

Richard Devlin
Chair
Oregon

Ted Ferrioli
Oregon

Guy Norman
Washington

Patrick Oshie
Washington



Northwest Power and Conservation Council

Bo Downen
Vice Chair
Montana

Jennifer Anders
Montana

Jim Yost
Idaho

Jeffery C. Allen
Idaho

Council Meeting Minutes
Council Central Offices
851 SW Sixth Avenue, Suite 1100
Portland, OR 97204

June 2020 Council meeting

Wednesday, June 17, 2020

Council Chair Richard Devlin on the phone brought the meeting to order at 9:02 a.m. Council Members Jeffery Allen, Jennifer Anders, Bo Downen, Ted Ferrioli, Guy Norman, Patrick Oshie and Jim Yost joined by phone. The meeting was held as a webinar due to the coronavirus health emergency. The next meeting also will be a webinar, scheduled for July 14 and 15, 2020.

Reports from Fish and Wildlife, Power and Public Affairs committee chairs

Fish and Wildlife Committee

Council Member Guy Norman, Fish and Wildlife Committee chair, reported on five items:

1. Mark Fritsch, project implementation manager, reported on COVID-19 impacts on the Fish and Wildlife Program. Most managers can still conduct office and field activities. This year's white sturgeon work has been canceled. Capital construction and fish tagging have been delayed. Member Norman said it has been a challenge for the sponsors, it's a fluid situation and the Committee will continue to report on it.
2. Member Norman reported on the Fish and Wildlife Amendment Part 1 public review process. There was a meeting on the June 15 meeting with 26 participants and two testified. There have been robust opportunities for input. June 22 will be the end of the public input period. A vote on approval by the Council will take place in August.

3. The Committee received an update on Washington's Statewide Salmon Strategy. This 1998 Salmon Recovery Act established regional recovery boards and a funding mechanism using monies from both the state and Pacific Coast salmon recovery funds from the federal government. In 2019, Governor Inslee authorized an update. The process is to be completed in December 2020.
4. The Environmental Protection Agency's John Palmer presented the Draft Columbia River Cold Water Refuges Plan. There are 12 tributaries that qualify as Cold Water Refuges in the Lower Columbia River, meaning they are 2% below mainstem temperature. The primary users are summer steelhead and fall Chinook. In August and September, 60,000 steelhead use these refuges.
5. The Committee received report from multiple presenters on the Comparative Survival Study, which was established in 1996 to measure and compare salmon transportation survival versus mainstem survival through the hydrosystem. CSS uses PIT-tags as a data source. The study is reviewed by the Council's Independent Science Advisory Board. The 2019 annual report is posted, and the 2020 annual report is coming later this summer.

Power Committee

Council Member Pat Oshie, Power Committee chair, gave an update on the 2021 Power Plan timeline. He expects to have a draft plan released by February 2021, with a final approved in June, 2021, perhaps May. In addition:

- The Committee reviewed Bonneville's portfolio analysis, which looks at the resources needed to meet the agency's obligation to supply power to the region under the Power Act. This included a look at BPA's energy efficiency supply curves, which is the technically achievable energy efficiency by customer sector. Member Oshie said BPA supplies power to 37 percent of the region's industrial, commercial and residential load. About 70 percent of its customer base falls within climate zone 1, which has milder temperatures. The technically achievable energy efficiency in the region is about 5,000 aMW. In BPA's service territory, there is about 1,900 aMW of achievable energy efficiency. About 1,500 aMW of that energy efficiency comes in at a cost below \$100. The study shows BPA's technically achievable efficiency could supply 2,000 aMW of peak power when needed, and 1,340 aMW of that comes in at a cost below \$80. The demand response impact shows about 1400 aMW available in summer and about 1,100 aMW in the winter.
- Gillian Charles spoke about primary generating reference plants for the 2021 Power Plan. Staff concluded the process on developing reference plants for the Power

Plan. The emerging technology reference plant is a small modular reactor, located in Idaho.

Public Affairs Committee

Council Member Jeffrey Allen, Public Affairs Committee chair, said the Committee did not meet yesterday. The 2020 Congressional Tour has been postponed. In 2021, it will be held in Montana, and Idaho will be the destination in 2022. The Council places a high value on these tours as do Congressional members and their staff. The Committee will meet in July.

