The following content is the chat content for the September 14, 2023 Evolving Grid Workshop

Meeting materials are available on the Transmission Business Model web page

9:23 AM from Sidney Villanueva - Blue Skies Law to everyone:

• Can you remind us re the basics of how Line and Load projects are financed?

9:25 AM from Sidney Villanueva - Blue Skies Law to everyone:

NT is essentially financed by BPA though, right?

9:25 AM from Chuck Goligoski to everyone:

can you identify the existing dispatchable resources that need to remain, please?

9:27 AM from Chuck Goligoski to everyone:

• is it natural gas, coal?

9:27 AM from Chuck Goligoski to everyone:

thank you

9:28 AM from Hamid Atighechi to everyone:

• What was the Path 3 flow?

9:29 AM from Chris Lockman to everyone:

• for the LLIR if the load growth appears for the NT customers then they are eligible for network credits for the upgrades

9:29 AM from Chuck Goligoski to everyone:

has this 2030 decarbonization study been published

9:31 AM from Chuck Goligoski to everyone:

 are these dispatchable resources needed to just meet peak load or also for grid stability and reliability

9:31 AM from Ravi Aggarwal to everyone:

• @Chuck, no the studies have not been published

9:31 AM from Chuck Goligoski to everyone:

• ok.. thank you

9:39 AM from Spencer Gray NIPPC to everyone:

• If the Canadian Entitlement is lowered in a renegotiated CRT, does the likelihood increase of meeting load with carbon-free resources in Puget Sound?



9:40 AM from Spencer Gray NIPPC to everyone:

Thanks

9:42 AM from Jake Stephens NewSun Energy to everyone:

• are these slides posted somewhere?

9:43 AM from Ravi Aggarwal to everyone:

PEA - Preliminary Engineering Agreement

9:43 AM from Kate French to everyone:

Can you talk about the main reasons some of the rejected requests?

9:43 AM from Sean Egusa to everyone:

 @Jake, please see Tech Forum or visit Transmission Business Model web page https://www.bpa.gov/energy-and-services/transmission/business-model

9:44 AM from Henry Tilghman/NIPPC to everyone:

• Is the percentage of customers leaving the queue consistent from study to study or is the percentage changing

9:45 AM from Jake Stephens NewSun Energy to everyone:

• Yes... mix of reasons. But many TSRs drop due to their view of timeline &/or cost viability of service plan... \$\$ or years vs. investing in project, commercial view of effect, etc

9:46 AM from Spencer Gray NIPPC to everyone:

• General comment: This kind of data aggregation and analysis is very helpful for reference for all of us, in this and the subsequent slides.

9:46 AM from Jake Stephens NewSun Energy to everyone:

• Yes, generally/nearly-always customer choice to continue/drop.

9:47 AM from Henry Tilghman/NIPPC to everyone:

Thanks.

9:47 AM from Jake Stephens NewSun Energy to everyone:

• Continuing also requires posting of \$\$ to BPA to begin design/engineering via PEA. TSEP results letter inform each customer what amount -- based on pro rata cost of estimated for each/all applicable N/U builds -- and if don't fund, dropped.

9:47 AM from Laura Green to everyone:

• Thanks Spencer, glad to hear the data is helpful.



9:50 AM from Richard to everyone:

Good point to reiterate Jeff - thanks

9:57 AM from Watkins, Michael SCL to everyone:

Good point Jake

9:58 AM from Jake Stephens NewSun Energy to everyone:

• Also, different CF offers have different potential curtailment exposures (and different customers analyze and consider those differently)

9:59 AM from Ryan Neale to everyone:

• If BPA were to join a day ahead market, would customers with conditional firm service be eligible for congestion revenue from the market?

10:00 AM from Jake Stephens NewSun Energy to everyone:

• (Great question, Ryan)

10:00 AM from Katie Sheckells BPA to everyone:

 Ryan, I know that the SPP Markets+ congestion rent team is discussing CF eligibility, a final decision is pending out of that governance team

10:01 AM from Ryan Neale to everyone:

• Thanks.

10:02 AM from Ravi Aggarwal to everyone:

NOPE: North of Pearl

10:02 AM from Jake Stephens NewSun Energy to everyone:

Katie, does that mean LTF getting congestion revenue? or also pending?

