather study does not include 95th percentile maximum average 72-hour temperature referred in §25.55(f)(1)(B) and (f)(2)(B) and restated its general comments.

Commission Response

In response to Sharyland's comments, the commission has updated the historical ERCOT weather study available on the Interchange since the draft rule was filed. The commission

refers commenters to the July 13, 2022, filing in Project Number 52691 which includes the missing information noted by commenters.

TNMP recommended replacing "facilities" and "facility" with "hot weather critical components" or "components" in proposed §25.55(f)(2)(B) to more accurately reflect the equipment to which temperature parameters will apply.

Commission Response

The commission declines to implement the changes recommended by TNMP for §25.55(f)(2)(B). The language of §25.55(f)(2)(A) already makes clear what actions are required and for what components to ensure the sustained operation of transmission facilities. Therefore, the rule is sufficiently clear in identifying what equipment is being referred to.

Proposed $\S25.55(f)(3)$, (f)(4), and (f)(5) – Declaration of preparedness

Proposed §25.55(f)(3) contains requirements for a TSP in drafting its declaration of preparedness. Proposed §25.55(f)(4) and (f)(5) require ERCOT to file with the commission compliance reports addressing whether a TSP has submitted its required declarations regarding winter and summer weather preparedness on or before December 20 and June 20, respectively, of each year.

Oncor recommended the term "control" be omitted from proposed §25.55(f)(3)(A)(i) and (f)(3)(B)(i), and proposed (f)(4) and (f)(5), because the term is undefined and not a common industry term. Oncor suggested that reporting and weatherization requirements should be based on facility ownership rather than "control" to better align with the ERCOT protocols and NERC reliability standards. Oncor provided draft language consistent with its recommendations. AEP similarly requested the commission replace the phrase "under the TSP's control" with "owned by the TSP" in proposed §25.55(f)(4) and (f)(5), which require ERCOT to file with the commission its compliance reports on TSP weather preparedness.

Commission Response

The commission agrees with Oncor and AEP that the term "control" as used in §25.55(f)(3), (f)(4), and (f)(5) is ambiguous and replaces it with the phrase "maintained by the TSP." The commission also revises proposed §25.55(f)(4) to replace the generic term "facility" with the more specific term "switchyards" in addition to transmission substations maintained by the TSP.

TEC requested that TSPs be required only to implement measures conforming to ERCOT's weather study data, as opposed to identify weather data for each facility. Accordingly, TEC opposed the requirement that a TSP identify each facility under proposed §25.55(f)(3)(A)(i), (f)(3)(A)(iii), (f)(3)(B)(i), and (f)(3)(B)(iii). TEC proposed as an alternative that a TSP be permitted to summarize the activities taken for the facilities it controls that are appropriate for the weather zone the facility is located within. TEC specifically requested that TSPs not be required

to list the temperatures recorded at nearby weather stations in their declarations and, consequently, for proposed \$25.55(f)(3)(A)(iii) and (f)(3)(B)(iii) be deleted as it is unclear and burdensome.

Consistent with its comments for proposed §25.55(f)(1)(B) and (f)(2)(B), AEP recommended proposed §25.55(f)(3)(A)(iii) and (f)(3)(B)(iii) be revised to eliminate the historical ambient temperature standard and rely solely on the historical weather data provided by ERCOT. AEP provided draft language consistent with its recommendations.

Commission Response

As previously noted, the commission modifies the rule to remove the local ambient temperature standard for the winter months.

The commission declines to implement TEC's proposed alternative to the ambient temperature standard. Specific local data is superior to data from the weather zone in general for the summer season. National Weather Service stations record historical weather conditions. Therefore, the requirement to list such data in a weather preparedness declaration is not overly burdensome. This requirement ensures an entity is prepared for local temperature conditions that may vary even within the same weather zone. The commission declines to implement AEP's recommendation to eliminate the historical ambient temperature standard for the summer season and rely only on the historical weather data from ERCOT's study for the same reasons.

TPPA recommended proposed §25.55(f)(3)(A)(iv) be deleted as the provisions require a utility to submit any additional information required by the ERCOT protocols. TPPA explained that such a requirement could make compliance more difficult as it would split the obligations for the declarations of weather preparedness between two regulatory bodies. TPPA recommended the commission subsequently address any insufficiencies the declarations may have for ERCOT under the proposed rule via a notice and comment rulemaking.

Commission Response

The commission declines to delete proposed §25.55(f)(3)(A)(iv). Market entities have historically been obligated to comply with both commission rules and the ERCOT protocols. The provision requiring additional information designated in the ERCOT protocols ensures that all weather preparation requirements are summarized in the declaration of preparedness. ERCOT may adopt additional filing or administrative requirements to facilitate the submission and review of hundreds of attestations of compliance with the adopted rule. However, the commission has modified these provisions to specify the date of the ERCOT protocols that apply to each declaration, to facilitate compliance with this requirement.

TEC requested that weather preparedness standards be established on a forward-looking basis, because historical ambient weather data may not be available for each facility. Accordingly, TEC recommended proposed §25.55(c)(3)(A)(iii), (c)(3)(B)(iii), (f)(3)(A)(iii), and (f)(3)(B)(iii) be revised by appending "with measurements beginning in 2023" to the end of each provision.

Commission Response

The commission disagrees that the rule should be revised to make the weather preparedness requirements forward-looking in the manner TEC recommends. If ambient temperature data is unavailable, data can be obtained at the nearest weather station.

AEP recommended the numbering for proposed $\S25.55(f)(3)(B)(iii)$ and (f)(3)(B)(iv) be revised to be (f)(3)(B)(iv), and (f)(3)(B)(v), respectively, and also change the term "generation entity" to "TSP" in the corrected version of proposed $\S25.55(f)(3)(B)(v)$.

Commission Response

The commission agrees with TEC that proposed §25.55(f)(3)(B)(v) should be revised to properly refer to a "TSP" and not a "generation entity".

Reiterating its comments for §25.55(c)(6), TEC and TPPA requested the good cause exception for §25.55(f)(4) be retained.

Commission Response

The commission declines to retain the explicit good cause exception process under the existing version of the rule as recommended by TEC and TPPA because justification for it

no longer exists. Specifically, the short notice of the previous version of the rule necessitated a good cause exception procedure. Almost a year has passed since adoption of phase I of §25.55 and a generation entity or TSP will have until June 2023 to prepare for summer ambient temperature standards and December 2023 to prepare for winter ambient temperature standards. Additionally, affected entities will have one year from the date of adoption of future ERCOT historical weather studies to implement any new weather preparation measures that may be needed to meet new temperature standards. Moreover, weather preparedness is based on measures that could reasonably be expected to ensure sustained operation, "as appropriate for the entity." Therefore, an explicit good cause exception process is not required in the adopted rule.

Proposed §25.55(g) and (g)(1) – ERCOT inspection of transmission facilities (TSP)

Proposed §25.55(g) and (g)(1) contain the requirements applicable to ERCOT to inspect transmission facilities and require ERCOT to issue a report to the commission regarding its inspections.

TPPA stated that it interprets §25.55(g) to "require ERCOT to select at least 10% of TSP facilities that will undergo regular inspections on a three-year cycle, with up to 90% not receiving regular inspections" and that the section should be revised to account for a longer inspection cycle that allows for more facilities to be reviewed. TPPA explained that since TSPs would incur a charge of \$3,000 for each facility inspected, the proposed rule and fee structure would burden a small amount of TSPs with "significant recurring costs that would ultimately be collected from

customers." Consistent with its recommendations for proposed §25.55(d)(1) and (g)(1), TPPA recommended the commission require ERCOT to inspect 30% of facilities on a seven-year cycle.

