NERC
NORTH AMERICAN ELECTRIC RELIABILITY CORPORATION

NERC Extreme Cold Weather Temperature Reporting

Phase 1 – Winter 2024-2025

Donna Pratt, Manager, Performance Analysis
Kiel Lyons, Senior Manager, Compliance Assurance
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Background

- The Federal Energy Regulatory Commission (FERC) issued an order in 2023 directing NERC to work with Commission 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
- In February 2024, NERC filed its work plan for data collection and analysis for cold weather data which focuses on analyzing data collected through a NERC Rules of Procedure Section 1600 cold weather generator data request
  - The NERC Board of Trustees approved the Section 1600 Data Request in December 2024

Reporting Requirements

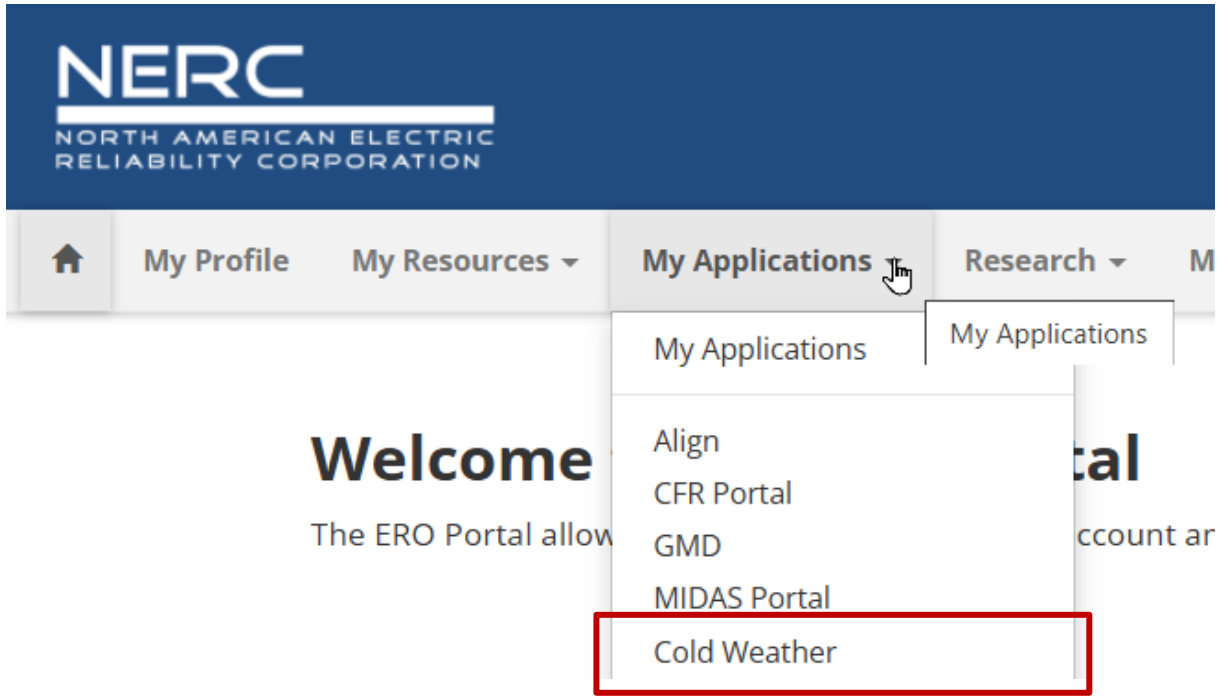
- **Who Must Report**
  - Any NERC registered Generator Owner (GO)
- **Reporting Deadline**
  - May 15 of each year
  - Initial submission due **May 15, 2025**
  - Entities may amend data until June 15 of the same year
- **What to Report**
  - For each generating unit of the GO, provide details on operating temperatures, constraints, and corrective action plans to address operational issues to during cold weather
  - Worksheet and Data Reporting Instructions are available on the ECWT page of NERC.com

How to Report

- Reporting will be through the NERC ERO Portal
- The initial phase of this reporting obligation will be collected via an Excel spreadsheet that is uploaded through the ERO Portal
  - **Only** Primary Compliance Contacts and Entity Administrators will have the ability to submit the worksheet in the initial phase
  - Any Primary Compliance Contact or Entity Administrator of the Generator Owner may submit the worksheet
- An automated solution will be implemented in time for the 2026 reporting period
  - In the automated solution (future), entities will be able to assign the reporting permission to other ERO Portal users in their organization

