

## A. Introduction

1. **Title:**           **Analysis and Documentation of Underfrequency Load Shedding Performance Following an Underfrequency Event**
2. **Number:**     PRC-009-0
3. **Purpose:**     Provide last resort System preservation measures by implementing an Under Frequency Load Shedding (UFLS) program.
4. **Applicability:**
  - 4.1. Transmission Owner required by its Regional Reliability Organization to own a UFLS program
  - 4.2. Transmission Operator required by its Regional Reliability Organization to operate a UFLS program
  - 4.3. Load-Serving Entity required by the Regional Reliability Organization to operate a UFLS program
  - 4.4. Distribution Provider required by the Regional Reliability Organization to own or operate a UFLS program
5. **Effective Date:**                   April 1, 2005

## B. Requirements

- R1. The Transmission Owner, Transmission Operator, Load-Serving Entity and Distribution Provider that owns or operates a UFLS program (as required by its Regional Reliability Organization) shall analyze and document its UFLS program performance in accordance with its Regional Reliability Organization's UFLS program. The analysis shall address the performance of UFLS equipment and program effectiveness following system events resulting in system frequency excursions below the initializing set points of the UFLS program. The analysis shall include, but not be limited to:
  - R1.1. A description of the event including initiating conditions.
  - R1.2. A review of the UFLS set points and tripping times.
  - R1.3. A simulation of the event.
  - R1.4. A summary of the findings.
- R2. The Transmission Owner, Transmission Operator, Load-Serving Entity, and Distribution Provider that owns or operates a UFLS program (as required by its Regional Reliability Organization) shall provide documentation of the analysis of the UFLS program to its Regional Reliability Organization and NERC on request 90 calendar days after the system event.

## C. Measures

- M1. Each Transmission Owner's, Transmission Operator's, Load-Serving Entity's and Distribution Provider's documentation of the UFLS program performance following an underfrequency event includes all elements identified in Reliability Standard PRC-009-0\_R1.
- M2. Each Transmission Owner, Transmission Operator, Load-Serving Entity and Distribution Provider that owns or operate a UFLS program, shall have evidence it provided documentation of the analysis of the UFLS program performance following an underfrequency event as specified in Reliability Standard PRC-009-0\_R1.

**D. Compliance**

**1. Compliance Monitoring Process**

**1.1. Compliance Monitoring Responsibility**

Compliance Monitor – British Columbia Utilities Commission

Compliance Monitor's Administrator – Western Electricity Coordinating Council

**1.2. Compliance Monitoring Period and Reset Timeframe**

On request 90 calendar days after the system event.

**1.3. Data Retention**

None specified.

**1.4. Additional Compliance Information**

None.

**2. Levels of Non-Compliance**

**2.1. Level 1:** Analysis of UFLS program performance following an actual underfrequency event below the UFLS set point(s) was incomplete in one or more elements in Reliability Standard PRC-009-0\_R1.

**2.2. Level 2:** Not applicable.

**2.3. Level 3:** Not applicable.

**2.4. Level 4:** Analysis of UFLS program performance following an actual underfrequency event below the UFLS set point(s) was not provided.

**E. Regional Differences**

None identified.