



**Stakeholder Comparison Comment Rationale Matrix**

**2010-07-15**

**AESO AUTHORITATIVE DOCUMENT PROCESS**

**Alberta Reliability Standard – PRC-018-AB-1 Disturbance Monitoring Equipment Installation and Data Reporting**

*NOTE: The AESO is asking market participants to give an initial indication of their support for, or opposition to, the specific Alberta Reliability Standard variances to the NERC requirements referenced below. Such an initial indication assists in the AESO’s practical understanding of the receptivity of the industry to the proposed changes, and in that regard the AESO thanks, in advance, all market participants who choose to respond. With regard to the specific standard changes and their implications, such responses are without prejudice to the rights of market participants under the Act, any regulations, or related decisions of the Commission.*

Date of Request for Comment [yyyy/mm/dd]: <u>2010/07/15</u> Period of Consultation [yyyy/mm/dd]: <u>2010/07/15</u> through <u>2010/08/15</u> Comments From: _____ Date [yyyy/mm/dd]: _____	Contact: <u>Jerry Mossing</u> Phone: <u>403-539-2496</u> E-mail: <u><a href="mailto:ars_comments@aeso.ca">ars_comments@aeso.ca</a></u>
---	--

*Listed below is the summary of changes for the proposed new, removed or amended sections of the standard. Please refer back to the Letter of Notice under the “Attachments to Letter of Notice” section to view the proposed content changes to the standard. Please double-click on the check box for either “Support” or “Oppose” and/or place your comments, reasons for position, and alternate proposals underneath (if any).*

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>Purpose</b> Ensure that Disturbance Monitoring Equipment (DME) is installed and that Disturbance data is reported in accordance with regional requirements to facilitate analyses of events.</p>	<p><b>Purpose</b> The purpose of this reliability standard is to ensure that disturbance monitoring equipment is installed and that disturbance data is reported in accordance with regional requirements to facilitate analyses of events.</p>	<p>Clarified the purpose to align with the content of the reliability standard.</p>		
<p><b>Applicability</b> 4.1. Transmission Owner. 4.2. Generator Owner.</p>	<p><b>Applicability</b> This reliability standard applies to:</p> <ul style="list-style-type: none"> <li>TFOs that own disturbance monitoring equipment as identified in the list as required in requirement R1, as published by the AESO on the AESO website, and as may be amended from time to time by the AESO on notice to market participants.</li> <li>GFOs that own disturbance monitoring equipment as identified in the list as required in requirement R1, as published by the AESO on the AESO website, and as may be amended from time to time by the AESO on notice to market participants.</li> <li>ISO</li> </ul>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to identify the responsible entities in Alberta.</p>		

**COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1  
DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING**

NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>Effective Date</b> Phased in over four years after BOT adoption: Requirements 1 and 2:</p> <ul style="list-style-type: none"> <li>- 50% compliant two years after initial issuance of regional requirements per RELIABILITY STANDARD PRC-002 Requirement 5.</li> <li>- 75% compliant three years after initial issuance of regional requirements per reliability standard PRC-002 R5.</li> <li>- 100% compliant four years after initial issuance of regional requirements per reliability standard PRC-002 R5.</li> </ul> <p>Requirements 3 through 6:</p> <ul style="list-style-type: none"> <li>- 100% compliant six months after BOT adoption for already installed DME.</li> <li>- 100% compliant six months after installation for DMEs installed to meet Regional Reliability Organization requirements per reliability standard PRC-002 Requirements 1, 2 and 3.</li> </ul>	<p><b>Effective Date</b> Ninety (90) days after the date of approval by the Commission.</p>	<p>A ninety day implementation timeline was selected as this reliability standard currently applies to installed disturbance monitoring equipment. Any new installations will be performed in accordance with direction provided by the ISO.</p>		
<p><b>R1.</b> Each Transmission Owner and Generator Owner required to install DMEs by its Regional Reliability Organization (reliability standard PRC-002 Requirements 1-3) shall have DMEs installed that meet the following requirements:</p>	<p><b>R1</b> The ISO must maintain and publish a list of all disturbance monitoring equipment that this reliability standard applies to, which includes all disturbance monitoring equipment the WECC requires to be installed in Alberta.</p>	<p><input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted</p> <p>Amended to identify requirements of the responsible entities in Alberta and for clarity and consistency.</p>	<p><input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal</i></p>	

