

**Northwest Power and Conservation Council  
Demand Response Advisory Committee  
November 3, 2023**

Dylan D'Souza, NWPCC, began the meeting at 9:30 by reviewing the agenda and calling for introductions.

Jennifer Light, NWPCC, took a moment to acknowledge [the recent passing of Dr. Tina Jayaweera, NWPCC](#). She spoke about Tina's professional accomplishments, generous nature, and pioneering, detail-driven work at the Council. Others in the room and online added more, speaking warmly of her kindness, eagerness to share and collaborate, and her deep caring for her family, her work, and the community.

**Plan for the Council's Mid-Term Assessment  
Jennifer Light, NWPCC**

Peter Schaffer, PacifiCorp, was curious about the Council's energy price threshold as he thinks it's more of a capacity product [Slide 8]. He was concerned that just looking at a pure cost per unit of energy would not capture the full value. Light said the next Plan's modeling will try to work on the locational value of these resources. She admitted that, that approach doesn't necessarily hit the capacity piece, but it does address some benefits of behind the meter things that they have not been able to fully quantify.

Fred Heutte, NW Energy Coalition, appreciated the look at the timeline noting that 2026 is approaching quickly and there are new modeling tools coming online as well. He felt the theme for the Ninth Plan should be: DEMAND, saying it's why everyone is concerned with transmission right now. Heutte said this is because of so many large industrial/commercial entities needing 8760 hours of demand.

Heutte then said that high demand, climate-driven events drive demand well above model projections. He said these events surge demand up 15% higher than the predicted maximum. Heutte said this puts a different perspective on EE and DR and should make us rethink economics and development pathway for both in new and unforeseen ways.

Jennifer Finnigan, Seattle City Light, appreciated Heutte's comments, writing: To what extent will the midterm assessment reflect electrification's impacts on load forecasts? I ask this because Seattle City Light's IRP saw little/no need for DR two to three years ago but including electrification in our forecasts showed bigger needs for DR (and EE) in our potential assessments and IRP analysis, in the question pane. Light said the Council is trying to land an updated, long-term load forecast. She said the Plan already included EVs and that number will be re-assessed but it did not include building electrification in the baseline scenarios. Light said this look will try to capture that information if there is data. Light stressed that the mid-term assessment will not run that load forecast with other assumptions but will take the learnings forward to the next Plan.

## **Share-Out on DR Programs/Plans**

### **PGE**

Heutte spoke about PGE's work, saying they are doing a lot. He touched on the revised flexible load plan, saying it deals with everything DR touches including planning, grid operations, customer engagement, rate recovery, and commission relations. Heutte said managing this program is complicated and PGE is choosing a multilayered, integrated approach that includes the Smart Grid. He said they have lofty goals and met with some headwinds as they try to create a virtual power plant.

Angela Long, Rockcross Consulting, added that PGE's DR is mostly focused on optimizing the virtual power plant so it can be available when there are constraints. She reported that their total portfolio is 200MW mostly from smart thermostat programs.

### **PacifiCorp**

Schaffer reported that PacifiCorp is doing a lot, starting with an RFP in 2021 which identified cost effective resources. He said they have secured third parties to implement DR and now have irrigation load control and an industrial curtailment program in OR and WA. Schaffer said they have approval for a bring-your-own thermostat program and residential water heater load control program, expecting them to launch in Q4.

Schaffer admitted that it feels challenging from a planning perspective as it's hard to always know enrollment numbers, how many MW they have, and how many to reject. He said it's a particular challenge if the Power Council's ramp rate assumption is different than the utility's.

Schaffer pointed to the recent filing of their Clean Energy Implementation Plan Progress Report in WA that plans to look at managed EV charging and residential/small commercial battery programs.

Finally, Schaffer agreed with Heutte's comment about the complexity of putting these programs together. He said they did call events over the past year but found them more complex than passive DERs. Schaffer referenced the steep learning curve that permeates the organization, noting that once you have a resource it may not be easy to dispatch in year one. He stressed that the model may not understand this nuance.

Long noted Schaffer's comment about the importance of ramp up time, asking if PacifiCorp has their DR programs start in year two or three of the IRP. Schaffer answered that their IRP allows them to expand existing programs in the first year, but new programs are not available until year two.

### **BPA**

Dave Moody, BPA, said they are close to making external outreach for a mid-voltage reduction pilot program. He noted that BPA is not heavily engaged in commercial DER as they don't need capacity in the short run but did report that they plan to go a bit more operational than before.

Light asked about the timing for that. Moody answered that internal briefings will happen in the next month or so, and a full, formal briefing to the Council could take place early next year.

