
FAC-501-WECC-AB-1 Transmission Maintenance

1. Purpose

The purpose of this *reliability standard* is to ensure the *TFO* of a major transmission path, including associated *transmission facilities*, has a *Transmission Maintenance and Inspection Plan (TMIP)* such that a reliable path is available.

2. Applicability

This *reliability standard* applies to:

- *TFOs* of major transmission path(s) who maintain these paths as identified in the table “Major *WECC* Transfer Paths in the *Bulk Electric System*” on the *WECC* website, who maintain these paths.

3. Definitions

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

4. Requirements

- R1** The *TFO's TMIP* must detail its inspection and maintenance requirements and must apply to all *transmission facilities* that are associated with each of the transmission paths identified in Appendix 1.
- R1.1** The *TFO* must review their *TMIP* annually and update it as required.
- R1.2** The *TFO* must annually submit its *TMIP* and any updates to the *ISO*.
- R2** The *TFO's TMIP* must include without limitation the following maintenance categories:
- R2.1** Transmission line maintenance details:
- R.2.1.1** Patrol/inspection
- R.2.1.2** Contamination control
- R.2.1.3** Tower and wood pole structure management
- R2.2** Station maintenance details:
- R.2.2.1** Inspections
- R.2.2.2** Contamination control
- R.2.2.3** Equipment maintenance for the following:
- Circuit breakers
 - Power transformers (including phase-shifting transformers)
 - Regulators

- Reactive devices (including, but not limited to, shunt capacitors, series capacitors, static VAR compensators, synchronous condensers, shunt reactors, and tertiary reactors)

R3 The *TFO's* maintenance practices in the *TMIP* must be performance-based, or time-based, or condition-based, or a combination of all three.

The *TFO's TMIP* must include scheduled intervals for any time-based maintenance activities and/or a description supporting condition or performance-based maintenance practices including a description of the condition or performance based trigger.

R4 The *TFO* must implement its *TMIP* and retain records that demonstrate such implementation including without limitation the following:

R4.1 The names of individual or crew members responsible for performing the work or inspection.

R4.2 The date(s) the work or inspection was performed.

R4.3 The *transmission facility* on which the work or inspection was performed, and

R4.4 A description of the inspection or maintenance performed.

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 A documented *TMIP* as identified in R1 exists and covers all *transmission facilities* as identified in Appendix 1.

MR1.1 Evidence exists that shows the *TFO* reviewed their *TMIP* annually and updated it as needed.

MR1.2 The *TMIP* and updates, if any, are received by the *ISO* annually.

MR2 The *TMIP* addresses the required maintenance details of R2.

MR3 The *TMIP* addresses the items in R3.

MR4 Records exist that show the *TFO* implemented and followed its *TMIP*.

7. Appendices

Appendix 1

Equipment and Facilities to be included in Path 1

WECC Path 1 – For this standard Path 1 shall include the following *facilities*:

1. 1201L from AB/BC boundary to Langdon 102S
2. 500kV breaker, reactor, switches, PT's, bus work at Langdon 102S
3. 500/240kV Transformer and 240kV switch at Langdon 102S

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4. SVC at Langdon 102S
5. All equipment associated with the connection of the SVC to the 240kV bus including:
 - a) breaker 102S252 and associated switches
 - b) breaker 102S552 and associated switches
 - c) 240kV West bus
 - d) 240kV West bus PT's
6. 786L West from AB/BC boundary to Coleman 799S
7. Breaker 799S786W and associated switches
8. The 138kV bus at 799S and associated PT's
9. Breaker 799S170E and associated switches
10. 170L from Coleman 799S to Pincher Creek 396S
11. Breaker 396S10 and associated switches
12. 887L from AB/BC boundary to Pocaterra 48S
13. Breaker 48S887X and associated switches
14. Switch 48S777N and associated PT's
15. 777L from Pocaterra 48S to Seebe 245S
16. Breaker 245S777X and associated switches

8. Guidelines

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

Revision History

Effective	Description
2010-09-10	New issue