

FAC-001-AB-0 Facility Connection Requirements

1. Purpose

The purpose of this *reliability standard* is to establish connection and performance requirements for *facilities* connecting to the *AIES*.

2. Applicability

This *reliability standard* applies to:

- *ISO*

3. Definitions

Italicized terms used in this *reliability standard* have the meanings as set out in the [Alberta Reliability Standards Glossary of Terms](#) and Part 1 of the [ISO Rules](#).

4. Requirements

R1 The *ISO* must document transmission *interconnection* requirements to comply with all *reliability standards*. The *ISO's* transmission *interconnection* requirements must address connection requirements for:

R1.1 Generating units

R1.2 *Transmission facilities*

R1.3 *Transmission connected end-use customer's facilities*

R2 The *ISO's* transmission *interconnection* requirements or project functional specification must address, but is not limited to, the following items:

R2.1 Voltage level and *MW* and *MVAR* capacity or *demand* at point of connection

R2.2 Breaker duty and *surge* protection

R2.3 *System* protection and coordination

R2.4 Metering and telecommunications

R2.5 Grounding and safety issues

R2.6 Insulation and insulation coordination

R2.7 Voltage, *reactive power*, and *power factor* control

R2.8 Power quality impacts

R2.9 Equipment *ratings*

R2.10 Synchronizing of *facilities*

R2.11 Maintenance coordination

R2.12 Operational issues (abnormal frequency and voltages)

R2.13 Inspection requirements for existing or new *facilities*

R2.14 Communications and procedures during normal and emergency operating conditions

R3 The *ISO* must assess the long term implications to the AIES of any facility to be connected to it.

R4 The *ISO* must maintain and update as required and post on its website its transmission *interconnection* requirements.

5. Processes and Procedures

No procedures have been defined for this *reliability standard*.

6. Measures

The following measures correspond to the requirements identified in Section 4 of this *reliability standard*. For example, MR1 is the measure for R1.

MR1 The *ISO* transmission *interconnection* requirements include requirements for generating units, *transmission facilities* and *transmission connected end use customer facilities*.

The *ISO* transmission *interconnection* requirements include content that is compliant and consistent with all *reliability standards*.

MR2 The *ISO* transmission *interconnection* requirements or project functional specifications contain information addressing each item identified in R2.

MR3 The assessment made in R3 is included in either the transmission *interconnection* requirements or project functional specification.

MR4 The *ISO* transmission *interconnection* requirements are posted on its website.

A revision history for the *ISO* transmission *interconnection* requirements shows that updates were made for each change to *reliability standards*, as appropriate.

Changes to the *ISO* transmission *interconnection* requirements are completed within 12 months of the *Commission* approving a change in the *reliability standards*.

7. Appendices

No appendices have been defined for this *reliability standard*.

8. Guidelines

No guidelines have been defined for this *reliability standard*.

Revision History

Effective	Description
2010-09-24	New Issue