

In the Community to Serve®

TAG #6 WA - TAG Meeting

Date & time: 2/1/2023, 1:00 PM to 2:30 PM

Location: Microsoft Teams Meeting

Presenters: Brian Robertson, Devin McGreal, & Ashton Davis

In attendance: Abbie Krebsbach, Abe Abdallah, Ashton Davis, Brian Robertson, Bruce Folsom,

Byron Harmon, Caleb Reimer, Carolyn Stone, Carra Sahler, Chris Robbins, Corey Dahl, Devin McGreal, Eric Wood, Garret Senger, Jennifer De Boer, Jon Storvick, JP Batmale, Kary Burin, Kevin Connell, Kim Herb, Lori Blattner, Mark Sellers-Vaughn, Michael Freels, Monica Cowlishaw, Kathy Moyd, Patrick Darras,

Patrick Shaughnessy, Rachel Preece, Russ Nishikawa, Sebastian Weber,

Tammy Nygard, Ty Jennings, Zachary Sowards,

Brian Robertson, Supervisor of Resource Planning, opened the meeting by welcoming and thanking stakeholders for participating in Cascade's IRP Process. Brian then proceeded with introductions, the agenda, and a safety moment.

Presentation #1 - Bill Impact Analysis (Devin McGreal)

- Devin opened the meeting by stating that the Bill Impact analysis is a preliminary analysis that is
 run through a much simpler calculation than when bills are actually adjusted in regulatory filings.
- Devin discussed the different scenarios and how they compared to a business-as-usual case.
- While discussing the different scenarios, Devin also described reasons as to why bills were impacted more in some scenarios than others.

Question: Byron asked if Cascade considered behavioral like end uses of hydrogen in our

modeling.

Answer: Devin responded that Cascade does consider that. When the Company modeled Hydrogen, a 20% volume was chosen as the blend, which is an equivalent of 7% by energy.

Question: Byron asked about the Plexos model and about path dependency. For example, Hydrogen has a projection in the future, and as time goes on while the Plexos model is running can the projection change?

Answer: Devin responded that the Plexos model doesn't quite have that functionality. It is something that the Company will need to discuss with Plexos to see if this is a possible functionality. Devin did mention that Cascade runs scenario modeling that encompasses some of these path changes that Byron referred to. Cascade would also like to add that changes to resources over time are the main reason IRPs are reproduced every two years.

Presentation #2 - Monte Carlo Results (Ashton Davis)

- Ashton provided a reminder to everyone that Cascade performed Monte Carlo simulations on weather as well as price. In future IRPs, Cascade will investigate performing Monte Carlo simulations on customer count as well.
- Ashton then shared some of the results the Monte Carlo simulations provided when analyzed in Plexos. For example, Cascade is able to analyze the range of carbon compliance obligations for each compliance period. Cascade can also analyze the range for each carbon compliance supply side option.

Question: Byron asked how the 1st percentile was being defined when those prices were removed from the first graph to the graph that only provided the 99th percentile.

Answer: Ashton responded that we'll need to look into it and confirm. Cascade has confirmed that the percentiles were based on the highest peak event.

Presentation #3 – Building Code Impacts (Brian Robertson)

- Brian discussed the RCW19.27A.020(2)(a) rule in depth, explaining that it is more of a goal, and how it may impact Cascade. Brian then shared RCW 19.27A.160 and discussed how that RCW is more of a mandate than a goal.
- Brian then discussed how pre-2018 a lot of the building code changes had a bigger impact on energy efficiency programs. Post-2018, the building code changes had a major impact on which end use appliances are allowed, resulting in a big impact to customer count and use per customer.
- Cascade is still gathering as much data as possible on the impacts that building code changes
 will have on the customer and load forecast model. This IRP locked in the forecast in early-2022,
 so there are building code changes implemented in the data from the 2018 WSEC, but the 2021
 WSEC changes won't come into effect until after the IRP is filed. Cascade will continue to gather
 data and update the forecast in future IRPs to reflect these building code changes.

Presentation #4 – 2023 IRP Schedule (Brian Robertson)

Brian noted that the final step is that Cascade will file the final IRP on February 24th, 2023.

The Meeting was Adjourned

Per Cascade Commitment #8 (Stakeholder Engagement Design Document, 2/22/2022: "Provide TAG minutes that include the action items from bullet #7 as well as any upcoming deadlines for feedback on the IRP"), here are additional action items to track, coming out of the TAG 6 meeting:

- 1. Cascade will look into ways to model path dependency issues in PLEXOS.
- 2. Cascade will investigate Monte Carlo simulations on customer counts.