

**Northwest Power & Conservation Council  
Demand Response Advisory Committee  
March 20, 2025**

Joe Walderman, NWPCC, began the meeting at 1:00pm. Kevin Smit, NWPCC, called for introductions.

**Commercial and Industrial Demand Response**

Fred Heutte, NW Energy Coalition, addressed the Heat Pump Water Heater Switch [Slide 5], recalling that Milton-Freewater has had a program since 1985. Heutte asked if anyone else is doing new switch programs. Walderman stated that PGE has had one in place for the last five years or so and they are revisiting while Tacoma Power had a switch-based pilot program.

Heutte questioned the \$150 for grid-connected UCM models, wondering what the price would be if the technology was deployed at scale. Walderman said staff do not have assumptions or data for this. Heutte suspected equipment costs would come down if deployed at scale.

Cam LeHouillier, Tacoma Power, reported that his utility is in the final stages of disconnecting switches for their pilot program. He said they plan to wait for the market to be saturated with CTA 2045-enabled technology for a new program.

Walderman said the assessment will pick up changes in stock over time.

Tom Smith, PSE, called the \$150 price low, saying he sees costs closer to \$180 for WIFI-enabled and more (\$250) for the cellular version. Walderman proposed using \$170 as a better estimate and offered to follow up offline.

Leona Haley, Avista Corp, asked For HVAC, Did you add in the L&I Permitting requirement costs for switch installations in WA, in the question pane. Walderman said staff used \$330 which was supplied by PacifiCorp. Walderman said staff could split costs out specifically for WA.

Haley understood the methodology on [Slide 7], but felt it was more of an either/or situation. Haley argued that if the incentive was not high enough the customer will not participate. Because of this, she felt staff should consider 100% of the incentive.

Walderman thanked her for her feedback, saying staff is trying to represent costs to the whole region.

Ted Light, Lighthouse Energy, called the methodology reasonable. Light asked about variations within a sector, saying some residential HVAC programs might have a higher

inconvenience factor than water heating or EV programs. Walderman said staff has been considering this. Light reiterated that some variation would make sense.

Jennifer Finnigan, Seattle City Light, thought that duration and frequency should be considered, saying 35% for a long duration event might not be sufficient for residential customers. Walderman called that a good point, adding that staff are not fully done with assumptions around deployment but are closing in on three to four hours for residential HVAC and longer for water heating. Walderman said that adjustments could still be made.

Heutte was not sure about the purpose of the slide, asking if it's an effective proxy for incentives. Walderman said staff will represent incentives found in the region and around the country. Walderman clarified that it is a way to quantify the value of lost service to a customer.

Heutte argued that empirical data has more value and suggested that staff look to utilities and California for data. Heutte cautioned that California data can be messy, but worried about distorting the outcome.

Walderman said staff reviewed and considered the [National Standard Practice Manual for Benefit-Cost Analysis of Distributed Energy Resources](#), before voicing appreciation for Heutte's suggestion.

Nolan Kelly, BPA, asked about different types of industrial customers, pointing specifically to waste water treatment plants. Kelly said these customers can easily move their operations around without incurring a real cost outside of initial administrative costs. Walderman called that interesting, saying that could be represented if programs were more granular. Walderman said that for now, most industrial programs are all-encompassing, technology that is agnostic to programs and are different for each customer. Walderman concluded by saying staff don't model different DR programs for each sector but generalize among customers.

Kelly suggested splitting the difference and toggling down costs if staff see a fundamental difference between DR programs. Walderman called for more data to support this. Kelly said he will look.

Heutte reported looking at the [CPUC DR cost effectiveness protocol](#) from July 2016, which reports how difficult it is to measure a user proxy value. Walderman revealed that the presented percentages were created using discussions with BPA, saying that evolves the work beyond the CPUC protocol.

Light brought the conversation back to the differences between specific industries, suggesting that there could be some difference between a cold storage unit which has some flexibility or a paper mill which is either 100% on or off.

