

Jeffery C. Allen
Chair
Idaho

Ed Schriever
Idaho

Doug Grob
Montana

Mike Milburn
Montana



Northwest **Power** and **Conservation** Council

KC Golden
Vice Chair
Washington

Thomas L (Les) Purce
Washington

Ginny Burdick
Oregon

Louie Pitt, Jr.
Oregon

Council Meeting Summary **April 12, 2023** **via Webinar**

This is a summary of the Council's March public meeting and the actions the Council decided upon. The meeting agenda, presentation materials; recording of each agenda item during the meeting; and subsequent documentation of any decisions by the Council are posted at <https://www.nwcouncil.org/calendar/council-meeting-2023-01-10/>
<https://www.nwcouncil.org/calendar/council-meeting-2023-04-11/>.

April 12, 2023

Council Chair Jeffery Allen brought the meeting to order at 9:32 a.m. Council Members Ginny Burdick, KC Golden, Doug Grob, Mike Milburn, Louis Pitt, and Ed Schriever were in attendance via webinar. The next Council meeting is scheduled for May 16-17, 2023, in Wenatchee, WA and via webinar.

Reports from Committees Chairs and Executive Director

Power Committee

Member Grob, power committee chair, reported on the power committee meeting held on April 11, 2023.

1. Generating Resources Builds Summary and Power Plan Comparison

Power staff, Annika Roberts and Dylan DSouza, provided an update on the regional and WECC-wide supply-side resource acquisitions and retirements since the adoption of the 2021 Power Plan. The Plan set a target of developing at least 3500 MW of renewable resources by 2027, and a WECC-wide build-out was generated to inform market prices used in the study. The update serves as a check-in on how the region's actions align with or differ from the Power Plan resource strategy and assumptions of the larger WECC. This is the first look at how closely the region is following the power plan resource strategy, in preparation for the mid-term assessment. The staff also incorporated comments and reactions from the Generating Resource Advisory Committee (GRAC) into the presentation. The aim is to track and report on generating resource builds, both regionally and across the WECC, in comparison to the 2021 Power Plan analysis and strategy.

For the report and the presentation materials, see https://www.nwcouncil.org/fs/18257/2023_04_p1.pdf.

2. State of Electric Utilities 2021-2022

Council staff, Massoud Jourabchi, provided an update on the state of electric utilities over the past couple of years. The report highlights the regional economy's average annual growth rate of 3.5% from 2011 to 2021, surpassing pre-pandemic employment levels, and flat electric sales which decreased by about 500 aMW in 2020 and increased by about 700 aMW in 2021 from the previous year. Regional electricity bills remained below the national average and increased by \$4 in 2021. Electric utilities collected \$15 billion in 2021. The region's peak loads continue to be driven by winter and summer temperatures, and the region is doing more with less electricity. The relevance of this report is that the Council must develop a long-term load forecast as part of a power plan and annual short-term hourly load forecasts to support other efforts.

For the report and the presentation materials, see https://www.nwcouncil.org/fs/18257/2023_04_p1.pdf.

Fish and Wildlife Committee

Member Milburn, fish and wildlife committee chair, reported on the fish and wildlife committee meeting held on April 11, 2023.

1. Report on Regional Coordination Forum meeting April 10th

Council staff Maureen Hess and Leslie Bach informed that the Regional Coordination Forum (RCF) met on April 10, 2023, and they briefed the committee members on the highlights from the meeting. The agenda items for the RCF meeting included regional coordination funding in the Program, an update on the next Program amendment timeframe, discussion of future project review process, Program Tracker demo and discussion of Strategy Performance Indicators, an update on Governors Report and future reporting discussion, and discussion on flat funding, among other topics if time allowed. The RCF provided an important mechanism for the Council to engage with the Fish and Wildlife managers on the priority work in the Fish and Wildlife Program, and it also provided a forum in which the managers could interact and discuss general issues of regional significance or interest. This was in accordance with part six, section III B. of the 2014 Fish and Wildlife Program.

For the report and the presentation materials, see https://www.nwcouncil.org/fs/18256/2023_04_f1.pdf.

