

**Northwest Power & Conservation Council
Conserving Resources Advisory Committee
April 29, 2021**

Kevin Smit, NWPCC, began the meeting at 9:00 by calling for introductions. He noted that the [minutes from the April 1 CRAC meeting](#) have been amended by staff for further clarification around pay-for-performance, the Washington Clean Buildings law and the NW Power Act. Smit asked that people look at the changes.

Craig Patterson, independent, asked how to amend the minutes. Smit said to send an email with corrections, and they will be incorporated.

Developing the EE Program for the 2021 Power Plan

Smit provided a brief update on the current takeaways from power plan analysis and presented staff's preliminary proposal for the conservation program, focusing on the regional target.

Nicolas Garcia, WPUDA, sent a note to Tina Jayaweera, NPWCC, asking if the model shows EE providing more or less value during the transition period (sunup and sundown) as compared to nighttime. Jayaweera answered that staff is still exploring that. [Slide 13.]

Garcia asked in the question panel: What is the basis for the statement that EE provides "higher quality" adequacy attributes than reserves. Staff referred him to a [presentation](#) by John Ollis, NWPCC, stressing particularly Part Two of the [presentation](#).

Garcia then wrote another comment regarding lost opportunity risks saying that they cut both ways. An investment made following a few years ago assuming a \$100/MWh future energy costs would be very much out-of-the-money today. A decision not to have made that investment would be better, at least from a financial perspective. Staff thanked him for his point.

Jennifer Finnigan, SCL, thanked Smit in the question panel for the high-level tour. She noted that two scenarios show more EE and asked how many scenarios there are in total. Staff answered: There are 7 scenarios, all with multiple sensitivities. There was one sensitivity in the EE Robustness scenario that showed more EE. All the others showed an equivalent amount or less. The other scenario sensitivities were also less. The Pathways to Decarb is the other scenario indicating a higher amount.

BREAK

Discussion

Smit asked the CRAC to address the first point on [Slide 31] For the attributes discussed (adequacy equity, resilience, flexibility), have we: Described them sufficiently? Applied them to the measures appropriately? Have we prioritized appropriately?

Patterson wondered why his perspective is so opposite from Council staff, saying he does not relate to anything that was said. He said that more key issues, like using deemed savings without verification, are not being addressed. Patterson said that he has been engaged in conservation industry for 40 years and knows there are people choosing between food and paying their electricity bill.

Patterson insisted that the trends were moving in the wrong direction because staff analysis is incomplete. He asked why the definition of energy conservation cannot be revisited. He also wondered how it can be applied equitably, saying old studies show 80% of the benefits got to 20% of customers. Patterson predicted that this number is actually higher as the economy implodes for the lower and middle class.

Patterson stressed that the group is ineffective at getting to most low-income people for water and/or space heating. He used Lane Electric as an example saying that they will spend \$5000 on new windows for an uninsulated trailer. Patterson said the first tenant of conservation is assessing where the greatest need is, and we do not do that.

Patterson then disagreed with the statement about renewables coming on quicker than conservation as we have not done conservation correctly yet. Patterson said he knows people doing verifications after assessment who agree with him, stressing that we do not verify.

Patterson said that rates are the main driver of EE and they need to be addressed openly and transparently as major impediments to targets.

Patterson again asked that projections forward include historical documentation, asking where the historical trends are that validate Council staff's perspective. He said that he thought residential was the usual place to look for EE, not commercial or industrial.

Smit agreed with Patterson's points about equity, pointing to work around prioritizing the "worst of the worst" homes. Smit said rates discussions would fit under question three: Are there other attributes the Council should consider in establishing a target for energy efficiency. Smit then said projections have historically looked forward, and the region has gone through most of the low-cost residential options.

Garcia was unclear about what credit multipliers would be given to each of the four attributes: adequacy, equity, resilience, flexibility and called for clarity. Garcia noted challenges with equity, saying weatherizing an unstable structure is probably not a wise choice and the decision needs nuance.

Garcia then asked where the 10% multiplier from the Act fits in this. He then said the regional number will be spread across the region and eventually to BPA customers. Garcia said these customers are very different and in vastly different situations. Garcia asked how this will be made relevant across the board.

Smit called these good questions that staff is thinking about, referencing [Slide 30] jurisdiction specific MCS for deep decarbonization.

Jayaweera said the multiplier has not been worked out yet saying that conversation with the Council still needs to happen. She called for ideas and feedback on the assumptions.