10:02 AM from Katie Sheckells BPA to everyone:

• The markets congestion rent questions are great, I will capture them for the markets team and that forum - I don't want to speak definitively on these right now as I know discussions are still underway

10:03 AM from Fred Heutte NWEC to everyone:

• re data center expansion: https://www.oregonlive.com/silicon-forest/2023/09/small-eastern-oregon-city-could-be-next-hotspot-for-big-data-centers.html

10:06 AM from Ryan Neale to everyone:



• Thanks, Katie, same question to be added to the list for the markets team but for NT customers using 6NN. Thanks.

10:06 AM from Sidney Villanueva - Blue Skies Law to everyone:

Thanks Randy for helping us all keep the context

10:07 AM from Katie Sheckells BPA to everyone:

Ryan - I can confirm that 6NN has been part of that discussion as well. I will work with the team
to make sure congestion rent is a topic of an upcoming DAM workshop. Appreciate the question
about it.

10:10 AM from Jake Stephens NewSun Energy to everyone:

• thanks, Katie

10:19 AM from Kathleen Fraser to everyone:

• Can BPA comment on the individual TSR study process? Is it correct that all individual requests will be studied serially (based on queue order) if they have an individual request in the TSR queue prior to December 2023? Does BPA commit to studying all individual requests in the queue or do they stop in June 2024 to begin focusing on the 2025 TSEP process?

10:19 AM from Jake Stephens NewSun Energy to everyone:

• (yes, same comment: great data, super helpful, thank you)

10:20 AM from Watkins, Michael SCL to everyone:

• Great Question Spencer

10:23 AM from Sidney Villanueva - Blue Skies Law to everyone:

• Is BPA open to shared ownership with IOUs?

10:24 AM from Watkins, Michael SCL to everyone:

 Recommend that BPA consider that reactive transmission planning based on subscription requests is not the least cost method of planning to serve customers

10:30 AM from Charlie Banke to everyone:

• I have the same question as Kathleen above around the individual TSR process and to what extent they will be studied serially?

10:33 AM from Kathleen Fraser to everyone:

• Thank you, Anita

10:34 AM from Charlie Banke to everyone:

Thank you



10:40 AM from Jake Stephens NewSun Energy to everyone:

 Confirming understanding (in written record here) that Evolving Grid project/plan approvals are still all subject to and pending environmental review.

10:40 AM from Watkins, Michael SCL to everyone:

Thank you

11:02 AM from Alan Zelenka - ODOE to everyone:

• Are the energy effiency acquisitions netted out of this forecast already?

11:04 AM from Doug Howell to everyone:

 A new study from the Clean Energy Transition Institute estimate 138,000 new MW of renewables by 2050. https://uploads-ssl.webflow.com/64512dc345012a0e621f373f/64e65839bc761c52e4f483f7 Evolved NZNW Energy Technical%20Report 06-2023.pdf

11:04 AM from Sidney Villanueva - Blue Skies Law to everyone:

• To be clear, these slides are based on the studies Ricky was relying on in meeting no. 1 and those studies were run in 2021 and 2022?

11:15 AM from Charlie Inman WA UTC to everyone:

Sounds good, thanks!

11:18 AM from Jake Stephens NewSun Energy to everyone:

• Ravi, can you add some color on what fossil you're assuming won't be dispatched? Oregon law allows IOUs to still sell @ 100% of gas plant output for *market sales*. So assuming those plants will not dispatch (or use transmission) is very different for Oregon IOU gas plants than WA CETA.

11:18 AM from Sidney Villanueva - Blue Skies Law to everyone:

• Can someone please explain how slide 30 is consistent with BPA's statements from the last meeting? Perhaps we went through it too quickly, but it looked pretty inconsistent.

11:18 AM from Jake Stephens NewSun Energy to everyone:

Also, Oregon gas plants not owned by IOUs are not affected by Oregon 100% clean HB 2021

11:22 AM from Lynn Latendresse to everyone:

Does the study incorporate WRAP transmission forward showing requirements for 2030?

11:24 AM from Chuck Goligoski to everyone:

 has there been/will there be studies to forecast BPA transmission rates with all the transmission projects that are going to be required



11:28 AM from Chuck Goligoski to everyone:

 my apologies, if I missed it. I had to drop off the call for a little bit. was there a discussion on forecasted bpa transmission rates? Or is there a place you can direct to where this has been discussed?

11:29 AM from Sean Egusa to everyone:

• @Chuck, we have flagged this as a follow up for future discussion. Good question, thank you.

