

Northwest Power & Conversation Council
Resource Adequacy Advisory Steering Committee
July 8, 2022

KC Golden, Washington Council member and RAAC co-chair, welcomed the Resource Adequacy Advisory Steering Committee, saying he is impressed by the level of uncertainty facing the region. He pointed to topics like measuring resource adequacy, tracking progress, and planning investments that will be explored to help ensure future adequacy.

Chad Madron, NWPCC, reviewed how to best interact with Go-to-Webinar.

Robert Petty, BPA, and co-chair of the RAAC, also greeted the body noting the importance of this process. He called for a robust discussion today.

Pacific NW Resource Adequacy Assessment

John Fazio, NWPCC

Fazio discussed what 2027 may look like and introduced the day's three major points of discussion: updates on GENESYS, choosing scenarios, and consideration of a multi-metric adequacy standard.

Rachel Clark, Tacoma, approved of the redeveloped GENESYS's ability to make nuanced market assumptions [Slide 10]. She pointed to the max import restrictions of 1250MW and 2500MW and wondered about the lower end of imports during bad conditions.

John Ollis, NWPCC, said there are definitely times that market supply is constrained below 1250/2500MW. He clarified that those times tend to be evening ramp hours after the sun goes down. Clark asked how regional supply is estimated during those tight times. Ollis said AURORA is used outside the region to look at loads and hourly shapes of resource capability, adding that in-region resources are modeled explicitly.

Spencer Gray, NIPPC, complimented staff for the GENESYS improvements in dynamic prices.

James Adcock, independent, stated that he has been critical of this approach, saying he still does not see a rational basis for hard limits and called for a written paper that justifies them. Fazio answered that the limits reflect the inability to stochastically model the entire WECC. Fazio added that this is a way to avoid expected market conditions which might overestimate NW adequacy. Fazio said the goal is to model the entire WECC stochastically which would eliminate market limits.

Nicholas Garcia, WPUDA, agreed that the redeveloped GENESYS is a vast improvement. He then asked if the model could be granular enough to address sub-regional concerns. Fazio said this GENESYS is already much more granular, addressing 17 zones verses two, and if one zone is

inadequate the whole region is then labeled inadequate. Ollis added that the zones are even more granular than just Balancing Areas as some BAs are split into smaller parts.

Scott Levy, Bluefish, wondered about GENESYS concerns beyond the three mentioned above. Fazio said there was a three-day workshop addressing concerns and offered to send the link to materials.

Fred Heutte, NW Energy Coalition, addressed adding WECC-wide solar and wind variability and looked forward to talking about adding even more regional data, listing some possible sources that could be folded into this analysis. Fazio agreed that this would be a good topic for the RAAC Technical Committee.

Choice of Scenarios for the RA Assessment [Slide 11]

Fazio called on the co-chairs for input.

Petty did not have specifics but looked forward to committee member input.

Golden noted that, in Washington, if the decarbonization scenario is not adequate that means the system is inadequate. He was not sure what that means for the rest of the region, but he assumed the answers would vary. He wondered if that policy imperative should be incorporated into the reference case.

Heutte called the scenarios good. He said there is a lot of interest in OR for offshore wind that the committee should consider. Heutte then said we should assess beyond “sited and licensed” and look for likely to build resources as well.

Fazio said this would be a great topic for the Technical Committee and asked Heutte’s opinion on the decarb case. Heutte said that scenario will be important for OR and WA adding that utilities in Idaho have made similar commitments.

Fazio then pointed to the LOLP heat map that will be produced and suggested multiple heat maps that look at LOLPs under even more conditions.

Adcock noted that in the past utilities often don’t build everything in their IRPs, but WA’s policies mean those utilities must meet the rules. He hoped for clarification. Fazio discussed that the adequacy process was developed as an early warning system and the Power Plan is much more extensive when it comes to resource strategy. Fazio said adding the last bullet to [Slide 11] addresses if the other planned resources will be enough to address any shortfall.

Golden agreed that it seems asymmetrical to include the EE target in the reference case but not for other resources. Fazio said they try to be as consistent as possible and equate EE targets from the Power Plan to sited and licensed for generation resources.

