



Northwest Power and Conservation Council

Meeting Notes
May 8 and 9, 2018
Boise, Idaho

In Boise, Council Members got a good news review of Idaho Power’s cutover to the Western Energy Imbalance Market last month. Currently the EIM has eight members, but more are slated to join and it promises to be a growing factor in the region’s energy landscape.

In addition, the Council approved the release for comment of staff’s report looking at underserved energy efficiency markets, which shows many markets aren’t underserved after all.

All Council Members were in attendance. The next Council meeting is in Portland, Oregon, on June 12 and 13, 2018.

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The Agenda

Prescott extols the virtues of the Western EIM

When Idaho Power cut over control of its hydro units to CAISO’s computers at midnight on April 4th it was similar to Y2K: a big non-event recalled John Prescott, a member of the governing board of the Energy Imbalance Market (EIM). The two-year planning process paid off and the system has been running smoothly with very few hiccups, he said. Prescott used the opportunity to clear up misconceptions about EIM “what it is, what it isn’t and what it might be next”.

Simply put, the Energy Imbalance Market is an energy only market that executes an optimization scheme every five minutes throughout the Western Interconnect using the CAISO supercomputer in Folsom, California. The EIM is voluntary – members can choose to leave without an exit fee.

The EIM is balanced and transparent. Each participant goes into the hour balanced and members can use their phones to look at 15-minute prices and congestion costs. If a utility encounters unexpected load changes, the EIM can dispatch the most economic unit to meet that increase, anywhere within the footprint of the EIM — be it Arizona, Washington or Idaho, Prescott said.

Prescott said the EIM is not a capacity market and doesn't solve the duck curve problem in the West. It is not a balancing market – it doesn't provide resources to meet load.

Overall, the EIM is a very small part of the market in the West and it represents a very small piece of the load. Currently there are eight entities in the EIM with four more joining in the next two years. Prescott said he read that Bonneville is looking at it and he stressed every entity has to do their own analysis and that those who have joined have had benefits that have exceeded their expectations with \$330,000,000 in net benefit savings, and an abundant of CO₂ emission savings to date by integrating variable energy resources into the system.

Council Chair Jim Yost asked about governance and the relationship of the EIM board with CAISO's governing board. Prescott explained a lot of thought was put into the governance structure and they are a truly independent body that does not report to CAISO. But they do get together to work through common issues. There's a misconception that participants are joining CAISO — they're not—they are joining the EIM and using CAISO computers, he said.

Prescott raised the question about the region looking at going beyond the within-hour market. He said it makes sense for the region and ratepayers to do a day-ahead market, but that would require a lot of changes. It's a more efficient way to run the power system.

A lengthy exchange took place between Cook and a number of Council Members. Overall, Council Members share Bonneville's interest in seeking opportunities to maximize revenue streams to get full value for their product – carbon free hydro – and recognize the unique challenges posed with the rapid expansion of renewables in California, including the transmission constraint on the Intertie. Cook acknowledged there were both challenges and opportunities ahead as Bonneville looks for solutions that make sense.

Underserved energy-efficiency markets report released for public comment

An analysis of the region's energy-efficiency programs shows that in many cases, utilities have improved participation among select demographic groups of customers. For example, utilities with low-income programs are doing better than expected, said Kevin Smit, NWPPCC senior energy efficiency analyst. Curiously, the highest income brackets participated at the lowest rates.

The Council approved the release of its staff report *Northwest Under-Served Energy Efficiency Markets Assessment* for a two-month public comment period ending July 6, 2018. The effort is an Action Plan item to ensure that all cost-effective, energy-efficiency measures are acquired. Energy efficiency is the largest resource in the Seventh Power Plan.

While the study found that the multifamily segment was consistently underserved, manufactured housing residents typically participated in energy-efficiency programs at higher rates than single family and multifamily housing residents. Also, a look at rural versus urban customers showed that participation rates were similar.

Finally, homeowners participated in programs at higher rates than renters (which is no surprise), and commercial customers were slightly underserved, according to the study.

The Council will get a report on the comments received at its July meeting.

Lake Roosevelt Forum lays out next steps in Columbia River Treaty process

A panel discussion on the future of the Columbia River Treaty was held in Spokane April 25, featuring U.S. State Department negotiator Jill Smail. About 125 people attended the public event. John Harrison, information officer, reported on the main takeaways:

1. It's the first time that Smail had convened the negotiating group in public to talk about the Treaty. The negotiating team consists of Smail and representatives of the Bonneville Power Administration, Bureau of Reclamation, Army Corps of Engineers and NOAA Fisheries.
2. Smail made it clear that this team will represent the December 2013 United States Entity Regional Recommendation and nothing else. There would be no reopening or renegotiating, that it's final and this is what they would be basing their recommendations upon.
3. There was strong public support for the inclusion of an ecosystem function in the treaty and there was support for the addition of tribal representation to the U.S. negotiating team. Smail made it clear they're not going to do that, Harrison said. In the late 1950s and early 1960s, the tribes were not consulted. This time in the regional recommendation, they were consulted. In the process beginning this summer, there will be updates for the public from the negotiating teams, including the tribes. While they won't share the fine points of the negotiations, they will provide updates on progress.