Commission Response

The commission disagrees with TPPA's recommendation to alter the three-year inspection cycle of 10% of substations or switchyards providing transmission service to a seven-year cycle for 30% of such facilities. Under the adopted rule, selection for inspection is based on risk to the reliability of the transmission system, emphasizing substations or switchyards that are most critical to the secure operation of the ERCOT transmission system. The inspection cycle frequency ensures more frequent rotation of facilities to be inspected based on their inherent risk to reliable operations.

OPUC requested that proposed §25.55(d)(1) and (g)(1) be amended to require ERCOT to consider the length of time since the generation resource or transmission facility was last inspected when prioritizing which resources and facilities to inspect.

Commission Response

The commission agrees with OPUC's recommendation to revise §25.55(d)(1) and (g)(1) to require ERCOT to consider the most recent time a resource or transmission facility was inspected when prioritizing inspections and amends each provision accordingly. PURA

§35.0021 and §38.075 require ERCOT to prioritize inspection based on risk level; a greater period of time between inspections may represent a relevant risk factor for reliability.

CenterPoint recommended the phrase "has experienced a forced outage or other failure related to weather emergency conditions" in proposed §25.55(g)(1) be replaced with "has experienced a major weather-related forced interruption of service or repeated weather-related forced interruption of service" because the term "major weather-related forced interruption of service" is a defined term under proposed §25.55(b)(5) but "forced outage" and "failure related to weather emergency conditions" are not. Oncor similarly recommended proposed §25.55(g)(1) be revised to "tie in the factors on which ERCOT bases its inspection priorities to the defined terms within the rule." Specifically, Oncor suggested replacing "forced outage" with "major weather-related interruption of service" and also replacing "other failure related to weather" with "a repeated weather-related forced interruption of service."

Commission Response

The commission declines to revise §25.55(g)(1), and by extension §25.55(d)(1), by replacing "forced outage" and "other failure related to weather" with the defined terms "major weather-related interruptions of service" and "repeat weather-related forced interruption of service" as CenterPoint and Oncor recommend. Major and repeated weather-related forced interruption of service are key terms used in determining whether an independent assessment by a qualified professional engineer is warranted under the rule. In contrast, the purpose of the ERCOT inspection is preventative. Limiting inspection to only major or

repeated weather-related forced interruptions of service would not benefit reliability as much as a more inclusive list of parameters and would not fulfill the purpose of the inspections to mitigate weather-related failures to provide service.

TPPA recommended the commission add language to proposed §25.55(g)(1) requiring ERCOT to publicly post the checklist used for inspection of generators and TSPs, respectively.

Commission Response

The commission declines to require ERCOT to publicly post its inspection checklist as recommended by TPPA. Doing so may inadvertently reveal critical energy infrastructure information. Moreover, the checklist may reasonably vary depending on the facility being inspected.

OPUC reiterated its previous comment that the requirement of a minimum 48-hour notice is appropriate under most circumstances but requested adding an additional subparagraph to \$25.55(g)(1) to allow for inspections without notice when an entity has been the subject of two or more repeated forced outages or other weather-related failures within the last calendar year.

Commission Response

The commission declines to implement OPUC's recommendation for a no-notice inspection.

TSPs and generation entities need time to prepare safety procedures, personnel, equipment, and records for the inspection team.

Proposed $\S25.55(g)(1)(A)$ – Notice of ERCOT inspection (TSP)

Proposed §25.55(g)(1)(A) requires ERCOT to provide a TSP entity 48-hour notice of an inspection and requires the generation entity to grant access to its facility to ERCOT and commission staff, including contractors.

TPPA recommended the requirement for ERCOT to provide advance notice of inspections under proposed §25.55(g)(1)(A) be revised to "include the names of all ERCOT employees, commission staff, or designated contractors expected to conduct oversee, or observe the inspection" to better ensure security of transmission facilities and only those authorized individuals are performing inspections.

Commission Response

The commission agrees with TPPA that the advanced notice of inspections provided by ERCOT under §25.55(g)(1)(A) must identify ERCOT employees, commission staff, or designated contractors participating in the inspection for security purposes and modifies the provision accordingly.

Proposed $\S25.55(g)(1)(B) - ERCOT$ inspection criteria (TSP)

Proposed §25.55(g)(1)(B) specifies the extent of access a TSP is required to provide to ERCOT and commission staff and prescribes the measures the inspection team may undertake as part of the inspection.

AEP noted that under proposed §25.55(g)(1)(B), which requires a TSP to provide access to records associated with weather preparation measures during an ERCOT inspection, a TSP's records may not always be "readily accessible or in a format conducive to providing to an inspector during the onsite inspection." AEP accordingly recommended the provision be revised to permit, if necessary, a TSP to provide access to the identified records after the inspection is completed.

Commission Response

The commission declines to adopt AEP's recommendation for §25.55(g)(1)(B) to permit a TSP to provide records to the inspection team after the inspection has occurred. The advance notice of an inspection should afford the utility adequate time to gather and provide the required records.

TPPA requested the commission clarify proposed §25.55(g)(1)(B) and classify all photographs or video recordings taken during an ERCOT inspection of a facility as confidential.

Commission Response

The commission agrees with TPPA that documents, photographs, and video recordings produced during the inspection or otherwise related to the inspection should be treated as confidential. The commission revises §25.55(g)(1)(B) in accordance with these recommendations. The commission notes that the retention and disposal of confidential records is governed by the procedures of the Central Records division, as approved by the Texas State Library and Archives Commission.

Proposed $\S25.55(g)(2)$ and (g)(2)(A) - ERCOT inspection report (TSP)

Proposed §25.55(g)(2) and (g)(2)(A) delineate requirements applicable to ERCOT when providing a TSP with its inspection report and requirements related to curing of identified deficiencies in the inspection report.

TPPA recommended that proposed §25.55(g)(2)(A) be revised to explicitly require the ERCOT inspection report be "written" to ensure consistency and accountability.

Commission Response

The commission agrees with TPPA that §25.55(g)(2)(A) should specify that the ERCOT inspection report be written and amends the provision accordingly.

TCPA recommended that proposed §25.55(g)(2)(A) be revised to require the inspection report be "detailed" and that the inspection report "must also provide meaningful information on which resource has been assessed."

Commission Response

The commission declines to revise §25.55(g)(2)(A) as recommended by TCPA to specifically require the ERCOT inspection report to be "detailed". The rule requires the report to provide sufficient information on the assessed resource or facility.

Proposed $\S25.55(g)(2)(B)$ – ERCOT inspection report; cure period (TSP)

Proposed §25.55(g)(2)(B) requires ERCOT to provide the TSP subject to inspection a reasonable period to cure the identified deficiencies if ERCOT finds that the TSP has not complied with one or more requirements of the rule.

TPPA recommended reference to a "final" cure period in proposed §25.55(g)(2)(B) be omitted from the provisions. TPPA instead recommended that proposed §25.55(g)(2)(B) allow for a "revised" cure period "if the TSP can adequately provide documentation supporting the request." TPPA also requested the provisions include language that states that an entity may appeal the "revised" cure period to the commission itself. TPPA further recommended proposed §25.55(g)(2)(B) explicitly prohibit commission staff that "would be involved in any enforcement action stemming from weather preparation inspections from participating in the setting of a

'revised' cure period" as it would inappropriately mix the commission's policymaking and enforcement functions.

Commission Response

The commission disagrees with TPPA and declines to implement a means of appealing a cure period to the commission or a prohibition on commission enforcement staff from weighing in on the cure period, because these changes are unnecessary.

