A. Introduction

1. Title: Under-Voltage Load Shedding Program Data

2. Number: PRC-021-1

Rurpose: Ensure data is provided to support the Regional database maintained for Under-Voltage Load Shedding (UVLS) programs that were implemented to mitigate the risk of voltage collapse or voltage instability in the Bulk Electric System (BES).

4. Applicability

- **4.1.** Transmission Owner that owns a UVLS program.
- **4.2.** Distribution Provider that owns a UVLS program.
- **5. Effective Date:** August 1, 2006

B. Requirements

- **R1.** Each Transmission Owner and Distribution Provider that owns a UVLS program to mitigate the risk of voltage collapse or voltage instability in the BES shall annually update its UVLS data to support the Regional UVLS program database. The following data shall be provided to the Regional Reliability Organization for each installed UVLS system:
 - **R1.1.** Size and location of customer load, or percent of connected load, to be interrupted.
 - **R1.2.** Corresponding voltage set points and overall scheme clearing times.
 - **R1.3.** Time delay from initiation to trip signal.
 - **R1.4.** Breaker operating times.
 - **R1.5.** Any other schemes that are part of or impact the UVLS programs such as related generation protection, islanding schemes, automatic load restoration schemes, UFLS and Special Protection Systems.
- **R2.** Each Transmission Owner and Distribution Provider that owns a UVLS program shall provide its UVLS program data to the Regional Reliability Organization within 30 calendar days of a request.

C. Measures

- **M1.** Each Transmission Owner and Distribution Provider that owns a UVLS program shall have documentation that its UVLS data was updated annually and includes all items specified in Requirement 1.1 through 1.5.
- **M2.** Each Transmission Owner and Distribution Provider that owns a UVLS program shall have evidence it provided the Regional Reliability Organization with its UVLS program data within 30 calendar days of a request.

D. Compliance

- 1. Compliance Monitoring Process
 - 1.1. Compliance Monitoring Responsibility

Regional Reliability Organization.

1.2. Compliance Monitoring Period and Reset Time Frame

One calendar year.

1.3. Data Retention

Adopted by Board of Trustees: February 7, 2006 Effective Date: August 1, 2006 Each Transmission Owner and Distribution Provider that owns a UVLS program shall retain a copy of the data submitted over the past two years.

The Compliance Monitor shall retain all audit data for three years.

1.4. Additional Compliance Information

Transmission Owner and Distribution Provider shall demonstrate compliance through self-certification or audit (periodic, as part of targeted monitoring or initiated by complaint or event), as determined by the Compliance Monitor.

2. Levels of Non-Compliance

- **2.1.** Level 1: Did not update its UVLS data annually.
- **2.2.** Level 2: UVLS data was provided, but did not address one of the items identified in R1.1 through R1.5.
- **2.3.** Level 3: UVLS data was provided, but did not address two or more of the items identified in R1.1 through R1.5.
- **2.4.** Level 4: Did not provide any UVLS data.

E. Regional Differences

None identified.

Version History

Version	Date	Action	Change Tracking
1	12/01/05	Removed comma after 2004 in "Development Steps Completed," #1.	01/20/05
		2. Changed incorrect use of certain hyphens (-) to "en dash" (-) and "em dash ()."	
		3. Added heading above table "Future Development Plan."	
		4. Lower cased the word "region," "board," and "regional" throughout document where appropriate.	
		5. Added or removed "periods" where appropriate.	
		6. Changed "Timeframe" to "Time Frame" in item D, 1.2.	

Standard PRC-021-1 — Under-Voltage Load Shedding Program Data

Appendix QC-PRC-021-1 Provisions specific to the standard PRC-021-1 applicable in Québec

This appendix establishes specific provisions for the application of the standard in Québec. Provisions of the standard and of its appendix must be read together for the purposes of understanding and interpretation. Where the standard and appendix differ, the appendix shall prevail.

A. Introduction

1. Title: Under-Voltage Load Shedding Program Data

2. Number: PRC-021-1

3. Purpose: No specific provision

4. Applicability: No specific provision

5. Effective Date:

5.1. Adoption of the standard by the Régie de l'énergie: April 26, 2016

5.2. Adoption of the appendix by the Régie de l'énergie: April 26, 2016

5.3. Effective date of the standard and its appendix in Québec: July 1, 2016

B. Requirements

Specific provision applicable to requirement R1.5:

In requirement R1.5, the Special Protection Systems are the type I or type II SPS classified by NPCC.

C. Measures

No specific provision

D. Compliance

1. Compliance Monitoring Process

1.1. Compliance Monitoring Responsibility

The Régie de l'énergie is responsible, in Québec, for compliance monitoring with respect to the reliability standard and its appendix that it adopts.

1.2. Compliance Monitoring Period and Reset Time Frame

No specific provision

1.3. Data Retention

No specific provision

1.4. Additional Compliance Information

No specific provision

2. Levels of Non-Compliance

No specific provision

E. Regional Differences

No specific provision

Standard PRC-021-1 — Under-Voltage Load Shedding Program Data

Appendix QC-PRC-021-1 Provisions specific to the standard PRC-021-1 applicable in Québec

Revision History

Revision	Adoption Date	Action	Change Tracking
0	April 26, 2016	New appendix	New