

Report to the Western Conference of Public Service Commissioners
on Electricity Committee Activities
July 2015 to June 2016

This report covers activities of the Committee on Regional Electric Power Cooperation and the Western Interconnection Regional Advisory Body.

**I. COMMITTEE ON REGIONAL ELECTRIC POWER COOPERATION
(CREPC)**

CREPC is a joint committee of the Western Interstate Energy Board (WIEB) and the Western Conference of Public Service Commissioners. In 1984, CREPC organized to provide a forum for discussion and information sharing among the Governor/Premier offices, energy agencies and the regulatory commissions from the states and provinces in the Western Interconnection. The Northwest Power and Conservation Council is also a member of the Committee.

In 2009, the U.S. Department of Energy issued grants to promote interconnection-wide planning and analysis under the American Recovery and Reinvestment Act (ARRA). Western states and provinces organized the State-Provincial Steering Committee (SPSC) in 2009 to provide input into interconnection-wide transmission planning and analysis in the Western Interconnection. SPSC members consisted of one representative of the Governor and one representative of the public utility commission or public service commission in each state in the Western Interconnection, plus provincial representatives from Alberta and British Columbia. The DOE ARRA grant for the SPSC ended April 30, 2015.

CREPC meets twice a year to share and exchange information and views on energy policy matters relevant to the Western Interconnection. In recent years, CREPC held joint meetings with the SPSC and the Western Interconnection Regional Advisory Body (WIRAB). These meetings include participation by representatives of the U.S. Department of Energy (DOE), the Federal Energy Regulatory Commission (FERC), the U.S. Environmental Protection Agency (EPA), the Western Electricity Coordinating Council (WECC), and the Western power industry.

Fall Meeting 2015

CREPC, SPSC, and WIRAB jointly met in San Diego, California on October 28-30, 2015. Two major themes issues for this meeting were the Clean Power Plan and regional market initiatives. The joint meeting included the following specific topics:

- Clean Power Plan (CPP)
 - EPA perspective of the Clean Power Plan (CPP) final rule

- State roundtable discussion on the Final Rule
- Emission trading opportunities under the CPP
- WECC's reliability assessment of the CPP
- Western States' future design of CPP scenarios

- Regional market initiatives
 - NW Power Pool market initiative
 - Energy Imbalance Market (EIM) update
 - Benefit analysis of PacifiCorp's participation in a Regional ISO
 - Policy issues of a future Regional ISO

- Recent activities at FERC and DOE

- Peak Reliability: strategic direction and current issues

- WECC report on reliability study requests
 - High distributed generation
 - High renewables
 - Coal plant retirements

- California's Renewable Energy Transmission Initiative version 2.0

- Western Planning Regions reports

- Flexibility Assessment of the Western Interconnection study

- Frequency response and stability under high renewable energy futures

- Idaho-WIEB State Energy Planning Grant update

Details of these discussions and presentations are linked to the meeting [agenda](#). A [summary](#) of the meeting and actions taken is available on the WIEB website.

Spring Meeting 2015

CREPC and WIRAB jointly met in Salt Lake City, Utah on April 26-27, 2014. Primary themes for this meeting were issues surrounding the proposed Regional ISO, the growing debate over distributed energy resources, and discussions about reliability. The specific topics for the joint meeting were as follows:

- Energy Balance Market update
- Proposed Regional ISO
 - Design issues
 - Governance issues
- Distributed Energy Resources
 - Outlook for distributed generation in the West
 - Rate and incentive policies
 - Expert panel on rate design issues
- Recent activities at FERC, DOE, and EPA
- Idaho-WIEB SEP Grant update
- Reliability of the grid
 - Outage risk and complexity
 - Essential reliability services with a changing resource landscape
- Future of Interconnection-wide planning and analysis
 - Proposed changes to WECC's TEPPC
 - Roundtable discussion
- Natural gas infrastructure demand
- Report on Aliso Canyon developments

Details of these discussions and presentations are linked to the meeting [agenda](#). A summary of the meeting and actions taken can be found on the WIEB website.

