



Northwest Power and Conservation Council

**Meeting Notes
March 12-13, 2019
Portland, Oregon**

The March Council meeting in Portland featured a parade of familiar faces in their new roles: PNGC Power’s Roger Gray talked about his organization’s concerns about future power supplies. Renewable Northwest’s new executive director, Nicole Hughes, discussed meeting Washington’s 100-percent clean energy goals. And Scott Armentrout, Bonneville’s new vice president of environment, fish and wildlife, offered a cautionary view on the future of the agency’s fish and wildlife program expenditures.

The meeting also was the first for new Council Member Jeffery C. Allen, who was appointed this month by Idaho Governor Brad Little. Allen has been the Council’s Idaho Office director and policy analyst since 2008. He joins Jim Yost as the second Idaho representative on the Council. Council Members Jennifer Anders, Tim Baker, Richard Devlin, Ted Ferrioli, Guy Norman and Jim Yost also were in attendance, while Member Tom Karier joined by phone. A replacement for Member Karier has not yet been named. The next Council Meeting will be held in Portland, Oregon, on April 9 and 10, 2019.

In This Issue

PNGC Power’s Roger Gray concerned about future power supply	1
PGE’s Wheatridge facility combines wind, solar and storage	3
Armentrout pledges a harder look at BPA’s fish and wildlife spending	3
Hughes shares Renewable Northwest’s perspective on carbon goals	4
Anadromous fish forecasts rise slightly	4

The Agenda

PNGC Power’s Roger Gray concerned about future power supply

Fresh from assuming his new role as PNGC Power’s new chief executive officer in January, Roger Gray shared his thoughts on BPA, power contracts and decarbonizing the region’s power supply. As a G&T Cooperative with a single BPA power contract for its 15 members in 7 states, Gray said, “We

are deeply concerned about our power supply and we're working very hard to preserve the economics of this BPA treasure."

He argued that BPA is competitive on an apples-to-apples comparison and it has a unique set of projects that can't be compared to the Mid-C spot market. The 80 plus years of the legacy system is important to save. If not, when current contracts are up in 2028 utilities might choose to make other decisions regarding power supply. And he cautioned, "We won't want until then to make decisions about our power supply. Those decisions will be made in 2020–2022."



Gray said that some call the Snake River system uneconomic, but it cannot be matched for its firm, flexible and affordable, carbon-free power supply. The Willamette system isn't the same, he asserted. But those who care about flood risk management care deeply about that system, so dam removal won't be on the table.

Integrated resource plans continue to peg energy efficiency as the region's greatest resource. These same plans also show we need renewables, especially for meeting carbon objectives. Gray stressed, "We also need a little gas for reliability as coal plants close and carbon policies pass."

This needs to be addressed, he said as he highlighted to a recent, near-miss incident in late February/early March when wind power virtually disappeared in the Northwest and California solar was dimmed by cloud cover. Thousands of megawatts were gone, Gray said. Power prices exploded, hitting a price cap of \$1,000 per MWh after being in the \$20's for some time. They remained at \$800 per MWh for most of the weekend – we don't want to get that close to a California energy crisis again, he said.

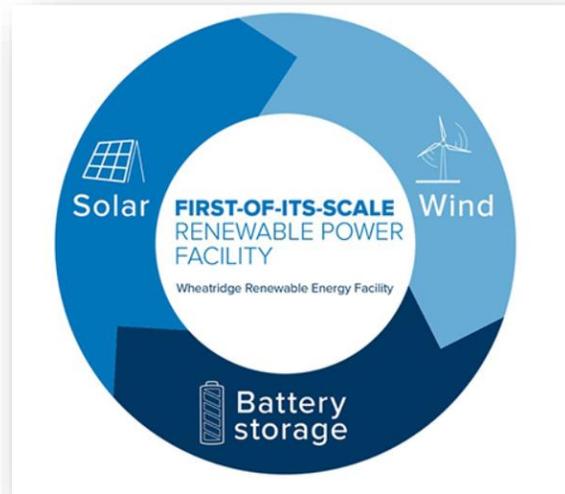
Council Member Jim Yost asked Gray how he would deliver a message about needing gas for integration and reliability. How can we connect to policymakers who have blinders on for renewables?

