NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

Questions and Answers

Cold Weather Generator Data Request

Background

The Federal Energy Regulatory Commission (FERC) issued an order on February 16, 2023 directing NERC to work with FERC staff to develop a plan to collect data on the winterization of generating units and to submit an annual informational filing on the analysis of the data. Specifically, NERC was directed to develop a plan that included, at a minimum, data that will help FERC understand what portion of a generator's fleet is capable of performing at the Extreme Cold Weather Temperature for the location, what portion is under a corrective action plan (and until when), and what portion will not be winterized due to declared constraints. In addition, the plan was to include how NERC will assess actual performance of freeze protection measures during future extreme cold weather events.

In response, NERC filed its work plan on February 16, 2024 detailing its data collection and analysis for cold weather data which focuses on analyzing data collected through this Section 1600 cold weather generator data request.

Defined Terms

Extreme Cold Weather Temperature - The temperature equal to the lowest 0.2 percentile of the hourly temperatures measured in December, January, and February from 1/1/2000 through the date the temperature is calculated.

Generator Cold Weather Reliability Event - One of the following events for which the apparent cause(s) is due to freezing of equipment or impacts of freezing precipitation (e.g., sleet, snow, ice, and freezing rain) on equipment within the Generator Owner's control, and the dry bulb temperature at the time of the event was at or above the Extreme Cold Weather Temperature:

1. A forced derate of more than 10% of the total capacity of the unit, but not less than 20 MWs for longer than four hours in duration;
2. A start-up failure where the unit fails to synchronize within a specified start-up time;
3. A Forced Outage

Generator Cold Weather Constraint - Any condition that would preclude a Generator Owner from implementing freeze protection measures on one or more Generator Cold Weather Critical Components using the criteria below. Freeze protection measures are not intended to be limited to optimum practices, methods, or technologies, but are also intended to include acceptable practices, methods, or technologies generally implemented by the electric industry in areas that experience similar winter climate conditions.

Criteria used to determine a constraint include practices, methods, or technologies which, given the exercise of reasonable judgment in light of the facts known at the time the decision to declare the constraint was made:

- Were not broadly implemented at generating units for comparable unit types in regions that experience similar winter climate conditions to provide reasonable assurance of efficacy;
- Could not have been expected to accomplish the desired result; or
- Could not have been implemented at a reasonable cost consistent with good business practices, reliability, or safety. A cost may be deemed "unreasonable" when implementation of selected freeze protection measure(s) are uneconomical to the extent that they would require prohibitively expensive modifications or significant expenditures on equipment with minimal remaining life.

Frequently Asked Questions

Q1. Where do I find relevant materials like this presentation, worksheet template, training materials, and other key resources?
A: These materials can be found at: Cold Weather Generator Data Request

Q2. How do I contact NERC for assistance?
A: Please contact us at ecwt@nerc.net

Q3. Can an entity submit one spreadsheet for multiple generating facilities? How about one spreadsheet for multiple NCRs?
A: Yes, one spreadsheet should be submitted that includes all generating facilities owned by that Generator Owner. Additionally, one spreadsheet can be submitted covering all units owned by more than one Generator Owner (multiple NCRs).

Q4. Entities have 150 days to determine whether a Corrective Action Plan is necessary as a result of a Generator Cold Weather Reliability Events, this may not be done by May 15 or June 15. What should we enter in the worksheet?
A: We understand this timing may not line up for later winter events. Please enter the best available information by May 15 and it can be updated until June 15. Changes after June 15 will be captured on the submission the following year.

Q5. If you do not have a Corrective Action Plan, what do you enter for columns 'S' – Capacity Under a Corrective Action Plan, 'T' – Corrective Action Plan Development Date, and 'U' – Projected Corrective Action Plan Completion Date?
A: Please enter '0' for column 'S' and leave columns 'T' and 'U' blank.

Q6. How do we enter multiple Corrective Action Plans for a single unit?
A: Please enter a duplicate row for the unit for each Corrective Action Plan (e.g. a single unit with two separate Corrective Action Plans will have two rows).

Q7. How do we enter multiple Generator Cold Weather Constraints for a single unit?
A: Please enter a duplicate row for the unit for each Generator Cold Weather Constraint.

Q8. What do I do if there are multiple Generator Cold Weather Reliability Events but the Corrective Action Plans are the same, do we need a row for each one?
A: No, multiple rows are only needed if there are multiple CAPs or Constraints for a unit.

Q9. If you do not have a Generator Cold Weather Constraint what do you enter for columns 'Z' – Date Generator Cold Weather Constraint Identified, and 'AA' – Generator Cold Weather Constraint Category?
A: Please leave columns 'Z' and 'AA' blank.

Q10. What do we enter for Generating Unit Minimum and Maximum Ambient Operating Temperatures?
A: A minimum operating temperature must be entered and any of the following three options may be used:

1. Design or nameplate temperature,
2. Historical operating temperature at least one hour in duration, or
3. Current cold weather performance temperature determined by an engineering analysis.

For 2025, the maximum operating temperature is only required for generating units with a declared Generator Cold Weather Constraint(s) due to the impacts on performance during warmer time periods.

Q11. Does this cold weather data request apply to Canadian Entities?
A: This data request is not mandatory for any Canadian Entities. To the extent Canadian Entities are Generator Owners on the NERC Compliance Registry and wish to respond they are welcome to, none of the information from Canadian Entities would be included in what is submitted to FERC.

Q12. Do non-BES or Category 2 Inverter Based Resources need to respond to this cold weather data request?
A: No, this data request applies only to BES units for currently registered GOs on the NERC Compliance Registry.

Q13. How do I find the Energy Information Administration (EIA) data requested?
A: See slides 14-16 of the training materials: Extreme Cold Weather Temperature Training

Q14. Our zip code begins with a 0, so the spreadsheet only shows a 4-digit number, will that return an error?
A: If you enter an apostrophe at the beginning of the zip code, 'XXXX, it will work, and no error should be generated.

Q15. If we calculated our Extreme Cold Weather Temperature prior to the implementation of EOP-012-2, are we required to recalculate to include this past winter or for this data request?
A: No. Please ensure the Extreme Cold Weather Temperature is re-calculated within five calendar years from that initial calculation date.

Q16. If we are notified of an error in our submissions via email, what should we use to resubmit?
A: Please utilize the ERO Portal and follow the training instructions.