NERC ERO Portal

ERO Portal Menu – My Applications



- Click “My Applications”
- Locate “Cold Weather” item
  - Note: Your list of applications may differ from the example provided here

Actions available for Cold Weather Reporting

- Upload Worksheet
- View or Export Submission History
- View the content of a Submission record

Cold Weather

The Federal Energy Regulatory Commission ("FERC" or "the Commission") issued an order[1] on February 16, 2023 directing NERC to work with Commission 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. In response, NERC filed its work plan on February 16, 2024 detailing its data collection and analysis for cold weather data. In December 2024, the NERC Board of Trustees approved the Section 1600 data request to collect the required data.

NERC registered entities with a Generator Owner function must respond by **May 15 of each year**, with the **initial submission of data due by May 15, 2025**. Entities will be able to amend data submitted until June 15, 2025.

The worksheet for submitting the data is available here.

Data Reporting Instructions are available here. Detailed instructions for completing the worksheet are also included within the worksheet.

[1] *N. Am. Elec. Reliability Corp.*, 182 FERC ¶ 61,094 (2023) (Order Approving Extreme Cold Weather Reliability Standards EOP-011-3 and EOP-012-1 and Directing Modification of Reliability Standard EOP-012-1)([hereinafter February 16 Order], *reh'g. denied,* 183 FERC ¶ 62,034, *order addressing arguments raised on reh'g,* 183 FERC ¶ 61,222.

Submit Cold Weather Generator Data | Download Submission History

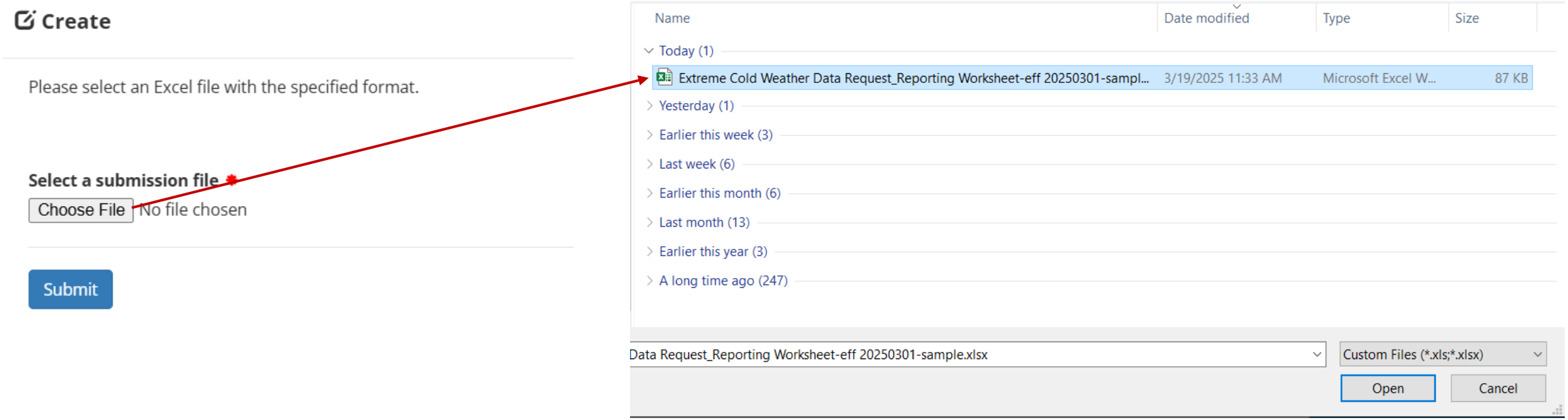
Submitted On	Name	Entity	NCR	Submitted By	Submitter's Email
3/25/2025 5:51 PM	NCR55555 Cold Weather Data Submission 3/25/2025 5:5...	Test Entity Name Change	NCR55555	Derek Kassimer	derek.kassimer@nerc.net
3/25/2025 5:50 PM	NCR55555 Cold Weather Data Submission 3/25/2025 5:5...	Test Entity Name Change	NCR55555	Scott Determan	scott.determan@nerc.net
3/24/2025 5:18 PM	NCR55555 Cold Weather Data Submission 3/24/2025 5:1...	Test Entity Name Change	NCR55555	Donna Pratt	donna.pratt@nerc.net