Snow and streamflow water supply forecasts an interesting year for Montana

When the Council met last spring in Boise, the runoff had locals scrambling as the Boise River had 8,000+ cubic feet per second (cfs) flowing through town, compared to 4,200 cfs this year. This year, it's Montana's turn for an interesting runoff, said Ron Abramovich, Natural Resource Conservation Service.

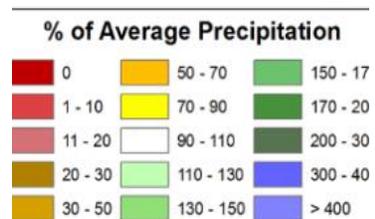
Last year was an amazing one for weather, he said. There were 45 atmospheric river events that made landfall on the West Coast in 2016-17. In the years following strong El Nino years, the pattern shows well above-average stream flows, which is exactly what's happening now, he said.

Looking at snowpack as of May 1, Abramovich said that spring precipitation can make or break the volume streamflow forecasts. Normal precipitation is assumed for forecasting future streamflow. And Southern Idaho is shaping up to have a higher runoff than normal, while other areas of Idaho are projected will remain drier than normal.

In Montana, the low valley snowpack has come down and there's plenty more on its way. Deep snowpack will continue to feed rivers and streams. He said that while primary flood impacts look to be in the Missoula area, long-duration high water is anticipated all the way downstream to the Idaho border. He said that rivers are going big in Idaho's northern basins and parts of Montana, primarily along the Continental Divide.

He concluded by saying that if you're a rafter, you'd better be careful until we see the peaks, and we'll have a long rafting season afterwards.

Total Precipitation Anomaly: April 2018 - 07 May 2018
Period ending 7 AM EST 07 May 2018
Base period: 1981-2010
(Map created 08 May 2018)



Council Briefs

New Council website to launch This coming week, a new Northwest Power and Conservation Council website will go live. After working with an outside contractor on the redesign, the new site will provide easy-to-use navigation and improved functionality.

Resource Adequacy Assessment update Council Member and Power Committee Chair Tim Baker reported on the Draft 2023 Resource Adequacy Assessment. The Council's loss of load probability standard is 5 percent. Looking out over five years, due to retirements, the region is creeping into the 7 percent range. Critical assumptions have to do with future load growth and imports from California. Utility plans identify about 800 MW in additional firm capacity, plus the Council has planned 400 MW of demand response. The report will come before the full Council in June.

Generation resource update In preparation for the next midterm assessment there was a report in the Power Committee on resource acquisition and retirements since adoption of the Seventh Power Plan. Member Baker said that energy efficiency and demand-side strategies are keeping load growth low and delaying the need for acquisitions. Factors driving renewable resources acquisitions are changes in the Oregon renewable portfolio standards and expiring federal tax credits. Uncertainty over environmental regulations and the future of carbon legislation is increasing the number of coal retirements, he said. Overall, he said, the staff observed that what we're seeing in resource planning and developments is very much in line with the Council's Seventh Power Plan.

Renewable generation costs are dropping Council staff reported that wind capital costs have dropped between 24 and 30 percent, while solar has fallen by 19 to 37 percent. Member Baker said that as the Council goes into the midterm assessment and the Eighth Power Plan, we'll want to factor in those decreasing costs.

New transportation forecasting module acquired Staff reported on demand forecasting in the transportation sector. A new transportation module was obtained to include into its long-term load forecasting. It looks at forecasts of sales, electricity demand and light-duty electric vehicles in the Northwest. Currently, demand for electricity in the transportation sector is relatively small. Over time, it could be an important electric load.

BPA able to satisfy loads Member Baker reported on BPA's resource program, which loosely, is BPA's integrated resource plan. Bonneville ran 400 futures, a least-cost portfolio analysis, and narrowed it down to a couple of portfolios. They reported that if they look at monthly market purchases for winter needs and focus on energy efficiency and demand response to meet summer needs, they can satisfy their loads into the future without acquiring new resources. It's worth reiterating that it's in our interest that BPA's resource decisions are in synch with the Council's Seventh Power Plan, Member Baker said.