The "final" cure period determination by ERCOT does not "bind" the commission in the manner TPPA states. For purposes of whether the commission "shall impose an administrative penalty" under PURA for failure to remedy a violation in a reasonable amount of time, the commission has the authority to determine whether the cure period provided by ERCOT was reasonable, as provided by §22.246(g). Accordingly, an additional means of appeal would unnecessarily complicate and lengthen the process for implementing weather preparedness measures. However, to prevent confusion, the commission does modify the rule to replace "final" with "revised" in both subsections (d) and (g).

Finally, because the commission ultimately determines whether the cure period was reasonable, it is unnecessary to prohibit commission enforcement staff from being involved in setting the deadlines for a cure period. This restriction would imply a conflict of interest where none exists and would make inefficient use of commission resources.

TSPA requested the commission specify what constitutes a "reasonable period" of time to cure deficiencies under proposed §25.55(g)(2)(B) due to the high penalties associated with a failure to comply with the weatherization standards provided by the proposed rule. TPPA similarly recommended proposed §25.55(g)(2)(B) include "a firm timeline for when the 'revised' cure period must be established" and specifically recommended "requiring a response within five business days from the receipt of the request for a modified cure period" from the TSP to expedite the curing of deficiencies.

Commission Response

The commission declines to revise §25.55(g)(2)(B) to specify what a "reasonable period" of time is to cure the deficiencies identified by the ERCOT inspection report as recommended by TSPA. A "reasonable period" to cure is a fact-specific determination that will vary among inspections. Each resource and transmission facility is different and may require a variety of measures that differ in the amount of time required to implement such measures. Accordingly, the nature of the inspection does not lend itself to defining the "reasonable period" to cure. Under the adopted rule such a determination will be left to the discretion of the inspection team and will afford the entity the opportunity to provide input on what timeframe is reasonable. For the same reasons, the commission declines to adopt TPPA's recommendation to require a response from ERCOT within five business days from the receipt of the request for a modified cure period.

Proposed $\S25.55(g)(2)(D) - ERCOT$ inspection report; violation (TSP)

Proposed §25.55(g)(2)(D) states that a TSP that does not remedy a violation in a reasonable period of time will be reported by ERCOT to commission staff and will be subject to enforcement investigation. This subparagraph also specifies that a violation of the rule is a Class A violation with a maximum penalty of \$1,000,000 per violation, per day.

TPPA argued that the rule is unclear as to when an entity is in violation of the rules under proposed §25.55(g)(2)(D) and, therefore, potentially liable for a \$1 million penalty. TPPA stated that the proposed rule covers a sequence of behaviors but is not clear at what point in the sequence an entity is in violation. TPPA requested clarification on this point.

Commission Response

The commission disagrees with TPPA that proposed §25.55(g)(2)(D) is ambiguous. Under PURA §38.075(d) the commission "shall impose an administrative penalty on an entity, including a municipally owned utility or an electric cooperative, that violates [this rule] and does not remedy that violation within a reasonable period of time." Accordingly, §25.55(g)(2)(D) serves to alert TSPs that if ERCOT notifies commission staff that a TSP has not remedied a violation within the cure period provided, commission staff will initiate an enforcement investigation. However, to directly answer TPPA's question about when a violation occurs, a violation occurs when any entity subject to this rule fails to comply with any provision of this rule – just like with any other rule. The issue of when the commission has discretionary authority to issue penalties for violations of this rule and when it is required

to issue penalties is discussed at length in the final order in Project Number 52312 and is directly addressed by the $\S22.246(g)(5)(C)$.

However, the commission also clarifies that the final determinations as to whether a violation has occurred, whether that violation was remedied in a reasonable amount of time, and whether a penalty is appropriate are made by the commission with full due process given to the entity under investigation.

Proposed §25.55(h) -- Weather-related failures by a TSP to provide service

Proposed §25.55(h) states that a TSP with a transmission facility that experiences repeated or major weather-related forced interruptions of service must contract with a qualified professional engineer to assess its weather emergency preparation measures, plans, procedures, and operations.

TNMP suggested clarifying proposed §25.55(h) to clearly state that the repeated interruptions must be to the same transmission facility.

Commission Response

Proposed §25.55(h) states that "A TSP with a transmission facility that experiences repeated or major weather-related forced interruptions of service must...." The use of the term "a transmission facility" and not "transmission facilities" is indicative of the same facility being subject to repeated or major weather-related forced interruptions of service. Accordingly, the commission declines to revise §25.55(h) as TNMP recommends.

AEP recommended the term "weather-related" be replaced with the term "weather emergency" in proposed §25.55(h) to remain consistent with the definition of "weather emergency" under proposed §25.55(b)(11).

Commission Response

The defined terms in §25.55(h) are used correctly in the rule as proposed. The definitions of major weather-related forced interruption of service and repeated weather-related forced interruption of service both incorporate the defined term weather emergency. The commission accordingly declines to adopt AEPs recommendation to replace the term "weather-related" with the term "weather emergency" in §25.55(h) as it would not serve to clarify the rule language.

CenterPoint recommended that the costs incurred to hire a professional engineer and costs related to the required assessment and action plan under proposed §25.55(h) be explicitly specified in the rule as recoverable in a base rate proceeding. Specifically, CenterPoint advised that such costs should not be included in a cost-of-service study, but rather be recorded as a regulatory asset for recovery in a utilities' next base rate proceeding.

Commission Response

CenterPoint's recommendations to make costs associated with compliance with the rule recoverable as a regulatory asset are beyond the scope of this rulemaking. Therefore, no revision is necessary.

TPPA reiterated its comments from proposed §25.55(e) and recommended proposed §25.55(h) be revised to specifically apply the prohibition on future assessments to the identified engineer. TPPA also noted that proposed §25.55(h) does not include a timeframe for the report to be submitted to the commission and ERCOT and proposed adding a nine-month deadline beginning from the repeated or major weather-related forced interruption that prompted the independent assessment.

Commission Response

The commission modifies the rule to require a TSP to submit the qualified professional engineer's assessment to the commission and ERCOT within 15 calendar days of receiving the assessment but declines to adopt TPPA's other recommendations. These decisions are consistent with the commission's treatment of TPPA's equivalent recommendations for subsection (e) and made for the same reasons described there.

The commission also declines to require the report be submitted nine months after the interruption of service that initiated the assessment because, as noted by commenters, there may be staffing constraints and other issues that necessitate delaying the assessment. Furthermore, the rule already requires entities to perform the assessment in a reasonable

timeframe as §25.55(e) and (h) requires ERCOT to refer non-compliant entities to commission staff for investigation. The commission also has revised §25.55(h) to require ERCOT to notify a TSP and commission staff of a repeated or major weather-related forced interruption of service.

Proposed §25.55(i) – ERCOT historical weather study

Proposed §25.55(i) contains the requirements ERCOT must follow in creating the ERCOT historical weather study.

AEP recommended that proposed §25.55(i) be revised to require ERCOT to notify a TSP when the historical weather study is filed with the commission due to the one-year deadline to update preparation measures following ERCOT's filing of an updated weather study.

Commission Response

The commission declines to adopt AEP's recommendation to require ERCOT to notify an entity when it files its historical weather study with the commission. Any interested party may subscribe to Project Number 52691 on the commission's Interchange where ERCOT's historical weather studies are submitted to receive automatic updates when there is a new filing in the project.

Sierra Club expressed concern that the requirement under the proposed rule to update weather preparation standards one year after ERCOT produces a weather study would mean "true winter

preparedness" would not be required until roughly five years from now and recommended a shorter, three-year, timeline.

