Northwest Power and Conservation Council Minutes of November 18, 2020 Council Meeting

Council Chair Richard Devlin brought the meeting to order at 8:33 a.m. Council Members Jeffery Allen, Jennifer Anders, Bo Downen, Ted Ferrioli, Guy Norman, Patrick Oshie and Jim Yost joined by phone. The meeting was held as a webinar. The next Council Meeting is scheduled for December 15 and 16, 2020.

Reports from Fish and Wildlife, Power and Public Affairs Committee chairs

Fish and Wildlife Committee

Council Member Guy Norman, Fish and Wildlife Committee chair, reported on four agenda items:

- The Committee discussed next steps for implementing Part I on Program Performance of the 2020 Addendum to the 2014 Fish and Wildlife Program. Staff laid out an example framework for collecting information and reporting on strategy performance indicators. The key is data availability to monitor the strategies and gauge progress on the program's objectives. Staff discussed as an example population objectives and associated strategy performance indicators incorporated from the Marine Fisheries Advisory Committee (MAFAC) process.
- 2. Bill Bosch of the Yakama Nation reported on the revised master plan for Yakima subbasin summer and fall Chinook, coho and steelhead production. The plan includes construction and upgrades for hatchery facilities fish passage and is part of a comprehensive restoration strategy that includes flow improvements, habitat restoration, and monitoring and evaluation. Production planning first began in 1994. The Yakama Nation updated the master plan in 2019. The Independent Scientific Review Panel reviewed the master plan last September and reported that it meets all the criteria. Capital costs to implement the revised plan total \$41.5 million. Of that, \$4.5 million is dedicated to the U.S. Army Corps of Engineers for John Day fall Chinook harvest mitigation. The committee recommended approval of the revised master plan, which will move the full Council next month.
- 3. Raymond Davis, U.S. Forest Service; Bernadette Graham-Hudson, Oregon Department of Fish and Wildlife; and Kurt Merg, Washington Department of Fish and Wildlife presented information about the 2020 wildfire season, particularly about the fires in Oregon and Washington in September that affected fish and wildlife resources and program-funded projects. Davis began by providing an overview of the fires and said climate change is starting to change the dynamic, resulting in wildfires becoming even more common. In Oregon, 750,000 acres burned. Graham-

Hudson reported eight hatcheries were evacuated and four were severely damaged. Juvenile salmon and trout were lost at these facilities, but some broodstock was saved. Merg reported on 14 fires in Eastern Washington, with the largest three near wildlife areas, burning 90,000 acres and destroying 70,000 miles of border fencing. The land needs to be reseeded and restored to prevent weeds from taking over and impacting sage grouse habitat. The cost is estimated to be \$10 million.

4. Idaho Fish and Game and Friends of Teton River presented a positive report on the status of Yellowstone cutthroat trout. Thanks to fish management, habitat restoration and the Council's water transaction program, the trout's abundance has tripled over the past 10 years.

Power Committee

Council Member Pat Oshie, Power Committee chair, reported a positive outcome on the Council staff's efforts to develop a wholesale electricity price forecast to incorporate into the resource portfolio model. Developing the price forecast requires making assumptions about resource development and dispatch WECC-wide, and the issue has been balancing the system consistent with state clean energy policies, which narrows generation options for power planners. John Ollis, planning and analysis manager, has been leading the effort. The latest model run shows a large buildout forecast of 400–440 GW, made up of wind, solar, solar battery and natural gas. The build out also included some offshore wind, batteries without solar and some pump storage. It's a diverse resource portfolio.

The buildout is remarkable given the size going forward, Member Oshie said. A smaller buildout may be more likely in actuality, and it will be dependent upon available alternative resources and policy compliance. There are concerns over the size of the buildout through 2025, given the short time frame involved, as different utilities and their regulators would have to gear up for a more diverse system and very high capital costs. There is a need to continue scoping the size of the system. The results were presented to the System Analysis Advisory Committee (SAAC), which is made up of modeling and operations professionals. They recommend Council coordinate more with other planning agencies in the WECC, which staff has been doing to ensure it is not off the mark in high-need areas.

