

**Northwest Power and Conservation Council
Conservation Resources Advisory Committee
April 29, 2020**

Charlie Grist, NWPCC, began the meeting at 1:00pm with a review of the agenda. Grist pointed to the posted minutes and asked for comments and corrections. There were none. He then called for introductions and noted that the CRAC charter requires updated membership every two years. Grist asked that members look for emails about future membership.

Conservation Supply Curve Results

NWPCC staff

Mohit Chhabra, NRDC, confirmed that [Slide 15] represents the time when the measure saves and not necessarily the sector. Grist confirmed, saying they are just bundled by sector not by measure.

Deborah Reynolds, WA UTC, asked to see the table behind [Slide 16.] Grist said yes. Tina Jayaweera, NWPCC, stated that there is a file called “Baseline EE” that doesn’t have charts, but said they could be added. Grist stated that the charts can be accessed by downloading the presentation.

Danielle Walker, BPA, asked how FMY data impacts these charts. Grist said the impact is minor, noting that there will be slides on the topic later in the presentation.

Estimated Impact of Climate Change on EE Savings

NWPCC Staff

Gurvinder Singh, PSE, asked about the criteria for picking a typical month [Slide 4.] Jayaweera explained that NREL picked the typical month using a variety of criteria.

Frank Brown, BPA, asked if the examples on [Slide 14] are of the difference for 2041 or an average over the 20-year planning period. Jayaweera answered that she’s not looking at a time variance for the savings but choosing a single, representative year for the whole 20-year period, moving back to [Slide 6] to explain further.

Chhabra asked if the same FMY data is used to model hydro availability and supply-side resources [Slide 18.] Jayaweera answered that GCM data are used for the hydro availability. Chhabra confirmed that the precipitation data lines up for both. Jayaweera confirmed, saying further information can be found in Hua’s November presentation to the Power Committee. Jennifer Light, NWPCC, also pointed him to an RTF presentation.

Grist thanked him for his question, stating that the impacts of climate change on hydro flows and availability is bigger than temperature changes alone. Chhabra mused about what would replace that summer resource, noting that gas or other fossil fuels might be constrained by

carbon reduction laws in Washington and Oregon. Jayaweera agreed, saying policy is modeled and will be a big driver.

Walker stated that these savings will take effect on year one. She then asked if any thought was given to the evolving relationship with load forecast. Jayaweera answered that load forecasts also incorporate the GCMs but agreed that the savings are not varied with time as any given year could be hot, cold or average.

Walker was still unsure about what it means to claim more summer savings in 2022 when the load forecast doesn't capture more loads until later on. Jayaweera pointed to "elasticity" in the RPM that provides a relationship between loads and available efficiency. J. Light added that the Regional Technical Forum will not adopt these numbers on the first day of the Plan, but instead plans to update numbers over time.

Walker voiced concern for utilities that use these supply curves as foundations for their IRPs and CPAs, saying there is opportunity for misalignment between measures going into the model and the need the model is selecting for. She stated that BPA's resource program is still looking for winter-saving measures and worried about big swings from winter to summer that may impact utilities that don't incorporate climate change.

Jayaweera agreed that consistency is needed. Chhabra called Walker's point important but called this work a terrific start, adding that if the RTF uses the same weather files the region will get to consistency.

BREAK

Update on Plan Process and Scenarios

NWPCC Staff

Wendy Gerlitz, NW Energy Coalition, asked if other measures will be considered for fuel switching [Slide 10.] Kevin Smit, NWPCC, answered yes adding that commercial cooking may be included too. Grist said Massoud Jourabchi, NWPCC, is looking at replacement equipment as an opportunity.

Gerlitz asked for a list of technologically feasible measures for fuel switching. Chhabra offered to send a list from NRDC's deep decarb team. Smit said he's also wrestling with the Industrial sector and will need input.

Nicholas Garcia, WPUDA, noted that increased electricity use will require a beefed-up transmission system. He asked if the transition will be constrained based on present day transmission limits or if the assumption will include a simultaneously expanded transmission network. Smit did not know but thought cost must be considered.

