



Northwest Power and Conservation Council

Meeting Notes
August 14 and 15, 2018
Portland, Oregon

At the Portland Council Meeting, representatives from the California Independent System Operator (CAISO) shared the success achieved by participants in its energy imbalance market (EIM). Low risk and financial reward promise continued growth as more utilities seek to take advantage of market opportunities. The Regional Technical Forum (RTF) announced the region surpassed its two-year conservation goals set in the Seventh Power Plan, but warned that reaching the Plan’s six-year milestones might be tougher to reach. Bonneville talked about the methodology behind its FY 2018 spill surcharge, and the Council adopted a report on underserved energy efficiency markets.

All Members were in attendance, except Tim Baker who joined by phone the first day. The next Council meeting is in Eugene, Oregon, on September 11 and 12, 2018.

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The Agenda

CAISO sets the table to grow EIM — will become its own Reliability Coordinator

The Western Energy Imbalance Market (EIM) has been successful for participating utilities with gross economic benefits totaling \$401.73M since EIM began operating in November 2014, revealed Stacey Crowley, Vice President, Regional and Federal Affairs for the California Independent System Operator (CAISO). In the second quarter of 2018 alone, the EIM achieved \$71.12M in benefits, the highest quarter since it began in 2014.

CAISO is one of nine independent grid operators in North America. CAISO’s western Energy Imbalance Market builds on existing bulk power-trading markets to find the lowest-cost energy, while managing congestion on transmission lines and integration of renewable resources. The EIM

represents about five percent of all transactions in normal market processes – with demand continuing to be served through the bilateral trading system, Crowley explained.

A voluntary market, the western EIM operates under its own governance structure, with a five-member body and delegated authority over rules specific to the EIM.

Utilities can opt in at low risk, and they can also withdraw from it, she said. With the addition of another five utilities in the next two years, access to the EIM will be expanded to more than two-thirds of the load in the West.

EIM provides an easily-scalable extension of real-time market to the broader region

- Builds on existing market: automated dispatch minimizes cost, facilitates renewables, resolves imbalance & avoids congestion
- Situational awareness enhances reliability
- Easily scalable, low-cost, low risk, no exit fees, voluntary option for new participants
- Preserves BAA autonomy, including compliance, balancing, and reserve obligations

Separate balancing authority areas

balancing authority

balancing authority

balancing authority

ISO

lowest cost energy

lowest cost energy

lowest cost energy

California ISO

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Participants are seeing significant benefits as a direct result of the EIM. If there's cloud cover over a solar panel or a maintenance issue, we can call upon real-time resources, Crowley said. The technology delivers the least-cost energy across transmission lines (with congestion in mind) to market participants.

John Anders, CAISO's Assistant General Counsel, said Bonneville has been a good partner in the effort, working with CAISO and member utilities to develop a Coordination Transmission Agreement to share information and address transmission constraints on the system.

Under discussion is a change to the day ahead market to enhance its services and to help address California's drastic afternoon energy ramps. CAISO's technical team is looking to move from a day-ahead, hourly block system to a day-ahead, 15-minute system. In addition, CAISO has a bill before the legislature, California Assembly Bill 813, to form a multistate regional transmission system organization.

CAISO to become its own reliability coordinator

John Anders told Council Members that they were disappointed to learn that Peak Reliability Services intended to offer market services in partnership with PJM, an announcement that resulted in CAISO beginning an evaluation in 2017 to become its own reliability coordinator. Since then, CAISO has issued a formal notice withdrawing from the funding agreement with Peak Reliability Services effective September 2019. Their objective is to stand-up services to provide reliability coordination to its balancing area, Anders said. And provide services to other interested Balancing Authorities. Concluding, he said Peak recently announced their intention to wind down its operations by the end of 2019.

Region exceeds two-year conservation milestone, but future goal could be tougher to reach

The region is on track for the first two years of the Council's *Seventh Power Plan's* conservation savings milestone, but there is some uncertainty over the ability to achieve the *Plan's* six-year goal, according to a report by the Council's Regional Technical Forum (RTF).

Each year, the RTF conducts the Regional Conservation Progress survey to chart the region's efforts to save energy. They tap utilities, Bonneville Power, NW Energy Efficiency Alliance and the Energy Trust of Oregon to get as complete a picture as possible. Savings are made up of utilities' program savings, savings attributed to market transformation, momentum savings and savings from codes and standards.

For this year's survey 136 entities reported their savings and expenditures, which tallied up 404 aMW of regional savings in 2016 and 2017, exceeding the 370 aMW goal. And utility-funded expenditures for conservation totaled \$512 million for 2017. Jennifer Light, RTF Chair and Manager, shared that much of the savings came from switching to more-efficient lighting. Noting there are some measures that continue to have significant cost-effective potential, such as HVAC and water heating, although they cost more to acquire.

Going forward, Light, has some concerns as she "raised a yellow card," cautioning that it is possible the region won't meet the *Seventh Plan's* six-year goal. She said that as the milestone grows, program budgets and savings are looking flat or declining. Achieving the region's six-year goal of 1,400 aMW will require significant savings outside of programs. And there remains large uncertainty, she added.

