

Summary of Proposed Reliability Standards Under NERC Project 2019-06 Cold Weather

Details of Standard(s) Development

Reliability Standards Authority: NERC

Standard(s)	<ul style="list-style-type: none">• EOP-011-2 Emergency Preparedness and Operations• IRO-010-4– Reliability Coordinator Data Specification and Collection• TOP-003-5 Operational Reliability Data
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Purpose	To enhance the reliability of the BES during cold weather events by ensuring Generator Owners, Generator Operators, Reliability Coordinators, and Balancing Authorities prepare for extreme cold weather conditions.
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Change Type:	FERC Directive
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Affected Functional Entities:	<ul style="list-style-type: none">• Reliability Coordinator (RC)• Planning Coordinator (PC)• Transmission, Owner (TO)• Generator Owner (GO)• Transmission Operator (TOP)• Transmission Planner (TP)• Distribution Provider (DP)• Balancing Authority (BA)
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Ballot Results:	<ul style="list-style-type: none">• Proposed Reliability Standard EOP-011-2: 78.26% approval / 90.65% quorum;• Proposed Reliability Standard IRO-010-4: 87.30% approval / 89.46% quorum;• Proposed Reliability Standard TOP-003-5: 87.52% approval / 89.14% quorum
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Ontario Participant Support: Ontario voted affirmative in support of the proposed reliability standards

Impact within Ontario The proposed reliability standards are of minimal impact to Ontario Market Participants. The impetus for these revisions have been extreme cold weather impacts in the southern regions in NERC. Cold Weather has always been a component of planning and operating within the NPCC footprint. Of note to Ontario Market Participants will be Requirement 7 of EOP-011-2 which will require Generator Owner to implement and maintain one or more cold weather preparedness plan(s) for its generating units.

Standard Development Milestones

Date	Action
June 11, 2021	<ul style="list-style-type: none">Adopted by NERC Board of Trustees
June 28, 2021	<ul style="list-style-type: none">NERC Petition for Approval
October 7, 2021	<ul style="list-style-type: none">IESO Posting Date
February 4, 2022	<ul style="list-style-type: none">End of OEB Review Period
TBD	<ul style="list-style-type: none">FERC Order Issued
TBD	<ul style="list-style-type: none">US Mandatory Enforcement Date
TBD	<ul style="list-style-type: none">Ontario Enforcement Date (Milestones in Reliability Standard Development and Lifecycle)

Summary

Several notable events over the last decade have demonstrated the substantial impacts that extreme cold weather conditions can have on the reliability of the Bulk-Power System. Extreme cold weather was a major factor in Bulk-Power System reliability events in 2011, 2014 and 2018. Extreme cold weather was likely a major factor in the February 2021 event affecting Texas and the south central United States as well. NERC has highlighted in its reliability assessments, the grid is rapidly transforming, and it is becoming increasingly reliant on variable energy resources, such as wind and

solar, and “just in time” natural gas deliveries. This resource mix is more sensitive to extreme temperature conditions than the generation fleet of prior years. The January 17, 2018 event in particular, conclusively demonstrated the need for mandatory Reliability Standards to help support the reliability of the Bulk-Power System during future winter seasons. This need was underscored by the most recent cold weather event in February 2021, which resulted in massive customer load shedding to maintain system stability.

In assessing the causes of the January 17, 2018 event, FERC and NERC staff concluded that the primary cause was a failure to prepare properly or winterize generation facilities for cold temperatures.⁶ Natural gas supply issues were a major contributing factor. In their report, NERC and FERC staff recommended a multi-pronged approach, including new or revised Reliability Standards, enhanced outreach to Generator Owners and Generator Operators, and market rules where appropriate, to address reliability needs in cold weather conditions. NERC developed the proposed Cold Weather Reliability Standards - proposed Reliability Standards EOP-011-2 (Emergency Preparedness and Operations), IRO-010-4 (Reliability Coordinator Data Specification and Collection), and TOP-003-5 (Operational Reliability Data) – to address the standards part of this recommendation.

Other Salient Information

There are no technical or financial impacts as a result of these proposed revisions.