



Underfrequency Load Shedding Work Group Charter

Establishment and Authority

The Underfrequency Load Shedding Work group (UFLSWG) was established by the Joint Guidance Committee (JGC). UFLSWG will report to the Reliability Assessment Committee (RAC).

Purpose and Responsibilities

The purpose of the UFLSWG is to serve as custodian of the WECC Off-Nominal Frequency Load Shedding Plan (WECC Plan) and to perform coordinated UFLS design assessments (completed biennially) to determine whether the WECC Plan's design meets the performance characteristics specified in NERC Reliability Standard PRC-006.

The UFLSWG is responsible for:

1. Reviewing the submitted UFLS data for consistency and accuracy of modeling (as per the requirements of PRC-006-WECC-CRT-3.1).
2. Performing dynamic simulations (biennially) to assess the effectiveness and adequacy of the WECC Plan's design in meeting the performance characteristics specified in PRC-006.
3. Documenting the simulation results in a biennial assessment report.
4. Recommending to the RAC improvements to the WECC Plan's design and implementation based on findings of the biennial assessment.
5. Documenting a coordinated event assessment of a BES islanding event which results in system frequency excursions below the initializing set points of the UFLS program. The assessment will take place within one year of event actuation to evaluate the performance of the UFLS equipment and the effectiveness of the UFLS program.
6. Performing other tasks as assigned by the RAC.

Committee Composition and Governance

1. Membership

- a. The UFLSWG will be composed of members from WECC Member organizations with subject matter expertise in both Planning and Operations functions.
 - i. Representation from all registered Planning Coordinators is strongly encouraged.

- ii. UFLSWG work products are focused heavily on power flow and dynamic simulations, so this kind of experience is strongly encouraged.
- b. Members will be selected by their organization's RAC representative. If no RAC representative exists, a member may be selected by their organization's WECC Member Representative.
 - i. WECC Member organizations may have multiple members on the UFLSWG.
 - ii. Notice of selection should be sent to the chair (or designee).
 - iii. UFLSWG work products may result in changes to the WECC Plan's implementation, so some members with operation experience are encouraged.
- c. Members cannot be marketing-function employees.
- d. Members will serve until they resign, or a successor has been selected.
- e. The UFLSWG will also include a liaison, appointed by WECC management, as a member.
- f. Committee members who miss three or more consecutive meetings will be removed from the committee.

2. Leadership

- a. The RAC chair will approve one of the UFLSWG members to serve as the chair.
 - i. The chair will manage the committee and its meetings.
- b. The chair of the UFLSWG will appoint a UFLSWG member to serve as the vice chair for UFLSWG approval.
 - i. The vice chair will perform the duties of the chair in the chair's absence or in case of a vacancy in the office of chair.
- c. The chair and vice chair will each hold office for a term of two years, or until a successor has been duly appointed. The chair and vice chair may serve multiple terms.
- d. WECC staff will partner with the chair and vice chair to manage the committee and its meetings, plan the agenda, and coordinate efforts with the other technical committees to ensure alignment with WECC staff work plans and priorities.
- e. WECC staff will prepare minutes of UFLSWG meetings for the committee's approval.
- f. The chair may appoint a steering committee that will assist with meeting agendas and action recommendations. The steering committee will include the vice chair, WECC liaison, subgroup chairs, and may include other members.

3. Meetings



- a. The UFLSWG will meet at least two times per year and as often as required to carry out its responsibilities.
 - i. Meetings will be held according to the WECC Meeting Policy.
 - ii. UFLSWG meetings may be in-person, virtual, a combination of the two (hybrid), or by conference call, as determined by the chair.
 - iii. Meetings will be open to the public except as otherwise approved according to Board policy.
 - iv. A quorum for meetings will be committee members representing a third of WECC Member organizations with committee members on the committee.
- b. The UFLSWG will strive to make all decisions by consensus. If consensus is not possible, action taken by the UFLSWG will require a majority vote of the members present.
 - i. Voting may be by any means the chair determines appropriate.
 - ii. Voting must take place in a noticed meeting.
 - iii. UFLSWG members may not vote by proxy or absentee ballot.
 - iv. Each WECC Member organization may only have one vote.
 - v. Members who vote in the minority regarding an approval item should provide an explanation for their vote. This explanation or a summary will be included in the minutes.
- c. WECC will give notice to each member of the UFLSWG of the time and place of all meetings and will post notice of all meetings on the WECC website. Notice will be given no less than:
 - 30 calendar days before in-person and hybrid meetings.
 - 10 calendar days before virtual meetings and conference calls.
- d. An agenda and the items for which action may be taken, will be posted no less than:
 - 10 calendar days before in-person and hybrid meetings.
 - Three calendar days before virtual meetings and conference calls.
- e. Any person who wants notice of UFLSWG meetings may notify the WECC liaison. WECC will then email the notice of future meetings to that person when the committee members receive the notice.

Reporting

The UFLSWG will report to the RAC on its activities and any recommendations.



Review and Changes to the Charter

The UFLSWG will review this charter every three years or as needed and discuss any changes with the RAC.

	Committee	Date
Approved	RAC	May 19, 2023
Endorsed	JGC	August 4, 2023
Reviewed	UFLSWG	May 2, 2023