The resource build is designed to come up with a wholesale electricity forecast. Member Oshie said the region can expect higher prices in the early years of the plan because of new resource capital costs, with lower prices to follow. Unless regulators change the depreciation stream, these high capital costs will be recovered through rates. Seasonally, the region should experience lower prices in the late winter to early spring with the runoff of the hydro system. Summer price spikes due to full-on solar. In the end, the committee determined that the forecast is reasonable and will be used as inputs into the Regional Portfolio Model (RPM). The committee is meeting again December 3, and will review Genesys results.

Staff still hopes to get the draft 2021 Power Plan out in the spring or early summer 2021.

Public Affairs

Council Member Jeffrey Allen, Public Affairs Committee chair, said there was no meeting, but he reported on three items:

- 1. The committee sent out a letter to NOAA supporting Dr. Michelle Wargo Rub's research work in the estuary.
- 2. States and tribes are highlighting the importance of hatcheries. The Council's online story map is seen as an effective tool for conveying that importance.
- 3. There is a massive effort to find federal funding for the pressing O&M needs of hatcheries. BPA funds a small portion of it, so they are lobbying Congress to help fund that work. Senate called for some additional funding. The committee will track to see if it gets similar support in the House. It already has support among the Northwest delegation.

Member Ferrioli mentioned that November is American Indian Heritage Month. It was first adopted as a single day in 1915, and in 1990, President George W. Bush made it a month.

1. Annual update from Northwest Energy Efficiency Alliance (NEEA).

The Northwest Energy Efficiency Alliance (NEEA) was created in 1996 to drive market adoption of energy-efficiency products, services and practices. NEEA helps Bonneville and regional electric and natural gas utilities band together to produce results.

Tina Jayaweera, power planning resources manager, introduced Susan Stratton, NEEA executive director.

Stratton reviewed the history of NEEA and its close relationship with the Council. She said NEEA was created from the Council and its Power Plan provides the roadmap for NEEA's goal setting. NEEA and the Council also serve a similar geographic footprint. Stratton introduced NEEA staff member Jeff Harris.

Stratton reviewed NEEA's Cycle 5 (2015-19) results. Working with electric and natural gas utilities, NEEA saved 219 aMW, exceeding its goal of 150 aMW. Much of this was achieved

with the adoption of standards and there was an expansion of strategic energy management for industrial and commercial facilities across the region. Other contributors included the sale of more than 80,000 ductless heat pumps and there's been an increase of 50% in LED lighting in the commercial market. There has been a 30% increase in average heat pump water heater efficiency.

Also notable is that NEEA added natural gas savings into its portfolio in 2019.

Stratton listed NEEA's accomplishments:

- Added more than 500 aMW of savings potential into the emerging technology pipeline
- Increased product specifications and availability
- Grew access to data through distributor platforms
- Fielded a Commercial Building Stock Assessment and launched the first End Use Load Research project in 30 years (which provides information about load shapes)
- Prepared the market for the first, commercialized, gas heat pump water heater (HPWH) product

Stratton said due to COVID, it is using online training and it still hopes to repeat its residential stock assessment and do a multifamily stock assessment.

Looking at opportunities, NEEA has a strong foundation and good relationships in the supply chain. The Alliance doesn't deal with end-use customers, but with midmarket customers. Stratton said it's a good time to work on emerging technology and they are looking at about 40 items. There's been an increase in federal standard activity and NEEA hopes to be involved in many of the discussions. Nationally, there's an interest in market transformation to model our accomplishments in the Northwest, Stratton said, and they're currently helping in the Midwest.

The risks are COVID, and a misalignment of national standards and NW standards.

NEEA's electric portfolio has three different buckets: products, integrated systems and new construction. Among products, the largest savings potential is in HPWH with 37% of the total expected savings. The retail product portfolio is next with 27%. Stratton said they'll be finished working on HPWH when federal standards require them.

In emerging technology, NEEA is looking at HVAC and water heating, and they see significant savings potential in controls such as lighting that changes when the environment changes.

Jeff Harris said NEEA is excited about the continued evolution of heat pumps into smaller packages — even to the extent that each room could have its own heat pump. But he

mentioned that hybrid technologies, such as heat pumps will always be challenged to perform at very cold temperatures.

