



Northwest Power and Conservation Council

Meeting Notes
August 9-10, 2016
Polson, Montana

On the beautiful shores of Flathead Lake in Polson, Montana, Council members and regional stakeholders met to discuss how they plan to engage with a variety of challenges and changes in the months ahead.

Bonneville Power shared next steps for grappling with rates, new contracts, emerging energy markets and the recent Biological Opinion decision. The Council approved the latest Adequacy Assessment and discussed some promising capacity contributions that could be made by developing Montana wind energy.

The next Council meeting will be in Spokane, Washington on September 13-14, 2016.

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The Agenda

New BPA Deputy Administrator looks forward to engaging in challenges ahead *Spending level decisions and cost drivers top of mind as BP 18 rate case begins this Fall*

As a familiar face to the Council, Dan James expressed his enthusiasm in being selected as BPA's Deputy Administrator. Being able to contribute in a new role on complex issues where he has focused most of his career is a gift, James said. He went on to say that he is energized by emerging leaders who are offering fresh eyes and perspectives in Bonneville's Focus 2028 process.

Reiterating that Focus 2028 is top of mind, he noted that the creation of a “Reference Case “will allow BPA to benchmark and assess the effect of different alternatives that may come out of these discussions. “This is the foundation we’ll be working from as we kick off the rate case and release an updated strategic plan at the end of the year based on the Focus 2028 process,” James said. “We must be cost competitive approaching these new, long-term contracts.”

With the current spending level forecast reflecting a four to nine percent rate increase for Tier 1 PF power and a three to five percent rate increase for transmission, he said Bonneville will use the Reference Case to look at spending level decisions and cost drivers for the BP 18 rate case this fall. A longer look suggests Tier 1 PF rate could decrease from BP 16 to FY 2030, while transmission rates increase over the same time in real dollars.

In addition to Focus 2028, BPA is engaged in several separate, but related initiatives relating to emerging energy markets, he said. And while BPA is not considering joining the energy imbalance market (EIM) or the Regional Independent System Operator (ISO) at this time, the agency must be engaged in how the rules are constructed.

Adding, this means taking an appropriate role in building a governance structure and a coordinated transmission system that ensures market roles comply with federal statutes, don’t add significant costs and don’t impact the reliability of the transmission service provided through contractual agreements.



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*Dan James
Deputy Administrator
Bonneville Power*

James went on to say “I got to enjoy the news about my appointment for five minutes” since the decision from Federal District Court Judge Michael Simon on the Biological Opinion (Bi-Op) on the federal hydro system came out the very day he was appointed Deputy.

He pointed out Judge Simon’s adoption of the federal defendants’ proposed five-year NEPA schedule which will give agencies time to develop a new Environmental Impact Statement (EIS). Adding, the EIS will include a robust scoping process that provides for public input on actions that federal agencies will consider for alternatives.

“We’re interested in working with all interested parties,” James said. The deadline for scoping is Sept. 30, 2017, and the court wants a status report soon after that and NOAA will still issue a BiOp in late 2018. “It already feels like a “hair on fire” moment,” he said. “We are establishing working teams with federal partners, knowing that this is a ball we simply can’t drop.”

When asked about what worries him the most, James said simply, “Cost saving challenges are a worry”. He added, he is excited to engage stakeholders in discussions that affect their future. And he is looking forward to bringing small groups together to talk through difficult situations and work to solve problems together.

In addition to serving as a primary spokes person’s for Bonneville, James will oversee communications, intergovernmental affairs, compliance, audit and risk, finance and compliance strategy. He will also serve as one of the primary spokespersons for Bonneville.

Council deems region adequate through 2020

Loss of load probability grows to 13% in 2021, with coal unit retirements

The updated Power Supply Adequacy Assessment for 2021, that addressed the impact of the closure of Colstrip units 1 and 2 announced in July, was released by John Fazio, senior power systems analyst. Overall, Fazio said that the region is adequate through 2020

This all changes though in 2021, when Boardman and Centralia coal plants (1,330 MW) are retired. Then the LOLP goes to 10 percent, he said, and when the loss of Colstrip 1 and 2 (307 MW of dedicated regional capacity) is added, the LOLP rises to 13 percent. Under a medium-load assumption the region would need to add around 1,360 to 2,560 MW of new capacity.

More than 6,000 different combinations of river flows, temps, wind generation and forced outages were reviewed. After looking at simulations that had at least one shortfall in supply system, adequacy is determined. The system's supply is deemed adequate if the loss of load probability (LOLP) is 5 percent or less, Fazio said. This Assessment serves as an early warning and there is a lot of potential new generation that could come on line, "so we shouldn't be concerned," he said.