2. Update on Columbia River Delta Assessment for the Wind, White Salmon and Klickitat Rivers

Bill Sharp from Yakama Nation Fisheries and Charles Seaton from Columbia River Inter-Tribal Fish Commission presented an overview of a Technical Assistance Agreement between Yakama Nation and the U.S. Army Corps of Engineers - Portland District, in partnership with Columbia River Inter-Tribal Fish Commission and others. The project aimed to assess local hydraulic conditions within the sediment fan/delta of Wind, White Salmon, and Klickitat River tributaries (Bonneville Pool). The project is currently gathering existing information and assembling a team of subject matter experts to inform management options for improving impaired aquatic habitats in delta areas, in order to reduce high juvenile salmon mortality due to predation and loss of cold water plumes for returning adults. This project was associated with the Yakama Southern Territories Habitat Project (STHP), addressing elements in the ESA Mid Columbia River Steelhead Recovery Plan, along with the 2014 Fish and Wildlife Program and the 2020 addendum under the Ecosystem Function strategy.

For the report and the presentation materials, see

Public Affairs Committee

Member Louie Pitt Jr., public affairs committee chair, reported on the public affairs committee meeting held on April 10, 2023.

Member Pitt Jr. shared that the committee welcomed Ed Schriever, Idaho Council Member. The public affairs division is currently reviewing the Council's media package to enhance the Council's message. Member Pitt Jr. also reported on an update of the planned congressional tour that will be held in August. The tour is aimed to provide an opportunity for Congress staff to learn about the Council's activities and priorities. Member Pitt Jr. will keep the committee informed as the plans develop.

Executive Director Report

Executive Director Bill Edmonds reported that Council staff will be providing a background briefing on resource adequacy, emphasizing that it would be the first in a series to share the Council's expertise across the region. He stressed the importance of engaging with the region and these press briefings are a new strategy to augment the Council's efforts. In May, the Council planned to visit Wenatchee, WA, and in June, the Corvallis/Missoula area in Montana. Edmonds also welcomed new members to the central staff, including Kate Self, who joined the Fish and Wildlife team as the Fish and Wildlife Program Scientist, and Kelsey Nealeigh, who assumed the role of Executive Assistant.

Council Meeting Agenda Items

1. Basin Climate and Water Supply Outlook

During the meeting, Council staff Leslie Bach introduced Henry Pai, Senior Hydrologist from NOAA's Northwest River Forecast Center, who updated the Council on the current hydrologic and climatic conditions and seasonal water supply forecasts for the Columbia Basin. Pai outlined the missions and roles of NOAA, NWS, and the Northwest RFC, which covers 326,127 square miles across eight states and British Columbia. He explained that the Northwest RFC uses conceptual hydrologic modeling to issue twice-daily 10-day deterministic forecasts and seasonal probabilistic forecasts. Dr. Pai highlighted that cooler temperatures since November had led to elevated snowpack conditions, while decreased melt and rain resulted in below-normal runoff. The April-September water supply forecasts were mostly normal to below normal, except in southern Idaho where they were significantly above normal.

Pai explained the NWRFC forecast technique and shared that water temperatures have been lower than usual since November 2022, except in the lower Snake River area. Precipitation in the basin, especially in Canada, is also way below normal. Pai presented data showing that snow and precipitation in the Upper Columbia Basin above

Grand Coulee Dam are at 68% of normal, while the snow and precipitation in the Snake River above Lower Granite Dam are at 91% of normal. Observed streamflow and adjusted runoff are normal west of the Cascades but below normal east of the cascades. Pai showed the Council the water year to date adjusted runoff and the water supply forecast on the Upper Columbia Basin, Snake River Basin, and Lower Columbia Basin, accompanied by maps showing the climate prediction center's seasonal outlook.

Pai also mentioned that the Climate Prediction Center Model predicts that there is a potential return to El Niño by May-July 2023, according to dynamical models. However, statistical models suggest that ENSO-neutral conditions are likely to continue into the Northern Hemisphere summer before warming up to borderline El Niño conditions in late summer/fall 2023.

Member Golden asked about the predicted 3.0 stream gage and the uncertainty in soil moisture. He also inquired about the potential for lower than expected flows in the spring and summer. Pai explained that if the snow melts quickly, it will run off quickly into the stream, which will lower the soil moisture. Member Pitt Jr. asked about the impact of climate change. Pai explained that warming temperatures can increase evaporation, leading to more moisture in the atmosphere. There is a belief that our region has the potential for more precipitation. Lastly, Member Schriever thanked Pai for the presentation, highlighting the importance of understanding how the snow melts for hydro operators.