1. Update on Pacific Northwest Utilities Conference Committee's Northwest Regional Forecast

Jennifer Light, Regional Technical Forum manager, introduced Shauna McReynolds, Pacific Northwest Utilities Conference Committee (PNUCC) executive director. McReynolds said PNUCC publishes its Northwest Regional Forecast of Loads and Resources annually. McReynolds reviewed the structure and the history of PNUCC. It has established two new industry partners, Energy Northwest and Powerex. She said PNUCC lost direct service industry members as aluminum company members stopped operations in the area. PNUCC has existed since the late 1940s and has been a part of the Council's business since it was formed.

The Northwest Regional Forecast looks at utilities' load forecasts and current/expected resources over the next 10 years. To compile the forecast, 28 entities provided data, including the largest utilities, PNGC Power, BPA and the U.S. Army Corps of Engineers. Long-term imports and exchanges are included in the Forecast, as well as hydro and utility-owned generation.

McReynolds said energy used to be the region's biggest issue, but now it's peak loads. She plotted the results from 2016 to 2020. Looking at the trends, winter peaks went downward, but have leveled this past year. Summer peak growth has been stronger than winter peak growth. The 2020 forecast is holding steady from last year. Annual energy follows the winter trend, where it has slipped over time. However, utilities are optimistic about the future and expect some load growth, she said.

She emphasized that utilities vary. Two-thirds of the utilities are experiencing flat-to-negative load growth. That's a big change from years ago. Seven utilities are seeing over 2% load growth, with an average of 4.9%.

Hydro provides a majority (62%) of the region's generating resources. Currently, the region has about 54,000 MW of nameplate hydro generation. Solar is making a mark at 4% and will continue to grow. Coal is at 8% and that will shrink as coal retirements are accelerating across the Western Interconnection. In the Northwest, 10 coal unit retirements are anticipated by 2030. Only four units will remain operating in the region: Colstrip 3 & 4 and Jim Bridger 3 & 4. About 150 MW of hydropower will also retire in the next few years. The result is a substantial decline in the availability of dispatchable baseload generation across the region. To see this much dispatchable generation leaving the Western Interconnect is making utilities look to make sure they can make up the difference, McReynolds said.

Member Devlin asked if PNUCC had the data on the actual production from those coal facilities? McReynolds said there is 3,500 MW of availability, with 3,700 MW of peak. Out 10 years, the region will have 1,500 MW of coal.

Member Devlin remarked that there are some regions in the U.S. that are finding that gas is cheaper, so coal use is being brought down. McReynolds suspects there are similar experiences in the Northwest. She noted that PacifiCorp changed the operation of its coal plants to follow solar.

Regarding energy efficiency, McReynolds said the forecast shows the region gained about 1,700 MW by 2020 over 10 years. Energy efficiency is looked at as the first resource in every utility's IRP. In 2021, she predicts the new projection for efficiency will be higher. This isn't an exact science and it will vary over time. She's looking forward to the Power Plan for a goal or a range of achievable energy efficiency.

Demand response is another area that utilities have put a lot of effort into, but they haven't found something they can count on. As you're building the plan, we're trying to get a sense of what's possible, she told Council members.

New resources in the forecast are mostly wind and solar: Wind 669 MW and solar 636 MW. It's notable that batteries are making an appearance in the forecast at 30 MW by 2022.

Retirements and loads are driving a growing resource gap, McReynolds said. Forecasted growth in peak load shows a growing disparity over the next eight years. Coal closures will exacerbate the gap going forward. Summer peak is becoming more of a story. By 2020, summer is starting to match winter need.

Member Oshie asked about seeing a balance between summer and winter peaking. McReynolds said Avista is starting to experience it. Member Oshie asked if McReynolds is seeing these averages driven by regions in BPA's territory or by certain large utilities experiencing changes in load requirements? McReynolds replied they're looking deeper into that question. Based on conversations with PGE and Idaho Power, additional air

conditioning and heat pumps are increasing summer load. In the winter, it's impacted by milder climate and the addition of large customers.

Looking at renewables and storage, McReynolds said there is a huge chunk of solar with batteries for planned resource additions. These can get us halfway there to address the resource gap, she said.

McReynolds said a resource adequacy program is under development through the Northwest Power Pool. It would not usurp utility authority but add to what they're doing. On July 1, there's a public webinar scheduled to discuss their activities.

Member Downen asked, as we look at our own load forecasting and COVID-19 impacts, what's the timing on your work and will you update it to reflect load changes? McReynolds said they think they'll have an idea by the 2021 Forecast. She said utilities with residential loads have seen increases.

Information item only. No Council action.

2. Briefing on upstream methane in Power Plan

Steve Simmons, senior economic analyst, briefed the Council members on how the staff proposes to incorporate upstream methane emissions into the 2021 Power Plan. All the calculations are on the Council's website for those who wish to dive deeper, he said. They also will be incorporating upstream emissions from coal surface mining.