Jayaweera then addressed the 10% credit from the Act, saying it is not yet clear if it falls to the adder. She then addressed Garcia's comment about the variety of BPA customers, asking if the current structure is equitable to BPA customers, noting the \$100 levelized cut off.

Garcia said he represents two different PUDs, one with 60% of people living below the poverty line and another with only 22%. He agreed that this is not equitable to begin with and feared further exacerbating the situation. Garcia did not know how to address this equity issue, wondering if there would be a non-uniform credit to utilities.

Jayaweera said that conversation needs to be broader and within the regional dialog.

Finnigan said she thought equity should applied to commercial, particularly small business. She told an anecdote about how surprised SCL staff was to find many barriers to small business customers.

Jeff Harris, NEEA, thanked the staff for moving beyond baseline conditions, saying that changes in the modeling reflect the changes in the power system. He said it feels like the power system is on the cusp of transition with unknown outcomes. Harris praised the modeling but said it is showing renewables being built at a never-before-seen scale. He said this cries out "uncertainty" to him.

Harris thought the proposed discussion with Council members is appropriate but said RPM results are always a question mark. He said this Power Plan is looking at a radically different future that has a lot of underlying assumptions about market, market pricing, the value of dispatch and the value of RECs. Harris said making EE decisions based on these future market assumptions gives him pause.

Harris went back to fundamentals, saying a reduced load means you would not need the build out in the first place. He supported the "baseline plus" approach because of the high level of uncertainty.

Harris then said the attributes are a call to ask how much insurance should be bought in the form of EE that supports the attributes. He had some questions about the model's negative pricing in the outyears, saying the renewables are being built today to meet short-term adequacy needs. Harris thought the adequacy value of EE can not be answered with analytical tools but said the region has proved that it can deliver EE quickly if the right signal is present. He said the price of that EE has historically varied but tended to be lower cost than anticipated when accelerated.

Harris thought EE could be built out faster and at a lower cost than what the model is showing, pointing to untapped possibilities. He thought the equity cost could be absorbed by the portfolio resource cost.

Jayaweera cautioned that the Duck Curve is happening in California and they are seeing negative prices. She acknowledged that the level is still uncertain but there must be a realization that the power system dynamics are changing, and market prices are shifting.

Smit addressed equity, saying targeting specific things did not have that much impact on overall costs. He said there is a model set up to test this.

Jessica Aiona, BPA, thanked staff for their creative and nuanced approach to capturing the additional benefits of EE. She echoed Finnigan's comment about expanding equity to out of the residential sector. She then addressed Garcia's concern, saying that BPA tries to focus on equitable access to EE programs across all their utility customers. Aiona agreed that a more restricted portfolio makes it harder to provide equal access.

Aiona then suggested looking for additional value from lost opportunity measures. She used a measure with a 10-year lifetime as example. Smit called this a good question, referencing the Sixth Plan where they were valued separately. Jayaweera recalled that lost opportunity was lost forever, but modeling enhancements recaptured them. Jayaweera said they saw very little difference but understood Aiona's point.

Smit addressed the small business comments and asked for suggestions on how to identify equity opportunities.

Finnigan said she has not considered the issue in the context of a Power Plan but has thought about programs, who can be targeted and why. She revealed that programs have reached 30% of commercial customers but only 1% of small business, adding that it screams equity. Smit asked for a copy of the report. Finnigan said she will ask if it can be shared.

Rich Arneson, Tacoma Power, appreciated the thoughtful analysis. He addressed the Patterson's point about verification, saying that BPA sponsored a 15-utility weatherization billing study, Tacoma Power sponsored a two-phase, RCT manufactured home heating system study. He added that there are other examples as well.

Arneson addressed a question from the presentation, "When does EE provide value." He said the Northwest has prided itself on producing a shape of savings that is used to derive values. He asked, since our core resource is hydro, if it would be reasonable to bank daytime savings in the reservoir to draw on later in the evening.

Jayaweera said yes, but the value is much lower during the day because of the influx of solar. She agreed that EE interacts with hydro 24 hours a day, but the value is higher in the evening and overnight.

Anna Kim, Oregon PUC, asked if any states can set different rates based on income. Smit did not know. Amy Wheelless, NW Energy Coalition, answered that WA has that ability and SCL can offer a re-discount to low-income customers. She continued, saying that most IOUs offer grants and recent legislation means that they can also offer re-discounts. Garcia added that many PUDs do as well.

