

**Northwest Power & Conservation Council**  
**Demand Response Advisory Committee**  
**April 12, 2021**

Tina Jayaweera, NWPCC, began the meeting at 1:00pm with introductions and a review of the agenda.

**Update on Plan Scenario Findings**

**John Ollis, NWPCC**

*Ollis presented initial findings around the baseline and scenarios using a Q&A format.*

Question 1: Baseline Conditions

Craig Patterson, independent, asked how the robustness of EE can be tested without acknowledging price signals that undermine EE. He asked how modeling works without a reference to the past or historical evolution. Ollis agreed that it's hard to trust past tools when you're in the middle of a paradigm change. Ollis said state policy and fundamentals are changing and the models may need some adaption but said some results are actual learnings.

Patterson urged staff to pay attention to today's policies that undermine the robustness of our intents. He noted how many ratepayers at his utility are on pre-pay as an example of trends going in the wrong direction. Ollis thanked him for his thoughts and said he will pass his comments along.

Tom Eckhart, UCONS, asked what happens with DR now that the baseline shows no need. Ollis said there will be results that give more context, adding that the baseline is the control and there are other ways to explore this.

Leona Haley, Avista, asked to see slides describing the background for the shift of DR in the baseline. Jayaweera suggested Ollis go through the slides related to the ASCC and ARM array.

Richard Keller, Idaho PUC, noted that DR programs in Idaho have dispatch limitations that batteries do not. He asked for better clarification about the comparison. Ollis called this an important point, noting that DR and batteries are not a one-for-one exchange, but have similar signals at the times they might be needed. Ollis used the evening ramp periods in winter and summer as times of price volatility that both battery-storage and DR can mitigate.

Keller understood, but said the evening ramp is a common daily experience while DR often comes with restrictions about when and how often it can be dispatched. Ollis clarified that they are not to be equated but the signal has value. Keller again understood the similarities but was concerned with the valuation, particularly with the limitations of DR. Ollis agreed, saying they are not modeled as the same resource but agreed the topic should be discussed further.

Quentin Nesbitt, Idaho Power, shared Keller's concern.

Fred Heutte, NW Energy Coalition, said he agreed that DR and storage have similar peak load reduction capabilities, noting that there are a lot of different DR products while storage has only two: pump storage and batteries. Ollis agreed that it is a broad brushstroke and the signal says we need to dig in further.

Nicholas Garcia, WPUDA, recalled that California had an issue during the shoulder times when solar was declining and they couldn't meet load [Slide 11.] He asked how that is captured with the ARMc or the ARMe. Ollis said GENESYS is showing those shoulder events and peak is less about peak load and more of peak obligation. Garcia thanked him and suggested strongly emphasizing that peak is not peak load but really "peak stress" in a slide.

### Question 2: Drivers for DR

Keller wondered if the market would squeeze the times when DR is beneficial. Ollis said there's a difference between individual utility needs and WECC needs. Ollis noted that it may be an opportunity to redesign a DR program, adding that we are not in that future yet. Keller said he was trying to quantify the time of high need and understand the best resource choice. Ollis agreed that a battery makes intuitive sense and gets used once you buy it. Ollis said the question is: does the battery get used often enough to overcome the fixed costs, noting the answer depends on where an individual utility is.

Keller added that DR has fixed costs too. Ollis agreed.

### Question 3: Binning Strategy

Josh Keeling, Cadeo Group, voiced approval of the re-binning strategy [Reconfiguring Bin 1] and asked about device-enabled products. Jayaweera confirmed that he was saying an enabled thermostat responds to a price signal. Keeling said yes, pointing to utility programs already underway.

Jayaweera said test shows the RPM sees value in reducing greenhouse gasses, noting there may be ways to use water heaters but cautioned about customer impact and variable dispatch costs. Ollis added that there are probably price sensitivities around dispatch costs noting that \$50 may look like \$0 but \$100 may mean it would be cheaper to run gas.

Keeling pointed to the difference between opt-in or opt-out. Jayaweera agreed that opt-out would have more participants and less impacts on all the participants.

Ahlmaz Negash, Tacoma Power, asked if the addition of DR improved the resource adequacy metric after the new binning strategy for DVR and TOU was employed. Ollis said most adequacy needs take WECC-wide solar interaction with the hydro system into account. He said a lot of adequacy events are during times of low prices adding that building solar in the region further charges the hydro system. Negash said it sounds like economics are driving the issue as opposed to reliability. Ollis agreed, particularly early on, adding that it probably doesn't hurt your adequacy if you have it.

Garcia asked about the sub-hourly value of DR. Ollis said he can convey if a resource can provide regulation reserves, spin or non-spin reserves. He said past analysis of DR did not have that ability but it could be done. Ollis added that reserve needs in general have been put on the marginal product and it could be tried.

