

PSE Electric Progress Report Webinar with IRP Stakeholders

September 13, 2022

Overview

On September 13, 2022, Puget Sound Energy (PSE) hosted an online webinar with Integrated Resource Plan (IRP) stakeholders on the Electric Progress Report to:

- Provide a brief overview of how the Inflation Reduction Act will be incorporated into the IRP process.
- Share results of Conservation Potential Assessment (CPA) for the Electric Progress Report.
- Discuss Achieving CETA Compliance and becoming 100% Greenhouse Gas Neutral by 2030.
- Share updates on electric generic resource costs and assumptions, follow up to the March 22, 2022, IRP stakeholder meeting.

Additionally, participants were able to ask questions and make comments using a chat box provided by the Zoom platform.

Below is a report of the questions submitted to the chat box. Answers to the questions were provided verbally by PSE staff during the meeting. 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 meeting.

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

Attendees

A total of 79 stakeholders, PSE staff and facilitators attended the meeting.

Attendees included:

Alexandra Karpoff, Allison Jacobs, Amy Wheelless, Andrew Wood, Aquila Velonis, Bill Will, Blake Bjornson, Bob Williams, Bradley Cebulko, Brian Duncan, Brian Grunkemeyer, Brian Tyson, Cindy Vu, Corey Corbett, Court Olson, Don Marsh, Douglass Hart, Elizabeth Hossner, Gamze Gungor Demirci, Gurvinder Singh, Hannah Wahl, James Adcock, Jeffrey Larsen, Jennifer Coulson, Jennifer Magat, Jennifer Snyder, Jesse Durst, Jessica Neely, Jessica Neely, Jessica Zahnow, Jim Schretter, Jisong Wu, Joel Nightingale, Jon Sdao, Jonathan Budner, Kara Durbin, Kasey Curtis, Kelly Hall, Kelly Xu, Kim Zamora Delgado, Lorin Molander, Marc Alberts, Marcus Sellers-Vaughn, Mark Lenssen, Meredith Mathis, Michael Forman, Michelle W., Nancy Shimeall, Natasha Bryan, Nate Davern, Nathan Critchfield, Nelli Doroshkin, Nick Gemperle, Phil Ritter, Phillip Popoff, Rachel Clark, Ray Outlaw, Renchang Dai, Sammie Roeun, Sashwat Roy, Scott Spettel, Sergio Dueñas, Seth Baker, Sophie Glass, Stephanie Chase, Steve Edburg, Tanner Gillespie, Tyler Tobin, Virginia Lohr, Wendy Gerlitz, Will Henderson, Willard Westre, 6 call-in attendees.

Questions Received

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

Name	Time Sent	Comment
Virginia Lohr, WA Clean Energy Coalition	1:07 p.m.	I see the written meeting purposes include providing an overview, sharing results, discussing things, and sharing updates. This all appears to involve 1-way communication from PSE and its representatives. I assume another purpose of the meeting, according to what Sophie Glass said, is to have a dialog with stakeholders. I think hearing what stakeholders think and giving stakeholders an opportunity for 2-way dialog should be one of the purposes of the meeting. Simply entering questions in the chat is not 2-way conversation. Entering questions in the feedback form is also not 2-way. Have I misunderstood the purpose of the meeting?
James Adcock, Electrical Engineer	1:07 p.m.	+1 Virginia
Don Marsh, Sierra Club	1:08 p.m.	Agree with Virginia. Also, comment on slide 9.
Sophie Glass, Triangle Associates	1:08 p.m.	Hi Virginia - Thanks for these comments. Putting questions in the chat is just a way of organizing your question. We will then have PSE answer the question "live" so the participant can hear the response and share follow-ups
Sophie Glass, Triangle Associates	1:09 p.m.	Thanks, Don. I see your note about Slide 9.
Bradley Cebulko, Strategen	1:09 p.m.	Phillip, the meeting materials included the electric price forecast report and data. Today's agenda doesn't include a discussion of the electric price forecast. Can you provide more context as to why PSE issued the electric price forecast report in the meeting materials? When will it be discussed at a stakeholder meeting?
Court Olson, Consultant to Building Owners	1:09 p.m.	Starting without conservation is a flawed approach. Though it likes to think so, PSE doesn't drive the conservation in the buildings market place. There are significant market trends that should be considered in electric demand forecasting.
James Adcock, Electrical Engineer	1:11 p.m.	+1 Don
Meredith Mathis, PSE	1:14 p.m.	https://www.pse.com/IRP/Get-involved/Give-feedback
Bradley Cebulko, Strategen	1:16 p.m.	Will someone at PSE please discuss any details about the proposed sale of Colstrip to Talen? I am particularly interested in the impacts of the sale to PSE's transmission and ability to access resources in Montana.
Don Marsh, Sierra Club	1:18 p.m.	My groups are also interested in the transmission rights impacted by the proposed Talen sale.
James Adcock, Electrical Engineer	1:19 p.m.	"Transmission *IS* an IRP Resource"
Don Marsh, Sierra Club	1:35 p.m.	Question on 15.
Sophie Glass, Triangle Associates	1:36 p.m.	Thanks Don
Sophie Glass, Triangle Associates	1:36 p.m.	We will get back to your question on slide 15
Bradley Cebulko, Strategen	1:39 p.m.	I have a question on slide 16
Sophie Glass,	1:39 p.m.	Noted Brad