Walker voiced surprise that fuel switching was an option. She asked if this scenario is a sensitivity, hoping that it wouldn't be incorporated into the potential. Grist clarified that this is not fuel switching as energy efficiency but a look at deep decarbonization.

J. Light added that this is an attempt to model policy that encourages this kind of change and tries to reveal what it would take to reach such a target. She added that Council members will look across all of the scenarios to inform the target.

Garcia stated that in Washington State public utilities are constitutionally prohibited to support fuel switching. Smit called this a good point, adding that these assumptions are not part of efficiency.

Walker emphasized that these are not achievable potential units for BPA. Grist called this point well taken.

Singh summed up that this scenario as an electric load forecast that then looks at the impact of fuel switching on that load and other resources. Smit called that close, saying it looks at appliances turning over to electric and how that will drive resource needs. Singh asked if peak and energy will be examined. Smit answered yes. Grist added that this does not look at switching from gas to electric resistance, but gas to heat pumps and other highly efficient equipment.

Singh asked about cost considerations. Grist said the primary look-see is about how low the carbon footprint can go across more than the electric sector. Jayaweera added that costs for decarbonization will be part of the story, saying that the scenario will look at what it takes and how much it costs to get to 90% decarbonization.

Chhabra asked if this is trying to reveal the best way to get to that 90%. Jayaweera agreed. Chhabra added that this is a policy tool.

Deb Young, Northwestern, noted that different areas have different policies and asked how these differences will be taken into consideration. Smit stated that this is to inform policy makers on the best, least-cost path.

Garcia stressed that policy makers need to know all the steps needed to reach these goals and how many extra resources will be required just for peak periods. He said there must be perspective about what will be required to move and provide power at the moment of demand.

Model Conservation Standards—Background for the 2021 Plan NWPCC Staff

Garcia asked for more explanation about the rate penalty BPA can recommend [Slide 11.] Grist stated that the Council recommends action to the BPA Administrator, and the Administrator decidea what to do.

Target-Setting Principals: Background for the 2021 Plan NWPCC Staff

Walker thanked staff for sharing their thoughts [Slide 18.] She stated that BPA wants to participate in the conversation but felt the approach crosses the boundaries into the implementation role. She thought this is better left to Bonneville's experts and called for more thought and discussion around the role of the Council and the role of implementors. Walker stressed that she didn't want to lose the flexibility of reaching conservation goals in the lowest cost, most efficient ways.

J. Light agreed that this needs more discussion. She assured Walker that the goal is not to guide towards a more expensive or overly prescriptive path.

Garcia asked if the effects of the Covid-19 pandemic will be considered for the early parts of the Plan, as utilities are concerned about immediate financial effects. Smit said this and other pandemic considerations will be discussed at the next Council meeting on May 12-13.

Grist closed the meeting at 4:00pm.

Attendees via Webinar

Charlie Grist	NWPCC
Shani Taha	UCONS
Kevin Smit	NWPCC
Aaron Bush	PPC
Brandy Neff	PNGC Power
Jack Cullen	Applied Energy Group
Brian Dekiep	NWPCC
Jennifer Light	NWPCC
Tina Jayaweera	NWPCC
Ted Light	Lighthouse Energy
Aaron Leatherwood	Evergreen Efficiency
Debbie DePetris	Clark PUD
Joan Wang	Cadmus
Chris Johnson	Benton PUD
Aquila Velonis	Cadmus
Eli Morris	Applied Energy Group
Leann Bleakney	NWPCC
Wendy Gerlitz	NW Energy Coalition
Danielle Walker	BPA
Deborah Reynolds	WA UTC
Bo Downen	NWPCC
Michael Coe	Snohomish PUD
Deb Young	Northwestern
Elizabeth Osborne	NWPCC
Jessica Aiona	BPA

Frank Brown
Mohit Chhabra
Chuck Murray
Nicholas Garcia
Pat Oshie
Phillip Kelsven
Gurvinder Singh

BPA
NRDC
Washington Dept of Commerce
WPUDA
NWPPC
BPA
Puget Sound Energy