Proposed New VAR-002-AB-4.1 — *Generator Operation for Maintaining Network Voltage*

Date of Request for Comment:	February 26, 2021			Contact:	Shannon Ferdinand
Period of Comment:	February 9, 2021	through	February 26, 2021	Phone:	780-392-5442
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Date [yyyy/mm/dd]:	2021/02/26				

Instructions:

1. Please fill out the section above as indicated.
2. Please refer to the Consultation Letter under the "Attachments" section to view materials related to the proposed new VAR-002-AB-4.1 — *Generator Operation for Maintaining Network Voltage*.
3. Please respond to the questions below and provide your specific comments, proposed revisions, and reasons for your position underneath (if any). Blank boxes will be interpreted as favourable comments.
4. Please be advised that general comments do not give the AESO any specific issue to consider and address, and results in a general response.

Alberta Reliability Standard	**Stakeholder Comments and/or Alternative Proposal**
Are there any requirements contained in proposed new VAR-002-AB-4.1 that are not clearly articulated? If yes, please indicate the specific section of proposed new VAR-002-AB-4.1, describe the concern and suggest alternative language.	1. Capital Power is generally supportive of the adoption of the proposed revisions to the VAR-002-AB standard for the reasons below. a) The removal of "*intention to operate*" without an AVR in service in R1 is consistent with the VAR-002-WECC-AB-1 R1 which establishes a 98% threshold, including unintended AVR outages as one of the exemption criteria. b) The removal of "*voice notification*" and reference of R3 in R1 offer flexibility to a generator operator to remediate or notify the ISO within 30 minutes of an AVR status or control mode change by a phone call or by SCADA data per the AESO Information Document ID# 2019-046. c) With some minor exceptions, the proposed new VAR-002-AB-4.1 standard is consistent with the NERC VAR-002-4.1. 2. Capital Power requests clarity on VAR-002-AB-4.1 R1 (a) and (b) and the use of the terms 'start-up' and 'shutdown'. With reference to aggregated generating units, is there a minimum generation under which the

	AESO defines the unit as being in the 'start-up' or 'shutdown' mode?
Do you have any additional comments regarding proposed new VAR-002-AB-4.?1If yes, please specify.	3. The proposed new VAR-002-AB-4.1 R3 states: *"Each operator of a generating unit and operator of an aggregated generating facility must notify the ISO within 30 minutes after a status or control mode change of the automatic voltage regulator, voltage regulating system or alternative voltage controlling device and power system stabilizer, as applicable, on any generating unit or aggregated generating facility."* The use of the term "and" in R3 suggests that a notification to the ISO is only required when both alternative voltage controlling device *and* power system stabilizer change their status or control mode. In contrast, the NERC VAR-002-4.1 R3 requires notification of *"a status change on the AVR, power system stabilizer, or alternative voltage controlling device"*. Capital Power suggests revising the current language in R3 unless this interpretation aligns with AESO's intention. 4. According to the NERC, generating units connected to the transmission system below 100kV are not part of the Bulk Electric System (BES) and are, therefore, not applicable to NERC Reliability Standards. Based on NERC's Rules of Procedure[1], including entities that are not part of BES within the scope of the NERC Reliability Standards is disproportionate to their impact and risk to the reliable operation of the interconnected BES. The AESO defines the BES using the same 100kV threshold as NERC, yet unlike NERC the AESO does not use its own BES definition as the applicability criteria for Alberta Reliability Standards (ARS). The AESO continues to apply many ARS[2], including VAR-002, based on criteria inconsistent with their definition of the Bulk Electric System (i.e. a much lower transmission system connection (≥25 kV) and / or lower generating capability (i.e. VAR-002 = 5MW). This approach to applicability is inconsistent with NERC and may not correlate to the risk posed by these non-BES assets. Capital Power recommends that the applicability of ARSs should be unified and based on risk, as defined by their connection to the BES. In line with this, Capital Power recommends that VAR-002-AB-4.1 should not apply to those generating units that do not fit into the definition of the BES.

[1] See Appendix 5B of the NERC Rules of Procedure
[2] ARSs that apply to generating entities connected to the Transmission System include PRC-004, PRC-005, PRC-019, VAR-002 and VAR-002-WECC