Name	Time Sent	Comment
Triangle Associates		
James Adcock, Electrical Engineer	1:44 p.m.	Slide 16 -- is Canadian-side methane leakage of Canadian gas imported to USA taxed, or only USA based leakage?
Sashwat Roy, RNW	1:45 p.m.	I have a question on Slide 13
Sashwat Roy, RNW	1:55 p.m.	Elizabeth, could you cover how the portfolio modeling considers these tax credits? Does the model have the ability to endogenously select between PTC and ITC? (for a solar paired with battery storage) Or will you assume that standalone solar gets a PTC and storage gets the ITC
James Adcock, Electrical Engineer	1:55 p.m.	DOE says current cost of Wind is \$32 per MWh, so after \$25 PTC that would mean that Wind would be \$7 per MWh - i.e. less than a penny per kilowatt-hour?
Sophie Glass, Triangle Associates	1:55 p.m.	Sashwat - I see your question, thanks
Sophie Glass, Triangle Associates	1:56 p.m.	Jim - I see your question, thanks
Sophie Glass, Triangle Associates	2:00 p.m.	Sergio - I see your hand. Thanks
Don Marsh, Sierra Club	2:10 p.m.	Somewhat concerned about the short duration battery modeling. It would be helpful to also analyze longer duration batteries, which other utilities have in pilot projects.
Sergio Dueñas, WEST	2:12 p.m.	I agree, Don. 8- and 10-hour storage should be studied.
Sophie Glass, Triangle Associates	2:12 p.m.	Thanks Don and Sergio. We are copy and pasting your comments into our notes
Sergio Dueñas, WEST	2:14 p.m.	I would also add that the limitation to consider pumped hydro storage (PHS) as an 8-hour asset should be properly justified. These assets are better defined by their seasonality or yearly start limits than their "duration" in hours. They could easily serve 12-hour needs.
Sergio Dueñas, WEST	2:14 p.m.	12-hour needs*
James Adcock, Electrical Engineer	2:14 p.m.	Concerned comparing the \$7 per MWh Wind verses the \$500+ per MWh that PSE is considering for some other resources in their CEIP appendices. You can do a LOT more GHG reductions for \$7 per MWh than for \$500 per MWh.
Sophie Glass, Triangle Associates	2:14 p.m.	Thanks Sergio. We are also copy and pasting this comment into our official meeting summary
Sophie Glass, Triangle Associates	2:14 p.m.	Thanks, Jim. We are going to copy over these comments into our meeting notes as well.
Court Olson, Consultant to Building Owners	2:16 p.m.	Why is it not possible for PSE to adjust its conservation analysis to include market impacts from the IRA
Sophie Glass, Triangle Associates	2:17 p.m.	Thanks, Court. I'll see if someone from PSE can answer your question.
Amy Wheelless, NW Energy	2:18 p.m.	what's your cut off date for including codes and standards?
Court Olson, Consultant to Building Owners	2:22 p.m.	Why can't PSE get Cadmus to revise their study to include IRA impacts. These will be significant and impact the market conservation trends. Skipping this now seems imprudent.
Bradley	2:26 p.m.	Question on slide 26

