WIEB Board Meeting Minutes
June 17 – 18, 2015

Board Members Present: Jeff Ackermann (CO), Alan Barber (BC), Jeff Blend (MT), John Chatburn (ID), Dr. Laura Nelson (UT), Governor Bill Ritter Jr. (US), and Janea Scott (CA). Tony Usibelli (WA) participated by phone.

WIEB Staff Present: Maury Galbraith, Thomas Carr, Alaine Ginocchio and Richard McAllister.

Others Attending: Karen Wayland and Larry Mansueti of the U.S. Department of Energy; Phil Pettingill of the California ISO; Sarah Edmonds of PacifiCorp; Matthew Bartos of Arizona State University; Sylvia Bender of the California Energy Commission; Erik Pytlak of the Bonneville Power Administration; Kristine Raper and Johanna Bell of the Idaho Public Utilities Commission; Vijay Satyal of the Western Electricity Coordinating Council; Scott Pugrud, Jennifer Pope, and Matt Wiggs of the Idaho Office of Energy Resources.

Board Actions:

1. Approved Minutes of October 2014 WIEB Board Meeting;
2. Approved the Proposed WIEB FY 2015-16 Work Plan and Budget;
3. Elected the following Officers for FY 2015-16:
   a. John Chatburn (ID) – Chair
   b. Jeff Ackermann (CO) – First Vice Chair
   c. Dr. Laura Nelson (UT) – Second Vice Chair
   d. Tony Usibelli (WA) – Treasurer

WIEB Staff Assignments:

1. Develop an alternative Charter for CREPC that includes a history of CREPC, a description of CREPC’s relationship with WIEB, but does not include membership and voting requirements;
2. Examine the feasibility of changing the in-person quorum requirement in the WIEB Charter.

Welcome and Introductions (June 17th 1:00 PM)
Board Chair John Chatburn (ID) provided the welcome and introductions.

Energy Implications of Western Drought
Mathew Bartos of Arizona State University presented his research on the impacts of climate change on the western power system. Modeling was performed to assess the impact of changing
air temperatures and stream flow impacts on generators throughout the Western Interconnection. Results showed that climate change would lower the summertime capacity of the power system by 3% across the Western Interconnection, and that the southern portion of the system would be hit harder with a 5% drop in capacity of the power system.

Sylvia Bender of the California Energy Commission provided an update on the severe drought conditions impacting California and discussed the State’s response to ensure a reliable power system. For the current year, hydroelectric generation has declined but there is sufficient generation from renewables, imports, and moderate peak load growth. An inter-agency drought task force was formed to address drought impacts. An electricity work group has been formed to: 1) develop tools to illustrate the water impacts on generation reliability; 2) monitor hydro power and use of water at thermal generation facilities; and 3) develop contingency plans. California water agencies developed a new water action plan.

Erik Pytlak of the Bonneville Power Administration briefed the Board on the expected impacts of climate change on the Columbia Basin and the corresponding implications on BPA’s hydroelectric system. The IPPC research shows that for the Northwest air temperature may increase of 2-6 F degrees and precipitation changes in the range of 10% decrease to 20% increase. The annual streamflow will not significantly change. However, the seasonal shift will have an increase of winter rain and a lower snowpack in the basin. This shifts seasonal stream flows such that winter and spring flows increase and the summer flows decrease. This could impact the traditional periods of power production and trading to other regions in the Western Interconnection.

Electricity Market Developments
Phil Pettingill, Director of Regional Integration at the California ISO, and Sarah Edmonds, Vice President of Transmission at PacifiCorp, provided an update on Energy Imbalance Market (EIM) performance and discussed the procedural steps and potential benefits of PacifiCorp joining the ISO as a full member.

Phil indicated that the EIM has steadily expanded since its launch in 2013 with NV Energy, Puget Sound Energy and Arizona Public Service all signing implementation agreements. The Transitional Committee has developed an EIM governance proposal and is on schedule to submit it to the ISO Board for approval in the fall of 2015.

Sarah suggested that PacifiCorp’s full participation in the ISO markets could bring significant benefits through optimization of day-ahead system set-up, sharing of surplus renewable generation across a larger area, unlocking the benefits of load and resource diversity; and improved reliability with greater system visibility. A benefits study of PacifiCorp’s full participation in the CAISO markets is underway. WIEB can engage by supporting regional
collaboration, holding forums for education and progress updates, and participating in stakeholder processes.