Presentation materials are at: https://www.nwcouncil.org/fs/18259/2023_04_1.pdf.

2. Overview of Potential New Load Forecast Tool

Simmons, Council's Principal Analyst, provided an overview of their load forecasting methods and the project to enhance their forecasting abilities. The Council's 2021 Northwest Power Plan identified several dynamic changes in the west that could affect the power system, such as increasing electric loads due to building electrification, transportation, and other demands like hydrogen production. Therefore, the Council is developing new load forecasting tools to improve modeling of these interactions.

Simmons explained two approaches to forecasting electricity demand: the Econometric Model and the End Use Load Model. The former uses statistical relationships between economic quantities, weather, and demand, while the latter sums up individual forecasts for each electric end-use. The End Use Load Model provides a 20+ year load forecast by state, sector, and end-use by month and requires large, detailed data sets.

To keep up with the complexity of long-term demand forecasting, the Council is looking for a tool that will facilitate sustainable load forecasting, with a graphical user interface, file management system, streamlined model structure, and strong technical support. They engaged a vendor to identify and evaluate end-use forecasting tool options that fit the Council's needs.

Simmons stressed that the load forecast model's data informs energy efficiency and demand response potential assessments and is a crucial input to many power planning models, such as RPM, GENESYS, and Aurora, as required by the Northwest Power Act.

Simmons discussed that the project was completed in March, and a tool suite has been identified. The new tool suite allows for a more streamlined process with more frequent forecast cycles, both long-term monthly end-use forecasting and hourly forecasting, finer geographic granularity, strong technical support, and an established user base, which will offer continued future engagement. The Council will provide a proposal next month. The next steps include contracting, deployment, and training on the new tool, with an initial forecast to be completed by Q1 or early Q2 of 2024. The results will be shared with the Demand Forecasting Advisory Committee. Future work will involve identifying and bridging any gaps between the new forecasting tool and integration with other planning processes.

Presentation materials are at: https://www.nwcouncil.org/fs/18252/2023_04_2.pdf.

3. Report out on Regional Technical Forum (RTF) Assessment into Valuing Resilience from Efficiency

Council's director of power planning, Jennifer Light, presented on the progress made from the 2021 Power Plan on valuing resilience from weatherization of buildings. Jennifer Light emphasized the importance of comparing supply and demand side resources on a comparable basis by representing information on energy and capacity provided, costs and benefits, shape of the resource, and other attributes that relate to the power system and the Power Act.

Light presented on the resource cost framework and the importance of resilience in homes and buildings due to recent events, such as Winter Storm Uri and the summer heat dome in the NW which resulted in substantial impacts. As a result, the 2021 Power Plan called for investigating methods to quantify the value of resiliency for energy efficiency measures to broaden the consideration of resilience in the next power plan. Light mentioned the conservation program in the 2021 Power Plan specifically focused

on weatherization, highlighting the importance of a well-insulated home or building in maintaining a conditioned temperature during extreme weather conditions.

Light shared key takeaways and mentioned that current studies mostly focus on grid resilience, with some starting to examine building resilience. Despite ongoing analysis, no one has yet quantified resilience impacts. However, it was noted that building resilience from efficiency has quantifiable benefits. Light provided an overview of the methodology for quantifying the resilience value of weatherization was presented. The methodology involved overlaying weather data to determine the type of weather during each outage event and defining outage events by frequency, duration, and customer impact. The benefits of adding weatherization were then modeled for each weather event to determine how much better a home or building holds its temperature. The next step was to translate this benefit into a dollar value to apply the value of resiliency. The result of this methodology was the resilience value of weatherization.

Light spoke about the next steps, explaining that staff will build on this work in preparation for the next power plan by exploring a more detailed approach that considers differences in geography and demographics that impact resilience impacts including alternative methods for improve assumptions. In addition, the approach will be expanded to include other resources as appropriate, such as additional energy efficiency measures like ventilation and heating/cooling equipment. Finally, staff will continue to consider the importance of grid resilience for reliability and how to address this in resource planning.

Member Burdick thanked the leadership of the RTF for the work and asked that if there was focus on weatherization for non-extreme weather. Light responded by mentioning that any weatherization done is providing room in the system during peak hours. Member Golden asked if avoided cost includes health and highlighting the smoke factor. Light mentioned that there was no health impact approach in this study. Member Schriever thanked the staff for continuing to think about grid resilience and the importance of energy efficiency.

