

**Northwest Power & Conservation Council**  
**Systems Integration Forum**  
**March 10, 2020**

Chad Madron, NWPCC, began at 9:30 with a review of the day's agenda. He noted that staff will take notes on a [virtual whiteboard](#) and pointed to the link. Madron then called for introductions.

**Analyzing the Bonneville Portfolio**  
**Council Staff**

Tom Haymaker, Clark PUD, asked about the possibility of Entitlement Returns of the Columbia River Treaty changing substantially for BPA [Slide 9.] Ben Kujala, NWPCC, answered that staff is working closely with Bonneville and thinks the Canadian Entitlement will be included. Kujala added that the notice period means everyone will be well informed in advance and can adapt accordingly.

Haymaker admitted frustration going back to the Seventh Plan, as this could be a very big number with a large impact. Kujala asked Haymaker what he thought might happen. Haymaker reported the position that the US has been significantly overpaying for entitlement obligations over the last 10-15 years. He thought things could get dramatically better from a power perspective.

Kujala asked Haymaker for his sense of the likely window staff should consider. Haymaker didn't know, saying those conversations are at the State Department level. Kujala said staff will stay on top of the issue.

Rick Williams, Portland State University, asked about ecosystem-based management changes that might influence the Plan in the near-term. Kujala said there might be some near-term actions before the treaty that may change Federal hydro system output. He assured him that staff is paying close attention to the issue and coordinating with Fish and Wildlife colleagues.

Wendy Gerlitz, NW Energy Coalition, addressed the BPA scenarios [Slide 8] saying it looks like load shapes will increase or decrease by a given percentage. She asked about testing other load shapes. Massoud Jourabchi, NWPCC, explained that regional load shapes differ from BPA and laid out the complexities of taking load shapes to hourly levels and then layering climate change effects. He added that system load shapes are typically close to BPA shapes.

Gerlitz asked if this scenario will give perspective on ways to optimally structure BPA contracts post 2028. Kujala said staff will think through this and thanked her for the question.

**BREAK**

Jim Litchfield, independent, clarified that Bonneville doesn't own new resources under the NW Power Act, but can acquire output [Slide 12.] Kujala agreed, thanking him for the clarification.

## **Early Retirements of Coal Generation**

### **Council Staff**

Gerlitz acknowledged that the “all units by year” approach illustrated on [Slide 6&7] reflects PacifiCorp’s method but called it neither helpful nor realistic. She feared that this modeling approach might miss incremental, customer-side resources and phasing retirements might provide a better opportunity. John Ollis, NWPCC, agreed that retiring a huge block of resources makes it harder for EE or renewables to fill the gap. He noted that part of the base load scenario examines the current trajectory while policy might limit gas.

Ollis encouraged further suggestions. Gerlitz suggested phasing coal out more realistically as opposed to shutting it off on one day. Kujala thanked Gerlitz for her comment and stated that baseline conditions already reflect a phasing out approach while this scenario is an attempt at something different.

## **LUNCH**

## **Greenhouse Gas Tipping Point**

### **Council Staff**

Charlie Black, independent, asked how greenhouse gas prices will be applied in the modeling, wondering if greenhouse gas-emitting resources will include them in incremental dispatch costs [Slide 7.] Ollis answered with an enthusiastic yes, explaining that this scenario is a specific dispatch decision. Kujala added that this scenario is testing the model’s awareness of the price of carbon.

## **Paths to Decarbonization**

### **Council Staff**

Gerlitz asked why there is no Demand Response in the chart on [Slide 5.] Jourabchi explained that DR is not explicitly called out as he is examining energy reduction. Ollis added that staff intends to examine DR as a potential capacity resource on the power side.

Gerlitz stated that she is unsure where the load and load shapes fit into the modeling. Kujala theorized that DR would have a smaller impact on emissions than other larger, upstream components, but agreed that it’s important.

Gerlitz noted the level of EE supply curves that staff plan to run [Slide 16] and wondered about using more aggressive curves here. Kujala stated that staff plans to run this scenario last using information learned in other scenarios like The Robustness of EE. Gerlitz thought this might be a good scenario to move away from known, widget-based technology curves and thinking about potential more broadly.