Methane emissions have been increasing since 2007, he said. They are 34 times more potent than CO₂, and it's one of the most important issues facing the oil and gas industry today. This is the first Power Plan that will include upstream methane emissions related to the extraction, production and transport of coal and natural gas. There is evidence the emissions can be reduced. As a strategy, it is cheaper than carbon capture and storage, and most likely cheaper than renewable natural gas.

Simmons discussed the methodology involved in establishing a value for the upstream release of methane. He next discussed the three different study types quantifying methane emissions:

1. Inventory modeling – bottoms-up type estimate (EPA for U.S., GHGenius for Canada) based on equipment operating under normal operations.
2. Ground and air-based facility-scale measurements (EDF/Research Universities U.S. only).
3. Hybrid approach (IEA, NETL).

What's new in the past five years has been the additional number of measurements. The Council has settled on an upstream methane emissions rate value of 1.37%. Simmons believes it can be reduced to 1% and said that natural gas methane emissions still have a clean advantage over coal. Staff wants to write a full lifecycle analysis for all resources, he said.

Information item only. No Council action.

3. Presentation on the Washington Lower Snake River Dams Stakeholder Engagement Report

Jim Kramer, Kramer Consulting; and Michael Garrity, Washington Department of Fish and Wildlife's energy, water, and major projects division manager, presented the Washington Lower Snake River Dams Stakeholder Engagement Report. Funded by the 2019 Washington Legislature.

The report is based on existing public information, stakeholder and tribal interviews, and public workshops. It summarizes the views of Washingtonians on retaining or breaching the dams. Kramer said it works to look at both points of view rather than to start with a conclusion, and it acknowledges and respects the values of different interests.

Kramer discussed the process of compiling the report. They interviewed over 90 stakeholder and tribal leaders, researched past reports and publications, held public workshops, and conducted an online survey that received over 8,000 responses and 2,000 written comments. They delivered the final report to Governor Inslee on March 6, 2020.

He said the report reviews ecological considerations (including salmon and orca), energy, agriculture, transportation, recreation and economics. He said the report recognizes the different needs, impacts and priorities. Parties either sided with science from NOAA (breaching won't have much impact) or with the Fish Passage Center (breaching will provide a substantial benefit for fish). It was hard to reach a common agreement on facts, he said. There are hugely different perspectives on what the future would be without the dams.

Kramer said the energy piece was fascinating, to discover the evolution underway on producing energy and efforts to impact demand. He said many they spoke with are unaware of what's happening in the energy field and the work to get energy from different sources. Many think we're awash in power and they were surprised to hear that we could be facing shortages, he said. More people would be interested in learning more about what's happening in the energy field and how it could affect them in the future.

Those who support retaining the dams are skeptical of the ability of renewables to provide the needed, timely power from dams. This is especially true in the Tri Cities where there are concerns over summer demand. Those who want breaching think it can be figured out.

For agriculture and transportation, Kramer outlined the complex relationship between grain producers (farmers), cooperatives, transporters, exporters and customers. Going through his slide presentation, he covered:

- Globally competitive markets: quality, price, reliability and timeliness, especially for moving Washington wheat;
- The complex system of truck, barge and rail;
- The value of irrigated land versus dry land farming. This would be affected if farmers could no longer draw from a reservoir. The perspectives varied depending on where they already stood on dam breaching.

Kramer said recreation would be impacted. The current system supports water recreation (boating, swimming, fishing). There are numerous parks operated and supported by local, state and federal agencies as well. There are differing perspectives on the value of current recreation in contrast to a free-flowing river.

He said they were limited in their ability to look at economic impacts. Federal agencies could not share that information during the study period, but will have it in their latest EIS. There are differing perspectives on taxation and on the economic impacts to local communities, state and region, due to shifts in recreation usage, employment and transportation.

He said they held three workshops in January and there was an even split between supporters of the dams and opponents. The was public was respectful of the different viewpoints. There were 200 attendees or so at each workshop.

Moving forward, he said the participants are tired of the cycle of study, lawsuits and court decisions. The people in favor of breaching seem to be more hopeful than those who want to retain them. There's an interest in a federal process on this issue. He said future processes will benefit greatly if they demonstrate respect and support for tribes, Eastern Washington and coastal fishing communities.

Garrity said there's a desire for a post-NEPA conversation involving sovereigns and other stakeholders. There's fear and hope, and some appetite to get beyond the cycle we've been in for the past couple of decades. The time might be ripe for a broader dialogue.

