



Northwest Power and Conservation Council

**Meeting Notes
May 10 & 11, 2016
Boise, Idaho**

May’s Council meeting in Boise featured a fish-heavy agenda with a vote to move forward on a plan for a sturgeon hatchery facility, a summary on the Idaho’s Chinook salmon populations, and reports on stream flows, fish and wildlife program investments and operation and maintenance strategies.

The second day brought interesting insights into Northern Tier Transmission Group expansion projects, Idaho Power’s decision to join the Energy Imbalance Market, and thoughts from two local Co-ops on Bonneville’s Focus 2028 process.

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The Agenda

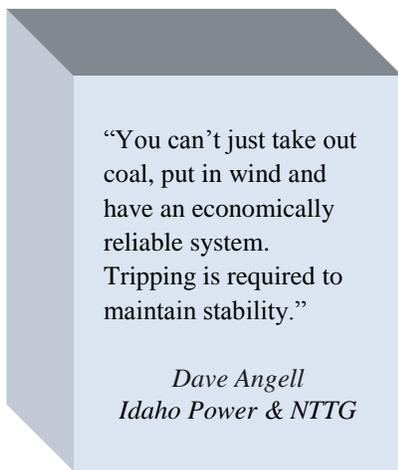
Reliability and renewable integration focus for transmission expansion project

Idaho Power, Northwestern Energy and PacifiCorp, all members of Northern Tier Transmission Group (NTTG) are undergoing major development in transmission expansion projects according to Dave Angell, Idaho Power’s senior manager of system planning. These projects are targeted at relieving regional congestion and serving load growth.

Angell described NTTG’s latest Regional Transmission Plan which is developed every two years. The Plan considers both regional and local transmission needs and includes Gateway West, Boardman to Hemingway (B2H), Southwest Intertie North and TransWest Express.

The integrated resource plan for Idaho Power includes energy from the Pacific Northwest to serve loads in 2024 in Southern Idaho. NTTG’s study of these projects revealed that building B2H is efficient and cost effective from a regional perspective. That is also the case with Bonneville’s need to serve Eastern Idaho, he said. By having that transmission request into NTTG, that analysis selected B2H into the project.

There wasn’t a similar transmission request for Gateway at this time. However there is a need for additional transmission at the local level which justified proceeding with the project.



Council Member Yost asked about the need – if there is additional wind energy development in eastern Idaho, Montana or Wyoming. Angell indicated the line would be needed for solar or “any resource development on top of what we have, we’d need it. We’re pretty constrained through Idaho” he said.

A requirement that came out of FERC 1000 is to study public policy requirements. Northern Tier had a request from Renewable Northwest, for an evaluation of retiring Colstrip Units 1 and 2 by 2020, and replacing them with 610 MW of wind at Broadview, Montana.

While the study showed that it can be done, it would require generation tripping (taking generation offline) to maintain stability. “You can’t just take out coal, put in wind and have an economically reliable system,” Angell said. “Tripping is required to maintain stability.”

Looking forward, Angell said member load submissions for 2026 are estimated to increase for Idaho Power and NorthWestern, whereas PacifiCorp and Portland General loads are projected to decrease. Overall a 240-MW reduction in load for 2024 is expected across NTTG’s footprint since the review was done. It also shows the resource stack changing with natural gas and wind generation declining while solar is expected to increase. Reductions in coal also are anticipated.

Council Member Pat Smith inquired about PacifiCorp looking at full integration with the California Independent System Operator (CAISO) in 2018. He asked, “What does that do to Northern Tier?”

Angell said that NTTG would be left with Portland General, NorthWestern Energy and Deseret Generation and Transmission, which is pretty small. At that point, NorthWestern and Idaho Power would get together and determine next steps.

Idaho Power reviews plan to join Energy Imbalance Market

Tess Park, Idaho Power's vice president of power supply, provided an update on the utility's decision to join the Energy Imbalance Market (EIM) in 2018.

Walking through the steps, Park said the utility first evaluated market solutions, such as a security constrained economic dispatch and a centrally clearing economic dispatch. Being outside of BPA's footprint, costs and lack of a level playing field brought Idaho Power to contract for a benefits study on joining the EIM. The study revealed that while the costs to join are roughly \$10 million, the benefits would cover startup and ongoing costs.

"The majority of our interconnections are with participants in Western EIM," Park explained. "Idaho Power can provide benefits to them as well. The market is founded on transmission reciprocity. With PacifiCorp, we can use their transmission and they can use ours. They were the big pushers for us to join. They see us as a way to move energy from west to east across Idaho. There are market benefits, transmission benefits and it provides the least-cost resource to serve our loads."

Park said that the benefits to Idaho Power include decreased net power supply costs, increased reliability, lower reserves, renewable resource integration, and voluntary participation. "You can get out if it's not working out."

The next steps include submitting an implementation plan with California ISO for participation, selecting vendors, and meeting with federal and state regulatory bodies.

