Northwest **Power** and **Conservation** Council

Minutes for Demand Resources Advisory Committee
April 27, 2026

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

Ninth Plan Modeling Results: Demand Response and Other Resources

Leona Haley, Avista, asked if the sensitivities on [Slide 9] are all run at once or individually. Tomás Morrissey, NWPCC, said they are run independently with the same load forecast and different assumptions.

Fred Heutte, NW Energy Coalition, didn't understand the spread of the inputs on [Slide 10]. Morrissey said the table is not meant to be read left to right.

Quentin Nesbitt, Idaho Power, asked if the constrained cost of $140/kW-yr on [Slide 17] is related to the constrained world. Walderman called that the levelized cost bin that the model bought up to in that scenario.

Jennifer Finnigan, Seattle City Light, spoke about operational readiness, saying not every utility will be able to deliver demand response even if the model wants it [Slide 18]. She asked where operational readiness is represented in the model. Walderman said there is a set-up cost attached to every product, adding that it does not include the full cost of building out the entire infrastructure. Walderman added that the locational modeling is not trying to represent an individual utility.

Nicolas Garcia, WPUDA, asserted that many of the PUDs he represents are full-requirement BPA customers and do not get a demand signal. He asked how information can get to these utilities so they can create an event. Walderman said BPA is working on transmitting a signal.

Smit added that staff tend to leave the details of program design to Bonneville or the utilities. Smit also said that there is not a super strong signal for DR in this Plan, with only two or three products showing up consistently.

Jennifer Light, NWPCC, stressed that these are pure modeling results and recommendations are to come. Garcia said the developing power markets may provide that price signal but wasn't sure how that would work with a full-requirements BPA customer. Garcia acknowledged that this is important as DR can be helpful and is important to get right.

Laura James, PacifiCorp, noted that renewables meet firm energy requirements but not planning reserve requirements [Slide 19]. She asked if this is because they are not dispatchable. Walderman answered yes.

James then asked about the criteria around this feature, wondering why storage does not meet the firm energy requirement. Morrissey explained that the resource must generate annual energy for the system and storage can have a negative annual value because of losses.

Ted Light, Lighthouse Energy, addressed modeling constraints [Slide 20], wondering about other strategies like looking at other modeling results to get a sense if the model would select more DR without those constraints.

Smit pointed to limited staff time for additional runs but if the Council members want it could be done. Smit said staff are seeing DR picked up when other resources are constrained. J. Light said that looking at the cost of acquiring batteries could be interesting, adding that the model picks up planned, stand-alone storage but prefers hybrid because that also provides energy.

Haley wrote; We may still run DR even though the market prices are low for customer engagement reasons or a localized constraint. Hard to model those, but it happens and supports your first bullet point, in the question pane.

James wrote; I was going to say something similar. The "reality of the resource" for us is that it takes years to ramp up a DR resource, and we incur annual costs in order to maintain the resource (program) once its established, regardless of whether we use it or not, in the question pane.

Heutte said this gets into his concern about the overall results. He notes that DR is big and cost effective, yet the model doesn't pick it. He suggested stressing this to Council members. J. Light said these are the results and not the Plan and recommendations are to come.

Andrew Grant, Cadmus, expressed curiosity about the levelized cost binning strategy, noting that the signal comes in at $20. He thought there may be value in breaking up the $20-$50 bin into smaller segments to test if the model creeps up higher into the bin. Walderman said this will be discussed later in the presentation.

Heutte wrote; We are hopeful the CAISO DDEMI (distributed demand and energy management initiative) will provide a strong price signal and revenue stream for DR, the price-pull is the big missing piece for demand flexibility [Slide 24]. Smit wrote, yes, that may be helpful.

Heutte wrote; and the potential delta on scarcity pricing during stress periods may be a significant undervaluation in the modeling for DR, to be sure it's hard to quantify that scarcity pricing also raises an important point: without coordinated peak load reductions it becomes a free rider game [Slide 25] in the question pane.

