Northwest Power and Conservation Council Meeting Summary January 12, 2022 Portland, Oregon - Webinar

Council Chair Guy Norman brought the meeting to order at 9:00 a.m. Council Members Jeffery Allen, Doug Grob, Ginny Burdick, Patrick Oshie, Jim Yost, and Mike Milburn joined the webinar. The next Council Meeting is scheduled for February 16, 2022.

Reports from Committees

Fish and Wildlife Committee

Member Allen, Fish and Wildlife Committee Chair, reported the Fish and Wildlife Committee meeting held on January 11, 2022.

1. Hatchery Story Map Web Tool

The Fish and Wildlife Committee gave a presentation on the Hatchery Story Map Web Tool which is now available on the Council's website. This tool is a valuable resource of information for the Council, scientists, and the general public on all hatchery operations in the Columbia Basin. In using the tool, one can find the species produced, number of smolts released, funding sources, history, and hatchery locations. There are around 140 hatcheries in the basin providing 3,600 jobs with an annual payroll of about \$140 million for the region. Member Allen noted the increased emphasis on water conservation and reuse while maintaining water quality standards and quantity needed for successful hatchery operations. Hatcheries have been critical to the Council's work in mitigating the impacts caused by hydropower. The Fish and Wildlife Hatchery Interactive Tool can be found here: https://hatchery.nwcouncil.org/

2. Update on Anadromous Fish Habitat and Hatchery Project Review

Council staff provided a brief update on the Anadromous Fish Habitat and Hatchery (AFHH) Project Review. This review category is the last category of projects to be reviewed in this cycle and was initiated in early February 2021. Staff provided an overview of the AFHH review schedule and preview policy issues currently being drafted for Council consideration as part of the decision document in April 2022. This review will cover over 100 projects split about equally between hatchery and habitat projects. Hatchery and habitat projects comprise about one-third of Council projects and receive about \$100 million annually. The Committee and staff are exploring how to improve the review process. Asset management remains a critical concern and they are intensifying efforts to find a reasonable approach to protect all the investments that have been made over the past 40 years. Static budgets are making it increasingly difficult to maintain the level of operations deemed necessary. Staff

highlighted several policy questions that the Council will need to consider in the coming weeks as they prepare to make Committee recommendations in March and full Council recommendations in April.

Power Committee

Member Oshie, Power Committee Chair, reported on the Power Committee Meeting held on January 11, 2022.

The Power Committee held a meeting to revisit the comments received for the Draft 2021 Power Plan. General Counsel John Shurts reviewed the Council's legal duty to read, consider, and come to some conclusion regarding the subject matter covered by the comments. The comments are an important component of the administrative record supporting the Council's final decision on the Power Plan. Though the Council has no obligation to change the Plan or its targets, it must address the comments and subject matters that are contained in them.

Division Director Ben Kujala presented the subject matters highlighted in the comments which include decarbonization, climate change analysis, transportation electrification, resource adequacy, system resiliency planning, conservation targets, renewable build timing, demand response, hydro operations, the Lower Snake River Dams, transmission availability, BPA assumptions, and regional equity efforts. The point of the presentation was not to make decisions based on the comments, but to advise the Committee on staff reflection of the issues and to encourage discussion among the Members on how to respond to the comments. Staff will continue to work with the Members to explore if the Committee will make changes based on these comments.

Public Affairs Committee

Member Burdick, Public Affairs Committee Chair, reported on the Public Affairs Committee Meeting held on January 11, 2022.

The Public Affairs Committee is resuming efforts to schedule a Congressional Staff visit for 2022. Congressional Staff visits have been difficult to schedule the past 2 years because of covid and forest fires. The Committee is planning to have the next Congressional Staff visit in Montana possibly at the end of June if schedules allow.

The Public Affairs Committee also agreed to be a sponsor for the Emerging Technologies Information Sessions in November 2022 held by the Pacific Northwest Aquatic Monitoring Partnership and StreamNet. The subject matter of this conference is directly related to the implementation of the Council's Fish and Wildlife Program.

