

Summary of Proposed Reliability Standard EOP-012-4

Proposed Reliability Standard EOP-012-4 — Extreme Cold Weather Preparedness and Operations

Details of Standard(s) Development

Reliability Standards Authority: NERC

Standard(s)	EOP-012-4 — Extreme Cold Weather Preparedness and Operations ¹
Purpose	To address the effects of operating in extreme cold weather by ensuring each Generator Owner has developed and implemented plan(s) to mitigate the reliability impacts of extreme cold weather on its applicable generating units
Change Type:	FERC DIRECTIVE
Affected Functional Entities:	• Generator Owner (GO) • Generator Operator
Ballot Results:	EOP-012-4: 77.68% Quorum / 93.84% Approval
Ontario Participant Support:	There were 87 votes cast by NERC registered entities. 1 OEB rate-regulated entity voted (1/87) Negative and 1 OEB rate-regulated entity voted (1/87) Affirmative.
Impact Within Ontario	EOP-012-4 applies to Bulk Electric System (BES) generating units that are not subject to oversight by the Canadian Nuclear Safety Commission (CNSC). Non-nuclear BES generating units must demonstrate and document reliable operation during cold-weather conditions.

¹ EOP-012-2 is currently in effect in Ontario. The EOP-012-3 standard did not achieve the necessary votes for approval by the ballot body and therefore did not come into effect in Ontario as per the Market Rules.

Standards Development Milestones²

Date	Action
October 8, 2026	• Adopted by NERC Board of Trustees
October 14, 2026	• NERC Petition for Approval
October 21, 2026	• IESO Posting Date
February 18, 2027	• End of OEB Review Period

Summary

The EOP-012 Reliability Standard was developed to address the reliability risks associated with operating generating units during extreme cold weather conditions. The standard requires Generator Owners and Generator Operators to develop and implement plans to mitigate the impacts of extreme cold weather on their generating units and to help ensure that the reliability of the Bulk Power System is not adversely affected.

During the development of Reliability Standard EOP-012-3, NERC received comments from Canadian registered entities expressing concerns regarding the applicability of certain requirements within the standard to Canadian operating and regulatory environments. Given the limited scope of that project and the need to address directives from the Federal Energy Regulatory Commission (FERC), NERC encouraged Canadian stakeholders to submit a Standard Authorization Request (SAR) so that their concerns could be more fully evaluated through a separate standards development project.

As a result, a SAR was submitted by members of Electricity Canada representing utilities and organizations from Quebec, Ontario, New Brunswick, and Manitoba. The SAR sought the development of Canadian specific revisions that would better reflect the unique climatic, operational, and regulatory circumstances in Canada. The SAR subsequently led to the creation of NERC Project 2025-01 Canadian-Specific Revisions to EOP-012-3.

The proposed Reliability Standard EOP-012-4 exempts Bulk Electric System (BES) generating units that are subject to regulation by the Canadian Nuclear Safety Commission (CNSC), in recognition of the existing requirements related to facility design, maintenance, operation, equipment reliability, and operational readiness. EOP-012-4 consists of nine continent-wide requirements (Requirements R1 through R9) and one attachment, all of which remain unchanged from EOP-012-3. The proposed standard introduces a new Section D containing the Canadian Variance. The Canadian Variance consists of eight variance requirements (Requirements D.A.1 through D.A.8) and one attachment, Attachment 1-CAN. These variance requirements and the associated attachment generally follow the structure of the continent-wide requirements but include revisions necessary to reflect differences in Canadian operational practices, regulatory frameworks, and winter operating conditions.

² The next steps will be the issuance of the FERC Order followed by determination of the [Ontario Enforcement Date](#).

Four new defined terms have been developed as part of the Canadian Variance and are identified by the designation "[CV]" to distinguish them from the corresponding continent-wide definitions:

- Generator Cold Weather Reliability Event [CV]
- Fixed Fuel Supply Component [CV]
- Generator Cold Weather Critical Components [CV]
- Generator Cold Weather Constraint [CV]

These Canadian-specific definitions were developed to recognize that generating units in Canada are designed, constructed, and operated under different cold-weather conditions than those contemplated by the existing continent-wide definitions.

Most of the requirements within the Canadian Variance have been carried forward from the continent-wide requirements and remain substantially unchanged, except for modifications necessary to incorporate the newly established Canadian-specific defined terms. Requirements D.A.2 and D.A.3 have been revised to ensure that the applicability of requirements for new generating units is determined based on the effective date of the standard, thereby preventing the retroactive application of requirements intended for new units to existing facilities.

In addition, Requirements D.A.2 and D.A.3 establish thermal performance criteria based on the Extreme Cold Weather Temperature and the generating unit's minimum operating temperature. These requirements also obligate Generator Owners to implement cold-weather operability measures that enable generating units to operate reliably under the severe winter conditions that they are reasonably likely to encounter.

Requirement D.A.6 has been revised to provide flexibility for differing regulatory approval processes across Canadian jurisdictions. Specifically, the requirement permits Corrective Action Plans to be revised and shared with impacted parties, including the applicable Compliance Enforcement Authority, as part of compliance monitoring and enforcement activities. The requirement also allows the timeline for completing a Corrective Action Plan to be suspended pending receipt of any necessary regulatory approvals, thereby recognizing that implementation may be contingent upon approvals from governmental or regulatory bodies.

Other Salient Information

Stakeholder Consultation

NERC Reliability Standards Development Procedure

- NERC develops Reliability Standards in accordance with Section 300 (Reliability Standards Development) of its Rules of Procedure and the NERC Standard Processes Manual;
- NERC's rules provide for reasonable notice and opportunity for public comment, due process, openness, and a balance of interests in developing Reliability Standards;
- The development process is open to any person or entity with a legitimate interest in the reliability of the Bulk Power System. NERC considers the comments of all stakeholders;
- Stakeholders must approve, and the NERC Board of Trustees must adopt, a new or revised Reliability Standard before NERC submits the Reliability Standard to FERC for approval;
- NERC provided public notices for comments and balloting as follows:

- Standard Authorization Request Comment: May 28 – June 26, 2025
- First Posting: July 16 – August 31, 2026
- Initial Ballot and Non-binding Poll August 21– August 31, 2026
- Final Ballot: September 25 – October 5, 2026

IESO Reliability Standards Standing Committee

- The purpose of the Reliability Standards Standing Committee (RSSC) is to assist market participants to develop a more comprehensive understanding of their reliability obligations by:
 - Notifying participants of reliability-related information on new and developing reliability standards;
 - Providing a forum to discuss and develop consensus comments on new and developing reliability standards; and
 - Engaging participants in the standard development process of NERC and NPCC.
- The majority of stakeholder engagement takes place by email communications and is open to any stakeholder wishing to join.
- Project 2025-01 Canadian-Specific Revisions to EOP-012-3 was discussed at the following RSSC meetings:
 - March 19, 2025
 - June 4, 2025
 - November 12, 2025
 - March 12, 2026