**Idaho-WIEB State Energy Planning Grant**

Alaine Ginocchio and Tom Carr, WIEB staff, provided an update on the project. Alaine explained the four stages of the project. The first stage, “baselining,” has been completed on schedule and the project priorities have been set through a stakeholder process. The priorities are: EPA’s Proposed Clean Power Plan (CPP); renewable resources and system flexibility; coal plant retirements and power system reliability; and state distributed energy resource standards. The project is in the second stage, mapping. In this stage the priority issues and solutions to challenges presented by those issues will be explored through research, stakeholder feedback, scenario development, analysis and modeling. The work will primarily focus on the CPP in the next year due to the soon-to-be released final rule.

Tom presented an update on modeling work underway in three areas. First, the WIEB-SPSC/WECC collaboration on modeling CPP compliance scenarios through a round trip process that links a production cost model and power flow analysis. Second, the WECC-WIEB-E3-NREL collaboration on the flexibility assessment project which includes a resource adequacy assessment followed by a flexibility assessment using the REFLEX modeling tool. Third, the modeling of the SPSC/WIRAB study requests (high renewables, coal plant retirements and high distributed generation) in WECC’s TEPPC study process.

The Board had a discussion of the proposed solution strategies that will be highlighted for the CPP work in this stage of the project and favored: exploring WREGIS enhancements for RE/EE tracking, reporting and trading; and advancing minimum standards in the West for energy efficiency. Some of the reasons other solutions were not favored were timing issues (i.e., white paper on regulatory frameworks); inadequate funding sources for the work (i.e., menu of options economic analysis); and potential duplication with another organization (i.e., understanding the variety of methods being used to evaluate compliance options).

**Recess**

Board Chair John Chatburn recessed the meeting at 5:00 PM. The Board dinner was held at the Cottonwood Grill.

**Welcome and Introductions (June 18th 8:00 AM)**

Board Chair John Chatburn (ID) provided the welcome and introductions.
U.S. Department of Energy Quadrennial Energy Review

Karen Wayland, Deputy Director for State, Local and Tribal Cooperation, and Larry Mansueti, Senior Analyst for State, Local and Tribal Cooperation, in the U.S. Department of Energy Office of Energy Policy and Systems Analysis, presented the White House-initiated Quadrennial Energy Review (QER). The first-year of the four-year review is focused on energy transmission, storage and distribution (TS&D) infrastructure.

Karen and Larry discussed with the Board the changing energy landscape, key findings, and selected recommendations in the eight areas related to TS&D infrastructure:

1. Resilience, Reliability, Safety, and Asset Security of TS&D Infrastructure;
2. Modernizing the Electric Grid;
4. Improving Shared Energy Transport Infrastructures;
6. Addressing Environmental Aspects of TS&D Infrastructure;
7. Enhancing Employment and Workforce Training;

For example, the Board learned during its discussion of Modernizing the Electric Grid that reliability is the primary driver in 48% of transmission investment and that renewable energy integration was the primary driver for 26% of projects. During the discussion of Siting and Permitting of TS&D Infrastructure, Karen and Larry noted the discrepancy between the EPA’s Clean Power Plan timelines and actual siting and permitting timelines for energy infrastructure. Karen and Larry also noted that most transmission projects are sited on state and/or private lands because of the lengthy siting and permitting process on Federal lands.

Richard McAllister of WIEB Staff made a presentation that identified six specific QER recommendations where WIEB might be able to promote state and provincial participation and cooperation:

1. Establish a competitive grant program to promote innovative solutions to enhance energy infrastructure resilience, reliability and security;
2. Provide state financial assistance to promote and integrate TS&D infrastructure investment plans for electricity reliability, affordability, efficiency, lower carbon generation, and environmental protection;
3. Support fuels diversity through research, demonstration and analysis;
4. Establish programs for academic institutions and not for-profits to develop legal, regulatory and policy roadmaps for harmonizing regulations across borders;
5. Work with states to promote best practices for regulating and siting CO₂ pipelines; and...
6. Prioritize meaningful public engagement through consultation with Indian Tribes, coordination with state and local governments, and facilitation of non-Federal partnerships.

Karen and Larry responded to each of Richard’s recommendations and the Board supported further discussion with the U.S. DOE on areas of potential collaboration.

**Business Meeting**

Maury Galbraith presented the Executive Director Report, which included a staffing update, organizational priorities, policy priorities, and three items requiring Board action.

Maury presented the proposed WIEB FY 2015-16 Budget and Work Plan including expenditures by program/committee and income by source/committee. Dr. Laura Nelson (UT) moved to approve the proposed budget. Janea Scott (CA) seconded the motion. The Board unanimously approved the budget and work plan.