He went on to say that there are about 550 MW of planned (but not sited and licensed) new resources identified in the April 2016 PNUCC Northwest Regional Forecast. The Council also identified 600 to 2,700 MW of demand response potential in the Seventh Power Plan. Coal replacement strategies are being evaluated by utilities, Fazio said. And if the loads change or the imports change, the LOLP will change as well.

Council Member Bill Booth remarked that there could be quite a potential shortfall. "I think we might want to be a little nervous, but it's up to the individual utilities to deal with the problem," he said. "We provide analysis and don't tell them what to do. The role we should play is to monitor it and let the region know that there will be a shortfall unless action is taken."

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Council Member*

In summary, the adequacy assessment states that:

- Inadequate status in 2021 was expected.
- Loss of the coal plants increases winter capacity need.
- The continued acquisition of energy efficiency is imperative.
- Some combination of planned resources, plus the acquisition of demand resources could be sufficient.
- If needed, the region has time to acquire additional generating resources.

The Council approved releasing the Assessment.

Mainstem water temperatures continue to be a concern

The Council's Fish and Wildlife Committee heard multiple presentations on the impacts of water temperatures on fish in the Columbia Basin's rivers.

In addition to a presentation on the importance of cold-water refuges for salmon and steelhead, the U.S. Army Corps of Engineers gave a presentation on water temperature modeling in mainstem rivers.

The modeling report was in response to a letter sent by the Council last December encouraging a system-wide model for monitoring mainstem temperatures in the Columbia and Snake rivers.



The Committee also received a briefing on real-time summer conditions from fish and wildlife managers in the Basin.

Managers are taking measures to prevent and reduce summer fish mortalities. These tools include the early release of water from Dworshak Dam to help cool waters in the fish ladders.

There also was a release of water from Canada to help fish in the Okanagan Basin.

This year, they're seeing a "more normal" level of fish survival, and said that they might be "out of the woods this year," but coordination will continue throughout the Basin to prepare for next summer.

Demand Response Advisory Committee promises to be popular

Interest in the Demand Response Advisory Committee exceeded expectations after nearly all of the 65 parties contacted expressed an interest to be engaged, reported Tina Jayaweera, staff senior energy efficiency analyst. The first meeting of the newly formed committee will be in November. It will follow a demand response symposium co-sponsored by the Council on September 28.

The agenda for the first meeting will be how to define demand response and its benefits. Members will spend time addressing expectations, developing a structure and discussing what barriers exist.

Montana wind shows potential, could provide greater winter peaking capacity

Montana wind is very promising and has some good characteristics, according to the preliminary review of historical data on Montana wind generating sites recently completed by Council staff. In particular, two sites (near Judith Gap and near Great Falls) indicate very promising associated system capacity contribution (ASCC) values which means greater available wind generation during regional peak load hours.

These studies concluded that Montana's higher annual energy generation — especially in the winter — helps increase ASCC. "Whenever you can add more to the system, it helps with the interaction of other resources," said John Fazio.

It also appeared that Montana wind correlates better with the timing of regional winter peak load, on the west side. Gorge wind is a little stronger in the summer, compared to winter.

The next steps are to obtain more historical data to improve simulated generation, and to investigate other potentially promising sites in Montana. While there is lots of interest in Montana wind, the issue will be transmission capacity.

Council Member Pat Smith, from Montana, said that in the last couple of years, there has been renewed interest in Montana wind by large, national wind companies.



He said there are currently 1,400 MW of capacity requests pending on BPA's system. Companies include EDP Renewables, Orion Renewable Energy and others. Smith added that there is 40 mw of new wind under construction in Montana near Bridger that will connect with PacifiCorp's system.

Maven of momentum savings outlines its importance to the region

Carrie Cobb, BPA's market research lead and proclaimed "maven of momentum savings," has engaged in a singular mission since 2011: to spread the gospel of the value of momentum savings in the Northwest's energy picture. Cobb presented the agency's work to define and total momentum savings in the region. Momentum savings are defined as energy efficiency that is not paid for by programs and is not included in NEEA's net marketing effects.

"What makes it a privilege to work in the Northwest is that we're building an energy efficiency power plant; one that resides in millions of homes and businesses," Cobb said. "Today, consumers can't buy appliances as they used to. They're more efficient, so they're a part of our power plant whether they want to be or not."

Appliance standards have been a huge, she said. The savings impacts of appliances standards since the Sixth Plan was developed are as large as building a new dam over the next 20 years — 1,507 aMW, which is enough to power over one million homes.



She said that the primary reason they measure momentum savings is to get a more accurate and comprehensive assessment of the market. By measuring total market shifts, they are able to quantify all the energy efficiency available for load planning.

The move from incandescent light bulbs to CFLs and now to LEDs is another primary example.

"Our analysis also helps us identify new markets and new opportunities to incorporate into future energy-efficiency planning," she said.

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*Carrie Cobb
Market Research Lead
Bonneville Power*