View Details

Process – Worksheet and ERO Portal

- Download and prepare the worksheet
  - Worksheet available at: https://www.nerc.com/pa/comp/Pages/Cold-Weather-Generator-Data-Request.aspx
- Log into ERO Portal
- From the My Applications menu, the Entity Administrator selects ***Cold Weather***
- The Entity Administrator clicks on the ***Submit Cold Weather Generator Data*** button to upload the worksheet
- The Entity Administrator selects the file and clicks the ***Submit*** button

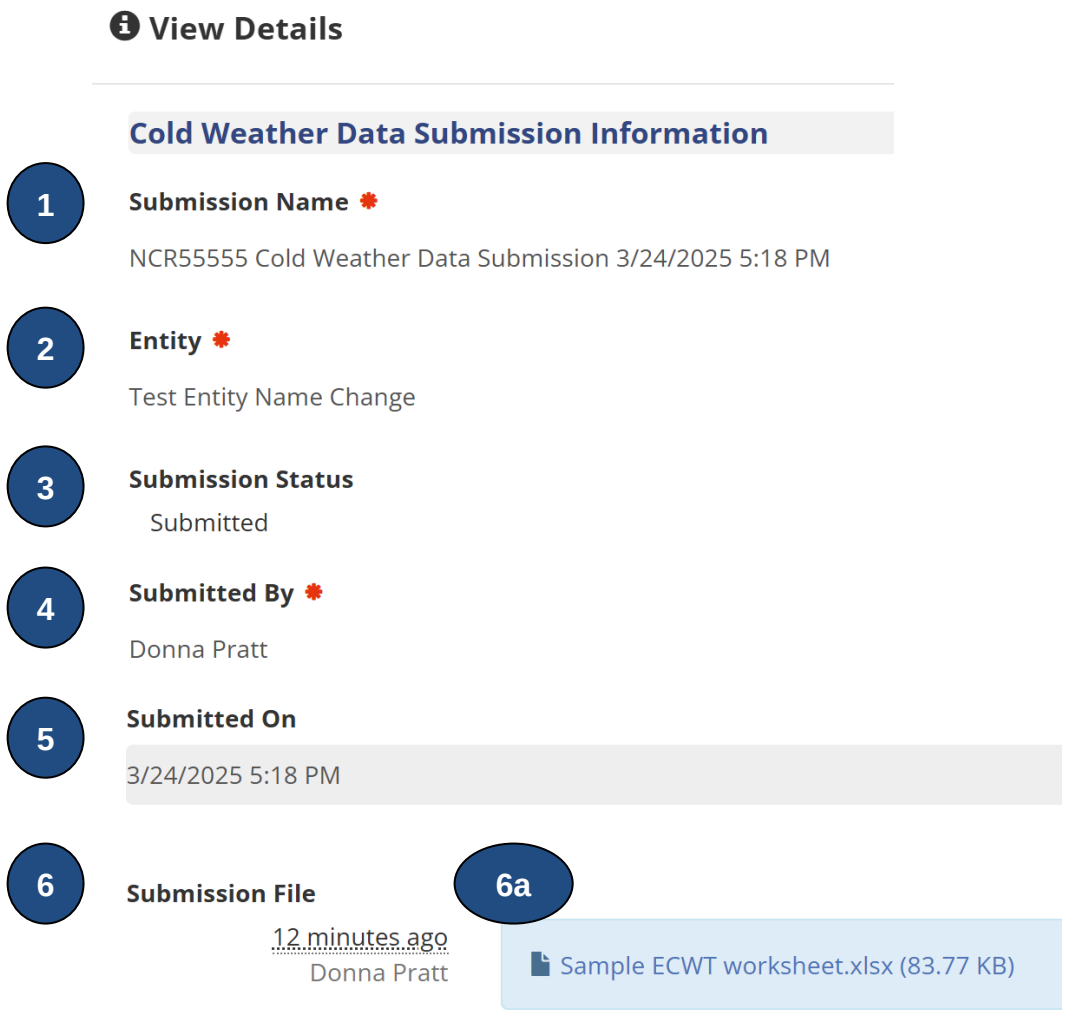
Select File to Upload



- Click ***Choose File***
- Select file to upload
- Click ***Submit***

Please include one NCR ID in the file name.