John Ollis, NWPCC, said this would ideally be tied to a particular customer, saying staff would need more information to dig further into this. Ollis asked Walderman if it was possible to do this work by program type. Walderman said yes, explaining possible processes.

Frank Brown, BPA, pointed to past, small-scale residential/commercial pilot programs that had no incentives yet still attracted good participation rates. Brown said the incentive of being a good residential/corporate citizen proved to be enough. Brown admitted that IOUs probably not do this, but co-ops can.

Haley asked about costs beyond one FTE for setup [Slide 9]. Haley pointed to standing up thermostat program that includes integration costs or timing programs that have high, one-time set up costs. Walderman said staff are just using the \$150,000, saying there is some flexibility there and asked for further feedback.

Rob Del Mar, ODOE, pointed to DR work in his agency which found that third-party aggregators are taking on roles customarily performed by utility staff. Del Mar wondered how Council staff is considering these players. Walderman said utilities can develop DR programs in different ways with different cost structures and staff are trying to capture them as best as they can.

## **BREAK**

Bonnie Watson, BPA, offered to run the numbers on [Slide 25] past her agriculture experts. Walderman appreciated the offer.

Brown pointed to a different variant to test ag DR: single control centers for large, corporate farms. Brown stated that Simplot has a single control center that allows them to employ DR on multiple farms without having to do anything on site. Brown said their DR program with Simplot had zero marketing and O&M costs. Walderman asked if BPA has done this. Brown said a utility might be able to work through the control center instead of working through individual farms/farmers. Walderman offered to talk more offline.

Brown then said the hassle factor is zero if a farm uses reservoirs that fill at night. Brown said farms that use wells, canals, or direct pumping probably experience a high hassle factor. Walderman suggested this might require an east side/west side adjustment.

Light asked about peak load impact, wondering if the 72% on the slide is potentially double counting. Walderman explained how staff calculate the peak coincidence factor, admitting that Light might be correct. Walderman said he would re-think the methodology which might bring the number closer to 100%.

Haley admitted that her utility doesn't have much irrigation work but stated that places that do tend to run 24/7 at the height of summer. Haley speculated that places like Idaho may

get 73% at the beginning of the summer and then drop to 50%. Walderman said that conversations with Idaho Power revealed that the full capacity isn't on at all times due to crop cycles. Walderman offered to explore more offline.

Walderman ended the meeting at 3:00.

**Attendees via Zoom Webinar**

Kevin Smit	NWPCC	Robin Maslowski	Trillium Energy
Annika Roberts	NWPCC	Criag Patterson	independent
Laura Thomas	NWPCC	Suzanne Frew	Snohomish PUD
Joe Walderman	NWPCC	Fred Heutte	NW Energy
Chad Madron	NPWCC	Nolan Kelly	BPA
Hayden Reeve	PNNL	Mark Jerome	CLEAResult
Brittainy Pond	PSE	Elizabeth Osborne	NPWCC
Ahlmahz Negash	Tacoma Power	Zeecha Van Hoose	Clark PUD
Nora Hawkins	WA Dept of Com	Jennifer Finnigan	Seattle City Light
Blaker Scherer	Benton PUD	Ted Light	Lighthouse Energy
Drew Thompson	Chelan PUD	Rob Del Mar	ODOE
Jennifer Snyder	WA UTC	John Ollis	NWPCC
Macolm Ainspan	NRG	Tom Smith	PSE
Landon Snyder	Snohomish PUD	Leona Haley	Avista Corp
Juan Carlos Blacker	PGE	Cam LeHouillier	Tacoma Power
Frank Brown	BPA	Bonnie Watson	BPA
Chad Ihrig	Uplight	Jake Kennedy	NWPCC
Mary Kulas	consultant	Kyle Billeci	PGE
Aaron James	NEEA	Quentin Nesbitt	Idaho Power
Aquila Velonis	Cadmus Group	Bruce Weiskotten	Skokomish