

**Northwest Power and Conservation Council  
Meeting Summary  
June 9, 2021  
Portland, Oregon**

Council Chair Richard Devlin brought the meeting to order at 8:30 a.m. Council Members Jeffery Allen, Doug Grob, Guy Norman, Patrick Oshie, Jim Yost, Chuck Sams, and Mike Milburn joined the webinar. The next Council Meeting is scheduled for July 14, 2021.

**Reports from Committees**

**Fish and Wildlife Committee**

Member Allen, Fish and Wildlife Committee Chair, reported on the Fish and Wildlife Committee Meeting held on June 9, 2021.

**1. Lower Columbia Estuary Partnership Briefing**

Elaine Placido, Executive Director of the Lower Columbia Estuary Partnership, gave an overview of the Partnership.

In over 20 years since adopting its Comprehensive Conservation Management Plan, the Partnership has made significant progress identifying, prioritizing, monitoring, protecting, and restoring nearly 30,000 acres of habitat. An update to their plan is underway to target additional priority areas. The Partnership successfully weaves together a variety of funding sources including Bonneville rate payer funds to accomplish work that benefits all the region's salmon and steelhead stocks as they pass through the estuary.

**2. Overview of the Federal Advisory Committee Act (FACA) and its relevance to the work of the Council**

General Counsel John Shurts gave an overview of how the Council interacts with the Federal Advisory Committee Act (FACA). The Council is the only non-federal entity subject to FACA. Over the years the Council has formed various advisory groups under FACA as well as working groups exempt from FACA requirements to help the Council carry out its duties.

**3. Lower Columbia River Chum Salmon**

Todd Hillson of the Washington Department of Fish and Wildlife gave an update on lower Columbia River chum population status, habitat projects, model development, and next steps. Fish manager have focused on habitat restoration, hatchery supplementation, and reintroduction. As a result of these efforts, chum populations have achieved numbers above

delisting goals in some areas for most of the past 20 years.

## **Power Committee**

Member Oshie, Power Committee Chair, reported on Power Committee Meetings held on June 7 and 8, 2021. The work of the Power Committee and Council staff to model all the scenarios that feed into the Power Plan is nearing completion.

Staff presented on the buildout of large-scale renewable development within the Pacific Northwest and the WECC region. The renewable buildout in the baseline conditions is forecasted at about 5 GW for the Pacific Northwest, and 200 GW for the WECC region by 2027. There are a large amount of wind and solar projects in the development queues across the region and in integrated resource plans from utilities. The critical concern is getting renewable generation to the load centers, and whether sufficient transmission can be made available on existing lines to accommodate the large buildout that is forecasted. The Committee discussed supply chain availability, public reaction to large scale construction projects, land use concerns, and environmental issues attributable to the large-scale buildout.

Staff reviewed all of the modeling and scenario work done to date to develop the Power Plan, as well as the Plan's draft proposed recommendations for the WECC region. The Committee discussed a number of topics including the forecasted resource builds inside and outside of the region, ensuring resource adequacy, available cost effective energy efficiency and demand response resources, natural gas builds, market reliance to meet resource needs, impacts of solar builds on resource availability, coal plant retirement, equity in the distribution of system resources, and climate impacts.

Fish and Wildlife Committee and Power Committee meeting materials for June 2021 can be found here:

<https://www.nwcouncil.org/meeting/council-meeting-june-8-2021>

## **Public Affairs Committee**

Member Sams, Public Affairs Committee Chair, reported on the Public Affairs Committee Meeting held on June 7, 2021.

Council Members will discuss amongst their respective states whether to invite staff from Governors' offices to the August 2021 Congressional Staff Tour. Council Central and Montana Staff will refine the itinerary for the Tour.

The Committee discussed the schedule for public hearings on the draft Power Plan, and they agreed that at least one hearing should be scheduled in each state with dates and locations to be determined by state offices. Council Members will determine if additional

hearings, virtual or in person, will be scheduled in their respective states. Central Staff will investigate the technology requirements for the online streaming of in person Power Plan hearings, with the goal of reaching as wide an audience as possible.

## **Council Meeting Agenda Items**

### **1. End Use Load Research (EULR) and the Impacts of COVID**

Northwest Energy Efficiency Alliance (NEEA) Senior Program Manager David Clement gave an overview of End Use Load Research Project and how it uniquely positioned them to study the impacts of COVID.