View Details



1. NCR ID, date, and time of submission
2. Entity Name
3. Submission Status
   a. Submitted – initial status, not validated
   b. Validated – validation in progress
   c. Returned – errors identified, waiting for corrections
   d. Locked – submission complete, being used for analysis
4. Submitting user
5. Date and time of submission
6. Name of file uploaded
   a. Click on filename to download the Excel file

Process – After The Upload

- Worksheet will be evaluated for completeness
- If errors are identified, an email will be sent to the original submitter within five days of submission requesting a **corrected worksheet within three business days of notification**
  - Subject of email will be "*ECWT Data Submission Errors-Corrections due by xx/xx/xx*"
  - Must be a complete worksheet with the corrected errors, not just the corrections
- Reporting status will be monitored weekly by NERC and Regional Entity Compliance
- Reminder emails will be sent to entities that have not reported or have outstanding errors to correct

The Extreme Cold Weather Temperature (ECWT) Worksheet

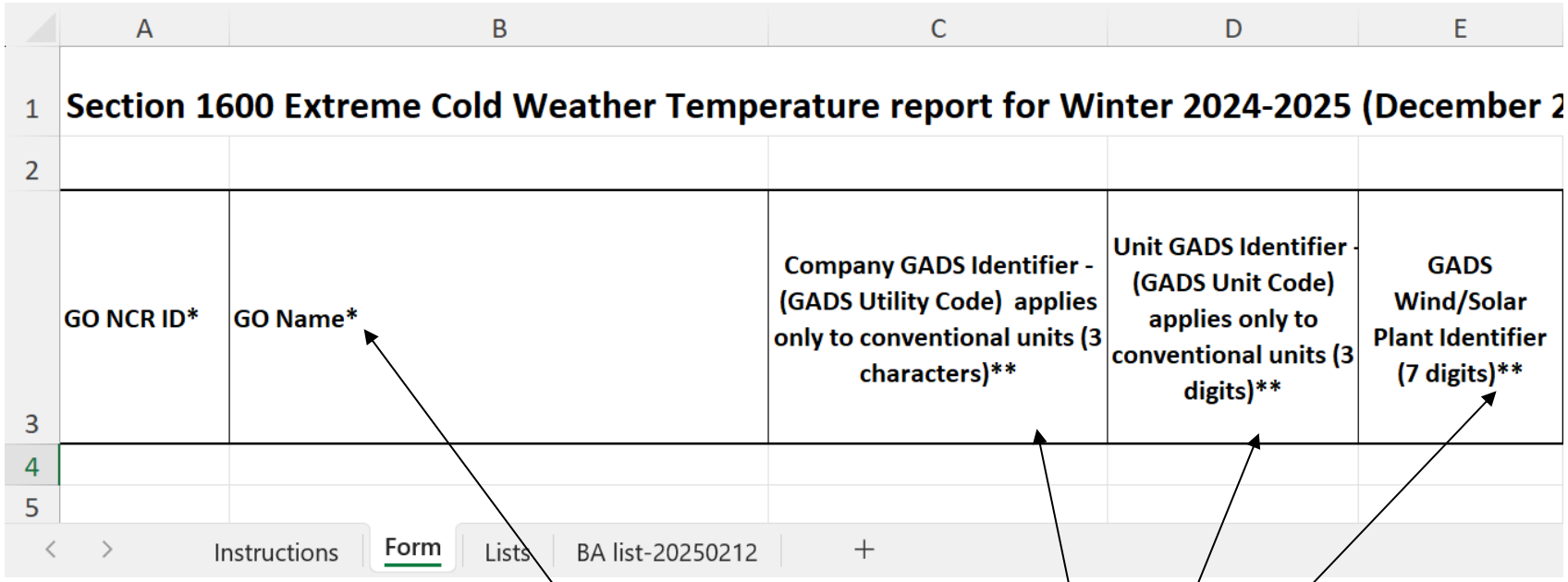
Completing the Worksheet

	A	B	C	D	E	F	G	H
1	Section 1600 Extreme Cold Weather Temperature report for Winter 2024-2025 (December 2024 - March 2025):							
2						EIA.gov		
3	GO NCR ID*	GO Name*	Company GADS Identifier - (GADS Utility Code) applies only to conventional units (3 characters)**	Unit GADS Identifier - (GADS Unit Code) applies only to conventional units (3 digits)**	GADS Wind/Solar Plant Identifier (7 digits)**	EIA Plant ID*	Unit EIA Code (EIA Generator ID)*	Unit Name (as identified to EIA)*
4								
5								

