Extreme Cold Weather Project

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September 21, 2023
Reminders

• This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO’s permission.

• If you need technical assistance during the meeting, please send a chat to the event producer.
Instructions for raising your hand to ask a question

- Select the raise hand icon 🙋 located in the lower tool bar. You will hear a beep tone when you are un-muted; at that time please state your name, and question.
- Phone only use #2 when dialed into the meeting.
- Please remember to state your name and affiliation before making your comment.

- If you need technical assistance during the meeting, please send a chat to the event producer.
- Do not mute yourself until you have completed your question or comment. WebEx platform will LOCK and mute you if you mute yourself once you have finished your question.

- Attendee list for today’s call can be seen on your chat.
- You may also send your question via chat to either Brenda Corona or to all panelists.
Agenda

- Review of current TOP-003 data request for cold weather
- NERC Alert Level 3
- TOP-003 data request, 3140A, Draft Changes Discussion
- BA Extreme Weather Template Update
- Next Steps
  - Please submit any comments or feedback via caiso.com > Contact Us or CIDI prior to 10/5/23.
  - BA Extreme Weather Template and 3140A updates planned to be effective on 10/12/23.
### Current 3140A Data Request 6.8.2

<table>
<thead>
<tr>
<th>Reg #</th>
<th>Responsible Party</th>
<th>Applicability</th>
<th>Data Request Effective Date</th>
<th>Data Item</th>
<th>To CAISO and its PTOs from each other</th>
<th>To CAISO and its PTOs from entities within CAISO BA/ TOP area</th>
<th>To CAISO and its PTOs from entities within RC West area</th>
<th>To CAISO and its PTOs from entities within Adjacent RC area</th>
<th>Data Update Frequency</th>
<th>Responsible for Submission to RC</th>
<th>Supporting Entity &amp; Task(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.8.2</td>
<td>Generator Owner</td>
<td>Dynamic Transfer Within CAISO BAA</td>
<td>July 1, 2023</td>
<td>Generating unit(s) minimum: 1. Design temperature; or 2. Historical operating temperature; or 3. Current cold weather performance temperature determined by an engineering analysis. All temperatures will be communicated in degrees Fahrenheit (F).</td>
<td>CIDI ticket</td>
<td>CIDI ticket</td>
<td>1) CIM file or equivalent file with sufficient model details uploaded to RIMS, or 2) submit through BA, or 3) email to <a href="mailto:RDT@caiso.com">RDT@caiso.com</a></td>
<td>Submit in accordance with your RC’s IRO-010 request, data will be shared with RC West</td>
<td>Before approval of commercial operation for new resources; as soon as practicable for existing resources</td>
<td>Single - CAISO</td>
<td>GO or their designee provides to CAISO via CIDI</td>
</tr>
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</table>

- CAISO BA sent out messaging for GOs in BA footprint to submit via CIDI to be aggregated
- Data was received from more than 85% of generators in CAISO BA and all BA data was received for RC West footprint
- Reminder to submit all BES generation for future projects
NERC Alert Level 3 – 8 essential actions

1. GO – Extreme Cold Weather Temperature (ECWT) calculation
2. GO – EOP-011 R7 – add critical components to plan
3. GO – identify which resources need additional freeze protection measures, is it possible by winter 2023-2024?
4. GO – identify which resources experienced ECW event winter 2022 – 2023
NERC Alert Level 3 – 8 essential actions

5. TOP – potential updates to EOP-011 plans
6. BA – potential updates to EOP-011 plans
7. Per Essential Actions #1 and #2, each GO should provide its RC, BA, and TOP the ECWT for its location prior to the next winter season and whether Generator Cold Weather Critical Component freeze protection measures will not be implemented on components prior to the 2023–2024 winter season.

8. Per the questions below on net winter capacity Megawatts (MW), each GO should share their responses with their respective BAs and TOPs to allow for updates to any operating plans before the 2023–2024 winter season
Survey Results with Joint Cold Weather Task Force

• ECWT
  – 80% of responses wanted to include ECWT language and/or calculations in a future update of data specification

• Generator Cold Weather Critical Component Freeze Protection Measures
  – 54% wanted to share in another format than EOP-011 plan reviews
  – 23% shared in current EOP-011 emergency plan
  – 23% planning to share in upcoming EOP-011 emergency plan
Survey Results with Joint Cold Weather Task Force

- Net Winter Capacity MW
  - 40% wanted to share this information in another format
  - 33% wanted to update the RIMS template to include capacity information to share with RC West
  - 20% wanted to share the NERC template with RC West
  - 7% wanted to aggregate this data into the existing plan reviews process

- Discussion was held regarding how ECWT may not impact some generation and will be incorporated as a “NO” option in the data submittal
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<td>July 1, 2023; December 1, 2023</td>
<td>Generating unit(s) minimum: 1. Design temperature; or 2. Historical operating temperature; or 3. Current cold weather performance temperature determined by an engineering analysis. Extreme Cold Weather Temperature (ECWT), if known All temperatures will be communicated in degrees Fahrenheit (F). If Generator Cold Weather Critical Component freeze protection measures will be implemented prior to upcoming winter season Net Winter Capacity (MW), with scenarios defined in NERC Alert 3</td>
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Proposed text added to match data in NERC Alert 3, Essential Actions 7 and 8

GO, or their designee, which may be the Scheduling Coordinator (SC) can provide this data via CIDI
Existing fields kept on template for identifying the resource, can copy from previous submittal

New fields added to match data per NERC Alert 3 Essential Actions 7 and 8

<table>
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<th>Resource ID</th>
<th>IDDID</th>
<th>Fuel Type</th>
<th>Min Design Operating Temperature (Degrees F)</th>
<th>Is ECWT known for this asset?</th>
<th>Extreme Cold Weather Temperature (ECWT) (Degrees F)</th>
<th>Will Generator Cold Weather Critical Component freeze protection measures be implemented on components prior to the upcoming winter season?</th>
<th>NERC Calculation Guidance linked</th>
<th>Net Winter Capacity (MW) as defined in NERC Alert 3</th>
<th>Net Winter Capacity (MW) that are capable of operation at or below ECWT Must be less than or equal to column H</th>
<th>Net Winter Capacity (MW) for which Cold Weather Critical Components have been identified Must be less than or equal to column H</th>
<th>Net Winter Capacity (MW) for which you believe to be at risk of being impacted by the same Cold Weather Reliability event(s) for the upcoming winter season (due to a known limitation or issue not mitigated by that time)</th>
<th>Net Winter Capacity (MW) which you believe to be at risk of being impacted by the same Cold Weather Reliability event(s) for the next winter season (due to a known limitation or issue not mitigated by that time)</th>
<th>If applicable</th>
<th>If applicable</th>
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Next Steps

• CAISO posted draft documents, with commenting period available until 10/5/23.
  – BA Extreme Weather Template and 3140A updates are planned to be effective on 10/12/23.
  – BA Extreme Weather Template available on caiso.com > Market & Operations > Network and resource modeling > Resource data submission
  – 3140A available on caiso.com > Rules > Operating Procedures

• Questions? Please let us know via a CIDI ticket or caiso.com > Contact Us.