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p><b>R1.1.</b> Internal Clocks in DME devices shall be synchronized to within 2 milliseconds or less of Universal Coordinated Time scale (UTC)</p> <p><b>R1.2.</b> Recorded data from each Disturbance shall be retrievable for ten calendar days.</p>	<p><b>R2</b> Each TFO and GFO that is directed to install disturbance monitoring equipment by the ISO must install disturbance monitoring equipment that meet the following requirements:</p> <p><b>R2.1</b> Internal clocks in disturbance monitoring equipment devices must be synchronized to within two milliseconds or less of the Coordinated Universal Time (UTC) scale.</p> <p><b>R2.2</b> Recorded disturbance data must be retrievable for at least ten (10) days.</p>	<p>Removed reference to PRC-002 as included in the NERC requirement as these requirements apply to the WECC. The ISO will review new requirements as they are developed by WECC.</p>	<p>(if any).</p> <p>TransAlta is concerned about who bears the initial and ongoing costs if disturbance monitoring equipment (DME) is directed to be installed for the purpose of increased reliability of the BES. TransAlta believes that the installation of any DME is clearly for the benefit of the system as a whole and as such should be considered a system cost and recovered through the AESO's tariff. TransAlta asks for confirmation from the AESO as to how these costs will be treated. TransAlta has asked for confirmation on this point in the Operations Working Group meetings as well.</p> <p>R1- TransAlta believes that the list the AESO is maintaining and publishing should be referenced in this standard for clarify.</p>	
<p><b>R2.</b> The Transmission Owner and Generator Owner shall each install DMEs in accordance with its Regional Reliability Organization's installation requirements (reliability standard PRC-</p>	<p><b>R3</b> Each TFO and GFO must install disturbance monitoring equipment as directed by the ISO.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Amended to identify the responsible entities in</p>	<p><input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input checked="" type="checkbox"/> Oppose</p>	

**COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1  
DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING**

Formatted Table

NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
002 Requirements 1 through 3).		<p>Alberta and for clarity and consistency.</p> <p>The ISO will review and implement, as appropriate, relevant requirements and standards that are developed by the WECC.</p>	<p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p>The standard should include a timeframe in which a DME must be installed after a registered entity receives direction from the AESO.</p> <p>TransAlta is concerned that PRC-002, which is referenced in this requirement in the NERC version of the standard includes the requirement for the Regional Reliability Organization to establish requirements for the installation of DMEs and reporting of data. As this standard is not applicable in Alberta it is not clear to TransAlta where these criteria exist in order to determine the installation requirements. TransAlta has been asking for clarity about these requirements in the Operations Working Group as well.</p>	
<b>R3.</b> The Transmission Owner and Generator Owner shall each maintain,	<b>R4</b> Each TFO and GFO must maintain and report, within 30	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended	<input type="checkbox"/> Support <input type="checkbox"/> Support with language	

Formatted Table

**COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1  
DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING**

NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
<p>and report to its Regional Reliability Organization on request, the following data on the DMEs installed to meet that region's installation requirements (reliability standard PRC-002 Requirements 1.1, 2.1 and 3.1):</p> <p><b>R3.1.</b> Type of DME (sequence of event recorder, fault recorder, or dynamic disturbance recorder).</p> <p><b>R3.2.</b> Make and model of equipment.</p> <p><b>R3.3.</b> Installation location.</p> <p><b>R3.4.</b> Operational status.</p> <p><b>R3.5.</b> Date last tested.</p> <p><b>R3.6.</b> Monitored elements, such as transmission circuit, bus section, etc.</p> <p><b>R3.7.</b> Monitored devices, such as circuit breaker, disconnect status, alarms, etc.</p> <p><b>R3.8.</b> Monitored electrical quantities, such as voltage, current, etc.</p>	<p>days of the ISO's request, the following data on the disturbance monitoring equipment:</p> <p><b>R4.1</b> Type of disturbance monitoring equipment, sequence of event recorder, fault recorder or dynamic disturbance recorder.</p> <p><b>R4.2</b> Make and model of disturbance monitoring equipment.</p> <p><b>R4.3</b> Installation location.</p> <p><b>R4.4</b> Operational status.</p> <p><b>R4.5</b> Date last tested.</p> <p><b>R4.6</b> Monitored elements which may include, without limitation, transmission circuit and bus section.</p> <p><b>R4.7</b> Monitored devices which may include, without limitation, circuit breaker, disconnect status and alarms.</p> <p><b>R4.8</b> Monitored electrical quantities which may include, without limitation, voltage and</p>	<p><input type="checkbox"/> Deleted</p> <p>Amended to identify the responsible entities in Alberta and for clarity and consistency.</p> <p>Split the requirement for TFOs and GFOs to report to the ISO and for the ISO to report to the WECC (refer to R5 in the Alberta reliability standard below).</p> <p><b>Alberta Variance:</b> Added a time period by which data on disturbance monitoring equipment is to be submitted to the ISO. This was included to add clarity and to make the requirement measurable.</p>	<p>suggestions</p> <p><input type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p>	