Fish and Wildlife and Power Committee meeting materials for January 2022 can be found

Council Meeting Agenda Items

1. Overview of Bonneville Integrated Program Review and Rate Case Processes

Karlee, Manary, Supervisor of Financial Analysis and Forecasting for Bonneville Power Administration, provided an overview of the Integrated Program Review (IPR) and Rate Case processes used by the BPA. The IPR allows interested parties to see and comment on all relevant BPA capital and expense spending level estimates. The IPR occurs every two years, or just prior to each rate case, and is the public review for the costs that will be recovered through rates the following two-year rate period. Bonneville will begin their IPR process for the upcoming Rate Case this spring.

Nearly \$2 billion in costs are set in spending levels through the IPR process. The spending level development takes place in the spring followed by public workshops in the summer and a close-out report in the early fall. Topics to be covered within the process include transmission costs, federal hydro, Columbia Generating Station, facilities, information technology, energy efficiency, fish and wildlife, conservation, grid modernization and other programs.

Manary reviewed the typical timeline for the IPR and Rate Case processes. At the beginning of the process in January, BPA sets high level targets based on their financial plan. The financial plan states that they will keep IPR costs at or below the rate of inflation. In February and March, they develop spending levels for program areas such as fish and wildlife and information technology. By early summer, BPA develops materials for customer workshops that take place in June. These workshops are where customers and interested parties can interact with BPA and attend presentations on spending levels for various programs. BPA also creates a detailed IPR publication which specifies how BPA will use funds for the next two years and highlights the accomplishments of recent years. In July there is typically a 30-day comment period during which customers and interested parties can comment and ask questions about IPR costs. At the beginning of fall, BPA publishes an IPR closeout document that addresses questions and comments received from customers and interested parties, details of any changes made to spending levels based on questions and comments, and details what costs will make their way into the rate case. Manary mentioned that sometimes there is a need for an IPR II which is a smaller scale IPR and used to reevaluate any additional information that might affect the initial IPR such as changes in inflation trends.

The Rate Case process begins during the IPR process in July where BPA conducts initial studies and proposes estimates of what the rate case will be. BPA's rates must be set so that BPA will be able to recover its total costs, including obligations to repay its debt to the

Federal Treasury. In late fall, BPA's initial rate proposal is then evaluated in a rate proceeding [7(i) Hearing] during which BPA staff presents its rate proposal for review by parties. The 7(i) Hearing concludes about one year after the initial studies and proposal where the Administrator issues a Final Record of Decision, which includes BPA's final rates. BPA then files its final rates with the Federal Energy Regulatory Commission for confirmation and approval.

Chair Norman asked if an IPR II would occur while a rate case is ongoing. Manary clarified that IPR II does occur during the rate case process after initial studies, but it happens in a very compressed timeline and must be completed by the end of March.

Chair Norman also asked what the best path forward is for the Council or staff to be involved in the ongoing IPR. Manary reiterated that the IPR is very much a public process, and she can work with a BPA liaison to ensure that the Council has access to all of the information to help decide its involvement in the process.

Presentation materials are posted with this summary here: https://www.nwcouncil.org/sites/default/files/2022 01 1.pdf

2. Update on Annual Greenhouse Gas (GHG) Emissions and Generation from the Power Sector: Northwest and United States

Senior Policy Analyst Gillian Charles presented the latest annual (2020) regional and national carbon dioxide emissions from the generation of electricity, including trends, observations, and takeaways. She also provided a look ahead at what can be expected in terms of emissions over the next few years.

