Generation Entity (GE) Winter Inspection Checklists

Alan Allgower
Inspector Analyst Lead

Raihan Khondker
Manager, Weatherization and Inspection

October 26, 2023
Introduction

- Weatherization Checklist developed in accordance with PUCT 16 TAC §25.55 Weather Emergency Preparedness: predominantly per subsection (c)(1).
- Weatherization and Inspection Team does not provide a legal interpretation of §25.55 Weather Emergency Preparedness.
- Inspection schedule is confidential, access limited to ERCOT and PUCT.
- Inspection scheduling period: December 4, 2023, to February 29, 2024.
- Inspection exclusions:
  - Monday, December 25th - Christmas Day
  - Tuesday, December 26th - Day after Christmas
  - Monday, January 1st - New Year’s Day
  - Monday, January 15th - Martin Luther King Jr. Day
  - Monday, February 19th - Presidents’ Day
Basic Requirements

- By December 1 each year, a generation entity must complete certain prescribed 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 new historical weather study report.
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (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.

• The Checklist:
  • List of cold weather critical components (CWCCs)
  • Review list at least annually before winter season and update list as necessary

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (A) (i): Installation and maintenance of adequate wind breaks for resources susceptible to outages or derates caused by wind;

• The Checklist:
  • Records of installation and maintenance of adequate wind breaks for resources susceptible to outages or derates caused by wind
  • Records of maintenance of adequate wind breaks throughout the winter season and complete any ongoing or monthly requirements at the appropriate time

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (A) (ii): Installation and maintenance of insulation and enclosures for all cold weather critical components;

• The Checklist:
  • Records of Installation and maintenance of insulation and enclosures for all CWCCs
  • Records of maintenance of insulation and enclosures for all CWCCs throughout the winter season and complete any ongoing or monthly requirements at the appropriate time

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (A) (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;

• The Checklist:
  • Prior to winter season, records it has inspected and repaired:
    – Existing thermal insulation and associated forms of water-proofing for damage or degradation for all CWCCs
  • Records of inspection and maintenance of existing thermal insulation and associated forms of water-proofing for damage or degradation for all CWCCs throughout the winter season and complete any ongoing or monthly requirements

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

- The Rule:
  - 16 TAC § 25.55 (c) (1) (A) (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;

- The Checklist:
  - Prior to winter season, records of arranging and providing for the availability and appropriate safekeeping of:
    - Sufficient chemicals
    - Auxiliary fuels
    - Other materials
  - Records of arranging and providing for the availability and appropriate safekeeping of such materials necessary for sustained operations during a winter weather emergency throughout the winter season and complete any ongoing or monthly requirements
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (A) (v): Plan for and maintain the operability of instrument air moisture prevention systems;

• The Checklist:
  • Prior to winter season, records of monitoring, planning and maintenance of the operability of instrument air (IA) moisture prevention systems
  • Records of monitoring, planning and maintenance of IA moisture prevention system throughout the winter season and complete any ongoing or monthly requirements

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (A) (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;

• The Checklist:
  • Records of maintaining freeze protection equipment for:
    – All CWCCs
    – fuel delivery systems controlled by the GE
  • Records of testing and verifying functionality of freeze protection equipment
    – prior to the winter season
    – monthly during the winter season

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (A) (vii): Monitoring of all cold weather critical components, including circuitry that provides freeze protection or prevents instrument air moisture;

• The Checklist:
  • Records of Monitoring:
    – All CWCCs
    – Circuitry that provides freeze protection
    – Prevents IA moisture

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
• The Rule:
  – 16 TAC § 25.55 (c) (1) (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:

• The Checklist:
• Does the GE have records it implemented weather emergency preparation measures that could reasonably be expected to ensure the sustained operation of all CWCCs during winter weather conditions using either personnel or automated systems where appropriate?

Yes No
O O

12
**GE Checklist**

- **The Rule:**
  - 16 TAC § 25.55 (c) (1) (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.

- **The Checklist:**
  - Mechanism to self-determine if existing measures are adequate. If not, implement additional weather emergency preparation measures to meet subparagraph (c)(1)(B)
  - Records of determining adequacy of existing measures or implementing additional measures reasonably expected to ensure sustained operation at temperature in ERCOT’s historical weather study

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (C): Review the adequacy of staffing plans to be used during a winter weather emergency and revise the staffing plans, as appropriate.

• The Checklist:
  • Records of reviewing adequacy of staffing plans for a winter weather emergency
  • If appropriate, revised staffing plans

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (c) (1) (D): Train relevant operational personnel on winter weather preparations and operations.

• The Checklist:
  • Records of training personnel on winter weather preparations and operations

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
GE Checklist

• The Rule:
  – 16 TAC § 25.55 (d) (2) (B) (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.

• The Checklist:
  • If the GE has not complied with any part of 25.55(c)(1), confer with the GE on a cure period to address identified deficiencies and document accordingly. The weatherization team will discuss the factors, determine an appropriate cure period, and inform the GE of the cure period.
Communications

• Per (d)(1)(A), Within 24 hours of receiving notice of inspection, a GE must provide ERCOT, commission staff, and designated contractors all GE requirements for facility access. Upon provision of the required written notice, a GE 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.

• In order to avoid late submission of declarations and late responses to Notice of Inspections, please assure ERCOT has your correct AR/BAR data and that those email boxes are checked frequently.

• Selected GE(s) AR/BAR, and site contacts must route ALL inspections-related communications through:
  – GenerationWeatherizationInspections@ERCOT.com

• All Cure period-related communications and Inspection Report (IR) transmission will be accomplished through:
  – cureperiod@ercot.com

• For ALL other inquiries, contact your ERCOT Account Manager or ERCOT Client Services at (512) 248-3900 or clientservices@ercot.com.
Best Inspection Preparation Practices

- Effective communication and collaboration between the Market Participant’s personnel and the Weatherization and Inspection Team will support successful completion of winter inspections.
- Creating and maintaining systematic and logical records of items relevant to PUCT 16 TAC § 25.55 Weather Emergency Preparedness regulations will facilitate the inspection process.
- Ensure specificity of records regarding resources.
- Provide well-organized records to Inspector/Inspection Team for a seamless winter weatherization inspection process.
THANK YOU