Bonneville appears to be falling behind in its share of the target from her perspective. BPA's budgets and projected savings for 2018-2019 are expected to be relatively flat. She did say, that BPA is confident in their estimates of market transformation and momentum savings to help the region meet the Council's target. In addition, adjustments from momentum savings – that can be up or down – plus what is yet to be estimated for savings from codes and standards as still unknown.

More good news is that efficiency continues to contribute significant capacity savings to the region, the energy savings over the last two years also reduces winter peak demand 865 MW and 499 MW in summer, Light highlighted.

And looking at what's been achieved historically, with the most recent survey results, the region has achieved more than 6,600 aMW of savings since 1978 and reduced carbon emission the equivalent of 35.6 million metric tons.



Bonneville records \$38.6 million in total costs for spill, resulting in \$10.2 million spill surcharge for FY2018

Bonneville Power Administration's Peter Cogswell, Acting Executive Vice President of Environment, Fish and Wildlife, appeared before the Council to discuss the calculations behind its fiscal year 2018 spill surcharge of \$10.2 million. The spill surcharge is a formula rate adjustment that approximates the additional cost that power customers would have been charged if BPA had known planned fish passage spill operations when setting final BP-18 rates.

Daniel Fisher, BPA's Power Rates Manager, explained rates are set based on an analysis of monthly forecast generation and market prices over 80 historical water conditions. BPA is forecasting it will spend \$20 million less than its rate case estimates on fish and wildlife in fiscal year 2018. He continued, the Administrator recognized the agency's cost-reduction measures could help offset the financial uncertainty the spill surcharge placed on customers. "We don't like our rates to move in the middle of a rate case," he added.

Formula Component	
Spill Cost	\$38.6 million
Cost Reduction*	<u>(\$15.5 million)</u>
	\$23.1 million
Non-Slice	<u>X .7726</u>
	\$17.8 million
Secondary Revenue	<u>(\$7.6 million)</u>
Spill Surcharge	\$10.2 million

*Represents a forecast reduction of \$20 million of F&W costs and the corresponding reduction in NW Power Act section 4(h)(1)(C) credits (22.3% credit on F&W costs).

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Member Anders said she's heard from electric co-ops in Montana who would say it's a fair process, but we were in a year where there was no cost to spill due to plenty of water in the system. "So, what happens with that \$10.2 million? Is it set aside for future years?", she asked.

Bryan Mercier, BPA's Executive Manager in the Fish and Wildlife Division, replied that rates are set on the averages based on the below-average water year they could have next year. In good year, reserves are likely

to be higher. They try to smooth it out, he said. The energy market is very volatile, whereas Bonneville's product is not.

Council adopts Underserved Energy Efficiency Markets Report

After receiving public comments, the Council adopted the *Underserved Energy Efficiency Markets Report*. Kevin Smit, Senior Energy Analyst, worked with the region for the past year and a half to develop the report — an item in the *Seventh Power Plan's Action Plan*. A working group looked at several possibilities listed in the Action Plan, performed research, and found that manufactured housing and the rental market stood out as key, underserved sectors. Of course, the results vary by utility. The next steps include monitoring and supporting utility efforts to revise program strategies and perform additional data analysis with a future update to the Council on utility efforts.

Member Jennifer Anders asked if the report addresses what the Action Plan called for. Smit replied that a lot of entities and members were involved in writing the report, but that some entities probably will not be satisfied. Still, he believes that what they got was better than expected. “We recommend that utilities take it from here,” Smit said. “We stepped in because it wasn’t happening on its own. Now utilities are moving with it.”

Council Briefs

Renewable expansion to exceed *Seventh Plan* forecast

The Power Committee heard a staff presentation on renewable portfolio standards (RPS) in the Northwest. Today, there are 9,000 MW of installed capacity in renewables in the Northwest. One-third of that is contracted to California. The *Seventh Plan* forecasted little renewables expansion over the next 20 years, about 250–400 MW. But things have changed and utilities and corporations are taking charge and are ordering renewables, explained Council Member Tom Karier. For example, PGE and PacifiCorp are putting out RFPs for up to 1,500 MW of renewables.

Price falls for renewables

An examination of resource acquisition trends and current utility requests for proposals reveal that some utilities are purchasing renewables because they’re cheaper than existing thermal generation. They are coming in at under \$20–\$25 per MWh, Member Karier reported. Constraints lie in how transmission is organized and owned, more than because of physical limitations, he said.

Council releases *Regional Savings Estimates* white paper for public comment

The Council released its white paper on the Development and Use of Regional Savings Estimates in the Northwest for a 60-day public comment period, ending on October 13, 2018. Energy-efficiency savings estimates developed by the Council and the RTF are used throughout the region for efficiency program planning, implementation and evaluation. Some stakeholders have expressed concerns about how these estimates are developed, and how the resulting estimates ultimately relate to the Council target. The white paper provides greater clarity on the methodology and rationale.

Council votes for a 90-day extension for recommendations to the Fish and Wildlife Program

Members voted to extend the deadline to submit recommendations to amend the Council's Columbia River Basin Fish and Wildlife program to December 13, 2018, in response to requests for additional time.