



Northwest Power and Conservation Council

Meeting Notes May 7 & 8, 2019 Boise, Idaho

The Council's meeting in Boise provided a forum for Idaho IOUs, co-ops and other stakeholders to share praises and concerns, and to urge Council action as it develops its *2021 Northwest Power Plan*. Some of the issues addressed included system adequacy, new technologies, the Energy Imbalance Market, decarbonization goals and fish mitigation costs. In addition, our own PNUCC Executive Director Shauna McReynolds briefed the Council on the *2019 Northwest Regional Forecast*, which confirms many of the concerns expressed by Idaho energy executives.

Chair Jennifer Anders led the meeting with all Council Members in attendance, except Member Tim Baker, who joined by phone. Member Anders noted Member Baker submitted his resignation from the Council, effective June 7, 2019. In his parting remarks, Member Baker said the work being done in the region is critically important. The decisions that are going to be made in the next 20 years will be some of the most important made for this region, and the challenges have never been greater. Baker said he was glad that he could play a role, however brief. The next Council Meeting will be June 11 and 12 in Portland, Oregon.

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<u>The Agenda</u>

PNUCC's 2019 Northwest Regional Forecast reveals capacity shortfalls

It's the pace of change that continues to be the story

As utilities move toward achieving their carbon reduction goals, the region's utilities are taking full advantage of opportunities, according to Shauna McReynolds, PNUCC executive director, yet there are no easy answers on how to fill the forecasted gaps in dispatchable resources as coal generation retires.

PNUCC's recently published 2019 Northwest Regional Forecast, shows the focus is on peak capacity need and flexibility with few new dispatchable resources planned. McReynolds said, "New wind and

solar alone cannot fully offset over 3,600 MW of traditional generation scheduled for retirement."

Utilities are exploring new technologies, she added, and batteries are being tested, but are not yet proven. McReynolds said that Montana wind is awesome, but transmission is key to using it in the Northwest. Idaho Power and Bonneville have



been working on siting and permitting the Boardman to Hemingway transmission project for 17 years. "We don't have 17 years," she said. "The next big challenge is in the next 10 years."

Most load growth in the *Forecast* is in the first five years as summer peak continues to grow, likely due to air conditioning, McReynolds told the Council. Winter peak is lower as weatherization and codes and standards continue to prove their value. Utilities have figured out energy efficiency is the one constant, realizing 160 MW a year in savings. It's what their customers want, McReynolds said.

Council Member Jim Yost asked how the region could keep the loss of load probability below or at five percent without some type of new generation? "I don't think we know that yet," McReynolds replied. We've had better than average hydropower available to help with capacity, but hydro can't cover it all as coal disappears from the resource mix, she said. Utilities are working to figure it out and to uncover what the next great resource is going to be. In the meantime, we're stretching everything we have today.

The *Forecast,* published annually using the sum-of-utilities' data since the 1950s, looks at utility loads and the resources they have to meet those loads. McReynolds said it is an on-the-ground view of the Pacific Northwest's electric power landscape that serves as a system adequacy barometer. The Executive Summary of the *Forecast,* as well as the full report, can be found at: www.pnucc.org/system-planning/northwest-regional-forecast

Idaho Power reveals its new clean-energy goal

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Idaho Power revealed that it is working toward an ambitious decarbonization goal to deliver 100 percent clean energy that is reliable and affordable by 2045. Tess Park, vice president of power supply for Idaho Power, told Council Members that while the announcement came as a surprise to a lot of people, the clean path they are on today makes this aspirational goal possible.

Idaho Power's prices are more than 20 percent below the national average Park said. Customer surveys have shown affordability is very important. If prices go up five percent, that's within their tolerance level –beyond that, their customers are backing off.

With fifty percent of the utility's power coming from hydro and a new deal to purchase 120 MW of low-priced solar, the utility is positioning itself to be cleaner as it continues its move away from coal. And completion of the proposed Boardman to Hemingway transmission line will move wind energy from Montana to add to their renewable portfolio, Park said.



The utility will continue to carefully plan for the future and keep an eye on technology. And as of today, without natural gas, it's not feasible to deliver energy reliably and at a price point they have to have to achieve affordability and reliability, she added.

Park also touched on Idaho Power's experience participating in the Energy Imbalance Market (EIM). Since joining in April 2018, it has saved Idaho Power customers \$10 million. She said the savings come from being able to operate the system in the most efficient way possible. More important is that the participants go into the EIM with fully committed resources, no one is leaning on other EIM participants.