Instructions | Form | Lists | BA list-20250212

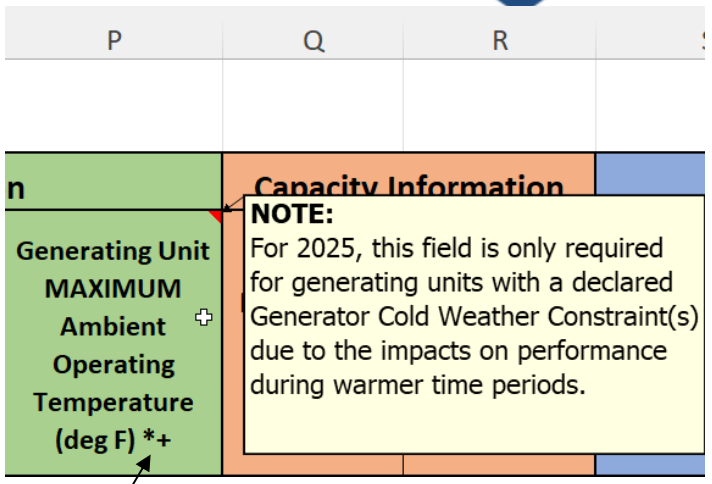
- Worksheet contains four tabs:
  - Instructions – Column by column details
  - Form – Where information is entered
  - Lists – Provides drop-down lists on Form – do not change
  - BA List – Provides drop-down list of BAs on Form – do not change

Field Symbols



	A	B	C	D	E
1	Section 1600 Extreme Cold Weather Temperature report for Winter 2024-2025 (December 2				
2					
3	GO NCR ID*	GO Name*	Company GADS Identifier - (GADS Utility Code) applies only to conventional units (3 characters)**	Unit GADS Identifier - (GADS Unit Code) applies only to conventional units (3 digits)**	GADS Wind/Solar Plant Identifier (7 digits)**
4					
5					

Instructions | Form | Lists | BA list-20250212



P	Q	R
n	Capacity Information	
Generating Unit MAXIMUM Ambient Operating Temperature (deg F) *+		

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

Three field notations:

* = Required Field

** = Required columns C+D or column E

*+ = Conditionally Required Field (see note or instructions)

Identifying Information

	A	B	C	D	E	F	G	H
1	**Section 1600 Extreme Cold Weather Temperature report for Winter 2024-2025 (December 2024 - March 2025):**							
2						EIA.gov		
3	**GO NCR ID***	**GO Name***	**Company GADS Identifier - (GADS Utility Code) applies only to conventional units (3 characters)****	**Unit GADS Identifier - (GADS Unit Code) applies only to conventional units (3 digits)****	**GADS Wind/Solar Plant Identifier (7 digits)****	**EIA Plant ID***	**Unit EIA Code (EIA Generator ID)***	**Unit Name (as identified to EIA)***

Column	*Name*	*Instructions*
A	GO - NCR #*	Enter the company's NERC Compliance Registry Number for the Generator Owner (GO) functional registration/scope.
B	GO Name*	Enter the name of the GO as found on the NERC Compliance Registry.
C	Company GADS Identifier **	Enter the 3-digit GADS company identifier: GADS Utility Code. Only applies to conventional/thermal units. If unit is inverter-based, leave blank. If the Generator Owner has units that do not report to GADS, use 000 as the GADS company identifier.
D	Unit GADS Identifier**	Enter the 3-digit GADS unit identifier: GADS Unit Code. Only applies to conventional/thermal units. If unit is inverter-based (wind or solar), leave blank. If the Generator Owner has units that do not report to GADS, use 000 as the GADS company identifier.
E	Plant GADS Wind/Solar Identifier**	Enter the 7-digit GADS Wind/Solar plant identifier. Leave blank for conventional/thermal generating units.
F	Plant EIA Code*	Enter the unit's EIA Plant ID. Plant file (part of annual zip file) available at: https://www.eia.gov/electricity/data/eia860/
G	Unit EIA Code*	Enter the unit's EIA Generator ID. Generator file (part of annual zip file) available at: https://www.eia.gov/electricity/data/eia860/
H	Unit Name*	Enter the name of the unit - as reported to EIA. ***Unit name may be the same as the EIA Generator ID.***

Which EIA file to use?

