

# Summary of Proposed Reliability Standards Related to Establishing and Communicating System Operating Limits

## Details of Standard Development

Reliability Standards Authority:	<ul style="list-style-type: none"><li>• NERC</li></ul>
Standard(s):	<ul style="list-style-type: none"><li>• FAC-011-4 – System Operating Limits Methodology for the Operations Horizon</li><li>• FAC-014-3 – Establish and Communicate System Operating Limits</li><li>• FAC-003-5 – Transmission Vegetation Management</li><li>• IRO-008-3 – Reliability Coordinator Operational Analyses and Real-time Assessments</li><li>• PRC-002-3 – Disturbance Monitoring and Reporting Requirements</li><li>• PRC-023-5 – Transmission Relay Loadability</li><li>• PRC-026-2 – Relay Performance During Stable Power Swings</li><li>• TOP-001-6 – Transmission Operations</li></ul>
Purpose	<ul style="list-style-type: none"><li>• Improve the framework for establishing and communicating System Operating Limits</li></ul>
Change Type:	<ul style="list-style-type: none"><li>• FERC Directive</li></ul>
Affected Functional Entities:	<ul style="list-style-type: none"><li>• Reliability Coordinator (RC)</li><li>• Planning Coordinator (PC)</li><li>• Transmission, Owner (TO)</li><li>• Generator Owner (GO)</li><li>• Transmission Operator (TOP)</li><li>• Transmission Planner (TP)</li><li>• Distribution Provider (DP)</li><li>• Balancing Authority (BA)</li></ul>

Ballot Results:	FAC-011-4 85.76% Quorum, 82.83% Approval
	FAC-014-3 83.44% Quorum, 92.34% Approval
	FAC-003-5 86.19% Quorum, 93.75% Approval
	PRC-002-3 86.45% Quorum, 94.17% Approval
	PRC-023-5 85.67% Quorum, 93.55% Approval
	PRC-026-2 86.19% Quorum, 94.18% Approval
	IRO-008-3 94.42% Quorum, 89.59% Approval
	TOP-001-6 94.00% Quorum, 87.93% Approval

Ontario Participant Support: 

- Ontario voted affirmative for the proposed revisions.

### Standard Development Milestones

Date	Action
May 13, 2021	<ul style="list-style-type: none"><li>Adopted by NERC Board of Trustees</li></ul>
June 28, 2021	<ul style="list-style-type: none"><li><a href="#">NERC Petition for Approval</a></li></ul>
July 7, 2021	<ul style="list-style-type: none"><li><a href="#">IESO Posting Date</a></li></ul>
November 4, 2021	<ul style="list-style-type: none"><li><a href="#">End of OEB Review Period</a></li></ul>
TBD	<ul style="list-style-type: none"><li>FERC Order Issued</li></ul>
TBD	<ul style="list-style-type: none"><li>US Mandatory Enforcement Date</li></ul>
TBD	<ul style="list-style-type: none"><li>Ontario Enforcement Date (Milestones in Reliability Standard Development and Lifecycle)</li></ul>

## Summary:

The use of System Operating Limits (SOLs) is a foundational construct in NERC’s Reliability Standards for providing for the reliable operation of the Bulk Electric System (BES). Under the NERC Reliability Standards, SOLs serve as the parameters within which the Bulk Electric System (“BES”) should be operated to provide for reliable pre- and post-contingency System performance. SOLs constitute the Facility Ratings, System Voltage Limits, and stability limits, applicable to specified System

configurations, used in BES operations for monitoring and assessing pre- and post-Contingency operating states.

The proposed revisions would improve the SOL framework by:

- providing for greater clarity and uniformity in Reliability Coordinators' SOL methodologies;
- improving the coordination between planning and operations as it relates to analysis input assumptions and System performance criteria;
- establishing a performance framework for determining SOL exceedances when performing Operational Planning Analysis, Real Time Assessments, and Real-time monitoring;
- clarifying functional entity responsibilities for establishing and communicating each type of SOL
- reducing redundancy and improving alignment with the Transmission Planning (TPL), Transmission Operations (TOP) and Interconnected Reliability Operations (IRO) Standards.

## Other Salient Information

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