James pointed to the constrained world scenario that is always asking for more DR [Slide 25]. She asked if one scenario is more likely than the other. Walderman said possible weighting of scenarios will be discussed. J. Light added that the scenarios should not be weighted equally. She said this range shows what's robust, what changes, and what credence to give to that world.

Sarah Widder, NEEA, asked about hydro ops, wondering if any scenarios are representative of what we think might happen this summer, given the snowpack. J. Light said hydro conditions are different than hydro operations, before explaining the modeling further. Widder then confirmed that each scenario is a range and not one static bar. J. Light answered that the investment is one static bar developed to be robust across the futures.

Heutte wrote just to note that this summer's hydro is above average for the mainstem Columbia and below average for the Lower Snake -- despite the drought conditions prevailing across much of the NW, see the most recent NWRFC monthly update: https://www.nwrfc.noaa.gov/presentations/html/wy2026_ws/WS_Briefing_Page_20260402.pdf in the question pane.

Heutte noted that 200MW is a lot less that was in the 2021 Plan [Slide 31]. Walderman said that is due to utility uptake. Heutte asked for documentation as he did not think that was happening. Walderman said the bigger utilities have been doing voltage reduction. Nesbitt agreed, saying it has been implemented across his service territory. Heutte was pleased with that and asked to hear from other utilities. Smit said he could dig some of those numbers up.

Questions and Discussion [Slide 36]

Nesbitt asked what constrained means in the constrained world scenario. J. Light explained that constrained meant pushing emerging technologies out 10 years, no additional transmission, but mainly it's putting limits on supply side resources in the near term while adding higher costs.

Nesbitt felt that utilities have some ability to put off large loads if they cannot be served. He added that DR is not the fastest thing to ramp up, and a constrained world seems like a shorter-term problem.

Nesbitt said Idaho Power can value frequency regulation, adding that there are other programs, but they come at a cost.

Nesbitt addressed bullet #3, saying he's having a hard time getting customers to agree to four hours three times a week, so 12 hours seems hard.

Finally, Nesbitt agreed that there is existing capacity in the region and the competition with batteries remains the driver.

Anthony Fontanini, Tacoma Power, wrote; Long Duration (12 hour+): Tacoma Power pursuing Large Load Customer DR programs. We are looking at 1-2 days of curtailment. I know that Seattle City Light also just launched a program in this topic, in the question pane.

Heutte voiced many concerns on where this stands. He said it's hard to see how a system undergoing rapidly increasing demand doesn't have a big component for flexible demand. Heutte wondered if a more moderately constrained scenario would yield different results.

Heutte then spoke about lost opportunity, saying a lot of the stressors are due to new demand, like EVs and building electrification. He said not addressing the energy efficiency and load flexibility of these would be a lost opportunity.

Lastly, Heutte addressed the high risk of low hydro years, suggesting that they get more weight in the discussion. Heutte felt that this is was an unfinished part of the effort and required quick strengthening. He said the modeling approach is suppressing a strong signal for DR and thought an intermediately constrained scenario might solve that.

Finnigan noted how transmission constrained her utility is. She addressed the next bullet, calling DR values a regional conversation between NEEA and the Peak Load Management Association. Finnigan pointed to the work these groups are doing and offered to make a connection.

Finnigan then addressed longer duration DR, calling it something SCL is developing and have contracted 1MW usage over 24 hours with a few large customers. She added that nothing has been called yet due to the mild winter.

Bryce Yonker, Grid Forward, said it seems unfathomable that a Plan five years after the last would obtain less DR. he said almost any market condition should show the signal for more, not less, flexibility. Yonker said this doesn't seem logical.

Yonker then asked if the Plan ever looks at other regions to compare where the region sits. Walderman answered no, saying the region is a late starter because of cheap, flexible hydro. J. Light added that the model is seeing the need for flexibility but is getting it from batteries and new natural gas.

Smit said that the DVR is not included in that 500MW recommendation.