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
	current.			
Refer to NERC requirement R3.	<b>R5</b> The ISO must provide the data received from the TFOs and GFOs in requirement R4 to the WECC within 45 days of the WECC's request.	<input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted  <b>Alberta Variance:</b> Added a time period by which data on disturbance monitoring equipment is to be submitted to the WECC. This was included to add clarity and to make the requirement measurable.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<b>R4.</b> The Transmission Owner and Generator Owner shall each provide Disturbance data (recorded by DMEs) in accordance with its Regional Reliability Organization's requirements (reliability standard PRC-002 Requirement 4).	<b>R6</b> Each TFO and GFO must provide all disturbance data recorded by disturbance monitoring equipment to the ISO within 30 days of a request.  <b>R7</b> The ISO must provide disturbance data recorded by a GFO's or TFO's disturbance monitoring equipment to the WECC within 60 days of WECC's request.	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted  Split the requirement for TFO and GFO to provide disturbance data to the ISO and for the ISO to provide disturbance data to the WECC.  <b>Alberta Variance:</b> Added a time period by which disturbance data recorded by disturbance monitoring equipment is to be submitted to the ISO and to the WECC. This was included to add clarity and to make the requirement measurable.		
<b>R5.</b> The Transmission Owner and Generator Owner shall each archive all	<b>R8</b> The ISO must archive all data recorded by disturbance	<input type="checkbox"/> New	<input type="checkbox"/> Support <input type="checkbox"/> Support with language	

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
data recorded by DMEs for Regional Reliability Organization-identified events for at least three years.	monitoring equipment for all WECC or ISO identified events for at least three years.	<input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted  Amended for clarity and consistency.	suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<b>R6.</b> Each Transmission Owner and Generator Owner that is required by its Regional Reliability Organization to have DMEs shall have a maintenance and testing program for those DMEs that includes:  <b>R6.1.</b> Maintenance and testing intervals and their basis.  <b>R6.2.</b> Summary of maintenance and testing procedures.	<b>R9</b> Each TFO and GFO that is directed by the ISO to have disturbance monitoring equipment must implement a maintenance and testing program for disturbance monitoring equipment that includes:  <b>R9.1</b> Maintenance and testing intervals and their basis.  <b>R9.2</b> Summary of maintenance and testing procedures.	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted  Amended for clarity and consistency.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<b>M1.</b> The Transmission Owner and Generator Owner shall each have evidence that DMEs it is required to have meet the functional requirements specified in Requirement 1 and are installed in accordance with its associated Regional Reliability Organization's requirements (R2).	<b>MR1</b> A list exists that identifies all disturbance monitoring equipment according to requirement R1.  <b>MR2</b> Measures for this requirement are identified in the sub-measures below:  <b>MR2.1</b> Confirmation exists that the disturbance monitoring equipment is synchronized as	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted  Amended to align with requirement R1 and R2.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>  TransAlta sees no value in the large number of measures that are defined for each	

**COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1  
DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING**

NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
	<p>specified in requirement R2.1.</p> <p><b>MR2.2</b> Confirmation exists that the disturbance monitoring equipment stores disturbance data as specified in requirement R2.2.</p>		<p>subrequirement, given that they simply provide a reference back to the subrequirement but no additional guidance as to what is required. TransAlta therefore recommends that MR2 should be reworded as suggested below and that all of the remaining measures for the subrequirements be removed.</p> <p><b>Proposed wording for MR2.</b> TFO's and GFO's that own disturbance monitoring equipment as identified in the list as required in requirement R1 have evidence that DMEs it is required to have, meet the functional requirements specified in R2, R2.1 &amp; R2.2 and are installed in accordance with (to be determined, see comments under R3 above).</p> <p><b>MR2.1, MR2.2</b> TransAlta's recommendation is to remove these measurements, however we would also like to state our concern about the use of the word "confirmation". If confirmations are to be used in the measures of the standards</p>	

**COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1  
DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING**

Formatted Table

NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
			<p>they should only be used to confirm receipt of data by the AESO. TransAlta believes confirmations are being used incorrectly in these measures as it would have the registered entity seek confirmation from the AESO that our equipment is meeting technical specifications (i.e.: synchronized as specified, storing data as specified). In TransAlta's opinion this is very burdensome and unnecessary. The entity must have evidence of synchronization and data storage in order to demonstrate compliance and confirmation from the AESO provides no additional value. Essentially the use of confirmation in this measure is a form of audit. "Here is my evidence, please confirm it is correct".</p> <p>As a general principle, TransAlta believes that a confirmation from the AESO should be an option available to the entity to assist them in demonstrating their own compliance, however a</p>	