Frank Brown, BPA, stated that Bonneville is very different than the rest of the region as they are not short on capacity and have no coal plants. He said they are always assessing capacity needs and don't see a pressing need, but acknowledged that there is some unpredictability around fish litigation, the Canadian treaty, etc.

Brown said BPA may be capacity long, but they are energy short, and that's the kind of DR that was talked about in the 2021 Plan. He called this discovery eye-opening particularly as their own plan found the same thing. Brown said this inspired BPA to develop the framework of a daily-use voltage reduction program that will be treated like an EE measure.

#### **Clark PUD**

Zeecha Van Hoose, Clark PUD, reported that a third-party, managed EV pilot will be rolled out in the coming year. She said she is also working with a specific industrial customer on load shifting. Van Hoose said there is budget in 2024 to run those programs adding that the WRAP program and a deeper look at adequacy in their IRP are also in play.

#### **Snohomish PUD**

Suzanne Frew, Snohomish PUD, said for the short-term, customer-side AMI and TOU rates are being rolled out by 2025. She said the TOU rates will roll out as each meter is installed and not at completion. Frew said the system side is focused on peak reduction with the use of utility-scale battery storage. She said they were also just awarded a \$30 million grant from DOE for smart grid work that will have some DR.

#### **Seattle City Light**

Finnigan reported that now have a BYO thermostat, direct load control pilot running and there are plans for a TOU rate program in 2025. She said there is interest and some research on managed charging but 2026 is the earliest that would come online.

#### **Puget Sound Energy**

Wesley Franks, WA UTC, reported on work he's done with PSE. He said their ambitious plan include reaching 5MW of capacity this year, 40 MW next year, and 86MW the year after that. Franks said these plans included automated, behavioral, and commercial DR programs. He noted they also have DR pilots to look at non-wire alternatives.

#### **Idaho Power**

Quentin Nesbitt, Idaho Power, sent a small share out via email said that Idaho Power's DR moved to later in the day, from 6-10pm, which is proving challenging. He said their current capacity is 280MW on irrigation programs, 25MW on residential AC, and 40MW on commercial/industrial. Light added that irrigation is their biggest piece and it's hard to get people to go out and physically change the systems later in the day.

## **Avista**

D'Souza read that Avista has a 30MW bilateral agreement with industrial customers that they call on 26 times a year in four-hour blocks. For their planned DR they are looking at WA State TOU and peak rebate pilot in June for residential and small business. They also have a NEEA-funded, end-use load flexibility project that will address grid enabled water heaters and line-voltage thermostats starting in 2024.

## **Comments**

Long pointed to community-based renewable energy projects in OR that IOUs must do. She said this approach pairs well with DR and wondered if anyone in WA is doing that. Jennifer Snyder, WA UTC, was unaware of anything that specific, but reported that the IOUs are implementing clean energy plans and looking at different facets of equity. Snyder expected some strong, community-based programs to come of that.

Light thanked the group and asked them to fill out the data request if they already haven't. Heutte added that Tacoma Power probably has some pilots and suggested reaching out.

## **BREAK**

### **Going Beyond DR: Where DER Fit**

Heutte lamented the use of the term DER [Slide 11] as the definitions are fluid. He asked that the Council be very specific when using this term, noting that there are many products under that label. He said the NW Energy Coalition landed on the term "customer-side resources" as the name points to customers as active participants.

Heutte continued, saying it's important to aggregate all of these things for analysis and show that these are not just little odds and ends at the edge of the system but increasingly important for managing grid reliability.

Light said this speaks to what the Council's Advisory Committees should look like to best capture the right information. She asked what people are looking at on the demand side.

Ted Light, Lighthouse Energy, reported that his work for clients includes resource modeling of energy efficiency and a suite of DR products that looks similar to 2021 Plan recommendations. He said one client asked for behind-the-meter storage work which fit well with other DR modeling he was doing. T. Light concluded by saying he liked the DER definition.

Finnigan said part of their potential assessment work included EE/DR with some behind the meter storage, which was not selected, as cost effective. She said this is the first time they included customer solar adding that all of these inputs will be used for the next IRP. J. Light confirmed that customer solar could be selected. Finnigan answered yes.

Brown said the BPA goes round and round on these terms as well, with so many definitions that it gets quite muddy. He added that they are working on energy saving products and repurposing them into something useful for Bonneville, but their titles would make you think they are DR products.

Brown then said he has observed some large utilities reorganizing staffs and programs into peak load reduction sections and energy management sections. He thought there could be function related groups like a Demand Advisory Committee that encompassed DR and DERs and a CRAC that examined energy savings with TOU rates, EE, and voltage reduction. He concluded that there is no clean way to slice and dice these concepts.

