

Webinar #7: CETA Assumptions, Demand Forecast, Resource Adequacy, Resource Need Q&A

9/2/2020

Overview

On September 1, 2020 Puget Sound Energy hosted an online meeting with stakeholders to discuss CETA assumptions, demand forecast, resource adequacy and resource need. Additionally, participants were able to ask questions and make comments using a chat box provided by the Go2Meeting platform.

Below is a report of the questions submitted to the chat box. Answers to the questions were provided verbally by IRP staff during the webinar. Please note that questions were answered in order of relevance to the topic currently being discussed. Questions regarding other topics were answered at the end of the webinar session.

To view a recording of the webinar and to hear responses from staff, please visit the project website at pse-irp.participate.online.

Attendees

A total of 70 stakeholders and PSE staff attended the webinar, plus another 11 attendees who called into the meeting and did not identify themselves (81 people total).

Attendees included: Allison Jacobs, Anne Newcomb, Anthony O'Rourke, Benjamin Zwirek, Bill Pascoe, Brian Grunkemeyer, Charlie Inman, Cody Duncan, Court Olson, Dan Kirschner, Don Marsh, Elyette Weinstein, Fred Heutte, Graham Horn, James Adcock, Jenny Lybeck, Jim Heidell, Jon Howell, Joni Bosh, Julie Zuckerman, Katie Ware, Kevin Jones, Kevin Yates, Kyle Frankiewich, Lana Gonoratsky, Larry Becker, Lori Elworth, Mike Hopkins, Natalie Mims, Nick Abrams, Nick Bengtson, Norm Hansen, Orijit Ghoshal, Patrick Leslie, Rachel Brombaugh, Rahul Venkatesh, Robert Briggs, Sarah Laycock, Stephanie Chase, Steve Johnson, Ted Drennan, Virginia Lohr, Vlad Gutman-Britten, Warren Halverson, Weimin Dang, Willard Westre

Questions Received

Questions from attendees are posted in the order in which they were received. The webinar began at 1:00 PM PDT and ended at 4:11 PM PDT.

Name	Time Sent	Comment
James Adcock	1:07 PM	Hand Raise Slide 10
James Adcock	1:09 PM	Hand Raise Slide 13
Kyle Frankiewicz	1:14 PM	Hello all! Apologies for joining late; had some internet troubles at home.
Joni Bosh	1:15 PM	Since Ecology has not finished the rule making around what kinds of projects qualify as ETPs,
Alexandra Streamer	1:15 PM	@Kyle, no problem – thanks for joining us!
Don Marsh	1:20 PM	We would like to see more forecasts for those "pockets" of demand, since PSE develops responses for those pockets. This seems like a blind spot in the IRP process.
Alexandra Streamer	1:23 PM	Thanks for the comment, Don
Don Marsh	1:26 PM	Raise hand slide 23
Anne Newcomb	1:37 PM	Thank you for including Covid impacts. How is PSE effected by the current and in many cases the future work from home ethic and less building occupation?
Warren Halverson	1:41 PM	PSE has actual demand data from Mar-Se', 6 months, please share with us the quantitative change and that actual percent impact for the next few years.
Warren Halverson	1:41 PM	Thank you.
Anne Newcomb	1:44 PM	Thanks for the great answer!
Warren Halverson	1:47 PM	Thank you
Don Marsh	1:48 PM	Raise hand slide 28
Vlad Gutman-Britten	1:52 PM	Do you consider the impact of ETPs on this EV deployment?
Kyle Frankiewicz	1:53 PM	agree that it's reasonable to expect some interactive effects between EVSE-based ETPs and EV adoption
Anne Newcomb	1:54 PM	Well said Don! :-)
Natalie Mims	1:54 PM	1:54 PM: Could you (repeat) the assumptions about on-peak and off-peak charging (e.g., 100% of charging is on-peak, 50% is on-peak)?
Fred Heutte	1:54 PM	I'm curious about the eventual saturation of EVs at about 25% by 2050. PGE also had analysis from Navigant and estimated a mid-range of 35% by 2050, with a low estimate about half that, and a high estimate more than double. Is PSE also including a low and high estimate in the IRP modeling?
Brian Grunkemeyer	1:54 PM	I'd like to suggest a CETA Energy Transformation Project. I think EV charging can be used to help further your carbon reduction goals. Looks like we can reduce emissions by about 10% using Don's suggestion of a fixed TOU, but we have some preliminary data suggesting a 20% reduction in emissions using a marginal CO2 emissions forecast. Would PSE consider something like this?
Bill Pascoe	1:55 PM	Raise Hand #28
Kyle Frankiewicz	1:56 PM	ETP = Energy Transformation Projects
Anne Newcomb	1:58 PM	Has peak demand changed during the pandemic?