Kramer said additional information would be helpful on the cost of upgrading the rail system and irrigation.

Kramer said Member Norman attended and provided a lot of help, as did a lot of community leaders.

Member Devlin made a statement about 50,000 acres being irrigated from Lake Sacajawea. That's an enormous amount of land, he said, and asked if there any other substantial areas being irrigated by the Snake River. Garrity replied that McNary Pool users are concerned with the impact of removing Snake River dams.

Member Allen remarked that the report was provided at less cost than forecasted. You had 51% of respondents want to retain the dams and the rest favor breaching, he said. What do you take away from these important, yet competitive, interests?

Kramer said the survey wasn't based on a statistical design and they found often people weren't just one thing in terms of their interests. They're exposed to farmers, who are some of the original and best conservationists. Many are equally concerned on how to make sure the environment is healthy into the future. They care about fish and agriculture. Dam breaching proponents want to make sure agriculture was made whole.

Member Allen said it's refreshing to hear someone say it's complicated rather than saying it's an easy fix.

Member Norman recognized Kramer and his team for a comprehensive piece of work completed in a short period of time. Also, there was a cooperative tone throughout this process and a fair product was produced. He hears that the Governor's office is pleased with the report.

Information item only. No Council action.

4. Council decision: Asset management priorities for FY2021 for hatcheries and screens

Mark Fritsch, Project Implementation Manager in the Fish and Wildlife Division, presented this item. Fritsch said this is part of the Council's asset management strategic plan, which was approved by the Council in October 2018. He talked about the annual process and future assessments. The next review will take place in 2022.

He reviewed the proposed actions and expenditures for FY 2021, Hatchery projects total \$104,500. Fish screen projects total \$394,000. The Council's Fish and Wildlife Committee and its Asset Management Subcommittee reviewed the proposal and recommended that the Council approve the recommendation to Bonneville for funding.

Member Ferrioli commended the program managers and operators on the projects. He thanked Fritsch for the process that helps meet emerging needs. He noted that there's still not a systematic fund for responding to nonrecurring needs.

Motion

Vice-Chair Downen moved that the Council recommend that Bonneville fund non-routine maintenance for fish screens in an amount not to exceed \$397,000, and hatcheries in an amount not to exceed \$104,500, for Fiscal Year 2021, as recommended by the Asset Management Subcommittee and the Fish and Wildlife Committee and presented by staff. Member Ferrioli second. Motion passed without objection.

5. Council Business

Renewal of Advisory Committee Charters

Andrea Goodwin, Senior Counsel, presented the advisory committee charters up for renewal.

Motion

Vice-Chair Downen moved that the Council renew for a period of two years the charters for the following Advisory Committees, as presented by staff:

- Demand Response Advisory Committee
- Demand Forecasting Advisory Committee
- Conservation Resources Advisory Committee
- Generating Resources Advisory Committee
- Natural Gas Advisory Committee
- Resource Adequacy Advisory Committee
- System Analysis Advisory Committee

Member Oshie second. Motion passed without objection.

Approval of contract for updates to Regional Portfolio

John Ollis, Manager for Planning and Analysis in the Power Planning Division, recommended the Council authorize the staff to execute a contract amendment for enhancements to the RPM. This will provide ongoing support for modifying the model to complete work for the 2021 Power Plan.

Motion

Vice-Chair Downen moved that the Council authorize staff to amend Contract C2020-04 with Lumidyne Consulting, LLC, to include in the statement of work additional enhancements and configurations to the Regional Portfolio Model (RPM) for use in developing the 2021 Power Plan and to add \$50,000 to the contract budget to accomplish these enhancements, for a total amended contract budget not to exceed \$125,000, as presented by staff. Member Oshie second. Motion passed without objection.

Public Comment

Public comment on the draft Council budget for Fiscal Year 2022 and revised budget for Fiscal Year 2021.

No one signed up to provide oral public comment. Written public comment will be accepted through June 30, 2020. There are directions on how to provide comments on the Council's website.

Public comment on the revised draft of Part I of the 2020 Addendum to the 2014 Fish and Wildlife Program.

No one signed up to provide oral public comment. The Council held a public hearing by webinar two days before, on June 15. Written public comment will be accepted through June 22, 2020. There are directions on how to provide comments on the Council's website.

Public comment on any issue before the Council.

No one signed up to provide comment.

Member Devlin said the July meeting will be another webinar instead of traveling to Spokane. The August meeting will be in Boise, and the September meeting will be in Missoula.

Chair Devlin adjourned the meeting at 12:11 p.m.

Approved July ____, 2020

Vice Chair