11:30 AM from Chuck Goligoski to everyone:

• ok... thank you Sean

11:31 AM from Jake Stephens NewSun Energy to everyone:

I would echo Randy's concerns about the timeline of PGE area projects. Some are simpler.
 Some are not. Appreciate BPA is hustling, but spread of complexity and timeline achievability.
 Projected schedules on each vs. MW enabled would be very helpful. And schedule ranges, as some have permitted timeline risk/realities pushing back 2030.

11:31 AM from Jake Stephens NewSun Energy to everyone:

*pushing past 2030.

11:33 AM from Jake Stephens NewSun Energy to everyone:

• WRAP question is key too: 1:1 MW ratios being tied up per generator will inhibit availability of same transmission capacity to actually work in the optimal ways BPA seems to be assuming.

11:34 AM from Jake Stephens NewSun Energy to everyone:

• Earlier Q not answered: Is BPA conclusion that can meet 80% in 2030 assuming only LTF? or assuming short-term capacity being used. State PUC + IOU policies don't allow non-LTF from new clean gen (eg in RFP disqualifiers + IRP models)

11:36 AM from Watkins, Michael SCL to everyone:

Great proposal, thank you for leading

11:40 AM from Spencer Gray NIPPC to everyone:

I echo Randy's comments, too, and appreciate BPA helping to pull in a larger group for an
initiative to do proper regional planning with multiple transmission providers and non-utilities
involved from the start.

11:41 AM from Sean Egusa to everyone:@Michael,

• @Spencer appreciate the comments

11:42 AM from Lauren Tenney Denison to everyone:

• Thank you to WPP and BPA for the leadership in moving this effort forward!



11:42 AM from Robert Cromwell-UEC to everyone:

Kudos @sarah!

11:51 AM from Sarah Edmonds WPP to everyone:

• Thank you Doug Howell - we are very aware of this need and are shaping up our thoughts about what that engagement migh tlook like, subject to input from Tribes and others

11:53 AM from Jake Stephens NewSun Energy to everyone:

 Bonanza = Prineville @/by current BPA 500/230/115 KV substation (serving PAC/Prineville and CEC coop)

11:54 AM from Kathleen Fraser to everyone:

• For the Tier 1 and "Projects of Interest" can BPA comment on TTC enabled. Does this data exist yet?

11:54 AM from Jake Stephens NewSun Energy to everyone:

• *... at BPA Ponderosa 500/230/115

11:54 AM from Robert Cromwell-UEC to everyone:

"West of Boardman" = "Six mile" (new name).

11:55 AM from Jake Stephens NewSun Energy to everyone:

• These projects are amazing, huge deal, great job by BPA getting these unlocked and in motion. Thank you.

11:55 AM from Erich Orth to everyone:

• Thank you Jake!

12:03 PM from Jake Stephens NewSun Energy to everyone:

PGE Round Butte-Bethel project was mentioned... links/info for that?

12:04 PM from Ravi Aggarwal to everyone:

@Jake, that would be for PGE to respond

12:05 PM from Watkins, Michael SCL to everyone:

• This is a great step forward by BPA. Thank you!

12:07 PM from Jake Stephens NewSun Energy to everyone:

• A lot of great data presented by BPA today, helping parse these things out, show so much. Thanks and much appreciated. Very helpful to so many people in so many ways.

12:08 PM from Jake Stephens NewSun Energy to everyone:



• In addition to amazing action plan, and getting things in motion on timelines that are really transformational compare to the prior several years. Deserves recognition -- and hopefully bigger shift in motion and more to come just like this. Thank you.

12:08 PM from Ravi Aggarwal to everyone:

• Thanks everyone for your thought provoking and excellent questions. Please feel free to followup

12:08 PM from Robert Cromwell-UEC to everyone:

• Thank you Richard, and all the BPA folks supporting these efforts.

12:10 PM from Sean Egusa to everyone:

• Please follow up through your transmission AE, constituent AE or techforum@bpa.gov

12:10 PM from Spencer Gray NIPPC to everyone:

• Thanks, BPA, great dialogue

12:11 PM from Sidney Villanueva - Blue Skies Law to everyone:

• Thanks team. Great dialogue.

12:12 PM from Sean Egusa to everyone:

• @Jake, PGE suggests looking at their transmission plan.

END OF CHAT TRANSCRIPT