In the Pacific Northwest, the data shows that in 2020 the region emitted 45.64 million metric tons of CO2, the lowest in at least 25 years and almost a 20% drop from 2019 emissions. Charles presented the trends of CO2 emissions from the generation of electricity over the last 25 years in the Pacific Northwest. The trendline of CO2 emissions is similar in shape to the line for fossil fuel generation, and is the inverse of the line for hydro generation. Generally, the better the hydro year, the lower the CO2 emissions. 2020 was a better hydro year than 2019, so emissions were down as a result. She also highlighted the upward trends of energy efficiency and wind generation as contributors.

The data also showed a significant downward trend in emissions [~20%] from 2013 to 2020 even though they were similar hydro generation years. Charles explained this by showing generation by resource type over the last 30 years. Hydro has always been the dominant resource in the region with coal as the second largest generator through the 1990s. From the mid-2000s on, generation from coal began to decrease as generation from cleaner natural gas and wind increased. So, in addition to the strong relationship between hydro

year and CO2 emissions, there is also a strong dynamic developing between fossil fuel mix (coal and natural gas) and CO2 emissions that is contributing to the downward trend in annual emissions in the region. Fossil fuel generation has increased over the past 25 years, but on average, coal generation has been declining while natural gas generation has been increasing. In 2018, the annual natural gas generation surpassed coal generation for the first time. Charles explained that natural gas generation emits roughly half of the CO2 of coal generation. So, as gas dispatch increases and coal decreases, this will contribute to lower future emissions from the fossil fuel fleet. This trend is expected to continue.

Another major component to the future of emissions is the anticipated retirement of coal units in the region and across the country. Coal generation accounts for the majority of historical CO2 emissions. In 2020, 4 major coal units in the region were retired. Over the next decade, the region is set to lose about 4,400 aMW of its coal capacity through planned coal unit retirements. As more coal plants retire and as coal generation declines in favor of other sources, emissions from Northwest generation will continue to drop. Most of the new resource capacity over the last 25 years has been natural gas and wind with increasing solar PV coming online in the last few years. Future emissions will be dependent on replacement resources and dispatch of existing system resources.

At the national level, emissions have been on a downward trend since a peak in 2007, falling nearly 17% since 2018. The U.S. power system as a whole is very different from the Northwest system, but shows some similar trends in historical energy generation. As with the Northwest, the U.S. shows natural gas and renewables increasing in capacity and generation with coal generation decreasing every year over the last decade or so. Natural gas generation overtook coal generation in 2016 and has continued to grow, now accounting for about 2/3 of fossil fuel generation. Hydro plays a much smaller role in the U.S. power system with natural gas being the dominant resource. Charles also highlighted that the carbon intensity of the U.S. electricity mix is greater than that of the Northwest due to the dominant role of hydropower in the Northwest.

2021 and Future Emissions

For the Pacific Northwest, the fall 2022 early analysis indicates that the 2021 emissions from the generation of electricity will likely be slightly lower than 2020. Charles pointed out that a lower 2021 water year could indicate an increase in emissions, but the effects of the 2020 coal unit retirements were not fully represented in the 2020 data because they happened at different points of the year, a few in the last quarter.

For the United States as a whole, fall 2022 early analysis indicates that emissions from the generation of electricity will likely increase in 2021. This is due to the economy picking back up compared to 2020, and the overall annual generation increased. Coal generation increased nationally in 2021, and natural gas generation remained steady.

Pacific Northwest emissions will likely continue to decline over the next few years. There are additional coal unit retirements planned for the next few years. Significant renewable development is expected over the next 20 years, and there are numerous projects in the pipeline. There may be years with stagnant emissions reductions, but the overall the trend toward emission reductions in the region is expected to continue.

Member Burdick asked if there are studies that include the overall cost of natural gas and coal - specifically if the cost of producing the fuel is accounted for, does natural gas become less competitive with coal than it is now from the standpoint for greenhouse gasses. Charles mentioned that there are ongoing analyses that are attempting to understand what the lifecycle emissions beyond the source of combustion are, and they might have an answer in the coming years. Member Burdick mentioned that this would be very relevant and that in order to understand the true impact you need to understand the upstream costs as well.