Idaho Co-ops seek greater flexibility with energy-efficiency mandates

Pointing to Bonneville's Focus 2028 process, Thad Fowler, Wells Rural Electric Company's (WREC) manager of external affairs, and Bear Prairie, Idaho Falls Power's assistant general manager, shared their concerns about declining load growth, energy-efficiency mandates and the economic pressures their customers are under.

"Many utilities, including WREC, are experiencing very low load growth," Fowler said. "Even though our members are using less energy, and installing energy efficiency measures, they see their bills increase, as wholesale power supply rates escalate and the recovery of our variable recovery rate is shifted into the fixed, monthly service and demand charges."

Fowler added that while WREC recognizes the value energy efficiency presents to strengthen relationships with members in order to provide a low-risk, carbon-free resource for electricity, BPA's Tier 1 wholesale power rates have increased 25 percent since 2010 and that has placed a huge financial stress on utilities. He said that WREC has cut, capped or increased the recovery of costs throughout its operations by reducing staff and benefits, outsourcing, automation and

refinancing. Since wholesale power and transmission costs account for 77 percent of total budget and depreciation, and adding debt service raises it to 82 percent, continued cost cuts are no longer sustainable.

“For WREC to reach levels of energy efficiency that the Council has encouraged BPA to seek, we need increased flexibility in available measures, rebate amounts and reporting periods,” Fowler said. He asked for increased utility self-funding and a corresponding decrease in BPA energy-efficiency rate components.

Idaho Falls Power’s Bear Prairie doubled down on Fowler’s concerns. “What keeps me up at night is loads, and if they fail to come back,” he said. “I used to assume load growth would come back in 2013 as we worked through our cost-of-service process. Through the last six months, our residential and commercial sales have been down ten percent.”

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Council Chair Henry Lorenzen

He said last December, they had average temperatures, and still their loads were eight percent under forecast while commercial was ten percent under. “And that’s with growing customer counts,” Prairie said. “We’re a growing utility with shrinking loads. My ask to BPA with Focus 2028 is to come up with energy-efficiency targets that work for Bonneville. Preference customers aren’t having the load growth. Be flexible for utilities without load growth.”

Council Chair Henry Lorenzen remarked that he tended to be an idealist. “I’m also a member of a Co-op and am familiar with these discussions having represented Co-ops,” he said. “Co-ops should be trying to develop the best product for

lowest possible cost. Sometimes that’s a conflict with the pressures the utility itself faces. Customers should be shouting hooray for paying less. But you also have pressure to cover your overhead. It drives me crazy. One of my pet concerns is the disconnect between incentives for energy efficiency and the real pressures utilities face.”

Master plan for sturgeon-rearing facility approved

The Council voted to recommend that Bonneville move forward in developing a master plan for a rearing facility to enhance selected populations of white sturgeon in the Columbia River Basin. Dr. Paul Anders, principal scientist at Cramer Fish Sciences, said the further up the river you go, the more precarious sturgeon populations become. Sturgeon size used to be 150 pounds, and now they are averaging 35 pounds.

Last year, the Columbia River Inter-Tribal Fish Commission submitted a master plan to the Council to address the declining sturgeon populations. Its planning process identified the careful use of a proposed hatchery. Its goal is to enhance harvest opportunities in the impounded area of the mid-Columbia habitat capacity, ensure protection and conservation of the remaining natural sturgeon populations, and to use hatchery-produced sturgeon as an experimental tool for applied research on the needs of these natural populations.

The proposed primary sturgeon production facility would be built at the Marion Drain Fish Facility on the Yakama Reservation. Companion facilities also would be developed at the Walla Walla South Fork Hatchery and the Walla Walla Water Resource Center.

Idaho supplementation study reveals need for sustained effort

After a 26-year effort to study the impact supplementing spring/summer Chinook populations in Idaho with integrated brood stock, its scientists reported that the impact was short-lived once supplementation ceased.

The study began in 1989, studying the Clearwater River and Salmon River drainages, to determine if hatcheries could increase the number of wild fish without reducing their ability to live in the wild. And, could fish be added to a population without making it less resilient? Once the study got underway there was a spike in abundance, then it went down again, reflecting ocean conditions. It has gone up and down to the present day.

“When we supplemented, we boosted populations by a significant amount, but when we stopped, it went away,” explained Dr. Timothy Copeland, coordinator of the wild salmon and steelhead monitoring program for the Idaho Department of Fish and Game. “We can achieve some short-term benefits and the cost was fairly low. Supplementation is a valuable part of an integrated management strategy, but you need to consider all the factors that can impact the population.”

Council Member Tom Karier questioned whether supplementation would continue even though the impact wasn't enduring. Copeland replied that continuation was built into the *U.S. v. Oregon* agreement and that the study team has learned lessons that will be incorporated into efforts going forward.