Study Requests to WECC

CREPC, SPSC and WIRAB have submitted study requests to WECC every January over the past six years (2010-2015). In 2016, CREPC/WIRAB submitted four [study requests](#).

II. WESTERN INTERCONNECTION REGIONAL ADVISORY BODY (WIRAB)

The Western Interconnection Regional Advisory Body (WIRAB) was created in 2006 pursuant to Section 215 of the Federal Power Act. Western Governors initiated the formation of WIRAB to provide public policy input to a new system of mandatory electric reliability standards enacted by the Energy Policy Act of 2005. Specifically, WIRAB has statutory authority to advise FERC, NERC, and WECC on the following:

1. Governance of an existing or proposed Regional Entity within the region;
2. Whether a standard proposed to apply within the region is just, reasonable, not unduly discriminatory or preferential, and in the public interest;
3. Whether fees proposed to be assessed in the region are just, reasonable, not unduly discriminatory or preferential, and in the public interest; and
4. "...any other responsibilities requested by the Commission."

Since the bifurcation of WECC in 2014, FERC authorized WIRAB also to advise Peak Reliability on governance, standards, fees, and other topics requested by FERC. All of the states with territory in the Western Interconnection, the provinces of Alberta and British Columbia, and Mexico participate in WIRAB and members are appointed by the Governor or Premier.

WIRAB priorities related to Peak Reliability and WECC are:

- Improve company reliability practices in order to avoid future cascading outages such as the September 8, 2011 Pacific Southwest outage.
- Improve information sharing by WECC and Peak Reliability so that independent researchers have access to data that is needed to study reliability challenges and states/provinces have data necessary to support policy decisions.
- Advance new technologies and practices that will enhance system reliability and efficiency.
- Ensure the region is addressing reliability challenges due to a changing resource mix.

In addition to its two in-person meetings with CREPC and the SPSC described above, WIRAB has provided written comments and advice to WECC, Peak Reliability, and FERC. WIRAB has also hosted webinars for state and provincial policy makers on key reliability matters.

WIRAB Advice to WECC, Peak Reliability, and FERC

Over this last year, WIRAB submitted formal comments on Peak Reliability's data sharing policies and its proposed Universal Data Sharing Agreement (UDSA); WECC's formal review of its structure and governance under section 4.9 of its bylaws; FERC's consideration of primary frequency response and a motion to eliminate funding for Peak Reliability under Section 215 of the Federal Power Act; and the Western Planning Regions proposal to coordinate planning across the regions. Specific advice filings are listed below.

- FERC: Notice of Inquiry on Primary Frequency Response – April 28, 2016
- Peak Reliability: 2016 Peak Board Evaluation Questionnaire – April 15, 2016
- Peak Reliability: Final Options for UDSA with the FAST Act – March 15, 2016
- Peak Reliability: Options for UDSA with the FAST Act – February 12, 2016
- WECC: Draft Charter for the Joint Guidance Committee – January 29, 2016
- Peak Reliability: October 12 Draft UDSA – November 3, 2015
- WECC: Draft Report on Section 4.9 Review– October 25, 2015
- FERC: EEI Motion to Vacate Orders on Section 215 Funding for Peak Reliability – September 25, 2015
- Peak Reliability: UDSA Alternative – September 23, 2015
- Peak Reliability: UDSA Proposal – September 21, 2015
- Western Planning Regions: Proposed for Interregional Transmission Planning Coordination Procedures – July 10, 2015

Reliability Webinars

WIRAB hosts webinars for public utility commissions and other policy makers on important electric reliability topics. WIRAB webinars over the past year are listed below. Recordings of WIRAB webinars are posted on the WIRAB [webpage](#).