The End-Use Load Research (EULR) project is a region-wide effort to collect detailed electricity consumption by end-use from homes and businesses. The project was started in 2016 and metering of individual homes began in 2018 and commercial building metering began in 2019. The metering collects consumption data at the 1-minute level (compared to 15 or 60-minute data) which provides a detailed look and when and how much electricity is being consumed. This level of detail is important for determining the true time value of energy efficiency and demand response, and for planning peaking resource needs. Since the metering was initiated pre-COVID, and continued during 2020 and now into 2021, the Council and participating utilities now have data that show some of the impacts on consumption habits. Home energy metering will continue through 2023, and commercial energy metering will continue through 2025.

The study showed higher residential demand in 2020 from the beginning of the pandemic. In the northwest from March 2020 through January 2021, the study showed a 6.3% increase in midday electricity demand, and a 3.1% decrease in the evening. They found that some load shifted from evening to midday, which might be expected with working from home and stay at home orders.

Detailed data showed that peoples' electricity use patterns changed as pandemic conditions changed. The largest divergence from expected loads occurred when COVID infection rates were surging in March 2020 and between November 2020 and February 2021. During these periods, people stayed at home often which meant more in-home lighting, plug loads, dishwashing, refrigeration, range cooking, and laundry driving higher peak demand.

Project funders have decided to make 15-minute residential data available for download at <https://neea.org/data/nw-end-use-load-research-project/energy-metering-study-data>.

Chair Devlin asked why it has taken so long for a study like this to be done since the last end-use load study was done back in 1980. Clement explained that cost has been a factor. The study requires a large collaboration and it has been difficult until recently to get funders on board.

Member Oshie asked what the technology requirements would be to implement this type of monitoring/study at a utility scale. Clement said that the equipment being used for the study hasn't been used before for a study of this scale. The study could be duplicated, but costs for the level of detail beyond a single end use remain high. He also emphasized that this detailed metering is being paired with building stock assessment data which takes every aspect of a building into account. The pairing of this information is a new level of information that hasn't ever been available until now.

Presentation materials are posted with this summary here:

[https://www.nwcouncil.org/sites/default/files/2021\\_06\\_1.pdf](https://www.nwcouncil.org/sites/default/files/2021_06_1.pdf)

## **2. Summary of WECC-Wide Utility Integrated Resource Plans (IRPs) Near-term Acquisitions**

Senior Policy Analyst Gillian Charles presented a summary of near-term resource acquisitions identified in utility integrated resource plans – both within the region and across the western interconnect (WECC).

Analysis for the draft 2021 Power Plan indicates a significant buildout of regional resources in the first five years, particularly cheap solar PV and wind (about 5 GW of renewables by 2027 in the baseline conditions). In addition, analysis for the Plan's wholesale electricity price forecast indicates a WECC-wide buildout of new resources by around 2033 that is equal in magnitude to the existing capacity in the WECC (about 270 GW). In total, the buildout reaches over 400 GW by the end of the power planning period (2041).

Presentation materials are posted with this summary here:

[https://www.nwcouncil.org/sites/default/files/2021\\_06\\_2.pdf](https://www.nwcouncil.org/sites/default/files/2021_06_2.pdf)

Chair Devlin clarified that not every build that ends up in an IRP actually gets built and asked if there is any precedent for having such a significant amount of builds in a short period of time. Charles said that it varies year to year and it largely has to do with need. A lot of wind projects were developed in the mid-2000s to meet renewable portfolio standards, but then slowed as those standards were met. The data shows that 2020 was the most significant year in terms of wind and solar development across the country. There is precedent for a large number of builds in a short time, but the transition will take a significant effort.

## **3. Bonneville Portfolio Scenario Findings**

Director of Power Planning Ben Kujala reviewed findings of the Bonneville Portfolio Scenario model. This scenario looks at the portfolio of Federal resources marketed by Bonneville and the forecast obligations that Bonneville will use these resources to meet. The scenario looks to optimize resource selection to meet the resulting needs and

examines some of the risks that could alter the selection of resources.

The Council is directed by the Act to make recommendations to the Bonneville Administrator about how much power to acquire and to the extent practicable, what types of resources that power should be acquired from. Understanding the federal portfolio and potential future needs is part of what informs those recommendations.