Council Power Supply Webpage

Charles provided a demonstration of the Council's Power Supply webpage, focusing on the visual and interactive tools they have curated as useful resources and references to not only the Council but the region as well. She showed a link to the generating resources project database. The database shows all of the existing resources in the region as well as details on proposed projects within the region. Charles also highlighted the external resources – the California ISO Outlook and the EIA electricity Dashboard which has real-time electric grid information. She also highlighted the Power Supply Map which is an impressive tool that functions as a historical moving graphic of how the region and the power supply has been populated in the Northwest. She demonstrated how to use the filters of the map to search for wind projects and coal unit retirements in various stages of completion. Technical and Web Data Specialist Eric Schrepel encouraged the Council and others to explore the tool and conveyed that it is a living tool that will be continually updated. The Council's Power Supply webpage can be found here:

https://www.nwcouncil.org/energy/energy-topics/power-supply

Presentation materials are posted with this summary here: https://www.nwcouncil.org/sites/default/files/2022 01 2.pdf

3. Recommendations on Response to Comment and Possible Revisions to the Draft Plan Document and Supporting Material

Division Director Ben Kujala presented on the comments received during the public comment period for the Draft Power Plan. He provided staff recommendations and the considerations for how they will respond to the comments in the Statement of Basis and Purpose and Response to Comments document and the process for revising the supporting material and Plan document. Kujala covered the general type of response recommended by

staff and organized staff recommendation into four categories:

- Respond in the Response to Comments: A response will be prepared and provided in the Statement of Basis and Purpose and Response to Comments document, detailing how the Council considered the comment in crafting the final plan, but we do not recommend changes to the draft plan document or supporting material based on the comment.
- 2. **Revisit supporting material:** Staff recommends revisiting the supporting material with an eye toward adding, expanding, or clarifying the material based on the comment.
- 3. **Revise the draft plan document:** Staff recommends revising the plan document and revisiting associated supporting material based on the comment.
- 4. Committee consideration: Staff feels the comment raises issues that were carefully considered by the Members in the draft plan or requests the Members commit to future work or make policy-based recommendations to the region. These comments add valuable context and perspective but generally do not impact the underlying analysis. There is either no change from the recommendations made in the draft plan or no staff-based recommendation. Staff will work with the Members to explore if the committee wants to make changes based on this comment.

Kujala noted that there is a distinction between a point-by-point response to comments vs. the consideration of broad themes that were addressed in the process of getting comments.

Staff will continue to work with Members to see if there is further work that needs to be done between Draft and Final.

Kujala also made a point to clarify a couple of misconceptions they observed from commenters about how the process of developing the Power Plan works.

- Assessing more costs and benefits for a type of resource would lead to the Council recommending more of that resource be acquired. Statute directs the Council to estimate a need for resources then find the least cost set of resources that reliably meets that need. The statute sets this up as a relative comparison of resources.
- Baseline conditions are the primary inputs and used in formulating the
 resource strategy. The resource strategy clearly takes into consideration the broad
 range of analysis done for the plan. Many commenters assume that a change in how
 staff approached baseline conditions would lead to a different recommendation. Staff
 does not agree since baseline conditions were intentionally formulated as a point of
 comparison.

Kujala proceeded to address the comments by category, first providing the Committee's summary of shared comments and then sharing the Committee's notes, considerations, and finally how the response to the comment will be handled.

Demand Forecast

Climate Change

Committee consideration: Include a robust discussion and analysis on planning for extreme and outlier climate events that could have a significant impact on grid resilience and resource adequacy.

Notes from the Committee Conversation:

- Consider recommendations on utility infrastructure and vegetation management being important mitigation for extreme events.
- Increasing reliance on electricity for heating and cooling makes an adequate supply
 of electricity more important during extreme events.
- It can be difficult to reach consensus on what constitutes extreme, and we need to be clear what is possible if we commit to future work.
- Consider recommendations on better utility coordination and planning for these types of events.