EIA files are produced twice a year: Early release (around June), Final (around September)

Form	Description
1_Utility_Yxxxx.xls	Lists the Utility IDs of reporting entities
2_Plant_Yxxxx.xls	Lists the Plant IDs and associated characteristics, Operable, Proposed, and Retired/Canceled
3.1_Generator_Yxxxx.xls	Lists the individual units and common characteristics of different types of units
3.2_Wind_Yxxxx.xls	Lists additional characteristics of wind generating units
3.3_Solar_Yxxxx.xls	Lists additional characteristics of solar generating units
3.4_Energy Storage_Yxxxx.xls	Lists additional characteristics of energy storage units
3.5_Multifuel_Yxxxx.xls	Lists additional characteristics of multi-fuel units
4_Owner_Yxxxx.xls	Lists ownership information about plants
no form 5	
6.2_EnviroEquip_Yxxxx.xls	Lists generating equipment and associated environmental controls
6.1_EnviroAssoc_Yxxxx.xls	Lists emissions standards and control strategies

EIA Data File Example

A	B	C	D	E	F	G	H
2023 Form EIA-860 Data - Schedule 3, 'Wind Technology Data' (Operable Units Only)							
Utility ID	Utility Name	Plant Code (1)	Plant Name	State	County	Generator ID (2)	Status
63560	Sand Point Generating, LLC	1	Sand Point	AK	Aleutians East	WT1	OS
63560	Sand Point Generating, LLC	1	Sand Point	AK	Aleutians East	WT2	OS
13642	Nome Joint Utility Systems	90	Snake River	AK	Nome	EWT 1	OP
13642	Nome Joint Utility Systems	90	Snake River	AK	Nome	EWT 2	OP
10633	City of Lamar - (CO)	508	Lamar Plant	CO	Prowers	T1-T3	OP
10633	City of Lamar - (CO)	508	Lamar Plant	CO	Prowers	T4	OP

1. This is the EIA Plant Code to enter in column F of the ECWT worksheet
2. This is the Generator ID to enter in column G of the ECWT worksheet
3. Also enter the Generator ID in Column H (Unit Name).

Temperature and Capacity Information

L	M	N	O	P	Q	R
	Temperature Information				Capacity Information	
Unit Self-Commits or is Required to Run at or Below 32 deg F (Y/N)*	Unit ECWT (deg F)*	Date ECWT Calculated*	Generating Unit MINIMUM Ambient Operating Temperature (deg F)*	Generating Unit MAXIMUM Ambient Operating Temperature (deg F) *+	Net Winter Capacity (MW)*	Capacity Operable at ECWT (MW)*

[Link to Calculating Extreme Cold Weather Temperature Document]

Column	Name	Instructions
L	Unit Self-Commits or is Required to Run at or Below 32 deg F (Y/N)*	Enter Y if the unit self-commits or is required to run at or below 32 deg F during the winter months of December y0 through March y1 and complete the remaining fields Enter N if the unit did not self-commit or is not required to run at or below 32 deg F during the winter months of December y0 through March y1 and leave the remaining fields blank **NOTE: 'N' should still be entered if the unit does not self-committ and is not required to run at or below 32 degs, but may be called upon to operate in order to assist in the mitigation of BES Emergencies, Capacity Emergencies, or Energy Emergencies during periods at or below a temperature of 32 degrees Fahrenheit.**
M	Unit ECWT*	Enter the unit's current Extreme Cold Weather Temperature in use in degrees Fahrenheit. Instructions for calculating the Extreme Cold Weather Temperature are available at: https://www.nerc.com/pa/Stand/Project202403RevisionstoEOP0122DL/2024-03_Calculating%20Extreme%20Cold%20Weather%20Temperature_120324.pdf
N	Date ECWT Calculated*	Enter the date (MM/DD/YYYY) the ECWT was calculated.
O	Generating Unit Minimum Ambient Operating Temperature*	Enter the generating unit's expected minimum ambient operating temperature in degrees Fahrenheit. 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.
P	Generating Unit Maximum Ambient Operating Temperature*+	Enter the generating unit's expected maximum ambient operating temperature in degrees Fahrenheit. 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 performance temperature determined by an engineering analysis. **NOTE: For 2025, this field is only required for generating units with a declared Generator Cold Weather Constraint(s) due to the impacts on performance during warmer time periods.**
Q	Net Winter Capacity*	Enter the net winter capacity of the unit in Megawatts (MWs).
R	Capacity Operable at ECWT*	Enter the portion of the unit's total net winter capacity from Column Q that is currently able to operate at ECWT in Megawatts (MWs).