Kujala highlighted these findings:

- Bonneville has future needs projected in their needs assessment and resource program which can be filled by energy efficiency, renewables, or some combination of the two.
- Having all customer utility contracts end at the same date makes planning for resource acquisition and/or managing contract risk difficult.
- Better fidelity on market interaction with Bonneville would likely reduce resource needs below what we see currently in the models and could change the value of renewable resources.

Presentation materials are posted with this summary here:

[https://www.nwcouncil.org/sites/default/files/2021\\_06\\_3.pdf](https://www.nwcouncil.org/sites/default/files/2021_06_3.pdf)

#### **4. Pathways to Decarbonization Scenario**

Kujala reviewed findings of the Pathways to Decarbonization scenario model.

This scenario looks at the greenhouse gas emissions associated with the use of energy in our region and the approaches to reducing these emissions. This power plan is the first plan where the Council has expanded forecasting to include the use of fuels for transportation, the home, the business, and industry. State targets in Oregon and Washington for reducing emissions are cross-sector, and many of the approaches for reducing emissions involve increasing load on the electric system. This scenario looks at what it takes in the broader energy sector to move toward these goals and examines the implications for the electric system. Decarbonization goals and the resulting policies and activities to pursue those goals have broad-ranging implications for the amount of electricity used in the region.

Kujala highlighted these findings:

- Increased energy efficiency tends to be very aggressive after the first decade. As more electric load is introduced, energy efficiency keeps pace with that electrification.
- Increasing load also increases renewables.
- No options for natural gas pushes storage and demand response and a single geothermal plant into the resulting strategy.
- Reserves likely need to be adjusted to account for additional renewables, though operability of the system is unclear.

Presentation materials are posted with this summary here:  
[https://www.nwcouncil.org/sites/default/files/2021\\_06\\_4.pdf](https://www.nwcouncil.org/sites/default/files/2021_06_4.pdf)

Chair Devlin clarified that in this scenario there are a lot of changes in public policy that are outside the purview of the Council, but under the four state legislatures and the federal government. And it would be beneficial to the electric sector to identify what the impact might be on the electric system and future forecasts if more decarbonization efforts are implemented over time.

Chair Devlin thanked Kujala and power staff for their hard work in the development of the Power Plan over the last two years.

## **5. Regional Technical Forum (RTF)**

Regional Technical Forum (RTF) Manager Jennifer Light, and RTF Assistant Annika Roberts gave an overview of the RTF and presented the RTF 2020 Annual Report. This report is intended to inform the Council and stakeholders about the RTF's activities in the previous year and to provide a brief preview of the ongoing work in the current calendar year.

The RTF is an advisory committee to the Council. It is funded by Bonneville, Energy Trust of Oregon, and regional utilities. The Council also contributes to the RTF through staff and office and meeting space.

2020 marked the first year of a new five-year funding commitment. In this latest cycle of funding, the RTF is continuing to focus on its core efforts of developing consistent and reliable energy savings estimates and methodologies. This work included updating and expanding its efficiency measure library to ensure that it keeps pace with efficiency opportunities across the region. Roberts highlighted the addition of pumps and fans and residential air conditioning measures. In addition, 2020 marked the expansion of the RTF's work into natural gas energy efficiency measures and demand response activities. This work initially focused on enhancing existing RTF tools to support natural gas measure analysis. The RTF also started an exploration into tools that would enable more robust analysis of demand response technologies in the future.

Presentation materials are posted with this summary here:  
[https://www.nwcouncil.org/sites/default/files/2021\\_06\\_5.pdf](https://www.nwcouncil.org/sites/default/files/2021_06_5.pdf)

Member Oshie thanked Light, Roberts, and all the RTF for their hard work, and highlighted the importance of the introduction of gas utilities that are now funders and using RTF services.

Member Grob praised the RTF for their great work, dedication, and their contributions to the entire region.

Chair Devlin also expressed appreciation for the RTF.

## **6. Update on Anadromous Fish Habitat and Hatchery (AFHH) Review process**

Fish and Wildlife (F&W) Division Project Review and Implementation Manager Mark Fritsch, and Program Analyst Maureen Hess provided an overview of the Anadromous Fish Habitat and Hatchery review process and schedule for projects.

In response to section 4(h)(10)(D) of the Northwest Power Act as amended in 1996 the Council initiated review of Fish and Wildlife Program projects with independent scientific review (ISRP) of projects funded by the Bonneville Power Administration. The Council uses the ISRP review as a basis for making recommendations regarding project implementation.