### **Roundtable Discussion [Slide 12]**

Finnigan said they included EE, DR, and customer solar in their potential assessment process and called the huge connection between DERs and transmission assumptions a challenge. She admitted that they didn't have great inputs and found that the models were sensitive to transmission assumptions that showed big tradeoffs, using commercial energy efficiency and utility scale solar as an example. Finnigan said they were surprised and puzzled by this connection.

Long referenced that tradeoff, asking if anything in particular, like meeting energy or capacity, was driving that in the model. Finnigan said it was transmission and rising loads from electrification.

J. Light referenced internal discussions about transmission and distribution deferral values. She said they have been updated and peanut buttered throughout the region. She listed ways they are thinking about this for the next Plan, including not having it as an input and asking the model to decide the value. Finnigan admitted this is outside her wheelhouse, calling not having specific inputs for deferred T&D a longstanding burr in her saddle. She said they use Council assumptions. Light said they may want to model to the individual BAs, listing the concerns around that as well.

Brown noted that all of the region's large utilities are in the WRAP including the entire BPA system and DR can be bought and sold across the WRAP. He thought it might be good to use definitions consistent with WRAP.

Heutte approved of thinking about DR and DER as a regional resource. He said the WRAP view of DR is indistinct at this point with significant restrictions including demanding everything look like a gas plant that can perform for four hours. He said the real issue is monetizing DR from a regional perspective, noting that the IOUs are desperate for capacity potential. Heutte said it's time to get serious about modeling for the regional perspective and where the value is.

T. Light pointed to the difficulty of modeling behind the meter resources, noting that they can be thought of as a pricey, but clean, personal back up generation for resiliency. He said this

group could eventually sign up for a utility program where the battery contributes a bit for peak. T. Light called this similar to an EE program with primarily NEBs. J. Light said this was a struggle in the last Plan, referencing thinking about the cost of a BYO thermostat program that was for an EE program.

Long suggested that any DER definition should consider size and location. She said nailing that down would help with the modeling, be it for a potential study, load forecast, or capacity expansion. Long said each approach could take a different definition, adding that how DERs are aggregated is also important.

Heutte added that from an analytical perspective you have to decide if you are looking at behind the meter or distribution level and behind the meter.

T. Light noted that CETA is forcing utilities to look geographically at different areas of their customer base, along with environmental and social/economic variances and how they align with EE and DR resources. J. Light said the Council will have limitations with granularity. T. Light said you may not have to look too hard at geographic granularity but there might be an opportunity for modeling other granularities, referencing incentives from the IRA that could affect cost effectiveness for certain customers that could also be used for DERs. J. Light agreed, saying the Council selected a load forecasting and capital expansion model that can analyze at the BA level. She said the RTF is also struggling with capturing these incentives.

Long said she has done several potential studies and IRPs and knows that the minute this work is done it will be outdated. There was general agreement in the room. She said don't let perfect get in the way of the good and just having a number to represent that value is important as we are just trying to inform.

J. Light agreed, saying we should focus on numbers that make a difference.

D'Souza reviewed next steps and ended the meeting at 12:00

#### **Attendees In Person and via Go-to-Webinar**

Jennifer Light	NWPCC	Suzanne Frew	Snohomish PUC
Dylan D'Souza	NWPCC	Amber Gschwend	GDS Assoc
Annika Roberts	NWPCC	Nora Hawkins	WA Dept of Commerce
Laura Thomas	NWPCC	Mark Jerome	CLEAResult
Angela Long	Rockcross Consulting	Nick Jones	CLEAResult
Ted Light	Lighthouse Energy	David Moody	BPA
Fred Heutte	NW Energy Coalition	Eli Morris	Applied Energy Group
Malcolm Ainspan	NRG	Todd Myers	Washington Policy Org
Frank Brown	BPA	Elizabeth Osborne	NWPCC
Rob Del Mar	ODOE	Scott Reeves	Cadeo
Christian Douglass	Ptarmigan Consulting	Liz Reichart	WA Dept of Commerce
Jennifer Finnigan	Seattle City Light	Peter Schaffer	PacifiCorp
Wesley Franks	WA UTC	Blake Scherer	Benton PUD

Kevin Smit	NWPCC
Jennifer Snyder	WA UTC
Taylor Thomas	Idaho PUC
Zeecha Van Hoose	Clark PUD
Kitty Wang	Energy Solutions
Brian Dekiep	NWPCC
Heather Nicholson	Orcas Power & Light
Sarah Yasutake	Gabel Assoc