Don Marsh	2:02 PM	Raise hand slide 29
Fred Heutte	2:03 PM	Comment on slide 29.
Virginia Lohr	2:04 PM	<p>Looking at new forecasts related to Covid and making immediate changes to your demand forecasts for the future is impressive. Projecting accurately what will happen in the future is essential for an IRP to be valid, so your making such rapid adjustment for Covid is noteworthy</p> <p>For temperature data, I see only backward looking data. The proposed scenarios look at using different segments of historic data, but none of the proposals are future looking. Clearly, you found projections on the impact of covid, and projections of changes of future temperatures could be found. We know that getting good projections for future temperatures is essential to getting useful projections for the environment in which PSE will be operating. Your President has said "I have been a very vocal advocate of the need to combat climate change however we can." Please help me understand the rationale for treating temperature data so differently from all the other forecasts, such as electric vehicle use, and how this will help your</p>
Alexandra Streamer	2:05 PM	@Virginia thanks for your question – looks like it may have been cut off at the end.
Don Marsh	2:07 PM	Thanks, Elisabeth!
Fred Heutte	2:08 PM	<p>Here's the NW Council staff's most recent summary of the climate-adjusted load forecast inputs for the 2021 Northwest Plan. Extensive presentations on how climate modeling has been incorporated into their estimates can also be found on their site:</p> <p>https://www.nwcouncil.org/sites/default/files/2020_08_p3.pdf</p>
James Adcock	2:08 PM	I suggest that everyone should be less worried about average Heating Degree Days, or Cooling Degree Days, and instead worry more about how Puget is modeling Peak Capacity needs aka "Coldest Winter Day" assumptions for "Resource Adequacy" purposes -- because I think Puget may be high by about 700 Megawatts.
Virginia Lohr	2:17 PM	<p>Looking at forecasts related to Covid & making changes to your demand forecasts is impressive. Projecting the future accurately is essential for an IRP to be valid, so your making such rapid adjustment for Covid is noteworthy. For temperature data, I see only backward looking data. The proposed scenarios use different segments of historic data, but none of the proposals are future looking. You found projections on the impact of covid, and projections of changes of future temperatures could be found. Getting good projections for future temperatures is essential to getting useful projections for the environment in which PSE will be operating. Your President said "I have been a very vocal advocate of the need to combat climate change however we can." Please help me understand the rationale for treating temperature so differently from all the other IRP forecasts, and how this will help your President show us that she intends for PSE to combat climate change if temperature forecasts are not used in this IRP.</p>
Anne Newcomb	2:17 PM	Does PSE have any new NG fired turbines under construction or any NG Gas plants in the pipeline currently or are there any future plans to add NG facilities?

Don Marsh	2:22 PM	Raise hand slide 32
Kyle Frankiewicz	2:26 PM	Agree that 2019 post-DSR lines provide really useful context
Court Olson	2:33 PM	I second the comments that Don Marsh is making on the gas demand projection chart.
Don Marsh	2:40 PM	Raise hand
Anne Newcomb	2:42 PM	Good answer. Thanks!
Court Olson	2:42 PM	Good to see no peak load growth over the next 12 to 15 years with the anticipated conservation. I think that trend is likely to continue beyond that time frame.
Court Olson	2:44 PM	FYI, recent modeling by the State of Washington predicts that Summer Peak will be bigger than winter peak by 2050. PSE should be predicting such a change.
Fred Heutte	2:46 PM	Comment on summer peak: the issue is not so much that it is lower than winter, but that the market is limited and will be moreso in the future with coal retirements.
Kyle Frankiewicz	2:48 PM	+1 for Fred's comment. Even if PSE's load isn't as big in July as it is in December, it may still be a bigger challenge to meet that load, or may have to pay exorbitant prices in competition with OR and CA to do so.
Kevin Jones	2:49 PM	Please don't overlook Anne Newcomb's question at 2:17
Steve Johnson	2:50 PM	From 2017 IRP page E-6 showing regression variables states χ_1 = dummy variables used to put special emphasis on summer months to reflect growing summer peaks.
Brian Grunkemeyer	2:50 PM	To augment Kyle's comment - An easy way to provide more context would be to see what the BPA and other utilities are doing with power sales during the summer vs. winter. If all available power is being sold to California in the summer, the power available in the NW may be quite limited. (No need to discuss, but please consider offline.)
Fred Heutte	2:53 PM	Slide 55 – a comment.
James Adcock	2:53 PM	To augment Brian's comments about BPA -- BPA has a legal requirement to meet the needs of the PNW before sales to other regions -- such as California. I don't believe BPA would want to be in the position of selling to California during a power shortage in the PNW -- I think that action would prove to be very troublesome for BPA to defend.
Kevin Jones	3:05 PM	raise hand
Brian Grunkemeyer	3:06 PM	Elizabeth, can you please confirm that your RA work looks at market availability of power during the summer, in addition to winter?
Fred Heutte	3:07 PM	Just to point out BPA must first meet the needs of its preference customers (public power), then offer any remaining resource within the Northwest ("regional preference") and only then sell outside the region.
Brian Grunkemeyer	3:08 PM	.. So essentially, if we have a Northwest-wide spike in demand, PSE may still not be able to get power during a summer. PSE's summer peak may of course be lower, but if they are still short in the summer during a peak demand period, PSE could need to curtail load. Correct?
James Adcock	3:10 PM	Raise Hand Slide 63