Patterson said, in terms of historical, scarcity increases prices. He asked, given the casino marketplace of Texas, what evidence is there that renewables will remain cost-effective. He then asked what the time frame overlap shows how that fits together. Smit asked for clarity. Patterson said the two pieces are coal going away and renewables taking its place.

Smit said that is what the modeling is working on and showing. He acknowledged that it is a big build but said many IRPs are showing large renewable builds that are in line. Smit said there are many discussions on this, and the modeling team continues to work on the issue. Jayaweera pointed to an upcoming presentation to the Council about TX and how it is and is not like conditions in the NW.

Garcia referenced a point from the recent SAAC meeting about coal use increasing even though the number of facilities is reduced. Jayaweera confirmed this fact, noting that only announced retirements are counted. She said that the early coal retirement scenario goes further but the resource stack maintains resources as understood over the next 20 years.

Garcia referenced [Slide 14] from the SAAC that shows the MWh from coal increasing significantly in 2023-2027.

Quentin Nesbitt, Idaho Power, asked what is meant by prioritizing appropriately. Smit moved to [Slide 24, 25, 26,27] to refresh. Nesbitt then asked what is meant by “Does not necessarily imply all measures should be cost-effective” on [Slide 28.] Jayaweera moved to [Slide 29] to further explain about measure permutations.

Question Two: Does the staff’s proposed approach to recognizing decarbonization seem appropriate?

Nesbitt said it looks like decarbonization and electrification adds load and if staff is suggesting adding it efficiently. Jayaweera answered yes. Nesbitt asked if the load forecast and EE increase under this scenario. Smit said yes, adding that the scenario also assumes that all new buildings are electric only. Nesbitt asked if this was run as an option or a sensitivity. Smit explained what a scenario is and the goals around this one.

Jennifer Light, NWPCC, added that there is no plan for an adder for decarbonization, but this is more of a recognition that jurisdictions may have it and give guidance.

Finnigan thanked Light for the clarification. She noted that there is a chasm between energy codes for new construction but there are existing measures that could be upgraded, and an adder could help how that is accomplished. Jayaweera clarified that there is no proposal for an adder around decarbonization but an MSC that stipulates that jurisdictions should consider efficiency with electrification.

Finnigan said she heard Council will not include an adder but provide adder guidance to utilities. Jayaweera said that was not explicitly adders but language that is directive. She said adders could be considered if it would be helpful. Finnigan said she would like to think about it and have a conversation about new construction, codes and what decarbonization really means.

Harris supported the idea of an MCS given regional differences but noted that the entire system will be affected by added loads. He noted that policy and economics is driving early coal retirements, calling it decarbonization and adding that it is having a system-wide impact. Harris thought that there should be perhaps an adder or some other credit for preparing for decarbonization, considering the system-wide impacts of the policy. He did not have a value or approach in mind but pointed to WA's decarbonization efforts impact beyond the state. Harris thought an additional, region-wide EE credit would be an appropriate, forward-looking approach to the decarbonization to parts of the system.

Jayaweera said staff is planning on talking to the Council members explicitly about the potential of broader decarbonization and the justification of increasing EE goals above and beyond the model.

Wheless addressed the difficulties of dealing with existing buildings and asked if this scenario contemplates the issues. Smit said this MCS does not yet, but it is on the list of things that need to be fleshed out. He added that the scenario assumes that all the measures are applied to all buildings over time.

Question Three: Are there other attributes the Council should consider in establishing a target for energy efficiency?

Harris suggested an attribute around the ability to accelerate quickly. He pointed measures that could be quickly installed in the six-year time period at low cost that would reduce the renewable buildout. Harris said this would not add additional capital to the power system and giving some extra credit for accelerating things like commercial lighting might help shore up resource adequacy issues and slow the overbuild of renewables.

Harris admitted that it is eventually more expensive but referred to early adoption as a potential insurance policy. Smit called that a good idea and did not think it would be that much

more expensive. He said one problem is a lot of utility goals are set in place already. Jayaweera added that the reserves are another high-quality resource and the relative value of the two still need to be explored.

Ted Light, Lighthouse Energy, reviewed how cost effectiveness is determined [Slide 17] and wondered how this will happen for the 2021 Plan given the early needs for more EE and less need in the medium and long term. Smit said the plan is to match to the six- and twenty-year targets set by the Council.