Maury summarized discussions at recent Committee for Regional Electric Power Cooperation (CREPC) and State-Provincial Steering Committee (SPSC) meetings regarding the disbanding of the SPSC and the adopting of a formal charter for CREPC with membership and voting rules. He presented a draft charter with membership and voting rules for Board consideration.

Dr. Nelson (UT) voiced the opinion that the charter should allow for a more open membership. Tony Usibelli (WA) opined that the charter represented a reasonable compromise, given that its voting requirements will be infrequently used. Grace Anderson expressed several points, one of which was that the WIEB/CREPC relationship would remain largely unchanged with adoption of the proposed charter. John Chatburn (ID) was of the opinion that CREPC needs to have a written charter. The Board directed WIEB staff to develop a second alternative draft charter that includes a history of CREPC, a description of CREPC’s relationship with WIEB, but does not include membership and voting requirements. The Board indicated that it would consider the two alternative Charters for CREPC at its next Board meeting.

Maury discussed election of officers with the Board. Jeff Blend (MT) moved to retain the current slate of officers. Jeff Ackermann (CO) seconded the motion. The Board unanimously approved the motion. Jeff Blend (MT) nominated Dr. Laura Nelson (UT) to fill the vacant Second Vice Chair position. Tony Usibelli (WA) seconded the nomination. The Board unanimously approved the nomination.

WIEB Board Officers for FY 2015-16 are:

- John Chatburn (ID) – Chair
- Jeff Ackermann (CO) – First Vice Chair
- Dr. Laura Nelson (UT) – Second Vice Chair
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- John Chatburn (ID) – Chair
- Jeff Ackermann (CO) – First Vice Chair
- Tony Usibelli (WA) – Treasurer

State-Provience Round-Table Discussion
The following is a high-level summary of the round-table discussion of current energy policy priorities in states and provinces:

**U.S. Government:** Governor Bill Ritter discussed implementation of the EPA’s Clean Power Plan, noting that while Western Governors vary considerably in their opinions about the proposed regulation, it is important for states to engage in discussions of how best to implement the Clean Power Plan. The Center for New Energy Economy, for which Governor Ritter serves as Director, sent comments on the proposed Clean Power Plan to EPA on behalf of Western states (10 of 13 were signatories), commenting on interim state targets, renewable energy potential and crediting (i.e., exporting vs. importing state issue), credit for early action, and difficulties with transmission infrastructure.

**Washington:** Tony Usibelli discussed collaborative work among Washington, California, Oregon and British Columbia to develop energy benchmarking, with a focus on greenhouse gas emissions from buildings. Tony also noted that the Washington legislature has provided $40 million for clean energy; 5 utility-scale energy storage projects involving either lithium ion or vanadium flow batteries are either under construction or being tested.

**California:** Janea Scott highlighted Governor Jerry Brown’s announcement of new and updated year 2030 energy goals, the so-called 5 pillars, during his January, 2015 inaugural address (e.g., proportion of renewable power generation increased to 50%). Janea also mentioned that transportation fuel suppliers became subject to the greenhouse gas emissions cap-and-trade program in January, 2015. The increase in transportation fuel prices has been approximately $0.10/gallon.

**Colorado:** Jeff Ackermann mentioned a Colorado focus on alternatively-fueled vehicle issues, especially compressed natural gas fueling stations, electric vehicle charging stations, and ethanol (E85) use. Jeff also noted that IOUs are being engaged on alternative revenue streams; performance incentive mechanisms may be employed.
Montana: Jeff Blend explained that, with respect to the Clean Power Plan, modeling and multi-state collaboration have been explored. Jeff also highlighted safety concerns associated with transportation of crude oil through the state, whether via pipelines or trains.

Saskatchewan: Mike Balfour noted that the province has had a large decrease in drilling activity, but a smaller decrease in crude oil production, with the recent drop in crude oil price. Mike also explained how de-carbonization is being accomplished, both by reduced coal/increased gas & wind generation and by carbon capture & sequestration (CCS). Boundary Dam 3 project is the world’s first commercial-scale CCS project, with data showing a 90% reduction in CO₂ emissions (and favorable changes in other emissions).

British Columbia: Alan Barber explained that while Site C (1100 MW; on Peace River) has received final approval from the Premier, it faces several court challenges and an 8-year construction schedule. Alan also noted that there are 2 transmission lines under construction, one to province’s interior to support increased mining activity and one for reliability of the province’s main load area of Vancouver.

Adjourn
Board Chair John Chatburn adjourned the meeting at noon.