Garcia thought a scenario that looks at 2028 and BPA's new contracts would be helpful as 1200MW could go away. Fazio wondered if enough data would be available. Garcia said there would be enough information to begin to inform people. He guessed that load would be a bit higher and questions around natural gas would be clearer. Fazio thanked him for the clarity.

Garcia then asked for heat maps divided by subregion. Fazio said that could be done. Ollis clarified that results may not be able to identify a subregion's adequacy and offered to continue the conversation at RAAC Tech.

Sibyl Geiselman, Public Generation Pool, wondered about Snake River dam removal in the retirement scenario. She reiterated interest in a decarb scenario and high load scenarios due to climate change, decarb policy, or server farm load growth. Geiselman also suggested putting decarb in the reference case.

Fazio said early PNW resource retirement is generic by design to address different generation going away. He said there is no plan to look at four dam draw down analysis. Geiselman asked how to generically look at different resources with different characteristics.

Fazio said the focus will be on non-hydro generating resources and it would be good to know if coal retires early or if the nuclear plant goes away. He stressed that this is a generic look.

Geiselman agreed that the planned resource scenario, in alignment with resource plans and the RAP, would be meaningful. Fazio said adding Council resources would be good but tricky. He said they could also take an aggregate of planned resources from the IRPs.

Heutte addressed planned resource, adding that there is a defined process for filling the resource replacement gap. He agreed there can be uncertainty in the acquisition part and suggested adding a realization factor.

Gray noted that this analysis is for a five-year horizon and the OR and WA deep decarb doesn't show up for the 2030s. He pointed to the 80% target for 2030 and wondered about the steepness of the curve to meet CETA and HB2020. Fazio noted that there is an RA assessment every year and the Power Plan addresses these long-term issues. Fazio thought a 2028 look is appropriate but 2030 is too far.

Golden echoed Gray's point about assumptions over five years to meet the 2030 destination.

Garcia thought his earlier comment about a 2028 scenario folds well into a 2030 scenario as it would provide BPA preferred customers a sense of what the world will look like. Golden thought that made a lot of sense. Fazio stated that everything is on the table, but each scenario adds more work and computing time, so prioritization is imperative.

PNW Utility using a Multi-Metric Standard [Slide 15]

Heutte strongly supported exploring a multi-metric adequacy standard, saying there is a real urgency to do this complex work. Heutte thought this would position the region as a leader and help the rest of the North American Grid do a better job. He said he's started discussions with Grid Lab and ESIG adding that they would be interested parties.

Adcock believed that the models are still extremely weak and probably do not support the simple LOLP metric well. He thought it would be inappropriate to propose that they could deliver a higher metric. Adcock then said, as a customer, he wondered why this is being perused as opposed to the reliability of delivered service.

Fazio appreciated the comment but said they only work on power adequacy.

Both Golden and Petty thanked the group for their input and collaboration.

Fazio discussed future meetings and ended the meeting at 10:30.

Attendees via Go-to-Webinar

KC Golden, NWPCC	John Fazio, NWPCC
John Ollis, NWPCC	Leann Bleakney, NWPCC
John Shurts, NWPCC	Elizabeth Osborn, NWPCC
James Adcock	Pat Byrne, BPA
Lawrence Becker	Rachel Clark, Tacoma Power
Jennifer Coulson, PSE	Renchang Dai, PSE
Mike Dalton, MT	Robert Diffely, BPA
Ted Drennan, OR PUC	Haley Ellett, Hood River
Nicolas Garcia, WPUA	Sibyl Geiselman, Public Generation Pool
Spencer Gray, NIPPC	Fred Heutte, NW Energy Coalition
Rebecca Klein, SCL	Scott Levy, Bluefish
Verene Martin, SCL	Ian Mcgetrick, Idaho Power
Matt Muldoon, OR PUC	Heather Nicholson, independent
Paul Nissley, SCL	Selisa Rollins, BPA
Will Rosquist, MT	Sashwat Roy, Renewable NW
Blake Scherer, Benton PUD	Adam Schultz, ODOE
Paul Schultz, MT	Lisa Stites, GC PUD
Jim Waddell	Tashiana Wangler, NRU
Ryan Fulleman, Tacoma Power	Michael Louis, Idaho PUC
Robert Petty, BPA	Alex Swerzbin, PNGC Power
Kelli Schermerhorn, Northwestern	