Decarbonization

Committee consideration: The draft plan does not fully incorporate reasonable decarbonization and electrification assumptions and thus doesn't call for sufficient resource additions.

The plan should account for Oregon and Washington's more aggressing greenhouse gas regulations.

 We will also propose supporting material that adds context for the magnitude and direction of changes associated with legislation in Oregon and Washington.

Greenhouse Gas Policy

Committee consideration: The plan should modify how the pathways to decarbonization analysis is focused, incorporated, and considered.

 We will also propose supporting material that adds more information on what assumptions were used.

The plan should modify how the pathways to decarbonization analysis is focused, incorporated, and considered.

Regional Reserve & Reliability Forecast

Resource Adequacy

Respond in the response to comment:

For future power plan cycles, examine whether continued resource adequacy work by the Council is necessary now that resource adequacy is being addressed through the Western Resource Adequacy Program (WRAP).

Statute requires assessing adequacy for the Plan.

The Council should consider adjusting (lowering) its baseline resource buildout outside of the region to be more reflective of other region's policies and forecasts.

Revisit supporting material:

The plan and supporting material should supply more detail on the Associated System Capacity Contribution (ASCC) methodology, especially since the Council's estimates for wind and solar ASCC are higher than estimates by other entities.

Resource Adequacy (2)

The Plan's analysis on resource adequacy is not sufficiently vetted and should be heavily caveated or removed with a recommendation to take up further work on adequacy after the completion of the Plan.

Committee Notes:

- Need to commit to and recommend more work on resource adequacy including looking at the current resource adequacy standard used by the Council.
- Also raised concerns that electrification of transportation and building load could impact resource adequacy.

Committee Consideration:

The Plan's recommended resource strategy significantly understates the amount of resource needed to maintain an adequate regional power supply and thus should recommend more resources.

The Plan should encourage BPA and other utilities to participate in the WRAP.

Conservation Resources & Program

Conservation

Respond in the response to comment:

Not fully capturing all benefits (would result in a higher target).

More quantification of environmental benefits of EE

Include more Non-Energy Impacts in the cost-effectiveness (especially for equity).

• We recommend the approach used in the draft, there are opportunities for improvement in future plans.

Use the utility cost as the basis for cost-effectiveness

• Differs from definitions provided in the stature for determining resource system costs

Revise modeling approach to adopt EE first, then add in other resources per the Act.

• This seems inconsistent with the Power Act.

Conservation (2)

Revisit supporting material:

Clarify the EE cost-effectiveness methodology.

Clarify approach to the portion of EE that is technically achievable.

The Plan's EE supply curves are missing substantial potential because of the methodology used.

This may be less about methodology than how decarbonization was treated, still we
will clarify the methodology and discuss in the supporting material future work by us
and other may allow progress toward this in the next plan.

Revise Draft Plan Document:

MCS on "conversion to electric space & water heating" implies that Council is encouraging fuel switching.

We will clarify language to indicate this is not the case.

Conservation (3)

Committee Consideration:

Conservation (EE) level (target) should be higher.

Conservation (EE) lever (target) should be lower.

1000 aMW should be the cost-effective level, but the regional target should remain as the 750-1000 range.

• Given we use the range, using 1000 aMW as a level for cost-effectiveness raises concerns on consistency with the statute.

Point target instead of a range

The plan should explicitly outline what cooperative actions the region, the Council, and Bonneville should take to address a future shortfall in EE acquisition and set forth the conditions that trigger these actions.

- The draft does say already to work cooperatively with Bonneville to address any shortfall.
- The Council can request more information form the Administrator related to consistency with the Plan at any time, the Plan does not need to restate statute.
- The Council is not an enforcement agency.

Council should set utility-specific EE targets and propose a surcharge for those that miss the target.

Explicitly include weatherization measures in the target for EE.

The best way to accomplish this would be to increase the lower end of the target to

reflect capturing these additional savings.