Name	Time Sent	Comment
Cebulko, Strategen		
Sophie Glass, Triangle Associates	2:27 p.m.	Thanks, Brad. We will get to that question in a moment
Don Marsh, Sierra Club	2:28 p.m.	When this group was meeting for the 2019 IRP, CETA was passed and completely changed the assumptions for the IRP. We stopped the IRP at that point. It seems like the IRA has almost as big an impact. Even if it delays the IRP by a few months, it feels important to model these significant changes in the CADMUS study. We realize this is uncomfortable, but obsolete modeling causes real costs that are borne by PSE's customers and the environment. We don't want to risk being penny wise and pound foolish.
Court Olson, Consultant to Building Owners	2:30 p.m.	Please define what you mean by a "split system" heat pump water heater. (Just checking to see if your definition and mine are the same.)
Sophie Glass, Triangle Associates	2:31 p.m.	Thanks, Don. We will have PSE respond in moment
Sophie Glass, Triangle Associates	2:31 p.m.	Thanks Court - one moment and we will get to your question
Virginia Lohr, WA Clean Energy Coalition	2:32 p.m.	What about heat pumps for cooling?
Bradley Cebulko, Strategen	2:35 p.m.	Energy efficiency ramp rates will be impacted by the IRA if the federal government is giving customers thousands of dollars per appliance.
Brian Grunkemeyer, Flex Charging	2:35 p.m.	How do you think about average MW vs. peak-coincident MW? There may be measures like smart hot water heaters & EV charging that can avoid peaks, providing a lot of economic benefit, but provides less aMW.
James Adcock, Electrical Engineer	2:36 p.m.	I am thankful that I just heard Mr. Popoff reconfirm that PSE will actually really be 80% by 2030 -- as required by the plain language of CETA law.
Jennifer Snyder, UTC	2:36 p.m.	Staff does not support a delay at this time. We would like to see an analysis on the magnitude of impact the IRA has on EE
Court Olson, Consultant to Building Owners	2:37 p.m.	PSE needs to go ahead and acquire any and all cost effective renewables ASAP, regardless of a possible delay in the IRP. That concern about a delay does not seem to be well founded.
Willard Westre	2:37 p.m.	S-27 Why is conversion of NG furnaces to heat pumps not included?
Sophie Glass, Triangle Associates	2:39 p.m.	Thanks, Willard.
Don Marsh, Sierra Club	2:48 p.m.	On slide 33, I'm assuming the potentials would be significantly higher after the IRA. The 30% ITC will be quite motivating for customers, especially because the incentives have been dropping until the IRA. Same for slide 24?
Don Marsh, Sierra Club	2:49 p.m.	Oops. I meant slide 34. As Aquila just said after I typed that.
Sophie Glass, Triangle Associates	2:49 p.m.	Noted! Thanks Don
Don Marsh, Sierra Club	2:51 p.m.	Is there anything in the IRA that might impact the analysis of Distribution Efficiency on slide 38? Just trying to understand all the impacts of the new legislation.
Bill Will, WA Solar Energy Industries Association	2:55 p.m.	The 9.7 percent electrical rate increase is also going to drive residential solar! Has that impact been modeled?
Don Marsh, Sierra Club	2:56 p.m.	I think he is talking about the rate case?

Name	Time Sent	Comment
Sophie Glass, Triangle Associates	2:56 p.m.	Ahh gotcha - thanks Don
Sophie Glass, Triangle Associates	3:05 p.m.	https://www.pse.com/IRP/Get-involved
Sophie Glass, Triangle Associates	3:05 p.m.	(slight typo on the URL on the slide)
Sophie Glass, Triangle Associates	3:10 p.m.	I see your hand, Sashwat.
Sophie Glass, Triangle Associates	3:11 p.m.	I'll call on you when Elizabeth wraps up this slide
Sashwat Roy, RNW	3:11 p.m.	Sure, thanks.
Sashwat Roy, RNW	3:13 p.m.	I can reach out offline. Thanks!
Don Marsh, Sierra Club	3:14 p.m.	When you consider cycle limits and short lifetimes, as well as short durations, flow batteries look more cost-effective for customers. I think limiting to short duration lithium-ion batteries could prove more expensive than necessary.
James Adcock, Electrical Engineer	3:22 p.m.	Slide 47 "REC" -- clarify that RECs must be "incremental" -- they cannot be created for generation already required by state or federal law.
Sophie Glass, Triangle Associates	3:22 p.m.	Thanks, Jim. We will get to this one in a moment.
Meredith Mathis, PSE	3:34 p.m.	https://www.pse.com/IRP/Get-involved/Give-feedback
Sophie Glass, Triangle Associates	3:38 p.m.	sglass@triangleassociates.com