

ARC Operations Work Group Assessment and Conversion of NERC PRC-010-0 to Alberta PRC-010-AB-0 Assessment of the Design and Effectiveness of UVLS Program			
Section	NERC PRC-010-0	Alberta PRC-010-AB-0	Reason for Difference
Purpose	Provide System preservation measures in an attempt to prevent system voltage collapse or voltage instability by implementing an Undervoltage Load Shedding (UVLS) program.	<u>The purpose of this reliability standard is to ensure the effectiveness of each UVLS program.</u>	Revised purpose to align with the standard.
Applicability	<p>4.1. Load-Serving Entity that operates a UVLS program</p> <p>4.2. Transmission Owner that owns a UVLS program</p> <p>4.3. Transmission Operator that operates a UVLS program</p> <p>4.4. Distribution Provider that owns or operates a UVLS program</p>	<u>ISO</u>	Identify the applicable entity in Alberta.
Effective Date	April 1, 2005	<u>Ten calendar days after the date of approval by the Commission.</u>	
Definitions		Italicized terms used in this reliability standard have the same meanings as set out in the Alberta Reliability Standards Glossary of Terms and Part 1 of the ISO Rules. ¹	Added definitions section to the Alberta reliability standard.
Requirement	R1. The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall periodically (at least every five years or as required by changes in system conditions) conduct and document an assessment of the effectiveness of the UVLS program. This assessment shall be conducted with the	R1. The <u>ISO must</u> conduct and document an assessment of the effectiveness of <u>each</u> UVLS program <u>every five years</u> . <u>In the event the AESO determines that conditions affecting the UVLS operation have occurred, it may conduct and document an assessment within such five year period as it deems appropriate.</u>	<p>Identified the responsible entity in Alberta.</p> <p>Changed passive term “shall” to “must”.</p> <p>The ISO will consult with TFOs and wire owners.</p>

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¹ Defined terms are not italicized in this document, but will appear in the Alberta Reliability Standards document.

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	associated Transmission Planner(s) and Planning Authority(ies).		
Measure	M1. Each Transmission Owner's and Distribution Provider's UVLS program shall include the elements identified in Reliability Standard PRC-010-0_R1.	MR1. Documentation of the most recent assessment of the effectiveness of each UVLS program exists and was carried out within the last five years.	
Requirement	R1.1. This assessment shall include, but is not limited to: R1.1.1. Coordination of the UVLS programs with other protection and control systems in the Region and with other Regional Reliability Organizations, as appropriate. R1.1.2. Simulations that demonstrate that the UVLS programs performance is consistent with Reliability Standards TPL-001-0, TPL-002-0, TPL-003-0 and TPL-004-0. R1.1.3. A review of the voltage set points and timing.	R2. The assessment of the effectiveness of each UVLS program must include, but is not limited to: <ul style="list-style-type: none"> Coordination of the UVLS programs with other protection and control systems in the WECC as appropriate. Simulations that demonstrate that the performance of each UVLS program is consistent with Alberta reliability standards TPL-001-AB-0, TPL-002-AB-0, TPL-003-AB-0 and TPL-004-AB-0. A review of the voltage set points and timing. 	Identified the specific regional entity. Note: TPL-001-AB-0, TPL-002-AB-0, TPL-003-AB-0 and TPL-004-AB-0 are targeted to be submitted in the July ISO rules cycle.
Measure		MR2. Documentation of the most recent assessment includes the elements of R2.	
Requirement	R2. The Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall provide documentation of its current UVLS program assessment to its Regional Reliability	R3. The ISO must provide documentation of its most recent assessment of UVLS programs to WECC on request and within the timeframe specified by WECC and agreed to by the ISO.	Identify the applicable entity in Alberta. Changed the passive term "shall" to "must".

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	Organization and NERC on request (30 calendar days).		Revised the time frame to coincide with that required by the WECC.
Measure	M2. Each Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall have evidence it provided documentation of its current UVLS program assessment to its Regional Reliability Organization and NERC as specified in Reliability Standard PRC-010-0_R2.	MR3. Written confirmation from WECC that the documentation requested by it pursuant to R3 has been received.	Identified the type of evidence required.
Procedures			
Compliance	1.1. Compliance Monitoring Responsibility Compliance Monitor: Regional Reliability Organizations. Each Regional Reliability Organization shall report compliance and violations to NERC via the NERC Compliance Reporting process. 1.2. Compliance Monitoring Period and Reset Timeframe Assessments every five years or as required by System changes. Current assessment on request (30 calendar days.) 1.3. Data Retention None specified. 1.4. Additional Compliance Information None. 2. Levels of Non-Compliance		There is no compliance section currently proposed in the Alberta Reliability Standards. A compliance program will be developed at a later date for Alberta Reliability Standards that recognizes the compliance monitoring and enforcement structure in Alberta. This approach is deemed consistent with the existing ISO Rules.

Deleted: M2. Each Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall have evidence it provided documentation of its current UVLS program assessment to its Regional Reliability Organization and NERC as specified in Reliability Standard PRC-010-0_R2.

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 Compliance Monitor: Regional Reliability Organizations. Each Regional Reliability Organization shall report compliance and violations to NERC via the NERC Compliance Reporting process.¶
 1.2. Compliance Monitoring Period and Reset Timeframe¶
 Assessments every five years or as required by System changes. Current assessment on request (30 calendar days.)¶
 1.3. Data Retention¶
 None specified.¶
 1.4. Additional Compliance Information¶
 None.¶
 2. Levels of Non-Compliance¶
 2.1. Level 1: Not applicable.¶
 2.2. Level 2: Not applicable.¶
 2.3. Level 3: Not applicable.¶

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	<p>2.1. Level 1: Not applicable. 2.2. Level 2: Not applicable. 2.3. Level 3: Not applicable. 2.4. Level 4: An assessment of the UVLS program did not address one of the three requirements listed in Reliability Standard PRC-010-0_R1.1 or an assessment of the UVLS program was not provided.</p>		
Regional Differences	None identified.	None identified.	Not applicable in Alberta

Proposed Terms for the Alberta Reliability Standard Glossary:

None specified.

Existing Defined Terms Used in this Standard:

(As included in the ISO Rules Definitions or Alberta Reliability Standards Glossary)

- reliability standard
- Commission
- ISO
- under voltage load shed (UVLS)
- WECC
- day

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Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall

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at least every five years or sooner if

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required by changes in system conditions,

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More frequent assessments may be appropriate when conditions affecting UVLS operation occur

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This assessment shall be conducted with the associated Transmission Planner(s) and Planning Authority(ies).

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Load-Serving Entity, Transmission Owner, Transmission Operator, and Distribution Provider that owns or operates a UVLS program shall

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its Regional Reliability Organization

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1.1. Compliance Monitoring Responsibility

Compliance Monitor: Regional Reliability Organizations. Each Regional Reliability Organization shall report compliance and violations to NERC via the NERC Compliance Reporting process.

1.2. Compliance Monitoring Period and Reset Timeframe

Assessments every five years or as required by System changes. Current assessment on request (30 calendar days.)

1.3. Data Retention

None specified.

1.4. Additional Compliance Information

None.

2. Levels of Non-Compliance

2.1. Level 1: Not applicable.

2.2. Level 2: Not applicable.

2.3. Level 3: Not applicable.

2.4. Level 4: An assessment of the UVLS program did not address one of the three requirements listed in Reliability Standard PRC-010-0_R1.1 or an assessment of the UVLS program was not provided.