

# **Cold Weather**

Project 2019-06

Cold Weather SDT April 14, 2021

#### RELIABILITY | RESILIENCE | SECURITY









#### **Administrative Items**



#### NERC Antitrust Guidelines

• It is NERC's policy and practice to obey the antitrust laws and to avoid all conduct that unreasonably restrains competition. This policy requires the avoidance of any conduct that violates, or that might appear to violate, the antitrust laws. Among other things, the antitrust laws forbid any agreement between or among competitors regarding prices, availability of service, product design, terms of sale, division of markets, allocation of customers or any other activity that unreasonably restrains competition.

### Notice of Open Meeting

Participants are reminded that this webinar is public. The access number was widely distributed. Speakers on the call should keep in mind that the listening audience may include members of the press and representatives of various governmental authorities, in addition to the expected participation by industry stakeholders.



- Modifications to:
  - EOP-011-2
  - IRO-010-4
  - TOP-003-5
  - Implementation Plan
- Next Steps
- Resources



# **Standard Drafting Team Members**

	Name	Entity
Chair	Matthew Harward	Southwest Power Pool, Inc.
Vice Chair	Matt Averett	Southern Company
Members	Alan Allgower	ERCOT
	Thor Angle	Puget Sound Energy
	David Daniels	American Electric Power
	Chris Dibble	Dominion Energy
	Samuel J. Dwyer, IV	Ameren
	Venona Greaff	Ingleside Cogeneration LP (Occidental Energy)
	James Healy	Seminole Electric Cooperative Inc.
	Cameron Lawson	Tennessee Valley Authority
	Jill Loewer	Utility Services
	Kenneth Luebbert	Evergy, Inc.
	Don Urban	ReliabilityFirst
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### **Cold Weather Project Status**

#### **Status**

On March 22, 2021, the Board took action without a meeting to direct the completion of proposed Reliability Standards under Project 2019-06 Cold Weather by June 2021.

In accordance with Section 8.0 of the Standards Committee (SC) Charter, an email ballot was be sent to the SC on March 29, 2021, requesting action by April 1, 2021, to consider the waiver request. The SC was asked to approve the following:

Approve waiver of Section 4.12 of the Standard Processes Manual (SPM) for Project 2019-06 Cold Weather, to reduce the length of the additional formal comment and ballot period(s) from 45 days to as few as 25 days, with ballot(s) conducted during the last 10 days of the comment period.

The SC voting concluded and the motion to approve the wavier passed.

A 25-day formal comment period is open through 8 p.m. Eastern, Monday, April 26, 2021 for the following:

- -EOP-011-2 Emergency Preparedness
- -IRO-010-4 Reliability Coordinator Data Specification and Collection
- -TOP-003-5 Operational Reliability Data

Additional ballots for the standards and non-binding polls of the associated Violation Risk Factors (VRFs) and Violation Severity Levels (VSLs) will be conducted **April 16-26, 2021**.



#### EOP-011-2 Emergency Preparedness and Operations

#### A. Introduction

1. Title: Emergency Preparedness and Operations

2. Number: EOP-011-2

Purpose: To address the effects of operating emergencies by ensuringe each

Transmission Operator, Balancing Authority, and Generator Owner has developed plan(s) to mitigate and prepare for operating Emergencies; and that Operating those Pplans are implemented and coordinated within athe Reliability Coordinator Area as specified within the

requirements. Area.

- 3. Applicability:
  - 3.1. Functional Entities:
    - 3.1.1 Balancing Authority
    - 3.1.2 Reliability Coordinator
    - 3.1.3 Transmission Operator
    - 3.1.4 Generator Owner
    - 3.1.5 Generator Operator
  - 3.2. Facilities
    - 3.2.1 For the purpose of this standard, the term "generating unit" includes means all Bulk Electric System generators units and BES generating plants.



- 1.2.6. Provisions to determine Rreliability impacts of:
  - 1.2.6.1. cold weather conditions; and
  - 1.2.6.2. any other extreme weather conditions.

- 2.2.9. <u>Provisions to determine Reliability impacts of:</u>
  - 2.2.9.1. cold weather conditions; and
  - **2.2.9.2.** any other extreme weather conditions.



- R7. Each Generator Owner shall develop, implement and maintain, and implement one or more cold weather preparedness plan(s) for its generating units. The cold weather preparedness plan(s) shall include the following, at a minimum: [Violation Risk Factor: High] [Time Horizon: Operations Planning and Real-Time Operations]
  - 7.1. Generating unit(s) freeze protection measures based on unique factors such as geographical location and plant configuration;
  - **7.2.** Annual maintenance and inspection and maintenance of generating unit(s) freeze protection measures;
  - **7.3.** Generating unit(s) cold weather data, to include:
    - 7.3.1. Generating unit(s) operating limitations in cold weather to include: 4

      through 2.2. 3.4; and
      - 7.3.1.1. capability and availability;
      - 7.3.1.2. fuel supply and inventory concerns;
      - 7.3.1.3. fuel switching capabilities; and
      - 7.3.1.4. environmental constraints.