Corrective Action Plan Information

	S	T	U	V	W	X
	Corrective Action Plans (CAPs)					
	Capacity Under a Corrective Action Plan (MW)*	Corrective Action Plan Development Date (mm/dd/yyyy)*+	Projected Corrective Action Plan Completion Date (mm/dd/yyyy)*+	Did the Unit Experience a Generator Cold Weather Reliability Event this past Winter? (Y/N)*	Is the Unit Under a CAP Because it was Identified as 'Similar Equipment'? (Y/N)*	Description of the 'Similar Equipment' Identified (free text)*+

Column	*Name*	*Instructions*
S	Capacity Under a Corrective Action Plan*	If applicable, enter the portion of the unit's net winter capacity from Column Q that currently cannot operate at ECWT and has a Corrective Action Plan (CAP) developed. ***If the unit does not need or have a Corrective Action Plan, enter 0 in this field. Other Corrective Action Plan fields may be left blank if no CAP exists and no Generator Cold Weather Reliability Event occurred during the winter reporting period.***
T	Corrective Action Plan Development Date*+	If applicable, enter the date (MM/DD/YYYY) the CAP in Column S was developed. Required when Capacity is under a Corrective Action Plan is reported.
U	Projected Corrective Action Plan Completion Date*+	If applicable, enter the date (MM/DD/YYYY) the CAP in Column S is projected to be completed. Required when Capacity is under a Corrective Action Plan is reported.
V	Did the Unit Experience a Generator Cold Weather Reliability Event this Past Winter? *	Did the unit experience a Generator Cold Weather Reliability Event in the most recent winter? Select 'Y' or 'N' from the list.
W	Is the Unit Under a CAP Because it was Identified as 'Similar Equipment'? *	Is the unit under a Corrective Action Plan (CAP) because it was identified as 'Similar Equipment' to another unit under a CAP? Select 'Y' or 'N' from the list.
X	Description of the 'Similar Equipment' Identified*+	Required when Column W is 'Y', enter a brief description of the "Similar Equipment' that was identified.

Constraint Information

Y	Z	AA	AB	AC
Generator Cold Weather Constraint Information				
Unit Has a Generator Cold Weather Constraint Identified? (Y/N)*	Date Generator Cold Weather Constraint Identified (mm/dd/yyyy)*+	Generator Cold Weather Constraint Category (select from drop down)*+	Generator Cold Weather Constraint Description*+ *Required when OTHER is selected as Constraint Category*	Notes/Comments - Optional

Column	*Name*	*Instructions*
Y	Unit has a Generator Cold Weather Constraint Identified*	Does the unit have a Generator Cold Weather Constraint identified as part of a Corrective Action Plan that prevents it from operating at ECWT? select 'Y' or 'N' from the list.
Z	Date Generator Cold Weather Constraint Identified*+	Enter the date (MM/DD/YYYY) the Generator Cold Weather Constraint in Column Y was identified.
AA	Generator Cold Weather Constraint Category*+	If applicable, select a category from the list that best represents the entity's rationale for declaring the Generator Cold Weather Constraint. Single units with multiple constraints should select the 'Other' category and use the associated free text box to specify a date identified and a category for each constraint.
AB	Generator Cold Weather Constraint Description*+	Required when a constraint with OTHER is selected as Constraint Category
AC	***Notes - Optional***	***Optional field to provide clarifying description or other comments***

Resources

- Extreme Cold Weather Temperature (ECWT) Page on NERC.com
- ECWT Section 1600 Data Request
- Data Reporting Instructions
- Worksheet for reporting
- Calculating Extreme Cold Weather Temperature Document
- Training presentation
- Questions: ecwt@nerc.net

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Questions and Answers