- **Primary Frequency Response**
March 28, 2016 – Debra Lew and Nick Miller, GE Consulting -- [Presentation](#) and [Report](#)

Primary Frequency Response (PFR) is critical to maintain reliability of the interconnection in the event of a contingency. There is growing concern about PFR because variable energy resources (VERs), specifically wind and photovoltaics (PVs), are not required to provide PFR. Wind and PV are the fastest growing resources, and with increasing Renewable Portfolio Standards (RPS) requirements in many states this will lead to continued growth. The webinar covered how different types of generators provide PFR, lessons learned from previous studies of VER penetration and PFR, and generator control settings. GE Energy delivered a draft report on PFR to WIRAB members on April 4, 2016. The webinar addressed the information and findings provided in the report.

- **Control Performance Standard BAL-001-2**

July 13, 2015 – Earl Shockley and Tim Van Blaricom, GridSME – [Presentation](#)

NERC’s new reliability control standard, BAL-001-2, became effective June 21, 2015. The purpose of this reliability standard is to maintain interconnection frequency within predefined frequency limits. Balancing Authorities in the Western Interconnection have been field-testing BAL-001-2 since March 2010. We discussed results of the field trial and considered lessons learned and recommendations for the successful implementation of the new control performance standard.

- **Grid Authority and Performance**

July 6, 2015 -- Earl Shockley and Tim Van Blaricom, GridSME – [Presentation](#)

This webinar covered the history and evolution of NERC’s authority and explained how reliability standards are developed and enforced. It also described the roles and responsibilities of Balancing Authorities, Transmission Operators, Generation Operators and Reliability Coordinators. The discussion included the history of NERC’s Control Performance Standards, shortcomings of the old standards, and the rationale for the new control standard, BAL-001-2, that was approved by FERC on April 16, 2015.

Peak Reliability and WECC Member Advisory Committees

Both Peak Reliability and WECC have established Member Advisory Committees (MAC) to advise the respective Boards on key matters including the development of budgets, business plans, funding and other matters pertinent to the purpose and operation of the corporations. The MACs obtain feedback from the membership on issues facing the corporations in order to inform and influence the decisions of the Boards on key matters. WIRAB works closely with the state and provincial representatives on both the WECC and Peak Reliability MACs when developing policy positions and recommendations.

III. IDAHO-WIEB STATE ENERGY PLANNING GRANT

The Idaho Office of Energy Resources is the lead state and WIEB is the principal investigator on a two-year U.S. DOE State Energy Planning grant. The purpose of the project is to identify opportunities for multi-state or region-wide collaboration to address emerging energy issues. A primary goal of the project is to develop a roadmap to advance multi-state collaborations on the emerging issues.

CREPC and WIRAB are working closely with the Idaho Office of Energy Resources and WIEB to implement the SEP grant. At the April 2015 joint CREPC/SPSC/WIRAB meeting, state representatives reviewed and endorsed a staff white paper that identified four regional challenges that would be the focus of efforts under the SEP grant: (1) the proposed Clean Power Plan (CPP); (2) state distributed generation resource policies; (3) renewable resources and system flexibility; and (4) coal plant retirements and system reliability.

At the October 2015 joint CREPC/WIRAB meeting, state representatives heard from WECC staff on the lessons learned from modeling mock scenarios of potential CPP futures. Western states discussed options how to proceed in developing future CPP scenarios for WECC to model and evaluate the reliability implications. Additionally researchers at Lawrence Berkeley National Laboratory worked with WIEB staff to identify how energy efficiency trading and formal rules for evaluation, measurement and verification (EM&V) could be used by states to meet CPP compliance targets.

Most recently at the April 2016 joint CREPC/WIRAB meeting, a WIEB staff [white paper](#) supporting the SEP grant was presented that explores the challenge of distributed energy resources, interconnection issues, and advanced inverters. A joint CREPC/WIRAB webinar on May 9, 2016 featured three technical experts that discussed interconnection timelines for distributed resources, national standards, the role of the Smart Inverter Working Group, and the capabilities of advanced inverters.