Based on experience gained from previous project review processes (e.g., all projects reviewed at once and rolling provincial review) implemented since the late 1990's, the Council and Bonneville, with input from the ISRP, developed a structure to more effectively review projects for Program implementation beginning in Fiscal Year 2010 and beyond. This review structure is called a category review for existing projects that are similar in nature and intent. The initial category review cycle of Fish and Wildlife Program projects was conducted between 2009 and 2013. In 2017, the Council initiated the second cycle of category-based reviews. The review schedule for four different project categories reflected the order and timing of the previous reviews and accounted for field season, public comment period, and time necessary based on the number of projects within each category- Wildlife, Mainstem/Program Support, Resident Fish and Sturgeon, and Anadromous Fish Habitat and Hatchery.

The Anadromous Fish Habitat and Hatchery Project Review is the last and largest category of this current review cycle that was initiated in 2017. The 124 projects in this review includes hatchery operation and maintenance (O&M), fish screen O&M, habitat restoration and the monitoring and evaluation activities associated with these project types. To date, the F&W Division has received review materials for 121 out of the 124 projects.

Further details on current projects, the review process, and the schedule are posted with this summary here:

[https://www.nwcouncil.org/sites/default/files/2021\\_06\\_6.pdf](https://www.nwcouncil.org/sites/default/files/2021_06_6.pdf)

Chair Devlin asked why project managers for the 3 remaining projects haven't submitted review materials and asked when F&W expects to get a response from the respective project managers. Fritsch said that he has been on communication with all three entities and cited unfamiliarity with the review process and staffing transitions as the reasons. Reviews are expected from two of the entities, and the remaining one is to be determined.

Member Norman mentioned that even though the Fish and Wildlife Plan was completed last

October, there is still a lot of work to be done to implement the finish the Program. With 124 projects there is a lot of work for staff, project sponsors, and the ISRP. Member Norman expressed appreciation for all of the work of F&W staff.

Member Allen echoed Member Norman's sentiments.

## **7. Council Business**

### **Council approval of the May 2021 Council Meeting minutes.**

Vice-Chair Norman moved that the Council approve for the signature of the Vice-Chair the minutes of the May 5, 2021, Council Meeting held in Portland, Oregon via webinar, as presented by staff.

Member Allen seconded.

Motion approved.

### **Authorization to Enter into a Contract to Migrate the Council Website**

Director of Public Affairs Mark Walker explained that currently the Council's website is on an expiring platform, and that the Council website is an integral part of operations, external and internal communications, and scheduling. After vetting available options over 6 months, staff recommended that the Council switch platforms and select a different vendor.

Vice-Chair Norman moved that the Council authorize staff to contract with Parthenon Software Group, Inc. in an amount not to exceed \$130,000 to support migration of the Council's website to a Django/Python platform as presented by staff [with any changes made by Members at today's meeting].

Member Yost seconded.

Motion approved.

**Public Comment on the Council's draft revised FY2022 budget or the proposed FY2023 budget.**

**No one signed up to provide comment.**

### **Public Comment**

Craig Patterson mentioned his 40 years of experience in energy conservation and highlighted issues he has with the current Power Plan. He believes conservation has not been adequately explored. The focus has constantly been on low hanging fruit and strides have been made with lighting, but these are only a small portion of energy needs. Space heating and water heating have been ignored. Patterson highlighted the need to identify



and address the weak links in energy conservation. He also said that rate structures undermine conservation.

Jim Waddell of Port Angeles, Washington is a Civil Engineer who is retired from a 35-year public service career with the U.S. Army Corps of Engineers. He recommended that the Council model a sensitivity analysis for the immediate retirement of the Lower Snake River Dams to understand the economic impacts and benefits to BPA, the power system, the Fish and Wildlife Program, and methane reductions.

Heather Nicholson commented as a ratepayer and resident of the northwest. Nicholson addressed decarbonization and expressed that everything that can be done should be done. Nicholson advocated for natural solutions for solar harvest, building design, primitive storage, and non-mechanical air handling and that options like these should be included in the Council's modeling. She stated that Council staff modeling should look at the costs of existing hydro projects.

Scott Levy, host of bluefish.org, presented a chart that suggests that the removal of the Lower Snake River dams ensures the lowest probable cost, and suggested that not having the removal of the dams in the next Power Plan would make the Plan illegal.

Chair Devlin adjourned the meeting at 1:39 p.m.

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