Utilities should weatherize all tribal homes by 2025.

Conservation (4)

Committee Notes:

- If an EE target is missed, it should be cause for reexamining the Council's analysis
 as much as looking at underlying reasons that utilities did not achieve the target set
 forth.
- It is important to stay focused and centered on the Council's statute and not go beyond that.

New Generating Resources

Renewables Build

Committee Consideration:

The 3,500 megawatts of renewables by 2027 in the Draft Plan's resource strategy is too low/too high.

The plan should include consideration for land use and habitat requirements and impacts of siting new transmission and renewable resources.

 There is existing language in the Plan and supporting material related to this, is it sufficient?

Committee Notes:

- Consider adding recommendations that look at the impacts to habitats that cross state boundaries where coordination is particularly valuable.
- Concern was raised that this could go beyond the Council's purview.

Demand Response

Demand Response

Committee Consideration:

Plan should require more DR and/or have an explicit target for DR.

Existing Generation

Lower Snake River Dams

Committee Consideration:

The Plan should include a scenario that examines removal of the dams.

The Plan should recommend removal of the dams.

The Plan should recommend that dams be preserved as an important part of the system.

The Council should maintain the Draft Plan's current approach of not engaging in analysis of the Lower Snake River Dams.

Hydro Operations

Committee Consideration:

Concerns around assumptions of flexibility within the FCRPS and Mid-Columbia PUD dams related to fish constraints.

Plan should include scenarios with differing operations.

The Plan should update hydro operations to match the most recent spill agreement for the Federal Columbia River Power System. It also does not consider effects of potential future changes to fish and wildlife hydro operations.

 Any additional analysis on hydro operations would require substantial additional time to both create and sufficiently vet with regional stakeholders for this Power Plan but could be pursued as future work.

Bonneville

Bonneville Power Administration

Committee Consideration:

Uncertainty in amount of market exposure needs to be explored further and Plan should be clear on BPA's role in a potential RTO

Differing thoughts on 36% assumption of Bonneville's portion of regional energy efficiency target

The Plan should recommend BPA incorporate equity in programs and operations.

General & Other Comments

Transmission

Revisit supporting material:

The Plan's estimate for deferred T&D does not properly reflect value during peak periods.

 We will provide more context in the supporting material on how the values were derived.

Revise the Draft Plan document:

The Plan should include more explanation and discussion about transmission and distribution system elements that are not part of the planning and analysis process and should provide further explanation of how these omissions impact the resource selection process.

Committee Consideration:

The plan should include an integrated review of transmission and generation expansion and/or commit to pursuing that analysis in the next Plan.

The Plan should evaluate the use of electrolytic hydrogen production.

Equity

We received several comments in support of the work done thus far around equity (e.g., system integration forum on DEI in power planning), with a variety of commenters urging the Council to expand the emphasis

Electricity Markets

Committee Consideration:

Plan should recommend the region integrate piecemeal efforts on markets and adequacy and move toward a comprehensive regional solution, e.g., form an ISO/RTO.

The plan should alter its approach to the baseline conditions in the treatment of resource expansion outside the region.

 Changing the methodology would require substantial rework of the Draft Plan, may be work to pursue in the future.

Action Plan

Respond in the response to comment:

The action plan period should be extended to 2030.

Revisit supporting material:

The Plan should include an action plan:

 We can collect a summary of recommendations in the plan for the supporting material.

Kujala believes the system is set up well to thoroughly review and consider all of the comments and get to recommended changes between the Draft and the Final Power Plan.

Presentation materials are posted with this summary here: https://www.nwcouncil.org/sites/default/files/2022 01 p1.pdf

Recognition of Council Member Louie Pitt Jr.

Chair Norman took time to welcome the newest Council Member out of Oregon, Louie Pitt Jr. Member Pitt is the Director of Government Affairs for The Confederated Tribes of Warm Springs and has a history of natural resource stewardship.

