

Date of Request for Comment:	December 7, 2020		
Period of Consultation:	December 7, 2020	through	January 12, 2021

The AESO is seeking comments from stakeholders with regard to the following matters:

Alberta reliability standard	Stakeholder Comments and/or Alternative Proposal	AESO Replies
<p>New</p> <p>1. Is the requirement contained in proposed new PER-006-AB-1 clearly articulated? If no, describe the concern and suggest alternative language.</p>	<p><u>Capital Power Corporation (“Capital Power”)</u></p> <p>1. Capital Power appreciates the opportunity to provide comments. With the exception of applicability, the proposed new PER-006-AB-1 standard is consistent with the NERC version of the same standard. Capital Power has no concern with the proposed requirement but offers comments on how this standard should be applied to Market Participants below.</p>	<p>1. The AESO appreciates Capital Power’s comment. Please refer to the AESO’s reply #10.</p>
	<p><u>ENMAX Energy (“ENMAX”)</u></p> <p>2. The standard does not stipulate a required occurrence of training, so is it safe to assume that training is only required once for each of the personnel identified in the applicability section. Also taking into consideration that additional training would likely be required if there are changes to the operational functionality of the protection systems and RAS that affect the output of the generation facilities.</p>	<p>2. The AESO agrees, as proposed new PER-006-AB-1 does not stipulate a required occurrence of training, the training is only required once for each personnel identified in the applicability section. Additional training will be required if there are changes to the operational functionality of the protection systems and remedial action schemes that affect the output of the generating unit or aggregated generating facility.</p>
	<p><u>Suncor Energy Ltd. (“Suncor”)</u></p> <p>3. Will the AESO’s version PER-006-AB-1 R1 have the same interpretation as the NERC PER-006-1 Guidelines and Technical Basis Section, https://www.nerc.com/pa/Stand/Reliability%2520Sta</p>	<p>3. The AESO confirms proposed new PER-006-AB-1 R1 has the same interpretation as the NERC reliability standard PER-006-1 Supplemental Material – Guidelines and</p>