Sierra Club also expressed concern that ERCOT's weather study is based on weather data looking backward in weather zones and stated that the proposed rule does not go far enough to assure grid reliance and resiliency due to changing trends in climate conditions.

Commission Response

The commission disagrees with Sierra Club's conclusion that weather preparedness will be postponed until 2026. An updated study was filed by ERCOT in Project Number 52691 on the commission's Interchange for use by entities until the next study is published. The adopted rule requires entities to adhere to ambient temperature standards for the summer season as early as June 1, 2023.

In response to Sierra Club's other comments, the commission notes that the historical weather study filed with the commission by ERCOT includes 99th percentile minimum and maximum temperature data and that the study must take into consideration weather predictions produced by the office of the state climatologist as required by SB 3. In addition, the commission has revised §25.55(c)(1)(B) and (f)(1)(B) to remove the ambient temperature requirement for the winters seasons and instead include wind chill as part of the 95th percentile minimum average 72-hour temperature reported in ERCOT's historical weather study to cover a greater range of minimum temperatures.

TPPA commented that proposed §25.55(i), which requires ERCOT to provide a historical weather study in association with weather predictions from the state climatologist, is not in compliance with SB 3. TPPA accordingly recommended the ERCOT weather study requirement under proposed §25.55(i) be deleted and that the commission should "consider directly engaging with the climatologist in a separate proceeding and filling any knowledge gaps with qualified power plant and TSP engineers to determine the sufficiency of the rule requirements to address weather predictions made by the climatologist" so that the proposed rule provides clearer, future-oriented standards and more accurately complies with SB 3.

Commission Response

The commission disagrees with TPPA that the historical weather study from ERCOT is not in compliance with SB 3 and declines to delete ERCOT's historical weather study from the rule. ERCOT has and will continue to work with the state climatologist in producing its historical weather study referenced in the rule. ERCOT's historical weather studies are submitted on the Interchange under Project Number 52691.

TPPA opposed allowing the five-year ERCOT weather study under proposed §25.55(i) to become binding immediately upon ERCOT's filing of the report with the commission. Specifically, TPPA stated that there would be lag time prior to implementation of the report's recommendations that may exceed the one-year timeframe from the date of ERCOT's filings to update weather preparation measures. Additionally, TPPA opposed the immediate binding effect of ERCOT filing its report as "inconsistent with the notice-and-comment rulemaking provisions of the

Administrative Procedure Act (APA) and recommend[ed] that the commission instead affirmatively adopt, reject, or amend this report consistent with statutory requirements."

Commission Response

The commission declines to modify the rule to extend the amount of time before updated ERCOT weather studies become effective. The one-year period should be sufficient to make any modifications required to prepare for an updated temperature standard. Any change in the ERCOT weather study correlates to measurable changes in the conditions faced by facilities and resources located in the ERCOT power region, and efficiently implementing additional preparation measures is essential for the resiliency of the grid.

The commission also disagrees that the APA requires the weather study to go through the full rulemaking process, because it is not a rule. Under the APA, a rule is "a state agency statement of general applicability." ERCOT is not a state agency, and thus the weather report – similar to its protocols and operating guides – is not subject to the APA.

TPPA requested the rule "provide clearer guidelines for the findings and calculation of the weather-related requirements, The rule should require statistical percentiles to be based on intervals no longer than 24 hours that span concurrent days in one-year increments." TPPA explained that defining a maximum interval size and requiring annual data would prevent "cherry-picking data during a certain season" or assuming the seasonal temperature occurred the entire year. Lastly, TPPA recommended proposed §25.55(i) be revised to require ERCOT to issue a

market notice and solicit stakeholder comments prior to filing its weather report with the commission.

Commission Response

The 72-hour average wind chill temperature metric represents an appropriate balance between the conditions observed in 2011 and 2021, specifically the 48-hour duration of the 2011 winter storm and the 120-hour duration of the 2021 winter storm. The commission accordingly declines to adopt TPPA's recommendation for a 24-hour interval to be utilized in the context of measuring temperature. However, ERCOT has analyzed in its 2022 study and is allowed to analyze in the future other average sustained temperature durations to provide meaningful context of how different analyses would render different standards.

Further, the commission refrains from adding a requirement in the rule compelling ERCOT to automatically issue a market notice and request comment from stakeholders prior to filing its historical weather study at this time. Interested commenters have several years before ERCOT conducts its next weather study to recommend process changes to the commission and ERCOT regarding the study, but how ERCOT interacts with stakeholders while developing its study is beyond the scope of this rulemaking project.

EDF, TCA, and ASC noted the 95th percentile of minimum and maximum temperature standard based on the ERCOT weather study is flawed as historic weather conditions are not necessarily predictive of current and future weather conditions. EDF, TCA, and ASC also argued the rule allows for "potential manipulation of historic weather data to bias temperature ranges downward"

if too long a historical timeframe is used. EDF, TCA, and ASC accordingly recommended the ERCOT historical study not permit the use of full-year data before 1996, as prior to 1996 there were significantly less 100-degree days in each region of Texas. EDF, TCA, and ASC further recommended that high temperature events after 1995 be supplemented with event-specific data for at least the worst five weather events in each category from the historical record preceding 1996.

EDF, TCA, and ASC also opposed the 72-hour average temperature metric in the ERCOT weather study standard as notable weather events have historically lasted longer than 72 hours and argued that sustained load for so long a duration may stress transmission and generation utilities beyond any impact of temperature alone. EDF, TCA, and ASC recommended the commission seek written expert advice from meteorologists and transmission and generation asset specialists about whether the 72-hour average temperature metric is appropriate and clarify whether metrics based on sustained temperature, episodic temperature, or load may better serve as benchmarks to prepare critical grid assets to perform under weather emergency temperatures.

Commission Response

In response to EDF, TCA, and ASC's comments regarding the lack of predictive capability and other flaws of the historical ERCOT weather study, §25.55(i)(2) permits ERCOT to "add additional parameters to the historical weather study." Additionally, ERCOT is required to consider the weather predictions of the state climatologist in preparing the historical weather study under §25.55(i)(3). These provisions ensure that ERCOT may choose whichever window of time it considers to be appropriate to ensure that any studies it produces are not

distorted by past data and may choose to analyze different weather parameters based the climatologist's analysis. The commission disagrees with EDF, TCA, and ASC that the 72-hour temperature metric in the historical ERCOT weather study standard is insufficient as it encompasses a span of time that is sufficiently small to capture consistent high or low temperatures while not distorting the average with a longer period of time. For example, Winter Storm Uri was a 120-hour event with the coldest days being February 14, 15, and 16, of 2021, with consistent temperatures below freezing. Conversely, the 2011 Winter Storm was a 48-hour event. A shorter span of time may risk the coldest period of Winter Storm Uri, namely the morning of February 16, being taken as representative of the weather event, and conversely, a longer period may inaccurately represent the most severe period of the 2011 winter storm. Since the intent of the historical weather study is to encapsulate the 95th percentile average of weather events, a 72-hour timeframe is appropriate.

Andrew Dessler opposed the requirements in the proposed rule that generation entities and TSPs must only consider historical temperatures to determine weatherization preparedness. Mr. Dessler elaborated that utilizing solely the historical record under proposed §25.55(c)(2)(B) will result in "a systemic underestimate" of future temperatures. Mr. Dessler concluded, based on his computer simulations for the 1950-2026 period from 21 different climate models, that there is a 45% chance of exceeding the 95th percentile temperature within Texas in the next five years. Accordingly, Mr. Dessler urged the commission to revise the proposed rule, specifically proposed §25.55(c)(2)(B) to reflect his findings. Mr. Dessler further recommended ERCOT incorporate the latest changing climate estimates into ERCOT's readiness metrics for generation entities and TSPs.

