

**Northwest Power & Conservation Council
Generating Resources Advisory Committee
October 1, 2024**

Annika Roberts, NWPCC, began the meeting at 1:00pm. Joe Walderman took roll.

Big GRAC Summer: Turbines

Rob Diffely, BPA, referenced Oregon HB 2021 asking if there are any caveats to “No Gas” or if it represents a fiat ban [Slide 13]. Roberts said there are some complicated caveats, and they are laid out in the text block of the slide.

Ian McGetrick, Idaho Power, referenced the new EPA rule around emissions and new gas plants, saying they guide his utility’s perspective on Recip versus Frame versus Aero. He said Idaho Power is seeing that they don’t mention Recips because they are small and can be aggregated to be larger. He said this gives them a different limitation on capacity factor than a single cycle. McGetrick said the Council’s interpretation could influence the decision to include both.

McGetrick called interpreting the rule important when defining the assumption. He said the rule makes it seem like a simple cycle could technically fit in the 20-40% capacity factor category, but did not think that was possible based on Idaho Power’s interpretation. Because of this he is modeling simple cycles as constrained to 20% and less and Recips to not be constrained to under 20%. McGetrick thought that it is important to model them both.

John Ollis, NWPCC, called this interesting. He asked if Idaho Power’s interpretation that each Recip unit is small enough to be under the limit means that by breaking them up they don’t have the same emission standard. McGetrick said that’s what it appears to be, calling it a weird loophole and not the intention of the rule.

Ollis answered that we can model both, but the goal is not having the model spin its gears as it usually puts out a more abstract interpretation of the resource. Ollis did admit that that particular distinction could make a difference.

Joni Sliger, ODOE, addressed gas siting in Oregon calling the slide reasonable and the same as Oregon State’s Energy reference scenario strategy.

Shannon Souza, Solcast, stated that the Oregon limitation trigger threshold is 25MW. She didn’t know if that makes a new natural gas turbine commercially viable.

McGetrick said the costs on [Slide 22] look a bit different than Idaho Power’s but close enough. He was curious about Recip costs, saying he finds data that ranges between 600

to 2800 \$/kW. Roberts agreed, saying she sees the same deep spread, so she chose a number in the middle.

Ollis wondered if the infrastructure played a role in the cost, asking PGE or another utility who recently built a Recip to weigh in. Roberts said her research showed a frame which cost less plus a different kind of peaking technology which was usually a Recip.

Souza said everyone is waiting for the V45 final rules to better understand hydrogen for power [Slide 26]. She pointed to work going on in the biomass area that should also be kept on the radar.

Alexandra Karpoff, PSE, said her utility is scheduling hydrogen for 2035, adding that they are looking at other alternative fuels as well. She said they are also assuming some pipeline access. Roberts said she is finding 2035-40 with an assumed pipeline in other IRPs as well.

Souza noted Mitsubishi's hydrogen modeling work, saying they are focusing on the CapEx differential between new transmission lines and hydrogen pipelines [Slide 27]. She wondered if that could fit into a scenario with significant renewable overbuild and less transmission, or a hydrogen pipeline in place of transmission.

Roberts noted a planned scenario that looks at resource costs and transmission availability.

Roberts ended the meeting at 2:00.

Attendees via Webinar

Annika Roberts	NWPCC	Nathan Critchfield	PSE
Kevin Smit	NWPCC	Elizabeth Osborne	NWPCC
Joe Walderman	NWPCC	Terry Toland	Clark PUD
Jennifer Light	NWPCC	Brad Westmoreland	PNGC
Ian McGetrick	Idaho Power	Jaclynn Simons	WA UTC
Frank Brown	BPA	Rick Williams	Portland State
Landon Snyder	Snohomish PUD	Tomás Morrissey	NPWCC
Cindy Wright	SCL	Shannon Souza	Solcoast
Blake Scherer	Benton PUD	Joni Sliger	ODOE
Nolan Brickwood	Van Ness Feldman	Alexandra Karpoff	PSE
Paul Lee	DOE	Edith Bayer	ODOE
Lori Hermanson	Avista Corp	Rob Del Mar	ODOE
Haley Ellet	Hood River	Robert Diffely	BPA
Mary Kulas	Consultant PPC	John Goroski	Flathead Coop
John Purvis	Clallam PUD	Bryan Neff	CA Dept of Energy
Chris Johnson	Benton PUD	Michael Freels	ODOE
Katie Chamberlain	Renewable NW	John Ollis	NWPCC
Brian Dekiep	NWPCC	Leann Bleakney	NWPCC
Karma Hara	BPA		
Tyler Tobin	PSE		
Aaron James	NEEA		