	<p>ndards/PER-006-1.pdf. If yes, will the AESO adopt same guidelines and technical basis in an ID document and post on the AESO website? If not, please advise variance from the guidance that the NERC provided.</p> <p>4. If the entity complied with the older version PRC-001-AB1-1 R1 that required similar training, does this mean that by using the same type of training and evidence, the entity will meet compliance requirements for PER-006-AB-1 R1?</p> <p>5. Is it sufficient to train Transmission and Distribution (T&D) personnel instead of generator operators (i.e. Power Engineers, Boiler Operators)? Only T&D personnel are responsible for operation and maintenance of protection systems of generating unit's. If there are any trips/alarms related to generator protection systems, they are addressed by T&D personnel and not specifically by generator operators.</p>	<p>Technical Basis section.</p> <p>The AESO intends to post an information document associated with proposed new PER-006-AB-1 that references the NERC PER-006-1 Supplemental Material – Guidelines and Technical Basis section as an appropriate guideline to follow in applying proposed new PER-006-AB-1.</p> <p>4. If the previous training provided under PRC-001-AB1-1 R1 meets the requirement and measure for R1 in proposed new PER-006-AB-1 and the appropriate evidence is available, then the entity will have met requirement R1 in proposed new PER-006-AB-1. Please be mindful of any changes to the operational functionality of the protection systems and remedial action schemes that affect the output of the generating unit of aggregated generating facility as training will also be required for changes to these protection systems and remedial action schemes.</p> <p>5. No, it is not sufficient to train transmission and distribution personnel instead of the operators of the generating unit or aggregated generating facility. Proposed new PER-006-AB-1 requires the training of personnel who are responsible for the real time control of a generating unit or aggregated generating facility and who directly or indirectly receives operating instructions from the ISO or operator of a transmission facility. The purpose of proposed new PER-006-AB-1 is to ensure that personnel are trained on specific topics essential to reliability to perform or support real time operations of the interconnected electric system.</p>
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	<p>6. The proposed 4 full calendar quarters implementation plan (from the approval by the Commission) may not be adequate to meet the compliance timeline given the current COVID19 situation and budget limitations. Even though this requirement is similar to the previous PRC-001-AB1-1 R1, we will need to review/modify the training materials, develop training modules, revise internal procedures and re-train the operators. We propose 8 full calendar quarters to allow more flexibility to meet compliance.</p>	<p>6. The AESO respects the challenges that market participants may be facing and trusts that the recommended 8 full calendar quarters is what is required to become compliant with proposed new PER-006-AB-1.</p> <p>The AESO will amend the proposed effective date for proposed new PER-006-AB-1.</p> <p>Please note, the AESO has set the effective date in Appendix 1, for the addition of new generating units and aggregated generating facilities, as “no less than 4 full calendar quarters after the date of notice”.</p>
	<p><u>TransAlta Corporation (“TransAlta”)</u></p> <p>7. TransAlta would like to request additional guidance from the AESO around which roles are required to receive the training; for instance, more definition around the term “personnel who are responsible for the real time control of” a generating unit, etc., would greatly assist us in clarifying which roles can be considered in-scope for completing the training.</p> <p>8. TransAlta notes one of the differences between NERC’s <u>PER-006-1</u> and <u>proposed PER-006-AB-1</u> is the threshold of 5MW MARP, versus 67.5MW as per NERC’s BES definition. In the interest of being consistent with NERC TransAlta is supportive to recommend the AB version to be aligned with NERC’s at 67.5MW.</p>	<p>7. The AESO supports the use of the Supplemental Material – Guidelines and Technical Basis section of the NERC reliability standard PER-006-1 which TransAlta may find to be helpful. The AESO does not believe further clarification in proposed new PER-006-AB-1 regarding personnel who are responsible for the real time control of a generating unit is required.</p> <p>8. The AESO has given further consideration to the proposed threshold for the applicability of proposed new PER-006-AB-1. The AESO has amended the applicability of proposed new PER-006-AB-1 to apply at the bulk electric system level with the ability for the AESO to apply proposed new PER-006-AB-1 to non-bulk electric system generating units and aggregated generating facilities that it determines necessary for the reliable operation of the interconnected electric system.</p>

	<p>9. the proposed PER-006-AB-1 is silent on the frequency such training is to be completed. If PER-006 applies to one-time situations such as onboarding of new personnel, or as new elements are added to be trained, then please add language to clarify in the ARS, or include in an Information Document.</p>	<p>9. Please refer to the AESO's reply #2. The AESO supports the use of the Supplemental Material – Guidelines and Technical Basis section in NERC reliability standard PER-006-1 as an appropriate guideline to follow in applying proposed new PER-006-AB-1. The Supplemental Material – Guideline and Technical Basis section addresses the periodicity of training.</p>
<p>2. Do you have any additional comments regarding proposed new PER-006-AB-1? If yes, please specify.</p>	<p><u>Capital Power</u></p> <p>10. According to 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 Procedure¹, 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.</p> <p>The AESO defines the BES using the same 100kV threshold as NERC, yet unlike NERC the AESO does not use their own BES definition as the applicability criteria for Alberta Reliability Standards (ARS). The AESO continues to apply many ARS², including PER-006, 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. PER-006 = 5MW)). This approach to applicability is inconsistent with NERC and may not correlate to the risk posed by these non-BES assets.</p>	<p>10. In accordance with the <i>Electric Utilities Act</i> the AESO is mandated to direct the reliable operation of the interconnected electric system. As such the AESO considers the potential impact to the reliable operation of the interconnected electric system, not just the bulk electric system. The AESO assesses each reliability standard based on the subject matter and the risk posed to reliable operation of the interconnected electric system and as appropriate applies each reliability standard accordingly, which may be at a lower threshold than the bulk electric system level.</p> <p>Regarding the applicability of proposed new PER-006-AB-1, please refer to the AESO's reply #8.</p>

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

	<p>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 PER-006-AB-1 should not be applicable to those generating units that do not fit into the definition of the BES.</p>	
	<p><u>ENMAX</u> 11. No comments.</p>	
	<p><u>Suncor</u> 12. No comments.</p>	
	<p><u>TransAlta</u> 13. No comments.</p>	