Mr. Dessler stated his recommendations are necessary to preserve citizen safety, economic health of the state, and preserve Texas electrical infrastructure. Sierra Club agreed with Mr. Dessler.

Commission Response

The commission disagrees with Mr. Dessler as ERCOT is instructed to consider weather predictions by the state climatologist when preparing its historical study. Further, adopted §25.55(i)(2) includes: "ERCOT may add additional parameters to the historical weather study." This language, along with the requirement that ERCOT must take into consideration weather predictions by the state climatologist in §25.55(i)(3), will enable ERCOT to produce studies that are not distorted by data from the past. Additionally, the local summer ambient temperature standard requirement ensures that local temperature patterns that are more severe than those projected in the ERCOT weather study are taken into account when reasonable preparation measures are being determined.

All comments, including any not specifically referenced herein, were fully considered by the

commission. In adopting this rule, the commission makes other minor modifications for the

purpose of clarifying its intent.

The rule is adopted under the following provisions of PURA: §14.001, which provides the

commission the general power to regulate and supervise the business of each public utility within

its jurisdiction and to do anything specifically designated or implied by PURA that is necessary

and convenient to the exercise of that power and jurisdiction; §14.002, which provides the Public

Utility Commission with the authority to make adopt and enforce rules reasonably required in the

exercise of its powers and jurisdiction. The rule is also adopted under §35.0021, which requires

the commission to adopt rules that require each provider of electric generation service in the

ERCOT power region to implement measures to prepare the provider's generation assets to provide

adequate electric generation service during a weather emergency; and §38.075, which requires the

commission to adopt rules to require each electric cooperative, municipally owned utility, and

transmission and distribution utility providing transmission service in the ERCOT power region

to implement measures to prepare its facilities to maintain service quality and reliability during a

weather emergency.

Cross Reference to Statute: Public Utility Regulatory Act §§14.001, 14.002, 35.0021, and 38.075.

177

§25.55. Weather Emergency Preparedness.

[repeal]

§25.55. Weather Emergency Preparedness.

- (a) Application. This section applies to the Electric Reliability Council of Texas, Inc. (ERCOT) and to generation entities and transmission service providers (TSPs) in the ERCOT power region.
 - (1) A generation resource with an ERCOT-approved notice of suspension of operations for the summer season or winter season is not required to comply with this section until the return to service date identified in its notice of change of generation resource designation required under the ERCOT protocols.
 - (2) A new or repowered resource scheduled to begin commercial operations during the summer season or winter season or a transmission facility scheduled for initial energization during the summer season or winter season must meet the requirements of this section prior to either the commissioning date established in the ERCOT interconnection process for generation resources or initial energization for transmission facilities, as applicable.
- **(b) Definitions.** In this section, the following definitions apply unless the context indicates otherwise.
 - (1) Energy storage resource -- An energy storage system registered with ERCOT as an energy storage resource for the purpose of providing energy or ancillary services to the ERCOT grid and associated facilities controlled by the generation entity that are behind the system's point of interconnection, necessary for the operation of the

- system, and not part of a manufacturing process that is separate from the generation of electricity.
- (2) **Generation entity** -- An ERCOT-registered resource entity acting on behalf of an ERCOT-registered generation resource or energy storage resource.
- Generation resource -- A generator registered with ERCOT as a generation resource and capable of providing energy or ancillary services to the ERCOT grid, as well as associated facilities controlled by the generation entity that are behind the generator's point of interconnection, necessary for the operation of the generator, and not part of a manufacturing process that is separate from the generation of electricity.
- (4) Inspection -- Activities that ERCOT employees, commission staff, and designated contractors engage in to determine whether a generation entity is in compliance with all or parts of subsection (c) of this section or whether a TSP is in compliance with all or parts of subsection (f) of this section. An inspection may include site visits, assessments of procedures, interviews, and review of information provided by a generation entity or TSP in response to a request by ERCOT, including review of evaluations conducted by the generation entity or TSP or its contractor.

(5) Major weather-related forced interruption of service of a resource –

- (A) The failure of a resource to start, following one or more attempts, for 12 or more continuous hours as a result of a weather emergency; or
- (B) The loss of 50% or more of the capacity reflected in a resource's seasonal net maximum sustainable rating for 12 or more continuous hours as a result of a weather emergency.

- Major weather-related forced interruption of service of a transmission facility
 A non-momentary transmission service outage caused by damage to, or the inoperability of, a transmission facility as a result of a weather emergency.
- (7) Repeated weather-related forced interruption of service -- Three or more of any combination of the following occurrences as a result of separate weather emergencies within any three-year period:
 - (A) The failure of a resource to start;
 - (B) The loss of 50% or more of the capacity reflected in a resource's seasonal net maximum sustainable rating for 30 minutes or more; or
 - (C) The loss or derate of 50% or more of a transmission facility's rating.
- (8) **Resource** -- A generation resource or energy storage resource.
- (9) **Summer season** -- June 1 to September 30 each year.
- (10) **Transmission facility** -- A transmission-voltage element inside the fence surrounding a TSP's high-voltage switching station or substation owned or operated by the TSP.
- (11) Weather critical component -- Any component of a resource or transmission facility that is susceptible to fail as a result of a weather emergency, the occurrence of which failure is likely to significantly hinder the ability of the resource or transmission facility to function as intended or, for a resource, is likely to lead to a trip, derate of more than five percent of the capacity represented in the resource's seasonal net maximum sustainable rating or of the transmission facility's rating, or failure to start.

- (12) **Weather emergency** -- A situation resulting from a summer or winter weather event that produces significant risk for a TSP that firm load must be shed or a situation for which ERCOT issues an Emergency Notice to market participants involving an operating condition in which the safety or reliability of the ERCOT system is compromised or threatened by summer or winter weather.
- (13) **Weather emergency preparation measures** -- Measures that a generation entity or TSP takes to support the function of a resource or transmission facility during a weather emergency.
- (14) Winter season -- December 1 to February 28 of the following year.

(c) Weather emergency preparedness reliability standards for a generation entity.

- (1) Winter season preparations. By December 1 each year, a generation entity must complete the following winter weather emergency preparation measures for each resource under its control. A generation entity must maintain these measures throughout the winter season and complete any ongoing or monthly requirements at the appropriate time. If necessary to come into compliance, a generation entity must update its winter weather emergency preparation measures no later than one year after ERCOT files a historical weather study report under subsection (i) of this section.
 - (A) Implement weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of all cold weather critical components during winter weather conditions. Where appropriate, such

measures may be implemented using either personnel or automated systems. Such measures include, as appropriate for the resource:

- (i) Installation and maintenance of adequate wind breaks for resources susceptible to outages or derates caused by wind;
- (ii) Installation and maintenance of insulation and enclosures for all cold weather critical components;
- (iii) Inspection of existing thermal insulation and associated forms of water-proofing for damage or degradation, and repair of damaged or degraded insulation and associated forms of water-proofing;
- (iv) Arrange and provide for the availability and appropriate safekeeping of sufficient chemicals, auxiliary fuels, and other materials necessary for sustained operations during a winter weather emergency;
- (v) Plan for and maintain the operability of instrument air moisture prevention systems;
- (vi) Maintenance of freeze protection equipment for all cold weather critical components, including fuel delivery systems controlled by the generation entity, and testing or verifying the functionality of freeze protection equipment prior to and on a monthly basis during the winter season; and
- (vii) Monitoring of all cold weather critical components, including circuitry that provides freeze protection or prevents instrument air moisture;