Don Marsh	3:11 PM	+ 1 on Brian's comment. I just looked up Avista's 2021 IRP. That utility is showing historical peaks and forecasts for both summer and winter. PSE shouldn't hide the summer peak forecast.
Don Marsh	3:11 PM	Raise hand slide 63
Willard Westre	3:13 PM	Raise Hand s-66 & 67
Kyle Frankiewicz	3:18 PM	Raised hand
Fred Heutte	3:21 PM	question on slide 65
James Adcock	3:27 PM	Re Slide 63 it would also be good to know that the "Hydro Data" has actually been "corrected" to reflect BPA change in operational conditions back in th 1980s -- a question which Puget hasn't clearly answered yet (and these issues have been unresolved for more than a decade now.)
Brian Grunkemeyer	3:27 PM	Kyle, great question. Would probably have a higher LOLP in summer, and lower in winter. But these numbers are computed on an annual basis. It's tricky. But this is important to avoid a California-style power shortage.
James Adcock	3:39 PM	It is also important to not build emitting resources in excess of what is in-practice needed on a 20-year basis.
James Adcock	3:30 PM	There has been about one day of largish Mid-C price spikes per year the last couple of years.
Brian Grunkemeyer	3:31 PM	You've just put your finger on the tension here. We want a lower LOLP to ensure PSE doesn't over-build based on the winter peak. We want a carefully-computed LOLP that might be higher in the summer to ensure we don't have a California-style blackout. This is a tricky tension, and the UTC has to make sure they can understand and defend this process to a future governor if something goes wrong.
James Adcock	3:33 PM	It is not UTC's job to defend Puget's choices right or wrong. It is Puget's job to defend Puget's choices right or wrong. And they can be wrong in two different directions -- they can "model" their peak capacity needs too high, or too low.
Brian Grunkemeyer	3:34 PM	What should PSE do? Two versions of the RA model, take the max of two LOLP's?
James Adcock	3:35 PM	In practice I suggest Puget should limit themselves to the most recent 30 years of temperature data. And they need to make sure that their hydro data has actually been "corrected" to account for BPA changes in operational practices as-of in 1980s.
Don Marsh	3:37 PM	Agreed. 30 years for RAM, 20 years for normal temperature calculation for peaks.
Court Olson	3:37 PM	These charts don't have significant value without DSR included.
Fred Heutte	3:38 PM	responding to Brian: as Tom Eckman from the NW Council liked to say, "you always want to be a little 'long' but not too long!"
Anne Newcomb	3:39 PM	It looks like my question will be better on slide 72. I see you are having a fresh look at your 2018 RFP which had a peaker plant Does PSE have any new NG fired turbines under construction or any NG Gas plants in the pipeline currently or are there any future plans to add NG facilities?
Virginia Lohr	3:40 PM	That question was from Anne. That was not my question.
James Adcock	3:40 PM	Renewables fuels are only allowed to the extent that they are fed directly to the NG power plant.

Virginia Lohr	3:41 PM	Please askmy question.
Anne Newcomb	3:41 PM	No problem at all! Thanks!
Don Marsh	3:41 PM	Raise hand
James Adcock	3:42 PM	Raise hand
Court Olson	3:42 PM	I didn't hear an answer to Anne's question on future PSE plans to build gas facilities. It was sidestepped.
Fred Heutte	3:42 PM	comment in response to Don Marsh