Gray replied that he's not resistant to renewables and he's in favor of carbon reductions. Our battery is the hydro system, and gas is the other battery needed to convert fuel into electricity quickly. We need to give policymakers clear instruction on what the alternatives are. If you want to get to 80 percent carbon-free, we probably could get there, he said. But getting to 100 percent will drive prices through the roof and reduce the value the of renewables.

PGE's Wheatridge facility combines wind, solar and storage

Soon, Portland General Electric (PGE) together with NextEra Energy, will construct a new, unique three-in-one energy facility in Eastern Oregon. When complete, the Wheatridge Energy Facility, located in Morrow County, Oregon, will integrate 300 MW of wind power, 50 MW of solar photovoltaic and 30 MW of battery storage on the same site.

PGE's Boardman coal plant is scheduled to cease coal-fired generation in 2020. During its 2016 integrated resource planning process, PGE identified the need for 100 average megawatts of clean power to help meet renewable portfolio standards as well as a need for capacity. PGE will own 100 MW with a power purchase agreement for 200 MW. The wind portion of the facility will begin operation in 2020, while the solar and battery components will commence in 2021.



Brendan McCarthy, PGE's state environmental policy manager, and Jimmy Lindsay, resource strategy project manager, told Council members that the solar portion can charge the batteries and deliver energy to customers. Operators can call on storage during late evening hours to meet peak capacity needs, or it can charge the batteries when power prices are lower. The flexibility characteristics of the battery make it easier to call upon reserves more efficiently. PGE expects to invest approximately \$160 million for its portion of the project.

Armentrout pledges a harder look at BPA's fish and wildlife spending

Scott Armentrout, Bonneville's vice president of environment, fish and wildlife, shared his thoughts about program expenditures and the pressure for cost-discipline at the agency.

Armentrout said power markets have changed so much that competitiveness in the price of power has required us to ask a lot of questions about why we're funding a project. Other questions include, how are we tracking that project through time? Is there a trigger or an exit ramp? He said we've spent billions of dollars, and we're still spending hundreds of millions of dollars a year. It's one of the best-achieving programs in the nation, so what are the next steps we can take and still deal with our emerging priorities?

Armentrout referred to Bonneville's 2018-2023 Strategic Plan, which says to improve cost management discipline and prioritize fish and wildlife investments based on biological effectiveness and mitigation for FCRPS impacts; and manage fish and wildlife program costs at or below inflation, inclusive of new obligations and commitments. These are strategic plans that are being moved into operational plans, he said. There are some real ramifications in that this will be different than the curve of spending that has occurred over the past decades.

In recent years, they have reached some of the highest expenditures ever for the fish and wildlife program. He speculated that there will be a concerted, collaborative effort to plateau costs and then reduce them. In addition to prioritizing programs and being more efficient, there's an enterprise level of examination that needs to take place.

Hughes shares Renewable Northwest's perspective on carbon goals

The Council had its first presentation by new Renewable Northwest Executive Director Nicole Hughes, who replaced Rachel Shimshak after she retired nine months ago. Hughes, who used to work as an archaeologist at Bonneville, shared the organization's policy, regulatory, transmission and clean-energy priorities with the Council.

She said one of Renewable Northwest's priorities is the probable passage of Washington's 100 percent clean-energy bill, which sets a target of 100 percent clean electricity by 2045. The measure, which passed the state Senate, requires utilities to switch away from all coal-fired power by Dec. 31, 2025; and by Jan. 1, 2030, have 100 percent of their energy from greenhouse-gas-neutral sources. Hughes acknowledged that the cost of getting to 100-percent clean energy today would be untenable. "I firmly believe we can get to 100-percent clean, but it will require significant investment by everybody on how to balance the system and maintain its reliability," she said.

Anadromous fish forecasts rise slightly

Representatives from Washington, Oregon, Idaho and NOAA appeared before the Council to reel off their annual fish counts for the prior year, and then took to their crystal balls to forecast returns for the coming year. NOAA's Brian Burke discussed the impact of ocean conditions on salmon and steelhead returns, and on the coastal ecosystem.

The nettlesome warm-water blob, which has lasted for about three years, has had severe impacts of the North Pacific ecology, including the migration of predatory species into Pacific Northwest waters. There have been multiple El Niño events, creating warmer-than-normal temperatures. 2017 was the lowest catch of juvenile Coho and Chinook in 21 years of sampling. Based on that and other factors, the broad, expected returns for Spring Chinook are similar to last two years, Fall- slightly higher, and Coho better, he said.