- (B) Beginning in 2023, implement weather emergency preparation measures by December 1 each year, in addition to the weather emergency preparation measures required by subparagraph (A) of this paragraph, that could reasonably be expected to ensure sustained operation of the resource at the 95th percentile minimum average 72-hour wind chill temperature reported in ERCOT's historical weather study, required under subsection (i) of this section, for the weather zone in which the resource is located.
- (C) Review the adequacy of staffing plans to be used during a winter weather emergency and revise the staffing plans, as appropriate.
- (D) Train relevant operational personnel on winter weather preparations and operations.
- (E) Beginning in 2023, create a list of all cold weather critical components, review the list at least annually prior to the beginning of the winter season, and update the list as necessary.
- (2) Summer season preparations. By June 1 each year, a generation entity must complete the following summer weather emergency preparation measures for each resource under its control. A generation entity must maintain these measures throughout the summer season and complete any ongoing or monthly requirements at the appropriate time. If necessary to come into compliance, a generation entity must update its summer weather emergency preparation measures no later than one year after ERCOT files a historical weather study report under subsection (i) of this section.

- (A) Implement weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of all hot weather critical components during summer weather conditions. Where appropriate, such measures may be implemented using either personnel or automated systems. Such measures include, as appropriate for the resource:
 - (i) Identification of regulatory and legal limitations of cooling capacity, water withdrawal, maximum discharge temperatures, and rights for additional water supply;
 - (ii) Arrange and plan for the provision and storage of adequate water supplies for cooling towers, reservoirs, heat exchangers, and adequate cooling capacity of the water supplies used in the cooling towers, reservoirs, and heat exchangers;
 - (iii) Arrange and plan for the provision and storage of availability and appropriate safekeeping of adequate equipment to remove heat and moisture from all hot weather critical components;
 - (iv) Arrange and provide for the availability of sufficient chemicals, coolants, auxiliary fuels, and other materials necessary for sustained operations during a summer weather emergency;
 - (v) Maintenance of all hot weather critical components, including air flow or cooling systems, and verifying the functionality of all components prior to and on a monthly basis during the summer season; and
 - (vi) Monitoring of all hot weather critical components.

- (B) Beginning in 2023, implement weather emergency preparation measures by

 June 1 each year, in addition to the weather emergency preparation

 measures required by subparagraph (A) of this paragraph, that could

 reasonably be expected to ensure sustained operation of the resource during

 the greater of the maximum ambient temperature at which the resource has

 experienced sustained operations or the 95th percentile maximum average

 72-hour temperature reported in ERCOT's historical weather study,

 required under subsection (i) of this section, for the weather zone in which

 the resource is located.
- (C) Review the adequacy of staffing plans to be used during a summer weather emergency and revise the staffing plans, as appropriate.
- (D) Train relevant operational personnel on summer weather preparations and operations.
- (E) Beginning in 2023, create a list of all hot weather critical components, review the list at least annually prior to the beginning of the winter season, and update the list as necessary.
- (3) **Declaration of preparedness.** A generation entity must submit to ERCOT, on a form prescribed by ERCOT, the following declarations of weather preparedness:
 - (A) No earlier than November 1 and no later than December 1 of each year, a generation entity must submit a declaration of winter weather preparedness for the upcoming winter season that:
 - (i) Identifies every resource under the entity's control for which the declaration is being submitted;

- (ii) Summarizes all activities engaged in by the generation entity to complete the requirements of paragraph (1) of this subsection;
- (iii) Provides the minimum ambient temperature at which each resource has experienced sustained operations, as measured at the resource site or the weather station nearest to the resource site;
- (iv) Includes any additional information required by the ERCOT protocols in effect as of October 1 of the year in which the declaration is submitted; and
- (v) Includes a notarized attestation sworn to by the generation entity's highest-ranking representative, official, or officer with binding authority over the generation entity attesting to the completion of all applicable activities described in paragraph (1) of this subsection, and to the accuracy and veracity of the information described in subparagraph (A) of this paragraph.
- (B) No earlier than May 1 and no later than June 1 of each year, a generation entity must submit a declaration of summer weather preparedness for the upcoming summer season that at a minimum:
 - (i) Identifies every resource under the generation entity's control for which the declaration is being submitted;
 - (ii) Summarizes all activities engaged in by the generation entity to complete the requirements of paragraph (2) of this subsection;

- (iii) Provides the maximum ambient temperature at which each resource has experienced sustained operations, as measured at the resource site or the weather station nearest to the resource site;
- (iv) Includes any additional information required by the ERCOT protocols in effect as of April 1 of the year in which the declaration is submitted; and
- (v) Includes a notarized attestation sworn to by the generation entity's highest-ranking representative, official, or officer with binding authority over the generation entity attesting to the completion of all applicable activities described in paragraph (2) of this subsection, and to the accuracy and veracity of the information described in this subparagraph.
- (C) A generation entity must submit the appropriate declaration of preparedness to ERCOT prior to returning a mothballed, outaged, or decommissioned resource to service during the winter or summer season. For any new or repowered resource, a generation entity must submit the appropriate declaration of preparedness prior to the resource commissioning date established in the ERCOT interconnection process for resources.
- (4) No later than December 20 of each year, ERCOT must file with the commission a compliance report that addresses whether each generation entity has submitted the declaration of winter weather preparedness required by paragraph (3)(A) of this subsection for each resource under the generation entity's control.

- (5) No later than June 20 of each year, ERCOT must file with the commission a compliance report that addresses whether each generation entity has submitted the declaration of summer weather preparedness required by paragraph (3)(B) of this subsection for each resource under the generation entity's control.
- (6) ERCOT will treat declarations of preparedness and associated information submitted by a generation entity as Protected Information as defined by the ERCOT protocols

(d) ERCOT inspection of resources.

- on factors such as whether a resource is critical for electric grid reliability; the length of time since the resource was last inspected; has experienced a forced outage, forced derate, or failure to start related to weather emergency conditions; or has other vulnerabilities related to weather emergency conditions. ERCOT must determine, in consultation with commission staff, the number, extent, and content of inspections, provided that every resource interconnected to the ERCOT power region must be inspected at least once every three years. ERCOT must develop, in consultation with commission staff, a winter weather inspection checklist and a summer weather inspection checklist for use during resource inspections. Inspections may be conducted by ERCOT's employees or contractors.
 - (A) ERCOT must provide each generation entity at least 72 hours' written notice of an inspection unless otherwise agreed by the generation entity and ERCOT. The written notice must identify each ERCOT employee,

commission staff member, or designated contractor participating in the inspection. Within 24 hours of receiving notice of inspection, a generation entity must provide ERCOT, commission staff, and designated contractors all generation entity requirements for facility access. Upon provision of the required written notice, a generation entity must grant access to its facility to ERCOT and to commission staff, including an employee of a contractor designated by ERCOT or the commission to conduct, oversee, or observe the inspection.

(B) During the inspection, a generation entity must provide ERCOT, commission staff, or designated contractors access to any part of the facility upon request. ERCOT, commission staff, and designated contractors must comply with all applicable safety and security regulations, including those maintained by the generation entity, during the A generation entity must provide access to inspection, inspection. maintenance, and other records associated with weather emergency preparation measures and must make the generation entity's staff available to answer questions. A generation entity may escort ERCOT, commission staff, and designated contractors at all times during an inspection. During the inspection, ERCOT, commission staff, or designated contractors may take photographs or video recordings of any part of the facility except control rooms and may conduct interviews of facility personnel designated by the generation entity. Documents, photographs, and video recordings collected or generated by ERCOT, commission staff, or designated

contractors during or related to the inspection will be treated as confidential information under applicable state or federal laws and regulations.

