

PNWCCREPORT Council



Northwest Power and Conservation Council

Meeting Notes

**October 10 and 11, 2017
Columbia Falls, Montana**

The big news from the Montana meeting was that the region blew past the first-year energy-efficiency goal in Council’s *Seventh Northwest Power Plan*. Lighting improvements and other utility measures captured a total of 275 average megawatts in 2016, exceeding a goal of 185 average megawatts.

Pacific Northwest National Laboratory’s Marc Ledbetter discussed how solid-state lighting advances promise to do more than simply light a space: they’ll reduce energy use even further and provide a technological boost to commercial operations. In other news, the Council reviewed and approved the Regional Technical Forum’s 2018 work plan and budget, and, after a lively discussion, approved a list of recommendations to Bonneville for the continued implementation of its wildlife projects.

Members Jim Yost and Bill Bradbury, joined by phone. The next Council meeting will be in Coeur d’Alene, Idaho, on November 14 and 15, 2017.

In This Issue

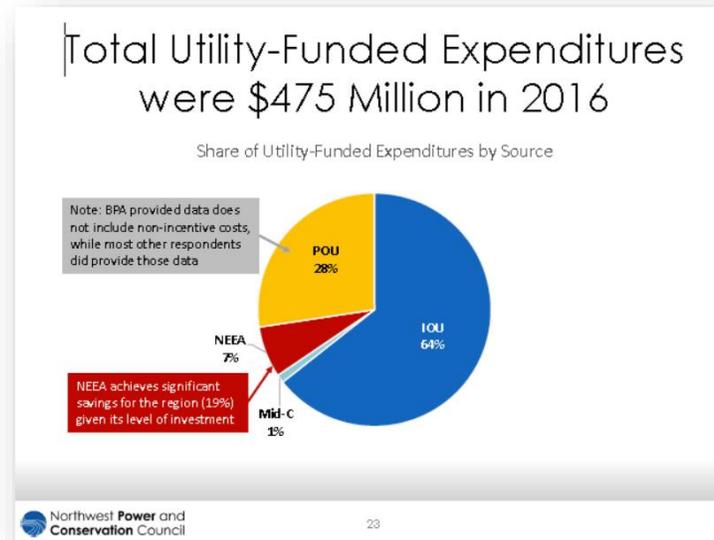
Efficient lighting helps region exceed first-year milestone in Seventh Plan.....	1
Ledbetter forecasts huge energy savings ahead	2
Demand Response and Storage Summit reveals planning challenges	3
Council votes to continue wildlife funding through 2023.....	3
Council Briefs.....	4

The Agenda

Efficient lighting helps region exceed first-year milestone in Seventh Plan

LEDs are lighting the way to greater energy-efficiency savings in the region according to Jennifer Light, Regional Technical Forum manager. Lighting and utility programs helped net a total of 275 average megawatts in savings this past year, which is the average power demand of 184,000 Northwest homes. Exceeding the goal of 185 average megawatts in first-year savings in the Council’s *Seventh Plan*.

The residential sector had significant savings Light said. And the majority, nearly 65%, is coming from more-efficient lighting. The look-back also found a big drop in energy use by electronics. NEEA stopped reporting on televisions, she added. “Residential savings from lighting is more than double what we’ve seen coming through programs in the past,” she said. “Programs are moving that market forward more quickly.” And it comes from the utilities and their specific program work Light added.



Utilities spent \$475 million on energy-efficiency in 2016. The breakdown found investor-owned utilities and the Energy Trust of Oregon accounting for 50 percent of the region’s energy savings. While publicly owned utilities accounted for 25 percent and the Northwest Energy Efficiency Alliance added another 19 percent.

Since 1978, the region has totaled 6,300 megawatts of energy savings, which is the equivalent of about two and a half Grand Coulee Dams or 26 combined cycle gas plants.

Ledbetter forecasts huge energy savings ahead

Advances in solid-state lighting provide new opportunities

The story of energy reduction due to the adoption of solid-state lighting has just started, said Marc Ledbetter, with the Pacific Northwest National Laboratory (PNNL). “There is lots of room for improving the efficacy of lighting,” he said. “It’s good – it’s gotten great — but it’s going to get a whole lot better.”

Solid-state lighting is now competitive across the board for almost every lighting application there is. Prices are down sharply and there’s room for prices to continue to drop, he said. And there’s only a 13 percent market penetration of LEDs in the U.S., so the ceiling for growth is high.