Heutte wrote; glad to hear about the long duration DR efforts, that's a hopeful development, in the question pane.

T. Light was confused by the 500MW number saying he's seeing 1000MW in most scenarios. Walderman clarified that that number is for 2032 and he is looking at 2046. T. Light asked, given the model constraints around DR and the underlying need for flexibility, if staff would consider a broader, more open-ended flexibility goals and let the utilities decide how to provide it. T. Light then noted that the other scenario builds new resources at a faster rate than the constrained world. He called this a risk, asking if leaning on the constrained world scenario would mitigate some of that risk.

Walderman called these interesting thoughts. J. Light called the broader range of flexibility idea interesting and said staff will give it more thought.

Fontanini asked why EV TOU and Res TOU fell out of this work. Walderman reported that this is where they fell in the cost bins.

Fontanini noted that Tacoma Power cannot do a TOU at the moment, wondering what his utility should do considering there still some relatively cheap DR. Walderman said products recommended in the past have been framed as inexpensive and easily deployed DR.

Smit conceded that the recommendations come with an amount and if other products fit into that bucket, they could be included.

Garcia pointed to the 500MW of EV TOU, saying demand will fall 500MW on a capacity level. Walderman answered yes.

Garcia asked if there was a sense of the price differential that would accomplish this. Walderman answered it's under $50 a kW-y. Garcia asked how people could be induced to change their charging behavior. Walderman said there's data in the supply curve.

Heutte wrote; my comment is that TOU alone or programmatic DR alone will fall short of their potential; PGE and others have done a fair bit to find the right balance, it's not easy but clearly a coordinated approach improves overall achievement, in the question pane.

Finnigan wrote; My question: are the 500 MW of EV TOU and Res TOU assigned to specific balancing authorities - or spread across the region? (and how does this compare to the EV TOU and Res TOU programs that are planned?) in the question pane. J. Light responded with; The 500 is a regional number. We can follow up on how that compares to what is planned. Thanks for that question.

Yonker agreed that data center flexibility was key and strongly supported the recommendation [Slide 41]. He said he is seeing a lot of current activity in the middle category but said there is a continuum in the industry.

Grant wrote; Would it be possible during the next DRAC to look at BA zone heat maps across time similar to what was shown during the Council meeting/CRAC for EE? Might be useful context if the Council is leaning towards two targets/recommendations across East/West lines, in the question pane.

Heutte agreed with Yonker, saying two years ago data centers said they couldn't do anything and now it appears they can do a lot.

Walderman asked the DRAC to send feedback on the remaining slides and recommendation, offering to set up another DRAC soon. He ended the meeting at 3:00pm.

Attendees via Zoom Webinar

Kevin Smit	NWPCC	Quentin Nesbitt	Idaho Power
Jennifer Light	NWPCC	Zeecha Van Hoose	Clark PUD
Tomás Morrissey	NWPCC	Elizabeth Osborne	NWPCC
Joe Walderman	NWPCC	Niclas Garcia	WPUDA
Tom Eckhart	UCONS	Leona Haley	Avista Corp
Aliza Seelig	PNUCC	Brenda Hunt	NEEA
Chris Johnson	Benton PUD	Ted Light	Lighthouse Energy
Frank Brown	BPA	Jennifer Finnigan	Seattle City Light
Rebecca Cottrell	Idaho PUC	Laura James	PacifiCorp
Malcolm Ainspan	NRG	Kerry Meade	Building Potential
Jennifer Snyder	WA UTC	Anthony Fontanini	Tacoma Power
Heather Nicholson	Orcas Power & Light	Bryce Yonker	Grid Forward
Steve Simmons	NWPCC	Sarah Widder	NEEA
Zoey Roberts	Puget Sound Energy	Jimena Diaz-Duran	Seattle City Light
Aquila Velonis	Cadmus	Mark Jerome	CLEAResult
Fred Heutte	NW Energy Coalition	Shivani Subramaniam	WA Dept of Com
Andrew Grant	Cadmus		