Member Burdick also extended a welcome, mentioning she had worked with Member Pitt in the past and describing him as a wonderful representative of his Tribe and the region. She said his knowledge of natural resources issues will be a tremendous benefit for the Council.

4. Council Business

Council approval of the December 2021 Council Meeting minutes

Vice-Chair Grob moved that the Council approve for the signature of the Vice-Chair the minutes of the December 15, 2021 Council Meeting held in Portland, Oregon via webinar, as presented by staff.

Member Oshie seconded.

No discussion.

Voice vote – all in favor, none opposed.

Motion was approved.

Election of Officers

Election of Council Chair and Vice-Chair

Motion to nominate Council Member Guy Norman from Washington as Council Chair

Member Allen moved that the Council nominate Guy Norman to remain Council Chair for 2022.

Member Burdick seconded.

Discussion – Member Allen and Member Oshie spoke highly of Chair Norman citing his knowledge and experience as the Fish and Wildlife Committee Chair and his professionalism in working with different organizations.

Voice vote – all in favor, none opposed. Motion was approved.

Chair Norman expressed his appreciation for the Members' support.

Motion to nominate Council Member Douglas Grob from Montana as Vice-Chair of the Council

Member Yost seconded.

Discussion – Member Oshie expressed that Member Grob has done an excellent job in his tenure as Interim Vice-Chair. He's been impressed with how Member Grob carries on his business, and thinks he'll do a fine job as Vice-Chair of the Council going forward.

Voice vote – all in favor, none opposed.

Motion was approved.

Vice-Chair Grob expressed his appreciation for the Members' support.

Committee Assignments

Chair Norman announced the Committee assignments for 2022.

Power Committee

Chair Norman assigned the same Members to the Power Committee, with Member Oshie serving as Chair.

Fish and Wildlife Committee

Chair Norman assigned Member Pitt. to the Fish and Wildlife Committee, with Member Allen remaining as Chair.

Public Affairs Committee

Chair Norman expressed that he would like Member Burdick to move over to the Executive Committee and have Member Pitt serve on the Public Affairs Committee as Chair.

John Harrison's Departure

With Council Information Officer John Harrison retiring at the end of January, Chair Norman and other Members took time to recognize and celebrate Harrison's time with the Council. Harrison was hired by the Council 31 years ago after working as a reporter for the Columbian newspaper and other regional newspapers. Chair Norman described Harrison as one of the best hires the Council has ever made. Chair Norman cited Harrison's work ethic, breadth of experience in journalism, and his love of the Columbia River and Pacific Northwest. Chair Norman also cited a few of Harrison's talents and accomplishments as a well-regarded Columbia River Basin historian, a published author, and photographer. Chair Norman thanked Harrison for over three decades of service and said he will be missed.

Public Comment

Scott Levy, host of bluefish.org, first referred to the public comments he made in the December 2021 Council Meeting where he highlighted changes in legal language between the 7th and 8th Power Plans. He urged the Council to review those sections. He presented a slide showing the Council's Pathways to Decarbonization Scenario considerations regarding the Lower Snake River Dams. Levy implored Power Staff and Council Members to conduct an analysis that examines the removal of the dams. He pointed out that methane from reservoirs is being tracked by the Council, so it is possible to find the quantifiable effects of the hydropower system and perform this analysis.

Levy then referred to a slide from an earlier presentation in this Council meeting which showed regional carbon emissions from power production. He pointed out that the graph does not include the methane produced from power production. He believes it would be possible to get a gross estimate of the effects of the hydropower system such as millions of metric tons of methane from reservoirs that can be refined over time and added to current analyses. Levy concluded saying that he was sad to see John Harrison retire, that he enjoyed their conversations over the years, and he will be greatly missed.

Chair Norman adjourned the meeting at 12:05 p.m.

Northwest Power and Conservation Council meeting materials for January 2022 can be found here: https://www.nwcouncil.org/meeting/council-meeting-january-11-2022