## **Organized/Limited Markets for Energy and Capacity**

### **Council Staff**

Gerlitz asked how this treats transmission from a retired coal plant [Slide 5.] Ollis answered that firm transmission from a retired resource would show as open here, but a resource that is not

retiring wouldn't have to hand over their firm transmission even if it could be economically replaced by a new resource. Charles added that transmission lines are not full the majority of the time and this looks at transmission that may be contractually booked up but not being used. Kujala reiterated that this is a narrative assessment and there is no technical way to look at transmission for every potential new resource.

Black noted that CAISO's transmission access charge has increased steadily over the last 20 years and asked if the Organized Market Scenario will reflect the prospect of large cost increases. Kujala said they are looking at the existing system and not transmission expansion or the system costs associated with expansion, moving to [Slide 10] for illustration.

## **BREAK**

### **Change Reliance on Extra-Regional Markets for Resource Adequacy Council Staff**

Williams asked about shut offs due to public safety [Slide 7.] Ollis said that has not historically been part of the Council's considerations but it may be worth studying.

Williams said these events have become a reality, pointing curtailments in southern Oregon and potential for curtailments in Hood River and thought exploring it would be within the Council's mandate. Ollis said this could be explored but staff doesn't have the tools or the planning-level data to move forward. Williams countered that if scenarios with climate change can move forward then the impact of this on-the-ground-reality should too.

Kujala summarized that transmission considerations may not be the same going forward due to wildfire and other natural disasters, before agreeing that this should be explored. Williams thought that Council interest in this topic will be well-received. Ollis asked for data sets that could help advise studies.

Kujala adjourned at 3:45.

### **Attendees**

Ben Kujala	NWPCC
Chad Madron	NWPCC
John Ollis	NWPCC
Gillian Charles	NWPCC
Tina Jayaweera	NWPCC
John Fazio	NWPCC
Kevin Smit	NWPCC
Dan Hua	NWPCC
Greg Nothstein	WA Dept of Commerce
Teresa Hagins	The Williams Companies, Inc
Wendy Gerlitz	NW Energy Coalition

### **Attendees via Webinar**

Richard Devlin	NWPCC
L McCarty	
Angela Tanghetti	CEC
Shirley Lindstrom	NWPCC
Josh Mitchell	Chelan PUD
Rob Diffely	BPA
Katie Ware	Renewable NW
Villamor Gamponia	SCL
John Goroski	
Jim Woodward	WA UTC
Ryan Egerdahl	BPA
Andrea Goodwin	NWPCC
Paul Nissley	SCL
Rick Williams	PSU
Dale Headrick	
Mike Hoffman	
Peter Stiffler	BPA
Bill Henry	dJoule
Steve Bellcoff	BPA
Jim Litchfield	independent
Cindy Wright	SCL
Torsten Kieper	BPA
Steve Johnson	WA UTC
Lauren McCloy	WA
Patrick Oshie	NWPCC
Kathi Scanlan	WA UTC
Dhruv Bhatnager	PNNL
Danielle Walker	BPA
Jeffrey Blend	Montana
Peter Cogswell	BPA
Aaron Bush	PPC
Richard Jensen	CEC
Katie Ware	Renewable NW
Ted Light	Lighthouse Energy
Zeecha VanHoose	Clark PUD
Elizabeth Osborne	NWPCC
Malcolm Ainspan	NRG
Jessica Aiona	BPA
Deanna Carlson	Cowlitz PUD
Bill Saporito	Umatilla Electric
Bobette Wilhelm	Idaho Falls Power
Gregory Cullen	Energy Northwest
Joan Wang	Cadmus

Doug Logan	
Charlie Grist	NWPCC
Brian Dekiep	NWPCC
Chase Morgan	Idaho Falls Power
Tom Haymaker	Clark PUD
Max Greene	Renewable NW
Frank Brown	BPA
John Lyons	Avista Corporation
James Gall	Avista Corporation
Rachel Clark	Tacoma Power
Charlie Black	
Rick Flanigan	Grant PUD
James Vanden Bos	BPA