Stratton showed a list of the 2021 products NEEA is working on.

In 2021, the NEEA's focus areas are to:

- Build awareness and increase adoption of HPWHs across the region
- Increase the influence on the Energy Star retail product portfolio (ESRPP) collaborative
- Incorporate online sales data into consumer product strategies
- Increase regional opportunity in the XMP market through fans research

For water heating products, NEEA intends to:

- Build consumer awareness
- Increase engagement at retail
- Identify product champions around the region
- Align with EPA ENERGY STAR
- Build a national coalition
- Develop a plan to address multifamily and commercial sectors

For integrated systems, Stratton said there is a lot of interesting research taking place in lighting controls, variable capacity heat pumps and building envelopes. She listed details for each category.

For new construction and codes and standards, NEEA will work to increase the adoption of above-code measures, influence code change opportunities and move towards zero energy ready performance by 2030.

Stratton said NEEA has worked to get voluntary compliance with advanced codes. She hoped to have a new manufactured homes code adopted years ago. We need more efficient manufactured homes and it seems like a crime we haven't updated that code in many years, she said.

She added that NEEA will support Oregon and Washington code adoption in 2021, participating in more than 30 product rule makings.

NEEA's residential building stock assessment will be finished in 2022, and published in 2023.

A \$12 million end-use load research study will be funded by some of the utilities in the region and also co-funded by the U. S. Department of Energy. It includes a Home Energy Metering Study (HEMS) where circuit metering equipment is installed in 165 homes. The

Commercial Energy Metering Study (CEMS) calls for the installation of circuit metering equipment in 47 buildings for continued data collection and analysis. It will include research on how consumers use energy differently before, during and after COVID.

Member Downen asked about NEEA's view on equity, diversity and inclusion. Stratton said this year they have focused on hiring and vendors. A bigger issue is the consumers of energy efficiency. She said because NEEA doesn't serve customers directly, they need to coordinate with utility partners to see if this is being addressed. Their focus is on rural/urban, income and race/language. In 2021, they will look at how they can better support their goals.

Harris discussed the distribution of efficient products. He said entry-level products tend to be some of the least-efficient products for sale. One way to get a price to drop for more efficiency products is through standards. Once that passes, economies of scale drop the price for that efficiency.

Member Oshie asked, when implementing Cycle 6, what are the challenges to overcome? How can the Council help?

Stratton said there are challenges in integrated systems. It's not easy to assess the efficiency footprint to look at the whole home rather than an individual product. It's more complex and more expensive. It requires working with builders and installers to understand the complexity so they can sell it to the buyer.

Harris said talking about systems is harder. The focus has been on individual things. We have to engage more elements of the market, he said. The region has a tremendous track record in delivering efficiency and, working together, we can do amazing things.

Stratton said NEEA has close ties with utility partners to help them make their programs more successful. It's a very collaborative environment in this region.

Devlin said, regarding heat pumps, when a product is expanding, often the price will come down. The exception is when a product is constantly evolving.

Harris said ductless heat pumps themselves have remained relatively stable, but the performance has been increasing. The contracting world is difficult to drive toward reduced prices and the pricing isn't very transparent. The total installed cost has been going up and they don't quite know how to get that reduced.

2. Presentation on the BPA Comfort Ready Home Program

BPA's Jess Kincaid briefed Council members on the agency's new Comfort Ready Home program. She said they began by looking at which energy efficiency and technologies would provide the highest value to BPA's system and its ratepayers. The found it was different than what they had been doing in the residential sector for the past five years.

In building the new program, BPA's first challenge was that the time required for paperwork exceeds the value of the incentives. The solution was to align payments with the value to the BPA system and to simplify reporting.

The second challenge is there are opportunities for energy efficiency that BPA doesn't have measures for. The solution was to prioritize weatherization, HVAC and water heating measure creation.

The third challenge is the remaining weatherization potential among late adopters or "laggards" who often don't know they need weatherization. The solution is the new Comfort Ready Home Program.

Member Devlin asked if the agency would come up with a better term than "laggard." Yes, Kincaid replied, they are keenly aware better terminology needs to be used.

