ALTALINK
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January 26, 2016

Mr. Dan Shield
Alberta Electric System Operator
2500, 330-5th Avenue SW
Calgary, Alberta T2P 0L4

Delivered by Email

Dear Sir:

Re: PRC-001-AB3-1.1(ii) Protection System Coordination Consultation

AltaLink appreciates the Alberta Electric System Operator's ("AESO") request for consultation on the above matter. In response to the AESO's December 15, 2015 correspondence, AltaLink provides the attached stakeholder comment matrix ("Matrix").

AltaLink understands the AESO's desire to ensure protection systems are coordinated among operating entities. The existing PRC-001 rule is a key ARS standard that helps ensure effective coordination between Market Participants. AltaLink is very committed to continued consultation to ensure the most effective rule possible for the industry. AltaLink will undertake all necessary process and documentation improvements not only to comply with the all ISO Rules, but to ensure we are able to appropriately evidence compliance and compliance management to any changes to an ISO Rule.

AltaLink is concerned that the proposed PRC-001 rule changes as currently drafted and under Market Participant Consultation review represents a significant departure from the historic scope and intention of the reliability rule and infers an inappropriate shift in accountabilities between TFOs and the AESO – both from Alberta industry experience and as compared to NERC rules implemented in the United States (US). Accordingly, AltaLink highlights the following areas of particular concern below in this proposed new version of PRC-001.

- The prescriptive, detailed and subsystem level equipment outage reporting requirements represented by the changes are significant and go much beyond NERC implementation of the same rule that has worked in the US for a number of years; it is not clear why the AESO or Alberta should have a much more detailed and prescriptive set of requirements;
- Such equipment outage reporting, and the frequency and volume is at an operator to operator level, and would represent a volume and detail level that AltaLink views better left to operating procedures and coordination, as defined in various ISO rules, such as Section 306.4 Transmission Planned Outage Reporting and Coordination;

- As noted in the comment matrix, AltaLink's telecom network is IP based utilizing MPLS technology, which provides extensive routing and auto-rerouting features utilized to provide high availability tele-protection. Each tele-protection communication channel may consist of multiple segments, each of which may have two or more paths. If one path fails, the traffic is automatically re-routed to the next available path. Though AltaLink monitors the path details of the MPLS network, it would be onerous and impractical to provide notification of the ongoing and dynamic communication channel details requested;
- The addition of detailed equipment outage reporting as a requirement and measure in the rule inappropriately shifts its focus from the previous 'protection coordination' focus to a real time operational protection management;
- Rules with prescriptive reporting timelines infer that the AESO has management accountability for the deficiency, which is not the case. It would be more effective to hold the TFO accountable for demonstrating the management of protection issues and set measures and evidentiary requirements that help govern the area
- The reporting of detail requirements to the AESO as part of an ARS rule appears to AltaLink as a shift in AESO role from governance (ie. oversight, reporting, audit) into a direct reporting and management role. AltaLink does not believe this is a warranted or desired shift in accountabilities.
- For example, similar to US NERC, requirements for TFOs to define monitoring plans and processes and provide evidence of following them would be a more appropriate set of controls and measures that leaves the accountability with the TFO to take corrective action in managing the risk of protection equipment outages; under the AESO's and MSA's governance
- The AESO references increased MSA concerns for findings under the prior PRC rule; AltaLink has received feedback from the MSA on the current R1 related to operating personnel being "familiar with the purpose and limitations of protection system schemes applied in its area" and appreciate the clarity the proposed R1 provides in that respect. However, AltaLink has not received other feedback from the MSA or the AESO through audits and believes, aside from R1, the current rule is functioning well to preserve protection coordination;
- The requested documentation and evidentiary requirements requested will require incremental information and record management investments and costs to ratepayers. AltaLink is not convinced of the prudence of this expenditure when current management process are working effectively and have for many years.

AltaLink acknowledges the AESO's mandate as Alberta's System Operator and views itself as a partner in the development and support of the Alberta transmission system. AltaLink's comments and suggestions arise from its experience regarding this issue and are intended to assist the AESO in ensuring a continued robust ARS framework that is both functional and

efficient. AltaLink would request to have a meeting to review our concerns at your earliest convenience.