T. Light asked if it is possible to set a different target, wondering how to balance the very different future the Plan is projecting. He wondered if there was a way to build flexibility into the target, like reviewing every two years, to avoid putting all the chips down on an uncertain future. Smit said the Council can set the target as they like, pointing to past Plans having two-year milestones.

Jayaweera said that a two-year review implies that the Plan is reopened, and it will be a topic of discussion as there are advantages and disadvantages. T. Light said that outside of the Council the two-year IRP cycle is the standard for planning and in more dynamic times a more frequent basis of updates is appropriate. Smit said he has heard that suggestion from others and offered to take the suggestion forward.

Garcia said that many WA utilities are still suffering from the effects of COVID and the moratorium on utility shut offs. He thought their ability to take on new EE programs would be hampered by lack of revenue and predicted that the next two years would be financially challenging.

Smit called this a good point. Garcia continued, saying if there are two-year goals, they should reflect the financial realities of these utilities.

Arneson asked to what extent electrification overpowers the load forecast. He pointed to the sheer number of gas-heated homes and gas-powered cars that would be converted. Smit said the details of the decarbonization scenario will be presented to the Council soon. Jayaweera said that EVs are incorporated into the baseline and accelerated in the Path to Decarbonization. She said a lot of variables go into the load forecast and there is not one single forecast.

Aiona asked about next steps, wondering if the proposal goes to the Council members before work on the actual value adders start. Jayaweera said that staff will meet with the Power Committee one-on-one to get a sense of priorities and relay information and hope to go to the committee with a fleshed-out proposal.

Garcia appreciated that each Council member will be spoken to but was concerned that there would not be much opportunity to comment on the adders before the meeting on May 26-27. He pointed to the many variables that come into play with the adders and strongly

recommended that staff give people a chance to look and comment on the numbers and methodology before the meeting.

Smit clarified that much conversation would not be on the actual value of the adders but more about the approach. He said the Council needs to set a target based on what they know and if it is above the 500aMW we would build the adders to that.

Garcia was troubled by that answer, saying he was under the impression that the adders would be developed in a way that gave value to the attributes. He said this sound like the exact opposite and called it a dangerous path. Smit assured him that there is analysis around the adequacy attribute, but nothing has been determined about the others yet.

Jayaweera added that there is always opportunity to comment and conversation even after the Draft Plan is released.

Smit ended the meeting at 12:00.

Attendees via Go-to-Webinar

| | |
|-------------------|----------------------|
| Kevin Smit | NWPCC |
| Tina Jayaweera | NWPCC |
| Chad Madron | NWPCC |
| Jennifer Light | NWPCC |
| Jessica Aiona | BPA |
| Rich Arneson | Tacoma Power |
| Steve Bicker | Tacoma Power |
| Leann Bleakney | NWPCC |
| Aaron Bush | PPC |
| Ben Cartwright | Energy Trust |
| Mohit Chhabra | NRDC |
| Debbie DePetris | Clark PUD |
| Jennifer Finnigan | SCL |
| Ryan Fulleman | Tacoma Power |
| Nicolas Garcia | WPUDA |
| Andrea Goodwin | NWPCC |
| Jeff Harris | NEEA |
| Fred Heutte | NW Energy Coalition |
| Chris Johnson | Benton PUD |
| Anna Kim | Oregon PUC |
| Ted Light | Lighthouse Energy |
| Scott Mayfield | Evergreen Efficiency |
| Kerry Meade | NEEC |
| David Moody | BPA |
| Eli Morris | Applied Energy Group |
| Brandy Neff | PNGC Power |

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|-------------------|---------------------|
| Quentin Nesbitt | Idaho Power |
| Heather Nicholson | independent |
| Elizabeth Osborne | NWPCC |
| Patrick Oshie | NWPCC |
| Craig Patterson | independent |
| Deborah Reynolds | WA UTC |
| David Siddiqui | Oracle |
| Jennifer Snyder | WA UTC |
| Shani Taha | UCONS |
| Taylor Thomas | Idaho PUC |
| James Vanden Bos | BPA |
| Aquila Velonis | Cadmus Group |
| Bonnie Watson | BPA |
| Amy Wheelless | NW Energy Coalition |
| Deb Young | Northwestern |
| Brian Dekiep | NWPCC |
| Warren Cook | ODOE |
| Lakin Garth | Cadmus |
| Jim Lazar | independent |