

**Northwest Power and Conservation Council
Resource Adequacy Advisory Committee-Tech/Steering
December 5, 2022**

Rob Petty, BPA, began the meeting at 1:30 by welcoming the group, adding that he is looking forward to the presentation. KC Golden, Council Member, praised Council staff's impressive work and the robust participation from the group.

Chad Madron, NWPCC, reviewed how to best interact with the Go-to-Webinar platform. He then helped call for introductions.

**Preliminary Pacific NW Resource Adequacy Assessment for 2027
John Fazio, NWPCC**

Blake Scherer, Benton PUD, asked about the seasonality/monthly values of the new annually measured metrics [Slide 8]. He wondered if the system would be deemed adequate if there was a problem with one month. Fazio explained that an annual metric is probably appropriate as the only reason to set a seasonal/monthly limit is if we think the reliable amount of available emergency capacity and/or energy differs by month or season.

Fazio stated that there are still a lot of unknowns and different seasonal/monthly limits can easily be set if needed. John Ollis, NWPCC, added that seasonal market reliance limits can also be set.

Spencer Gray, NIPPC, asked for a quick review of other agencies adopting these standards. Fazio admitted that the NWPCC is the first to adopt a standard like this, but many are looking at a multi-metric standard. Fazio listed other options including an event-based approach adopted by Seattle City Light and Tacoma Power's annualized metric approach like LOLh.

Fazio explained that this unique, multi-metric approach meets Council objectives. He confirmed that Council staff can also generate metrics for comparison with other entities.

Ryan Egerdahl, BPA, recalled concerns around how setting one metric threshold might affect other metric thresholds. He said it now looks like these metrics can be considered independently of one another. Fazio called this interpretation fair, reminding the room that limits are provisional, and metrics may need fine-tuning. He added that the process is evolutionary, and metrics may drop away if deemed inconsequential.

Ollis read a question from Council Member Golden: Without LOLh how can we assess/evaluate the cost of alternative standards? Fazio said cost is more comprehensively evaluated in the system expansion model explicitly designed to deal with resource cost. Golden understood

why LOLh wasn't practical but asserted that at some point there must be judgement around cost/adequacy and the metric that does that best is not available.

Fazio agreed but said the definition of LOLh was way too lax and would never be binding, adding that it wasn't very useful in the U.K or the Netherlands. Golden agreed but wondered how to address that objective. Fazio said this standard will be used to calculate an adequacy reserve margin that can be fed into the system expansion model. The model, Fazio stated, will try to achieve that reserve margin in the least cost manner.

Golden understood but said there will still have to be iterations. He wondered what happens if the lowest cost solution still generates "sticker shock." Fazio said other metrics to assess costs could be included. Ollis confirmed that the capital expansion tool is the right way to look at this but agreed that the question requires exploration.

Fazio asked that more questions and feedback about the new standard be sent to him.

Results—High Level Observations

John Ollis, NWPCC

Dor Hirsh Bar Gai, NWPCC

Council Member Golden stopped at [Slide 44] to urge RAAC members to follow up with questions and comments.

Brian Dombeck, BPA, wrote: "Curious if staff have talked about integrating all metrics into a single numeric value for inclusion in resource planning as an additional objective function. E.g. minimize cost and this adequacy metric? Discrete thresholds are tricky. Appreciate the effort to show the borderline scenarios." at [Slide 50].

Ollis answered that the planning reserve margin, based on metric thresholds, might be that single numeric value. Fazio said the work for that is not done yet but said it could be like how the LOLP was generated.

Fazio asked for further feedback and questions, adding that comments will be incorporated into the minutes. Ollis said staff will present this to the Council and hoped to finalize this work in the next six weeks.

Golden thanked staff for the action-packed presentation. He said he felt good about the "dials" on the machine and asked for RAAC guidance on how to turn them. Golden said he looked forward to testing out these new metrics and the new model.

Petty agreed, calling the work impressive and interesting. He said he was greatly looking forward to the next steps.

Petty ended the meeting at 3:30.

Attendees via Go-to-Webinar

John Fazio	NWPCC	John Ollis	NWPCC
Dor Hirsh Bar Gai	NWPCC	Rob Petty	BPA
KC Golden	Council Member	Leann Bleakney	NWPCC
Ben Brouwer	Montana	Frank Brown	BPA
Pat Byrne	BPA	Robert Diffely	BPA
Brian Dombeck	BPA	Bill Edmonds	NWPCC
Ryan Egerdahl	BPA	Ryan Fulleman	Tacoma Power
James Gall	Avista	Eric Graessley	BPA
Spencer Gray	NIPPC	Doug Grob	NWPCC
Doug Hart	PSE	Fred Heutte	NW Energy Coalition
Massoud Jourabchi	NWPCC	Scott Levy	Bluefish
Dan Lloyd	Montana	John Lyons	Avista
Ian Mcgetrick	Idaho Power	Joel Nightingale	WA UTC
Elizabeth Osborne	NWPCC	Damon Pellicori	Northwestern
Denny Rohr	independent	Will Rosquist	Montana
Sashwat Roy	Renewable NW	Blake Scherer	Benton PUD
Adam Schulz	ODOE	Paul Schulz	Montana
Aliza Seelig	PNUCC	Steve Simmons	NWPCC
Jaime Stamatson	Montana	Tyler Tobin	PSE
Hannah Wahl	PSE	Brian Dekiep	NWPCC
Charles Banke	Connect Gen	Jeff Blend	Montana
Daniel Catchpole	News Data	Dylan D'Souze	NWPCC
Ted Drennan	OR PUC	Haley Ellett	Hood River
Nora Hawkins	WA Dept of Commerce	Torsten Kieper	BPA
Maya McNichol	Western Power Pool	Kathi Scanlan	WA UTC