- 7.3.2. Generating unit(s):
  - 7.3.2.1. minimum design temperature; or
  - 7.3.2.2. minimum <u>historical operating temperature</u>; <u>demonstrated</u> <u>historical performance during cold weather in the previous 5 years</u>; or
  - 7.3.2.3 engineering analysis to determine current minimum cold weather performance temperature
- M7. Each Generator Owner shall will have evidence a documentinged that its cold weather preparedness plan(s) was implemented and maintained in accordance with Requirement R7. and have evidence such as (a review or revision history to indicate that the plan has been maintained;) and have evidence such as operator checklists, work orders, test records, other operating and maintenance documentation, or other communication documentation to show that its cold weather preparedness plan was implemented; and have evidence such as training materials and attendance list showing successful completion of training.



- R8. Each Generator Operator or Generator Owner shall provide generating unit-specific training to its maintenance or operations personnel responsible for implementing cold weather preparedness plan(s). [Violation Risk Factor: Medium] [Time Horizon: Longterm Planning, Operations Planning]
- M8. Each Generator Operator or Generator Owner will have documented evidence that the applicable personnel completed training of the Generator Owner's cold weather preparedness plan(s). This evidence may include, but is not limited to, documents such as personnel training records, training materials, date of training, agendas or learning objectives, attendance at pre-work briefings, review of work order tasks, tailboards, attendance logs for classroom training, and completion records for computer-based training in fulfillment of Requirement R8.



## **EOP-011-2 Implementation Guidance**

#### Requirement R7:

- Cold Weather Definition (Geographical location, climate, and GO experience with operation during cold weather events)
- Minimum historical operating temperature
- GO not required to install freeze protection
- Requirement R8:
  - No specific training method or process up to entity



#### **IRO-010-5 Draft 2 Modifications**

- 1.3. Provisions for notification of BES generating unit(s) -specific design specification or minimum historical performance during local forecasted cold weather to include: , and expected BES generating unit operation limitations during local forecasted cold weather.
  - **1.3.1** Operating limitations based on:
    - **1.3.1.1.** capability and availability;
    - **1.3.1.2.** fuel supply and inventory concerns;
    - 1.3.1.3. fuel switching capabilities; and
    - 1.3.1.4. environmental constraints
  - 1.3.2. Generating unit(s):
    - 2.3.2.1. minimum design temperature; or
    - 2.3.2.2. minimum historical operating temperature; or
    - **2.3.2.3.** engineering analysis to determine current minimum cold weather performance temperature.



#### **TOP-003-5 Draft 2 Modifications**

- 1.3. Provisions for notification of BES generating unit(s)-specific design specification or minimum historical performance during cold weather, and expected BES generating unit operation limitations during local forecasted cold weather to include:-
  - 1.3.1. Operating limitations based on:
    - **1.3.1.1.** capability and availability;
    - **1.3.1.2.** fuel supply and inventory concerns;
    - 1.3.1.3. fuel switching capabilities; and
    - 1.3.1.4. environmental constraints
  - 1.3.2. Generating unit(s):
    - 1.3.2.1 minimum design temperature; or
    - 1.3.2.2. minimum historical operating temperature; or
    - **1.3.2.3** engineering analysis to determine current minimum cold weather performance temperature



### **TOP-003-5 Draft 2 Modifications**

- 2.3. A periodicity for providing data. Provisions for notification of BES generating unit(s) status during local forecasted cold weather to include:
  - **2.3.1**. Operating limitations based on:
    - **2.3.1.1.** capability and availability;
    - **2.3.1.2.** fuel supply and inventory concerns;
    - **2.3.1.3.** fuel switching capabilities; and
    - **2.3.1.4.** environmental constraints.
  - **2.3.2.** Generating unit(s):
    - 2.3.2.1 minimum design temperature; or
    - 2.3.2.2. minimum historical operating temperature; or
    - **2.3.2.3** engineering analysis to determine current minimum cold weather performance temperature.



# **Implementation Plan**

#### Effective Date

- Updated from 12 months to 18 months
  - Justification: Availability of engineering studies needed by entities

Where approval by an applicable governmental authority is required, the Reliability Standard shall become effective on the first day of the first calendar quarter that is eighteen (18) months after the effective date of the applicable governmental authority's order approving the Reliability Standard, or as otherwise provided for by the applicable governmental authority.

Where approval by an applicable governmental authority is not required, the Reliability Standard shall become effective on the first day of the first calendar quarter that is eighteen (18) months after the date the standard is adopted by the NERC Board of Trustees, or as otherwise provided for in that jurisdiction.



- Final Ballot
  - May 2021
- NERC Board of Trustees Adoption
  - June 2021



- Project 2019-06 Project Page: <a href="https://www.nerc.com/pa/Stand/Pages/Project%202019-06%20Cold%20Weather.aspx">https://www.nerc.com/pa/Stand/Pages/Project%202019-06%20Cold%20Weather.aspx</a>
- 2019 FERC and NERC Staff Report: The South Central United States Cold Weather Bulk Electric System Event of January 17, 2018: <a href="https://www.ferc.gov/legal/staff-reports/2019/07-18-19-ferc-nerc-report.pdf">https://www.ferc.gov/legal/staff-reports/2019/07-18-19-ferc-nerc-report.pdf</a>