In addition, Idaho Power is participating in discussions around an Extended Day Ahead Market (EDAM) with other EIM participants. It will provide the next level of market, Park said, and an opportunity for the next level of incremental savings that do not exist today. EDAM is different from full market participation because everyone retains their transmission, there's no consolidation of balancing authorities or relinquishing of transmission assets. Given the utility's diverse resources, a market will help move toward a clean future.

ICUA members urge Council focus on costs and reliability

Margins are thin, and resources characteristics matter

A panel of Idaho Consumer-Owned Utilities Association (ICUA) members cautioned the Council that there can be economic consequences to going all in on renewables, and urged a cap on fish and wildlife costs. The ICUA represents 22 rural electric and municipal power companies, which get 96





percent of their power from BPA and serve 137,000 customers across the state.

Bear Prairie, Idaho Falls Power general manager, pointed to the value of the hydro system during the recent scarcity event in March – the main stem and lower Snake consistently provided power. This was in contrast to very little wind and a no show for California solar, Prairie said, the market sent a price signal that reached nearly \$1,000/MW due to lack of available resources.

A cautionary tale against the region putting too many eggs in the availability of energy basket called the market. This impact needs to be considered before retiring other projects, relying too heavily on the market, wind or solar, he said.

Salmon River Electric's general manager, Ken Dizes, said it's time take another hard look at the project cost

allocations for the Columbia River dams and Snake River dams. When the dams were built, 75 percent of the costs were allocated to power. And over the decades the value equation has probably changed, he said. The power system no longer delivers equivalent amounts of power — in fact, it's been reduced by a third. At the same time, the value of the dams for flood control has risen. As a result, ICUA is proposing Congress and the Council urge the Bureau of Reclamation and Army Corps of Engineers to reallocate costs for flood control.

Spending effectively is key as we look ahead, said Max Beach, Idaho County Light and Power's general manager. The rubber hits the road with Bonneville customers paying for fish and wildlife mitigation. We're just not seeing the fruits of the dollars spent. "Last year, our power bill was \$2.3 million, with about \$700,000 going to fish mitigation, or \$18 per month per customer," he said. Since the 2000s, the overall cost trend has gone up for fish. Ocean conditions play a big role, since they spend 80 percent of their lives there, he said.

Bryan Case, chief executive officer/general manager of Fall River Electric, has confidence in their continued long-term partnership with Bonneville, and credited BPA Administrator Elliot Mainzer for working to change the cost curve in response to customers' concerns about the agency's cost trajectory. He pointed to spill and modernization of the Columbia River Treaty as opportunities to help address rising costs. And added Bonneville's participation in the California markets would add value to hydro and increase secondary net revenues. He suggested a cap on fish mitigation costs and recommended mature programs be removed, and others that aren't realizing a good return on the investment be reassessed.

Case asked the Council to look at how its sets its conservation goals. He said Fall River spends around to \$300,000 to save one million kilowatt hours a year in conservation. Irrigators have used the program and commercial relighting has been effective. But he cautioned, one size does not fit all, saying heat pumps haven't worked as well in their climate. He encouraged the Council to ensure flexibility in conservation programs as the Council sets its goals for the *Eighth Plan* (now called the *2021 Northwest Power Plan*).

Case said there is no value in building resources for the Northwest because of cost and the risk of not knowing whether they will be operating in the future. "We're operating on margins that are already pretty thin," he said. In the meantime, everyone is pointing to the other person to build something as concerns are raised about resource adequacy.

Chatburn shares an overview of Idaho's energy picture

Low rates, new opportunities

John Chatburn, director, Idaho Governor's Office of Energy and Mineral Resources, provided the Council with a high-level view of his state's energy mix. Idaho has the fifth-lowest average electricity rate, 44 percent of its electricity is generated within the state, and more than half of its fuel mix is hydro (53 percent). Its other resources are coal, natural gas, wind, nuclear, solar and other sources.

Chatburn said the development of small modular reactors at Idaho National Laboratory is moving forward. NuScale is working through its design certification process with the Nuclear Regulatory Commission and the facility's completion is expected in early 2021. And while Idaho has some of the best geothermal resources in the lower 48 states, he said the cost of prospecting is a challenge.

Looking at the conservation, Idaho utilities continue to achieve energy efficiency savings from programs. Idaho also is expanding its electric vehicle refueling infrastructure with five stations this June along I-84 and I-15 under Volkswagen's Electrify America program. Idaho also is applying for

\$17 million to mitigate emissions under the Volkswagen settlement to use for alternate fuel programs for light-duty vehicles.

Utilities recognize the importance of transmission and currently there are three transmission projects underway. They include Gateway West, which received its final right of way grant from the Bureau of Land Management; Boardman to Hemingway, which finished its federal review and is in the state of Oregon's siting process; and Hooper Springs, which is under construction.