- (2) ERCOT inspection report.
 - (A) ERCOT must provide a written report on its inspection of a resource to the generation entity. The written inspection report must address whether the generation entity has complied with the requirements in subsection (c)(1) or (2) of this section.
 - (B) If the generation entity has not complied with a requirement in subsection(c)(1) or (2) of this section, ERCOT must provide the generation entity areasonable period to cure the identified deficiencies.
 - (i) The cure period determined by ERCOT must consider what weather emergency preparation measures the generation entity may be reasonably expected to have taken before ERCOT's inspection, the reliability risk of the resource's noncompliance, and the complexity of the measures needed to cure the deficiency.
 - (ii) The generation entity may request ERCOT provide a longer period to cure the identified deficiencies. The request must be accompanied by documentation that supports the request.
 - (iii) ERCOT, in consultation with commission staff, will determine the revised cure period after considering a request for a longer period to cure the identified deficiencies.
 - (C) ERCOT must report to commission staff any generation entity that does not remedy the deficiencies identified under subparagraph (A) of this

- paragraph within the cure period determined by ERCOT under subparagraph (B) of this paragraph.
- (D) A generation entity reported by ERCOT to commission staff under subparagraph (C) of this paragraph will be subject to enforcement investigation under §22.246 of this title (relating to Administrative Penalties). A violation of this section is a Class A violation under §25.8(b)(3)(A) of this title (relating to Classification System for Violations of Statutes, Rules, and Orders Applicable to Electric Service Providers) and may be subject to a penalty not to exceed \$1,000,000 per violation per day.
- (e) Weather-related failures by a generation entity to provide service. ERCOT must notify a generation entity and commission staff of the generation entity's repeated or major weather-related forced interruption of service. Upon notification from ERCOT, the generation entity must contract with a qualified professional engineer to assess its weather emergency preparation measures, plans, procedures, and operations. The qualified professional engineer must not be an employee of the generation entity or its affiliate. The qualified professional engineer must not have participated in previous assessments for the resource for at least five years, unless the generation entity provides documentation that no other qualified professional engineers are reasonably available for engagement. The qualified professional engineer must conduct a root cause analysis of the failure and develop a corrective action plan to address any weather-related causes of the failure. The generation entity must submit the qualified professional engineer's assessment to the

commission and ERCOT within 15 calendar days of receiving the assessment. A generation entity to which this subsection applies may be subject to additional inspections by ERCOT. ERCOT must refer to commission staff for investigation any generation entity that does not comply with a provision of this subsection.

(f) Weather emergency preparedness reliability standards for a TSP.

- (1) Winter season preparations. By December 1 each year, a TSP must complete the following winter weather preparation measures for its transmission facilities. A TSP must maintain these measures throughout the winter season and complete any ongoing requirements at the appropriate time. If necessary to come into compliance, a TSP must update its winter weather preparation measures no later than one year after ERCOT files a historical weather study report under subsection (i) of this section.
 - (A) Implement weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of all cold weather critical components during winter weather conditions. Where appropriate, such measures may be implemented using either personnel or automated systems. Such measures include, as appropriate for the facility:
 - (i) Confirmation of the operability of all systems and subsystems containing all cold weather critical components;
 - (ii) Confirmation that the sulfur hexafluoride gas in breakers and metering and other electrical equipment is at the correct pressure and temperature to operate safely during winter weather emergencies, and perform annual maintenance that tests sulfur hexafluoride

- breaker heaters and supporting circuitry to assure that they are functional; and
- (iii) Confirmation of the operability of power transformers and auto transformers in winter weather emergencies by:
 - (a) Inspecting heaters in the control cabinets;
 - (b) Verification that main tank oil levels are appropriate for actual oil temperature;
 - (c) Inspecting bushing oil levels;
 - (d) Inspecting the nitrogen pressure, if necessary; and
 - (e) Verification of proper oil quality such that moisture and dissolved gases are within acceptable ranges for winter weather conditions.
- (B) Beginning in 2023, implement weather emergency preparation measures by December 1 each year, in addition to the weather emergency preparation measures required by subparagraph (A) of this paragraph, that could reasonably be expected to ensure the sustained operation of the TSP's transmission facilities at the 95th percentile minimum average 72-hour wind chill temperature reported in ERCOT's historical weather study, required under subsection (i) of this section, for the weather zone in which the facility is located.
- (C) Review the adequacy of staffing plans to be used during a winter weather emergency and revise the staffing plans, as appropriate.

- (D) Train relevant operational personnel on winter weather preparations and operations.
- (E) Beginning in 2023, create a list of all cold weather critical components, review the list at least annually prior to the beginning of the winter season, and update the list as necessary.
- (2) Summer season preparations. By June 1 each year, a TSP must complete the following summer weather preparation measures for its transmission facilities. A TSP must maintain these measures throughout the summer season and complete any ongoing, monthly, or regular requirements at the appropriate time. If necessary to come into compliance, a TSP must update its summer weather preparation measures no later than one year after ERCOT files a historical weather study report under subsection (i) of this section.
 - (A) Implement weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of all hot weather critical components during summer weather conditions. Where appropriate, such measures may be implemented using either personnel or automated systems. Such measures include, as appropriate for the facility:
 - (i) Inspecting transformer cooling systems prior to and on a monthly basis during the summer season;
 - (ii) Cleaning transformer cooling systems prior to and on a regular basis during the summer season;
 - (iii) Verifying proper functioning of cooling fans and pump controls;

- (iv) Arrange and provide for the availability of sufficient chemicals,
 coolants, and other materials necessary for sustained operations
 during a summer weather emergency; and
- (v) Confirmation that sufficient chemicals, coolants, and other materials necessary for sustained operations during a summer weather emergency are protected from heat and drought.
- (B) Beginning in 2023, implement weather emergency preparation measures by June 1 each year, in addition to the weather emergency preparation measures required by subparagraph (A) of this paragraph on, that could reasonably be expected to ensure the sustained operation of the TSP's transmission facilities during the greater of the maximum ambient temperature at which the facility has experienced sustained operations or the 95th percentile maximum average 72-hour temperature reported in ERCOT's historical weather study, required under subsection (i) of this section, for the weather zone in which the facility is located.
- (C) Review the adequacy of staffing plans to be used during a summer weather emergency and revise the staffing plans, as appropriate.
- (D) Train relevant operational personnel on summer weather preparations and operations.
- (E) Beginning in 2023, create a list of all hot weather critical components, review the list at least annually prior to the beginning of the winter season, and update the list as necessary.

- (3) **Declaration of preparedness.** A TSP must submit to ERCOT, on a form prescribed by ERCOT, the following declarations of weather preparedness:
 - (A) No earlier than November 1 and no later than December 1 of each year, a

 TSP must submit a declaration of winter weather preparedness for the

 upcoming winter season that:
 - (i) Identifies each transmission substation or switchyard maintained by the TSP for which the declaration is being submitted;
 - (ii) Summarizes all activities engaged in by the TSP to complete the requirements of paragraph (1) of this subsection for the upcoming winter season,
 - (iii) Provides the minimum ambient temperature at which each transmission facility has experienced sustained operations, as measured at the substation or switchyard or the weather station nearest to the substation or switchyard;
 - (iv) Includes any additional information required by the ERCOT protocols in effect as of October 1 of the year in which the declaration is submitted; and
 - (v) Includes a notarized attestation sworn to by the TSP's highest-ranking representative, official, or officer with binding authority over the TSP, attesting to the completion of all activities described in paragraph (1) of this subsection, except activities required to be completed after December 1, and to the accuracy and veracity of the information described in subparagraph (A) of this paragraph.

