# Information Document Disturbance Monitoring and Reporting Requirements ID #2018-022



Information Documents are not authoritative. Information Documents are for information purposes only and are intended to provide guidance. In the event of any discrepancy between an Information Document and any Authoritative Document(s) in effect, the Authoritative Document(s) governs.

## 1 Purpose

This Information Document relates to the following Authoritative Documents:

- Alberta reliability standard PRC-002-AB-2, Disturbance Monitoring and Reporting Requirements
- Section 502.9 of the ISO rules, Synchrophasor Measurement Unit Technical Requirements ("Section 502.9").

The purpose of this Information Document is to provide information regarding fault recording data and Dynamic Disturbance Recorders. It will be of most interest to any legal owner of a transmission facility, legal owner of a generating unit, or legal owner of an aggregated generating facility that owns fault recording data.

# 2 Supplemental Information For Fault Recording Data (Requirement R4 of PRC-002-AB-2)

The intent of requirement R4 is to capture the fault recording data of the connected system elements on the bulk electric system buses identified in requirement R1.1 for the duration specified in requirement R11.1. If setting triggers solely pursuant to requirements R4.3.1 and R4.3.2, i.e. neutral (residual) overcurrent and phase under voltage or overcurrent would result in undesired events being captured and pose the risk of overwriting the data required by requirement R4, the legal owner may add additional triggers with the associated thresholds in accordance with their own practices and standards.

# 3 Supplemental Information For Dynamic Disturbance Recorders and Data Streaming Synchrophasor Measurement Units

The requirements identified for dynamic disturbance recording data in PRC-002-AB-2 can be satisfied with synchrophasor measurement unit data. The AESO considers synchrophasor measurement units to be a form of dynamic disturbance recording equipment, which generally meet the technical specifications outlined in PRC-002-AB-2 for dynamic disturbance recordings.

Due to the AESO's growing reliability needs for integrating additional synchrophasor measurement unit data in real-time operation for on-line applications, the AESO anticipates amending PRC-002-AB-2. This amendment would require data streaming for identified system elements determined by the AESO which will be primarily based on reliability needs identified in each area.

In general, the technical requirements for data-streaming synchrophasor measurement units are set in subsections 5 and 6 of Section 502.9 of the ISO rules.

### **Revision History**

Posting Date Description of Changes

2019-12-09 Updated to include information on-line data streaming.

2019-01-10 Initial release

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<sup>&</sup>lt;sup>1</sup> "Authoritative Documents" is the general name given by the AESO to categories of documents made by the AESO under the authority of the *Electric Utilities Act* and associated regulations, and that contain binding legal requirements for either market participants or the AESO, or both. AESO Authoritative Documents include: the ISO rules, the Alberta reliability standards, and the ISO tariff.