Alberta Reliability Standard
Reliability Coordinator Operational Analyses and Real-time Assessments
IRO-008-AB-3

A. Introduction

1. Title: **Reliability Coordinator** Operational Analyses and **Real-time Assessments**

2. Number: IRO-008-AB-3

3. Purpose: Perform analyses and assessments to prevent instability, uncontrolled separation, or **cascading**.

4. Applicability:

4.1. the **ISO**.

5. Effective Date: January 1, 2028

6. Background: See NERC Project 2014-03 project page

B. Requirements and Measures

R1. The **ISO** must perform an operational planning analysis that will allow it to assess whether the planned operations for the next-day will exceed **system operating limits** and **interconnection reliability operating limits** within its **wide-area.** [*Alberta Risk Rating: Medium] [Time Horizon: Operations Planning]*

M1. The **ISO** must have evidence of a completed operational planning analysis. Evidence may include dated power flow study results or other equivalent evidence.

R2. The **ISO** must have a coordinated **operating plan**(s) for next-day operations to address potential **system operating limit** and **interconnection reliability operating limit** exceedances identified as a result of its operational planning analysis as performed in Requirement R1. [*Alberta Risk Rating: Medium] [Time Horizon: Operations Planning]*

M2. The **ISO** must have evidence that it has a coordinated **operating plan** for next-day operations to address potential **system operating limit** exceedances and **interconnection reliability operating limit** exceedances identified as a result of the operational planning analysis performed in Requirement R1. Evidence may include plans for precluding operating in excess of each **system operating limit** and **interconnection reliability operating limit** that were identified as a result of the operational planning analysis, or other equivalent evidence.

R3. The **ISO** must notify impacted entities identified in its **operating plan**(s) cited in Requirement R2 as to their role in such **operating plan**(s). *[Alberta Risk Rating: Medium] [Time Horizon: Operations Planning]*

M3. The **ISO** must have evidence that it notified impacted entities identified in its **operating plan**(s) cited in Requirement R2 as to their role in such **operating plan**(s). Evidence may include dated operator logs, e-mail records, or other equivalent evidence.

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R4. The **ISO** must ensure that a **real-time assessment** is performed at least once every 30 minutes. *[Alberta Risk Rating: High] [Time Horizon: Same- day Operations, Real-time Operations]*

M4. The **ISO** must have, and make available upon request, evidence to show it ensured that a **real-time assessment** is performed at least once every 30 minutes. Evidence may include dated computer logs showing times the **real-time assessment** was conducted, dated checklists, or other equivalent evidence.

R5. The **ISO** must notify, in accordance with its **system operating limit** methodology, impacted **reliability coordinators** as indicated in its **operating plan**, when the results of a **real-time assessment** indicate an actual or expected condition that results in, or could result in, a **system operating limit** exceedance or an **interconnection reliability operating limit** exceedance within its wide area. *[Alberta Risk Rating: High] [Time Horizon: Same-Day Operations, Real-time Operations]*

M5. The **ISO** must have, and make available upon request, evidence that it informed, in accordance with its **system operating limit** methodology impacted **operators** of **transmission facilities** within its area, and other impacted **reliability coordinators** as indicated in its **operating plan**, of its actual or expected operations that result in, or could result in, a **system operating limit** exceedance or an **interconnection reliability operating limit exceedance** within its wide area. Evidence may include dated operator logs, voice recordings or transcripts of voice recordings, electronic communications, or other equivalent evidence. If such a situation has not occurred, the **ISO** may provide an attestation.

R6. The **ISO** must notify, in accordance with **system operating limit** methodology, impacted **reliability coordinators** as indicated in its **operating plan**, when the **system operating limit** exceedance or an **interconnection reliability operating limit** exceedance identified in Requirement R5 has been prevented or mitigated. *[Alberta Risk Rating: Medium] [Time Horizon: Same Day Operations, Real-time Operations]*

M6. The **ISO** must have, and make available upon request, evidence that it informed, in accordance with its **system operating limits** methodology impacted **operators** of **transmission facilities** within its area, and other impacted **reliability coordinators** as indicated in its **operating plan**, when the **system operating limit** exceedance or an **interconnection reliability operating limit** exceedance identified in Requirement R5 has been prevented or mitigated. Evidence may include dated operator logs, voice recordings or transcripts of voice recordings, electronic communications, or other equivalent evidence. If such a situation has not occurred, the **ISO** may provide an attestation.

