

Alberta Reliability Standard Facility Connection Studies FAC-002-AB-4

A. Introduction

1. Title: Facility Connection Studies
2. Number: FAC-002-AB-4
3. Purpose: To study the impact of connecting new or amended facilities on the **bulk electric system**.
4. Applicability:
 - 4.1. Functional Entities:
 - 4.1.1. the **ISO**;
 - 4.1.2. the **legal owner** of a **transmission facility** that is part of the **bulk electric system**; and
 - 4.1.3. the **legal owner** of a **generating unit**, **legal owner** of an **aggregated facility**, and **legal owner** of an **energy storage resource** that is part of the **bulk electric system**.
5. Effective Date: The later of (i) July 1, 2029, and (ii) the first **day** of the first calendar quarter 12 **months** following **Commission** approval.

B. Requirements and Measures

- R1.** The **ISO** must study the **reliability** impact of: (i) connecting new generation, transmission, or electricity end-user facilities, and (ii) existing connections of generation, transmission, or electricity end-user facilities seeking to make a qualified change as described by the **ISO** under Requirement R6. The following must be addressed in its studies: *[Alberta Risk Rating: Medium] [Time Horizon: Long-term Planning]*
- 1.1. The **reliability** impact of the new connection, or existing connection seeking to make a qualified change as described by the **ISO** under Requirement R6, on affected system(s);
 - 1.2. Adherence to applicable **reliability standards**; transmission planning criteria; and the **ISO's** transmission connection requirements;
 - 1.3. Steady-state, short-circuit, and dynamics studies, as necessary, to evaluate system performance under both normal and **contingency** conditions; and
 - 1.4. Study assumptions, system performance, alternatives considered, and coordinated recommendations. While these studies may be performed independently, the results must be evaluated and coordinated by the entities involved.
- M1.** The **ISO** must have evidence (which may include study reports, including documentation of **reliability** issues) that it met all requirements in Requirement R1.
- R2.** Each **legal owner** of a **generating unit**, **legal owner** of an **aggregated facility**, and **legal owner** of an **energy storage resource** seeking to connect new generation facilities, or existing connections of generation facilities seeking to make a qualified change as described by the **ISO** under Requirement

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R6, must coordinate and cooperate on studies with the **ISO**, including the provision of data as described in R1, Parts 1.1-1.4. *[Alberta Risk Rating: Medium] [Time Horizon: Long-term Planning]*

M2. Each **legal owner** of a **generating unit**, **legal owner** of an **aggregated facility**, and **legal owner** of an **energy storage resource** must have evidence (including documents containing the data provided in response to the requests of the **ISO**) that it met all requirements in Requirement R2.

R3. Each **legal owner** of a **transmission facility** seeking to connect new facilities, or existing connections of facilities seeking to make a qualified change as described by the **ISO** under Requirement R6, must coordinate and cooperate on studies with the **ISO**, including the provision of data as described in R1, Parts 1.1-1.4. *[Alberta Risk Rating: Medium] [Time Horizon: Long-term Planning]*

M3. Each **legal owner** of a **transmission facility** must have evidence (including documents containing the data provided in response to the requests of the **ISO**) that it met all requirements in Requirement R3.

R4. [Intentionally left blank.]

M4. [Intentionally left blank.]

R5. [Intentionally left blank.]

M5. [Intentionally left blank.]

R6. The **ISO** must maintain a publicly available description of qualified change for the purposes of facility connection. *[Alberta Risk Rating: Lower] [Time Horizon: Long-term Planning]*

M6. The **ISO** must have evidence that it has maintained a publicly available description of qualified change.

C. Compliance

[Intentionally left blank.]

D. Regional Variances

None.

E. Associated Documents

AESO Information Document, ID#2026-XXX, *Facility Connection Studies*

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Version History

Version	Effective Date	Description of Changes
AB-4	The later of (i) July 1, 2029, and (ii) the first day of the first calendar quarter 12 months following Commission approval.	Revised based on NERC FAC-002-4, approved by FERC Order 693 and RD22-5-000. The revisions remove requirements for the ISO to retain and provide documentation of reliability impact evaluations for new transmission facilities, in alignment with NERC's Project 2013-02 Paragraph 81. The revisions also add the requirement for the ISO to describe the term qualified change.
AB-0	2010-03-22	Initial Release.