Standard Authorization Request

WECC-0157 PRC-006-5 Automatic Underfrequency Load Shedding, Update to the WECC Regional Variance

Submitted May 2, 2025

# Overview

This Standard Authorization Request (SAR) was received on May 2, 2025, deemed complete and put into the WECC software on the same day. The WECC Standards Committee (WSC) vetted this SAR on May 21, 2025 and assigned the project number WECC-0157. This SAR can be reviewed on the WECC-0157 project page in the Standard Authorization Request accordion. If you have any questions, please contact Donovan Crane at [dcrane@wecc.org](mailto:dcrane@wecc.org) or by phone at (385) 408-9296.

# Introduction

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# Requester Information

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# Type of Request

# Create, Modify, Retire, or Review a Document

### Requested Action

Revise/Modify an Existing Document

### Document Type

WECC Variance to a Reliability Standard

### Issue

The purpose of PRC-006 is “To establish design and documentation requirements for automatic underfrequency load shedding (UFLS) programs to arrest declining frequency, assist recovery of frequency following underfrequency events and provide last resort system preservation measures.” Assessments of the UFLS programs need to occur on a periodic basis to ensure the purpose is met.

If the performance of the UFLS program is not met, applicable entities need to develop corrective action plans intended to meet performance. UFLS entities in the WECC Interconnection need to be able to effectively evaluate options when a UFLS Assessment does not meet the performance characteristics to ensure reliable operations. With the significant changes in the WECC Interconnection due to the proliferation of Inverter-Based Resources, the UFLS program, and its assessment, has more importance in terms of reliable operations than previously expected. Nation-wide Requirement R15 references UFLS assessments completed in Requirements R4, R5, or R12 that are to meet Requirement R3 (performance criteria). Requirements R3, R4, R5, and R12 were absorbed within the WECC variance. Requirement R15 was to be incorporated as well per the language within the variance (“The following Interconnection-wide variance shall be applicable in the Western Interconnection and replaces, in their entirety, Requirements R1 through R5, and R11 through R15.”).

Unfortunately, when the WECC variance was developed Requirement R15 language that allowed Corrective Action Plans to be developed was inadvertently left out. The proposed change will allow the appropriate entities to collaborate on opportunities to provide effective remediation activities in a timely manner if there are deficiencies noted within an UFLS assessment activity. As is, there is a possible gap that could cause an inadvertent potential noncompliance which would be remediated through mitigation efforts that would effectively be a Corrective Action Plan afforded through Requirement R15 for all other entities in North America. That gap does not support reliability, nor does it allow for quicker remediation of an issue if noted.

Effectively this could ease possible costs associated with additional administrative efforts if a potential noncompliance resulted due to the non-inclusion of Requirement R15.

### Proposed Remedy

The goal would be to incorporate nation-wide Requirement R15 in a manner that would allow effective mitigation of a UFLS assessment not meeting performance criteria within the WECC Interconnection. This would allow effective coordinated collaboration to address a performance issue if noted.

The project scope would be limited to changes within the WECC variance. An evaluation of the current nation-wide Requirement R15 language incorporation into the WECC variance is the expected scope. Effectively the scope would be limited to create Requirement(s) language and identify the appropriate functional entities to develop and implement Corrective Action Plans in a timely manner to remediate any identified issues within a UFLS assessment. The drafting team may choose to incorporate Requirement R15 as a separate Requirement or build in actions to other Requirements within the WECC variance.

### Applicable Entities

* Balancing Authority
* Planning Authority/Coordinator
* Transmission Owner
* Transmission Planner

### Detailed Description

The goal would be to incorporate nation-wide Requirement R15 in a manner that would allow effective mitigation of a UFLS assessment not meeting performance criteria within the WECC Interconnection. This would allow effective coordinated collaboration to address a performance issue if noted.

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### Affected Reliability Principles

**Reliability Principle**

Reliability Principle 1 — Interconnected bulk electric systems shall be planned and operated in a coordinated manner to perform reliably under normal and abnormal conditions as defined in the NERC Standards.

# Document Information

No other Document Provided

# Reference Uploads

[PRC-006-5](https://www.wecc.org/system/files/webform/standard_authorization_request_f/451/prc-006-5_0.pdf)

### Provide additional comments

No other Comments Provided