Formatted Table

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
			confirmation should not be a requirement if the entity has proper evidence, such as paper trails of submissions etc, to demonstrate compliance. .	
<p><b>M2.</b> The Transmission Owner and Generator Owner shall each maintain the data listed in Requirements 3.1 through 3.8 for the DMEs installed to meet its Regional Reliability Organization’s DME installation requirements.</p> <p><b>M2.1</b> The Transmission Owner and Generator Owner shall each have evidence it provided this DME data to its Regional Reliability Organization within 30 calendar days of a request.</p>	<p><b>MR3</b> Confirmation exists that disturbance monitoring equipment has been installed as specified in requirement R3.</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Amended to align with requirement R3.</p>	<p><input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p><b>MR3</b> TransAlta recommends that this measurement be rewritten as follows:</p> <p>“Evidence exists that disturbance monitoring equipment as been installed as specified in R3.”</p> <p>Please see comments above in R2 regarding the use of the word “confirmation” and as above, we are also concerned that in this case it is being used incorrectly, not to confirm receipt of data, but rather to confirm technical aspects for</p>	

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
			which the registered entity will have records to demonstrate compliance and a confirmation from the AESO provides no additional value. In this case the technical aspects are records of equipment installation.	
<p><b>M3.</b> The Transmission Owner and Generator Owner shall each have evidence it retained and provided recorded Disturbance data to entities in accordance with its associated Regional Reliability Organization's Disturbance data reporting requirements. (R4 R5)</p>	<p><b>MR4</b> Confirmation exists that data is maintained and is provided as specified in requirement R4.</p> <p><b>MR4.1</b> Data is complete and accurate for each disturbance monitoring equipment device as specified in requirement R4.1</p> <p><b>MR4.2</b> Data is complete and accurate for each disturbance monitoring equipment device as specified in requirement R4.2</p> <p><b>MR4.3</b> Data is complete and accurate for each disturbance monitoring equipment device as specified in requirement R4.3</p> <p><b>MR4.4</b> Data is complete and accurate for each disturbance monitoring equipment device as</p>	<p><input type="checkbox"/> New  <input checked="" type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Amended to align with requirement R4.</p>	<p><input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p><b>MR4</b>  TransAlta sees no value in the large number of measures that are defined for each subrequirement, given that they simply provide a reference back to the subrequirement but no additional guidance as to what is required. TransAlta therefore recommends that MR4 be reworded and suggests the AESO look at the NERC measurements for simplicity.</p>	

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
	<p>specified in requirement R4.4.</p> <p><b>MR4.5</b> Data is complete and accurate for each disturbance monitoring equipment device as specified in requirement R4.5.</p> <p><b>MR4.6</b> Data is complete and accurate for each disturbance monitoring equipment device as specified in requirement R4.6</p> <p><b>MR4.7</b> Data is complete and accurate for each disturbance monitoring equipment device as specified in requirement R4.7.</p> <p><b>MR4.8</b> Data is complete and accurate for each disturbance monitoring equipment device as specified in requirement R4.8.</p>		<p>Please see comments above in R2 regarding the use of the word “confirmation” and as above, we are also concerned that in this case it is being used incorrectly, not just to confirm receipt of data, but also to confirm that an entity retained data. In order to demonstrate compliance on this aspect an entity will simply need to produce the data (ie. show retention of data), and a confirmation from the AESO provides no additional value</p> <p><b>MR4.1 to MR 4.8</b> While TransAlta believes these measures should be removed, we would also like to comment on the use of the words “complete and accurate” which are subjective and are hard to measure.</p>	
	<p><b>MR5</b> Confirmation exists that data is provided as specified in requirement R5.</p>	<p><input checked="" type="checkbox"/> New  <input type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Added to align with requirement R5.</p>	<p><input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input type="checkbox"/> Oppose</p>	