Ledbetter said that solid-state lighting is not just a replacement for existing lighting; it will add a wide range of important new functionality. Plus, the savings will be huge with the U.S. energy savings attributable to LED lighting reaching about 170 aGW by 2035.

PNNL is working to improve solid-state lighting technology in terms of circadian effects, horticulture applications and connected lighting. In terms of connected lighting, Ledbetter said that because solid-state lighting is an electronic product, it’s much easier to collect usage data than from previous generations of lighting products.

PNNL is very interested in the capability of lighting products to collect and self-report energy use data. “We think it can open up new business models for how lighting products are sold and make it easier to understand whether energy projects are achieving their predicted energy savings,” Ledbetter said.

Demand Response and Storage Summit reveals planning challenges

On September 27 and 28, Smart Grid Northwest hosted a Northwest Demand Response and Energy Storage Summit. Council staff members John Ollis and Mike Starrett attended and shared some of the takeaways.

Ollis discussed the efforts utilities are making to integrate demand response into their integrated resource plans (IRP). For example, Puget Sound Energy was on a panel and described the challenges of moving from the planning stage to requesting proposals to acquire the resource. It put a spotlight on describing the product that is needed, something they will be working on in the future he said. Idaho Power discussed its successes implementing a simplified version of demand response.

Starrett spoke about the Washington Utilities and Transportation Commissions’ interest in having utilities include storage in their IRPs. He added that utilities face an inherent risk and fear in spending money on a project with a long timeline, when so many things could change. Asking, what if they find themselves down the road – on the hook with no recovery?

Member Karier attended the conference and said that the commission staff is looking to the Council to calculate the cost of storage. We’re looked to as an objective, technical expert he said.

Council votes to continue wildlife funding through 2023

Meeting management objectives a priority for Council and Bonneville

The Council endorsed the Fish and Wildlife Committee’s recommendation to fund 29 Bonneville Power funded wildlife projects through 2023 following the 2017 program review. Annual funding for FY 2018 is set at \$12.2 million.

The Council’s Lynn Palensky and Mark Fritsch, provided an overview of the projects and recommendation. Palensky said there is agreement that program sponsors should have measureable, task-based or biologically based objectives articulated within their management plans in order to measure progress in meeting management objectives. “This will be addressed,” she said.

After listening to the description of the programs, Karier remarked, I think about wildlife differently. He continued, the *Power Act* asks us to protect, enhance and mitigate for the effects on fish and wildlife from the power system. I don’t see this doing that. Our managers are good or better than anywhere.

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Member Tom Karier

“I see this as inserting ourselves in the process of managing these lands that we empowered managers to take care of into perpetuity.” Karier added, “Our obligation is the mitigation of effects of the hydrosystem – that phase has been very successful and is largely coming to an end.”

Member Jennifer Anders said they discussed these issues in the Fish and Wildlife Committee and made recommendations that will address many of these issues head-on in the amendment process. Member Guy Norman said there is value bringing the wildlife managers together. And Member Bill Booth agreed with both, adding it is good to have a review every six years.

The motion passed with one abstention from Member Karier.

Council Briefs

Council approves Regional Technical Forum funding

The Council approved the Regional Technical Forum’s 2018 work plan, business plan and budget for \$1.83 million. The RTF is a technical advisory committee to the Council that develops standards to verify and evaluate energy efficiency savings. Jennifer Light said the big themes for 2018 are continued measure development, addressing the capacity benefits of energy efficiency, and supporting the Council analysis for the development of the *Eighth Power Plan* — especially around commercial models and industrial applications.

PURPA contracts driving solar in Idaho

With nearly 330 MW of utility-scale solar in the system, most of it in Idaho, discussion in the Power Committee centered PURPA rules and how they drive solar development in the region. Rules are being addressed with a move from longer-term to shorter-term contracts.

Low gas prices forecasted

Member Karier, chair of the Power Committee, said a Council staff forecast on natural gas shows gas prices are expected to be low and stable. Continuing the trend of lower pricing than the previous one.

Conservation benefits white paper in development

Council staff is working on a white paper that will provide a detailed look at conservation’s benefits in the past and its role going forward. It will examine the effects of conservation on all types of utilities in an environment of low gas prices and low load growth.