Presentation materials are at: https://www.nwcouncil.org/fs/18254/2023_04_3.pdf.

4. Program Performance: Strategy Performance Indicators (SPI) and Program Tracker

Council staff Leslie Back and Kris Homel provided an update on the implementation of the Strategy Performance Indicator (SPI) work, which was identified in Part 1 of the Fish and Wildlife Program 2020 Addendum. Bach provided a brief history and language that

focus on performance in the Fish and Wildlife program and the program performance and adaptive managements. Bach highlighted that the 2020 Addendum process included eight workshops on goals, objectives, and strategy performance indicators. Fish and wildlife managers and experts provided suggested SPIs that were revised based on data availability and sources by the SPI workgroup and its subgroups. It was noted that the Addendum Part I focused on goals and objectives for various species and ecological objectives. These included anadromous salmon and steelhead, sturgeon, lamprey, resident salmonids, wildlife, ecological objectives such as flow, habitat, and water quality, as well as communication and coordination objectives. Bach explain the strategies listed in Part I of the 2020 addendum.

Bach noted that it was noted that the Workgroup was established to provide guidance to the Council on compiling, assessing, tracking, and reporting on program goals, objectives, and strategy performance indicators. The Workgroup consisted of technical representatives from Tribes and State and Federal fish and wildlife agencies with staffing provided by NPCC. Bach mentioned that the Workgroup made decisions related to time period, location, life stages, stocks included, how to display, reporting format, frequency of updates, and other related matters. The Workgroup's tasks included identifying data sources and data gaps, refining indicators, reviewing the Program Tracker, guiding data summary and reporting, and providing context information.

Homel provided a tour of the tracker and explained how the tracker worked and showed some examples. Homel explained that explained that the Program Tracker serves three main purposes. Firstly, it provides a resource for the region and can be used to support future program amendments, as well as being a tool for reporting and research needs. Secondly, it tracks progress towards the goals and objectives set out in the 2014/2020 program by linking SPIs to specific goals and objectives. Additionally, a query tool will be developed in the future to sort SPIs by their respective goals and objectives. Lastly, datasets assembled for the Program Tracker will contribute to an historical examination of program performance over the last 40 years. New terminology was developed to consistently describe actions called for over time. This terminology was then crosswalked the 2014/2020 strategies, which allows the associated SPIs to be used to describe accomplishments of all programs.

Homel provided a framework for evaluating program performance which involve planning, implementation, evaluation, and improvement. The program's success is assessed based on its ability to meet established benchmarks, goals, and objectives. By using the PPA framework, organizations can ensure that their programs are well-planned, effectively implemented, and continuously evaluated and improved.

Member Schriever and Member Golden mentioned how great this tool was and asked how this tool will be used to improve the program. Homel mentioned that the information

will always stay current and relevant and will help the Council find out if they are meeting their goals and objectives identifying gaps in the program. Bach commented that the tool is a multifaceted resource for managers and staff.

Presentation materials are at:

https://www.nwcouncil.org/fs/18251/2023_04_4.pdf.

5. Council Business

Approval of March 2023 Council Meeting Minutes

Vice Chair Golden moved that the Council approve for signature of the vice chair the minutes of the March 15, 2023 Council Meeting, held at Coeur d'Alene, Idaho and via webinar, as presented by staff.

Member Grob seconded.

No discussion.

Voice vote – all in favor, none opposed.

Motion was approved.

The approved minutes of the March 2023 Council meeting and other materials from that meeting are at https://www.nwcouncil.org/fs/18253/2023_04_5minutes.pdf.

Approval of modification to QW Contract

Vice Chair Golden moved that the Council authorize staff to execute an amendment to Contract C2023-24 with QW Consulting, LLC to add \$31,000 to the contract, for a total amended budget not to exceed \$129,700, to accomplish additional work of the Council's Resources Tools and Maps as presented by staff.

Member Pitt Jr. seconded.

No discussion.

Voice vote – all in favor, none opposed.

Motion was approved.

The approved minutes of the February 2023 Council meeting and other materials from that meeting are at https://www.nwcouncil.org/fs/18255/2023_04_5contract.pdf.

Public Comments

No public comments.

Chair Allen adjourned the meeting at 12:24 p.m.