- (B) No earlier than May 1 and no later than June 1 of each year, a TSP must submit a declaration of summer weather preparedness for the upcoming summer season that at a minimum:
 - (i) Identifies each transmission substation or switchyard maintained by the TSP for which the declaration is being submitted;
 - (ii) Summarizes all activities engaged in by the TSP to complete the requirements of paragraph (2) of this subsection;
 - (iii) Provides maximum ambient temperature at which each transmission facility has experienced sustained operations, as measured at the substation or switchyard or the weather station nearest to the substation or switchyard;
 - (iv) Includes any additional information required by the ERCOT protocols in effect as of April 1 of the year in which the declaration is submitted; and
 - (v) Includes a notarized attestation sworn to by the TSP's highest-ranking representative, official, or officer with binding authority over the TSP attesting to the completion of all activities described in paragraph (2) of this subsection, except activities required to be completed after June 1, and to the accuracy and veracity of the information described in subparagraph (B) of this paragraph.
- (4) No later than December 20 of each year, ERCOT must file with the commission a compliance report that addresses whether each TSP has submitted the declaration

- of winter weather preparedness required by paragraph (3)(A) of this subsection for each transmission substation or switchyard maintained by the TSP.
- (5) No later than June 20 of each year, ERCOT must file with the commission a compliance report that addresses whether each TSP has submitted the declaration of summer weather preparedness required by paragraph (3)(B) of this subsection for each transmission substation or switchyard maintained by the TSP.
- (6) ERCOT will treat declarations of preparedness and associated information submitted by a TSP as Protected Information as defined by the ERCOT protocols.

(g) ERCOT inspections of transmission facilities.

(1) ERCOT must conduct inspections of transmission facilities and may prioritize inspections based on factors such as the length of time since the transmission facility was last inspected; whether a transmission facility is critical for electric grid reliability; has experienced a forced outage or other failure related to weather emergency conditions; or has other vulnerabilities related to weather emergency conditions. ERCOT must determine, in consultation with commission staff, the number, extent, and content of inspections, as well as develop a risk-based methodology for selecting at least ten percent of substations or switchyards providing transmission service to be inspected at least once every three years. ERCOT must develop, in consultation with commission staff, a winter weather inspection checklist and a summer weather inspection checklist for use during facility inspections. Inspections may be conducted by ERCOT's employees or contractors.

- (A) ERCOT must provide each TSP at least 72 hours' written notice of an inspection unless otherwise agreed by the TSP and ERCOT. The written notice must identify each ERCOT employee, commission staff member, or designated contractor participating in the inspection. Within 24 hours of receiving notice of inspection, a TSP must provide ERCOT, commission staff, and designated contractors all TSP requirements for facility access. Upon provision of the required written notice, a TSP must grant access to its facility to ERCOT and commission staff, including an employee of a contractor designated by ERCOT or the commission to conduct, oversee, or observe the inspection.
- (B) During the inspection, a TSP must provide ERCOT, commission staff, and designated contractors access to any part of the facility upon request. ERCOT, commission staff, and designated contractors must comply with all applicable safety and security regulations, including those maintained by the TSP, during the inspection. A TSP must provide access to inspection, maintenance, and other records associated with weather preparation measures, and must make the TSP's staff available to answer questions. A TSP may escort ERCOT, commission staff, and designated contractors at all times during an inspection. During the inspection, ERCOT, commission staff, and designated contractors may take photographs and video recordings of any part of the facility except control rooms and may conduct interviews of facility personnel designated by the TSP. Documents, photographs, and video recordings collected or

generated by ERCOT, commission staff, or designated contractors during or related to the inspection will be treated as confidential information under applicable state or federal laws and regulations.

- (2) ERCOT inspection report.
 - (A) ERCOT must provide a written report on its inspection of a transmission system or facility to the TSP. The written inspection report must address whether the TSP has complied with the requirements in subsection(f)(1) or (2) of this section.
 - (B) If the TSP has not complied with a requirement in subsection (f)(1) or (2) of this section, ERCOT must provide the TSP a reasonable period to cure the identified deficiencies.
 - (i) The cure period determined by ERCOT must consider what weather emergency preparation measures the TSP may be reasonably expected to have taken before ERCOT's inspection, the reliability risk of the TSP's noncompliance, and the complexity of the measures needed to cure the deficiency.
 - (ii) The TSP may request ERCOT provide a longer period to cure the identified deficiencies. The request must be accompanied by documentation that supports the request.
 - (iii) ERCOT, in consultation with commission staff, will determine the revised cure period after considering a request for a longer period to cure the identified deficiencies.

- (C) ERCOT must report to commission staff any TSP that does not remedy the deficiencies identified under subparagraph (A) of this paragraph within the cure period determined by ERCOT under subparagraph (B) of this paragraph.
- (D) A TSP reported by ERCOT to commission staff under subparagraph (C) of this paragraph will be subject to enforcement investigation under \$22.246 of this title. A violation of this section is a Class A violation under \$25.8(b)(3)(A) of this title and may be subject to a penalty not to exceed \$1,000,000 per violation per day.
- (h) Weather-related failures by a TSP to provide service. ERCOT must notify a TSP and commission staff of the TSP's repeated or major-weather related forced interruption of service. Upon notification from ERCOT, the TSP must contract with a qualified professional engineer to assess its weather emergency preparation measures, plans, procedures, and operations. The qualified professional engineer must not be an employee of the TSP or its affiliate. The qualified professional engineer must not have participated in previous assessments for this facility for at least five years, unless the TSP provides documentation that no other qualified professional engineers are reasonably available for engagement. The qualified professional engineer must conduct a root cause analysis of the failure and develop a corrective action plan to address any weather-related causes of the failure. The TSP must submit the qualified professional engineer's assessment to the commission and ERCOT within 15 calendar days of receiving the assessment. A TSP to

which this subsection applies may be subject to additional inspections by ERCOT. ERCOT must refer to commission staff for investigation any TSP that violates this subsection.

- each weather zone classified in the ERCOT protocols. ERCOT must file with the commission a report summarizing the results of the study at least once every five years, beginning no later than November 1, 2026.
 - (1) At a minimum, ERCOT must calculate the 90th, 95th, and 99th percentiles of:
 - (A) the daily minimum temperature in each weather zone;
 - (B) the daily maximum temperature in each weather zone;
 - (C) the maximum sustained wind speed in each weather zone;
 - (D) the minimum average 72-hour temperature in each weather zone;
 - (E) the maximum average 72-hour temperature in each weather zone; and
 - (F) the minimum average wind chill in each weather zone.
 - (2) ERCOT may add additional parameters to the historical weather study.
 - (3) ERCOT must take into consideration weather predictions produced by the office of the state climatologist when preparing the historical weather study.

This agency hereby certifies that the rule, as adopted, has been reviewed by legal counsel and found to be a valid exercise of the agency's legal authority. It is therefore ordered by the Public Utility Commission of Texas that §25.55 relating to Weather Emergency Preparedness is hereby adopted with changes to the text as proposed.

Signed at Austin, Texas the 29 day of September 2022.

PUBLIC UTILITY COMMISSION OF TEXAS

PETER LÁKE, CHAIRMAN

WILL MCADAMS, COMMISSIONER

LORI COBOS, COMMISSIONER

JIMMY GLOTFELTY, COMMISSIONER

KATHLEEN JACKSON, COMMISSIONER