Garcia said he was bothered by the assumption that the river system is going to stay the same, given the conversations around the Lower Snake River dams. He thought DR would be much more important if there was less hydro flexibility. Ollis agreed.

Ryan Fulleman, Tacoma Power, voiced curiosity on how the test configuration for DVR and TOU was determined. He asked if a four-hour resource during hours 6pm-10pm, Monday through Saturday, look ideal for the region. Ollis did not think it was an exact four-hour window, explaining past modeling strategies that showed solar changed the shape of peak hours by price. Ollis said he used this information to come to the four-hour period, adding that it is not perfect.

Nesbitt said Idaho Power is seeing the same changes in their IRP. He added that past looks at economic dispatch programs revealed the difficulty in financially justifying the capital expenditures.

Nesbitt also said that TOU programs are less reliable during extreme weather events.

Ollis was not surprised by Nesbitt's comments, noting that CA is sending a signal to the WECC about the evening ramp. He said some utilities without hydro might have a different view. Jayaweera said TOU is based on typical responses and there may be periods with less or more response.

#### Question 4: Next Steps

Patterson noted that the region has some of the cheapest energy in the country and the difference between cost and markets. He asked how we can rely on inexpensive renewables from outside the region when those renewables could fetch a higher price elsewhere. Ollis said he models the wholesale transaction, saying most hydro doesn't have a REC making it higher price. He noted that 70% of the WECC will be under clean policy eventually creating a tradeoff.

Patterson clarified that he is talking out price signals from outside the region, using TX as an example. Ollis said the models show that the region is importing solar when the sun is up and exporting hydro when the sun goes down. He agreed there is uncertainty around the ramp periods but needs are being identified.

Heutte commented that the new baseline does not send a bright light adequacy signal into the RPM. He called this surprising given the upcoming coal retirements, adding that this is why the model is not picking certain resources. Heutte said he is uncomfortable with the baseline, acknowledging that there is little appetite to revisit and rejiggering the bins has little effect.

Heutte said his personal view is that the baseline is having a substantial influence on all of the analysis, adding he appreciates the work but was concerned with where this was going to end up. Ollis clarified that staff is also suspicious, noting that early needs are being passed to the RPM but the in-region solar is helping hydro meet the needs.

Jayaweera added that rebinning caused the RPM to acquire 800MW of DR on average over time.

### **Summary of System Integration Forum Exploration of Energy Equity in the 2021 Plan**

#### **Tina Jayaweera**

*Jayaweera reviewed the SIF DEI work and asked the group to discuss development of potation actions to be considered in the 2021 Plan.*

Finnigan thanked staff for the SIF presentation, calling it a great, thought-provoking workshop. She strongly stated that changes need to be foundational and not a “check the box” solution.

Patterson suggested turning the DEI question on its head and ask about the levels of impediments that are preventing DEI.

Negash said she also appreciated the SIF, calling it particularly helpful to Washington utilities where the Clean Energy Transformation Act requires equity in planning.

Ollis thanked her for her comment. Jayaweera asked that anyone with comments contact her or fill out the survey. She ended the meeting at 4:00pm.

#### **Attendees via Go-to-Webinar**

Tina Jayaweera	NWPCC
John Ollis	NWPCC
Jennifer Light	NWPCC
Kevin Smit	NWPCC
Malcolm Ainspan	NRG
Nick Bengtson	Energy Hub
Kacia Brockman	OPUC
Frank Brown	BPA
Aaron Bush	PPC
Tom Eckhart	UCONs
Ryan Finesilver	Avista
Jennifer Finnigan	SCL
Kyle Frankiewich	WA UTC
Suzanne Frew	Snohomish PUD
Ryan Fulleman	Tacoma Power
Lakin Garth	Cadmus
Nicolas Garcia	WPUDA
Leona Haley	Avista

Lee Hall  
Fred Heutte  
Mark Jerome  
Josh Keeling  
Richard Keller  
Hanna Lee  
Ted Light  
Corinne Milinovich  
Eli Morris  
Quentin Nesbitt  
Heather Nicholson  
Tim Nies  
Craig Patterson  
Will Price  
Liz Reichart  
Blake Scherer  
Jennifer Snyder  
Taylor Thomas  
Brian Dekiep  
Ahlmahz Negash  
Ken Nichols  
Robin Maslowski  
Kitty Wang

BPA  
NW Energy Coalition  
CLEAResult  
Cadeo Group  
Idaho PUC  
BPA  
Lighthouse Energy  
Davison Van Cleve  
Applied Energy Group  
Idaho Power  
independent  
Energy Northwest  
independent  
EWEB  
WA Dept of Commerce  
Benton PUD  
WA UTC  
Idaho PUC  
NWPPCC  
Tacoma Power  
EQL Energy  
Guidehouse  
Energy Solutions