AltaLink appreciates the opportunity to further consult and comment on the proposed changes to PRC-001. Please contact the undersigned at (403) 267-4480 to schedule a follow up discussion.

Yours truly

Mike Bartel, P. Eng.
Vice President, Asset Management

Cc:
Dennis Frehlich, AltaLink
Richard Arthurs, AltaLink
Johanne Black, AltaLink
Rick Spyker, AltaLink
Maureen Higgins, AltaLink

Market Participant Comment Matrix – December 15, 2015

AESO AUTHORITATIVE DOCUMENT PROCESS

Consultation on Proposed Amended Alberta Reliability Standard PRC-001-AB3-1.1(ii), *Protection System Coordination* ("PRC-001-AB3-1.1(ii)")

Date of Request for Comment: December 15, 2015	**Contact:** Morgan Tam
Period of Consultation: December 15, 2015 through January 26, 2016	**Phone:** 403-365-7464
Comments From: AltaLink	Email: Morgan.tam@altalink.ca
Date [yyyy/mm/dd]: 2016/01/26	

Listed below is the summary description of changes for the proposed amended PRC-001-AB3-1.1(ii). Please refer back to the Consultation Letter under the "Attachments" section to view materials related to the proposed amended PRC-001-AB3-1.1(ii). Please place your comments/reasons for position underneath (if any).

1. Alberta Reliability Standard	Market Participant Comments and/or Alternative Proposal
a) New The AESO is seeking comments from market participants with regard to the following matters: 1. Do you agree or disagree with the proposed amended PRC-001-AB3-1.1(ii)? If you disagree, please provide comments. 2. Are there any subsections where the language does not clearly articulate the requirement for either the AESO or a market participant? If yes, please indicate the subsections and suggest language that would improve the clarity.	*AltaLink does not agree with the proposed amendments to PRC-001-AB3-1 (ii); with detailed comments below. PRC-001-AB3-1 (ii) has prescriptive, detailed and subsystem level equipment outage reporting requirements over and above NERC's PRC-001-1 (ii), and it is not clear how these additional requirements improve protection system coordination or enhance system reliability. The existing PRC-001 rule is a key ARS standard that helps ensure effective coordination between Market Participants. The changes represents a significant departure from the historic scope and intentions of this reliability rule and infers an inappropriate shift in accountabilities between TFOs and the AESO.* R1 & R2: Why is ISO notification required in R2 but not R1? If the GFO is not expected to notify the ISO what is the expectation for the TFO upon receiving notification from the GFO? R2: Why is there a requirement for notification for teleprotection communication channel failures? NERC PRC-001-1 (ii) only requires notification for "protection relay or equipment failure." From an implementation perspective, AltaLink's telecom network is IP based utilizing MPLS technology, which provides extensive routing and auto-rerouting features utilized to provide high availability teleprotection.. Each teleprotection communication channel may consist of multiple segments, each of which may have two or more paths. If one path fails, the traffic is automatically re-routed to next available path, so it would be onerous to determine and report the ongoing and dynamic details associated with communication channel redundancy and failure duration. Since the concern for system reliability is the failure of teleprotection, AltaLink believes that this is already covered by (a) and (b), as teleprotection is included in the protection system.

	R2: This requirement contains prescriptive failure reporting and follow-up timelines that are not included in NERC PRC-001-1 (ii). What is the purpose of this additional reporting when there is already a requirement to “correct the failure as soon as possible”? R4: What is the purpose of the ISO notification? NERC PRC-001-1 (ii) states to “coordinate.” Is the intention for the ISO to be notified for every protection coordination in Alberta, and if so, for what purpose? *AltaLink requests clarification on the following language:* R1 & R2: Why has the AESO chosen to use “protection system” versus “protective relay or equipment” as per NERC’s PRC-001-1 (ii)? R2: It is redundant to include teleprotection communication channel failures separately from protection system failures. The AESO Consolidated Authoritative Document Glossary defines “protection system” to include “communication systems necessary for correct operation of protective functions.” Therefore, AltaLink suggests deleting bullets (c) and (d). R5: The ISO has inserted the word “planned.” What are the practical implications such as timeline and evidentiary requirements of this addition?