BPA determined the following needs for the program:

- Expand utility and contractor capacity to do the work.
- Increase number of insulation contractors where there aren't enough to do the work.
- Increase training infrastructure for contractors.
- Provide targeted marketing materials.
- Develop materials to support contractors in the field.
- Provide energy education support.
- Help homeowners with buying decisions.

Member Downen asked who at BPA would be the conduit to the utility and the homeowner? For example, how would a Missoula Electric customer participate?

Kincaid said end-use consumers can access a website where the marketing team will refer to a third-party vendor. They can access installation, incentive and cost information.

There are three program objectives:

- 1. Increase the uptake of measures in BPA's program service area.
- 2. Improve the quality of installations to improve cost effectiveness.
- 3. Ensure that the quality of measures installed, reported and invoiced by contractors makes their customers' work as easy as possible.

Kincaid said the multifamily segment has the great potential and is the least served; therefore, that will be a priority. Also, the lower the income, the higher the potential. She said they found that within BPA's service territory, income is slightly inversely proportional to participation. Language is a great barrier to installation. So there will be a focus on Spanish-speaking customers.

Kincaid said getting contractors to do weatherization work is difficult — it's hard, often dirty and has smaller profit margins. She provided an overview of program support mechanisms and tools and reviewed a menu of services. There is a website and people on the ground building relationships with contractors and other resources.

The program will launch December 18.

Member Ferrioli commented that multifamily housing is a tough segment to crack. He said multifamily housing owners are either corporations or individuals. Individuals are ineligible to apply for programs and owners don't derive savings from the energy efficiency. How do you connect the dots?

We have theories, but don't know, Kinkaid said. It's about building relationships between tenants and landlords. Also it's going to require money to cover half to two thirds of the cost of those installed insulation measures. Covering most of the cost through incentives and tax credits will help build the market. With high competition for housing, there's little incentive to upgrade. So we'll try to build the business case.

Member Devlin asked how does BPA weigh putting dollars into one program versus spending it elsewhere? Do we include month-to-month leased multifamily with longer-term condos?

Kinkaid replied they have a complicated analysis where payments don't exceed the value derived.

3. Update on Washington's Clean Energy Transformation Act (CETA) Rule Making Process

Elizabeth Osborne, senior energy policy analyst, introduced Washington Department of Commerce's Sarah Vorpahl, energy policy specialist, and Austin Scharff, energy rules and legislative coordinator.

Vorpahl and Scharff updated the Council on the progress made to develop rules for implementing the Clean Energy Transformation Act (CETA), which was adopted in 2019 by the Washington

legislature. CETA requires utilities in the state to eliminate coal-fired electricity by 2025, achieve net-zero greenhouse gas emissions by 2030, and supply Washington customers with electricity from 100 percent clean or non-emitting resources by 2045.

Scharff said CETA's principles are to deliver energy that is clean, affordable, reliable and equitable. He listed the multiple state agencies involved in rulemaking. Washington Utilities and Transportation Commission (WUTC) is overseeing rules for investor-owned utilities, Commerce for consumer-owned utilities, Ecology for energy transformation projects and GHG emissions protocols, and Health for the cumulative impact analysis on health due to climate change and fossil fuels.

They have conducted 24 workshops and Commerce is holding a public hearing on December 2 on the proposed rules. WUTC is holding a public hearing on December 9. Vorpahl said CETA is complex and wide-reaching. The WUTC has the authority to write rules and implement them. The state auditor's office is in charge of compliance and the attorney general is in charge of enforcement.

CETA is really a planning bill, she said. It's about rethinking how the state does long-term planning around electricity. A big change is the review planning mechanism called the Clean Energy Implementation Plan, which is basically an extension of an integrated resource plan.

It's a new, long-term planning document looking at four-year implementation periods. The rules identify different targets for renewable energy, energy efficiency and demand response. There are rules about how utilities report specific actions with respect to an equity provision.

She said there was a need to look at public participation. They also considered small utility participation.

A compliance report has to be written looking back four years. The first compliance report is due at the end of 2022.