R7. The **ISO** must use its **system operating limits** methodology when determining **system operating limits** exceedances for **real-time assessments**, real-time monitoring, and operational planning analysis. *[Alberta Risk Rating: Medium] [Time Horizon: Same-Day Operations, Real-time Operations, Operations Planning]*

M7. The **ISO** must have, and provide upon request, evidence that it used its **system operating limit** methodology for determining **system operating limit** exceedances for **real-time assessments**, real-time monitoring, and operational planning analysis. Evidence may include **operating plans**, **contingency** sets, **system operating limits**, alarming and study reporting thresholds, operator logs, voice recordings or other equivalent evidence.

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C. Compliance

[Intentionally left blank]

D. Regional Variances

None.

E. Interpretations

None.

F. Associated Documents

Operating Plan - An **operating plan** includes general operating processes and specific **operating procedures**. It may be an overview document which provides a prescription for an **operating plan** for the next-day, or it may be a specific plan to address a specific **system operating limit** or **interconnection reliability operating limits** exceedance identified in the operational planning analysis. Consistent with the AESO definition, **operating plans** can be general in nature, or they can be specific plans to address specific **reliability** issues. The use of the term **operating plan** in the revised TOP/IRO **reliability standards** allows room for both. An **operating plan** references operating processes and **operating procedures**, including electronic data exchange, which are available to the real-time operating personnel on a daily basis to allow the real-time operating personnel to reliably address conditions which may arise throughout the day. It is valid for tomorrow, the day after, and the day after that. **Operating plans** should be augmented by temporary operating guides which outline prevention/mitigation plans for specific situations which are identified day-to-day in an operational planning analysis or a **real-time assessment**. As the definition in the AESO's *Consolidated Authoritative Document Glossary* states, a restoration plan is an example of an **operating plan**. It contains all the overarching principles that the real-time operating personnel needs to work his/her way through the restoration process. It is not a specific document written for a specific blackout scenario but rather a collection of tools consisting of processes, procedures, and automated software systems that are available to the real-time operating personnel to use in restoring the system. An **operating plan** can in turn be looked upon in a similar manner. It does not contain a prescription for the specific set-up for next day but contains a treatment of all the processes, procedures, and automated software systems that are at the real-time operating personnel's disposal. The existence of an **operating plan**, however, does not preclude the need for creating specific action plans for specific **system operating limit** or **interconnection reliability operating limit** exceedances identified in the operating planning analysis. When the **ISO** or a **reliability coordinator** performs an operating planning analysis, the analysis may reveal instances of possible **system operating limit** or **interconnection reliability operating limit** exceedances for pre- or post-**contingency** conditions. In these instances, the **ISO** or **reliability coordinators** are expected to ensure that there are plans in place to prevent or mitigate those **system operating limit** or **interconnection reliability operating limits**, should those operating conditions be encountered the next day. The **operating plan** may contain a description of the process by which specific prevention or mitigation plans for day-to-day **system operating limit** or **interconnection reliability operating limit** exceedances identified in the operating planning analysis are handled and communicated. This approach could alleviate any potential administrative burden associated with perceived requirements for continual day-to-day updating of "the **operating plan** document" for compliance purposes.

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Version History

Version	Effective Date	Description of Change
AB-3	2028-01-01	Revised based on NERC IRO-008-3, as approved by FERC in Docket No. RD22-2-000.
AB-2	2019-12-01	Revised based on NERC IRO-008-2 and to account for ISO's assumption of Reliability Coordinator functionality for the Alberta footprint.
AB-1	2015-04-01	Initial release.