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1				
DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
			<i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<b>M4.</b> Each Transmission Owner and Generator Owner that is required to install DMEs to meet its Regional Reliability Organization's DME installation requirements, shall have an associated DME maintenance and testing program as defined in Requirement 6.	<p><b>MR6</b> Confirmation exists that disturbance data is provided as specified in requirement R6.</p> <p><b>MR7</b> Confirmation exists that data is provided as specified in requirement R7.</p>	<input type="checkbox"/> New <input checked="" type="checkbox"/> Amended <input type="checkbox"/> Deleted  Amended to align with requirement R6 and R7.	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input checked="" type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i> <b>MR6 and MR7</b>  As a general principle, TransAlta believes that a confirmation from the AESO should be an option available to the entity to assist them in demonstrating their own compliance; however a confirmation should not be a requirement if the entity has proper evidence, such as paper trails of submissions etc, to demonstrate compliance.	
	<b>MR8</b> Confirmation exists that the ISO archived all data recorded by disturbance monitoring equipment for all WECC and ISO	<input checked="" type="checkbox"/> New <input type="checkbox"/> Amended <input type="checkbox"/> Deleted	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose	

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
	identified events as specified in requirement R8.	Added to align with requirement R8.	<i>Insert comments, reason for position, and alternate proposal (if any).</i>	
	<p><b>MR9</b> Confirmation exists that a written maintenance and testing program was implemented as specified in requirement R9.</p> <p><b>MR9.1</b> Interval information is included as specified in requirement R9.1.</p> <p><b>MR9.2</b> A summary as specified in requirement R9.2 exists and includes clear and detailed procedures.</p>	<p><input checked="" type="checkbox"/> New  <input type="checkbox"/> Amended  <input type="checkbox"/> Deleted</p> <p>Added to align with requirement R9.</p>	<p><input type="checkbox"/> Support  <input type="checkbox"/> Support with language suggestions  <input checked="" type="checkbox"/> Oppose</p> <p><i>Insert comments, reason for position, and alternate proposal (if any).</i></p> <p><b>MR9</b>  TransAlta sees no value in the large number of measures that are defined for each subrequirement, given that they simply provide a reference back to the subrequirement but no additional guidance as to what is required. TransAlta therefore recommends that MR9 be reworded and suggest the AESO look at the NERC measurements for simplicity</p> <p>Please see comments above in R2 regarding the use of the word "confirmation" and as above, we are also concerned</p>	

Formatted Table

COMPARISON BETWEEN NERC PRC-018-1 AND ALBERTA PRC-018-AB-1 DISTURBANCE MONITORING EQUIPMENT INSTALLATION AND DATA REPORTING				
NERC PRC-018-1	Alberta PRC-018-AB-1	AESO Reason for Difference	Stakeholder Comments	AESO Replies
			that in this case it is being used incorrectly, not to confirm receipt of data, but rather to confirm technical aspects for which the registered entity will have records to demonstrate compliance and a confirmation from the AESO provides no additional value. In this case the technical aspects are such things as interval records, which can simply be produced by the entity. There is no value in having the AESO confirm the records exist.	
<b>Compliance</b> To view the compliance section D of the NERC reliability standard follow this link: <a href="http://www.nerc.com/files/PRC-018-1.pdf">http://www.nerc.com/files/PRC-018-1.pdf</a>		The Alberta reliability standards do not contain a compliance section. Compliance with all Alberta reliability standards is completed in accordance with the Alberta Reliability Standards Compliance Monitoring Program, available on the AESO website at: <a href="http://www.aeso.ca/loadsettlement/17189.html">http://www.aeso.ca/loadsettlement/17189.html</a> .		
<b>Regional Differences</b> None identified.	None identified.	Not applicable in Alberta		

Definitions	Comments	Rationale and/or Alternate Proposal
<p><b>(a) New</b></p> <p>“<i>disturbance monitoring equipment</i>” means devices capable of monitoring and recording system data pertaining to a disturbance, including any or all of the following:</p> <ul style="list-style-type: none"> <li>(i) sequence of event recorders which record equipment response to the disturbance;</li> <li>(ii) fault recorders, which record actual waveform data replicating the system primary voltages and currents and which include protective relays that provide this functionality; and</li> <li>(iii) dynamic <i>disturbance</i> recorders which record incidents that portray system behaviour during disturbances, such as low-frequency (0.1 Hz - 3 Hz) oscillations, abnormal frequency or voltage excursions, and which include protective relays and phasor measurement units that provide this functionality.</li> </ul>	<input type="checkbox"/> Support <input type="checkbox"/> Support with language suggestions <input type="checkbox"/> Oppose  <i>Insert comments, reason for position, and alternate proposal (if any).</i>	
<p><b>(b) Removals</b></p> <p>N/A</p>		
<p><b>(c) Amendments</b></p> <p>N/A</p>		

TransAlta general comments:

The text in the draft standard does not show defined terms in bold and this makes it somewhat difficult to fully interpret the intention of the AESO in using particular language.