Equity is a new part of electricity in Washington, Vorpahl said. A provision says that "utilities must ensure that all customers are benefitting from the transition to clean energy through the equitable distribution of benefits and reduction of burden." They will develop indicators of vulnerable populations, and community action programs in the state can be consulted to help identify these populations. They are working closely with WUTC to further define this area.

By 2030, 80% of generation has to come from clean resources. There was a discussion on interpreting the provision. It's a foundational question and discussions will continue.

All utilities must have a resource adequacy standard by 2022. It must include:

- Measures of adequacy
- Methods of measurement
- Measures of resource contribution to resource adequacy.

Smaller utilities don't need as much detail.

Scharff said there is a no-coal requirement after 2025, although short-term purchases are permitted.

They discussed the cost methodology to meet the standards. Scharff said CETA provides a stopgap measure so it doesn't become too burdensome for utilities. It establishes a cost threshold for each utility, set at 2% of the utilities' retail revenue requirement. In addition, it includes GHG emission costs in resource evaluation and acquisition; and an assessment and measurement of energy efficiency and demand response.

REC retirements are required for all renewable energy claims and Washington has adopted Oregon's approach to thermal renewable energy credits.

Future work under CETA:

- Mandates that all electric utilities have programs for low-income households. They need to know how large that population is and need to make progress on serving that population.
- Carbon and electricity markets workgroup.
- Transmission corridors workgroup.
- Accounting for energy storage.
- Incorporating environmental impacts in resource plans.
- Clean energy transformation projects.
- Electric resource adequacy meeting and 2024 report.

Member Oshie asked the panel to characterize the themes they're seeing in comments from utilities affected by the rulemaking.

Scharff said they've been pleased with the comments. They took a number of rulemaking issues off the table and postponed them because they wanted to wait for the markets work group. Equity is a new aspect to the rules and they're a little nervous about that, which is why they came up with the guidance document.

Vorpahl said there has been a lot of back and forth between utilities, community action groups and advocates. Commerce is trying to put it all into some useful rules.

There have been a lot of questions about storage. People want us to make sure it's explicitly dealt with.

Vorpahl reiterated that they have done 24 workshops, not including individual meetings. I think these rules represent middle ground on how to implement CETA's provisions, she said.

Member Ferrioli said he's interested in the results. Any time Oregon's legislature tried to introduce an equity formula, there were unintended consequences. Some utilities have almost all their customers qualifying for assistance in rural areas. How do you set your parameters for distressed communities?

Vorpahl said their work on low-income energy efficiency programs came out of Oregon. They're having utilities do an analysis of their most vulnerable, and incorporate equity in long-term planning at the beginning. Snohomish PUD did a good job in their service area. We are producing the state energy strategy, where there's an opportunity to do a statewide assessment of where the greatest needs are, she said. It takes a lot of intentional work.

Member Devlin said Oregon has considered similar laws and probably will take this up in the next session. Advocates are starting to use the term "100% clean." Some think Washington's 2045 standards are 100% clean. Some resources, such as biomass, renewable natural gas and renewable hydrogen might be carbon neutral, but they're not carbon free. Are there any changes to that in current law?

Scharff said it's hidden in the 100% clean standard and it will be the objective of the legislature going forward to make those resources more clean or pull them off the grid. Vorpahl said hydro and nuclear are a part of CETA.

Member Devlin remarked that Washington has the most consumer-owned utilities and a lot of hydro is utilized. Also, when costs exceed a certain level, there could be delays for certain utilities in meeting these deadlines.

Council Business

Minutes of October 2020 Council Meeting

Vice-Chair Downen moved that the Council approve for the signature of the Vice-Chair the minutes of the October 14, 2020, Council Meeting held in Portland, Oregon via webinar, as presented by staff. Member Ferrioli second. Motion passes.

Public comment

Scott Levy, Bluefish.org, commented to the Council on the recent federal Columbia River System Operations Environmental Impact Statement (EIS), with a particular focus on an information in the appendices that in his perspective indicates lower Snake River dam removal can be implemented in a sound economical manner. He wants the Council to talk about the EIS.

Chair Devlin wished everyone a happy and healthy Thanksgiving. He adjourned the meeting at 11:29 a.m.