

CCAIE/EFB Questions Set 2:

SPS Responses are provided in red font below.

1. The response to CCAIE/EFB Data Request question 4b indicates that the probabilistic model does not include loads from known customer requests. Does this mean that all known customer requests are captured in the “Oil and Gas” and “DC/Crypto/Other”? If that is correct:
 - a. Does the projected load for both categories reflect all customer requests spanning from customers that have expressed interest in taking service all the way up to having a signed electric service agreement with SPS?
No. The total large loads included in the forecast, including both the customer requests and the probability distribution, only represent about 25 percent of the total load from all customer requests.
 - b. Is SPS tracking these customer requests with probabilities for different criteria? I read AnnaLinden’s testimony in the CPCN case and her testimony (page 15) referenced a probability of connection (1-49% for low probability of connection; 50-79% for strong probability of connection; and 80-99% for high probability of load connection)?
 - i. If that is how the forecasts for the “Oil and Gas” and “DC/Crypto/Other” were developed, would it be possible to see that supporting workbook and what any probability assignments mean (for example does 80-99%% mean the customer has signed an agreement)?
SPS is unable to share the supporting workbook because the information contains highly confidential customer specific information.
 - c. The workbook “Attachment 4a to Resp to CCAIE-EFB Data Request 6.4.26 – Load Forecast Details” shows a different peak forecast for the “Large Load – Oil and Gas” and the “Large Load – Data Centers/Crypto/Other” for the Planning Forecast and Low Forecast. Is the difference in the level of large load included in the Low Forecast related to alternative assumptions around the probability of connection?
No. The difference is due to additional projects being included in the Planning forecast.
2. The EV forecast in the workbook “Attachment 4a to Resp to CCAIE-EFB Data Request 6.4.26” shows a significant growth in the EV peak between 2039 and 2040. Is this increase the result of an assumption around a significant change in EV adoption or something else?

The increase is driven by a move to overnight, winter peaks in 2040. See slide 13 from Workshop #3 for further discussion.

3. The retail forecast in the workbook “Attachment 4a to Resp to CCAE-EFG Data Request 6.4.26” shows a significant decline from 2039 to 2040. Is this decrease the result of an expected decline in customers or something else?

No. See response to question number 2.

4. For the Emerging Tech EnCompass input file, can the SMR resources be connected to the RPS program immediately or would they not qualify for the RPS until 2045?

SPS currently has the SMR resources generating RECs for RPS purposes on in-service date.

5. For the hydrogen CT allowed for selection in the Advanced Technology scenario, is the assumption that hydrogen blending is at 100% starting in 2040?

The assumption is that starting in 2040, SPS could build a new CT that runs on 100% hydrogen fuel. This ability to run on hydrogen fuel comes with additional costs as compared to traditional, natural gas, CT.

6. The response to question 4b in the set related to the EnCompass database indicates that the replacement six and eight hour storage projects were not available for selection so the Maximum Energy Storage input would not impact the results. The files I reviewed seemed to indicate that replacement four-hour battery storage projects were allowed. For example, project “B_Maddox 38” had maximum project additions and maximum active projects set to allow for one project. The resource “B_Maddox 38” connected to that project has a Maximum Stored Energy that aligns with the generic 4-hour battery and not the size of the “B_Maddox 38” resource. This is similar for projects related to Nichols (“B_Nichols35”, etc.). I wanted to confirm that those resources would also be updated to align the Maximum Energy Storage with the project size.

Yes, all four-hour storage resources were updated to reflect the correct maximum stored energy (e.g. The maximum stored energy for “B_Maddox 38” is now 736 MWh).

7. The response to question 6 in the set related to the EnCompass database indicates that the capital cost for battery storage does not reflect the ITC. I could

not find an input set in the "Investment Tax Credit" field in EnCompass. Is that assumption modeled elsewhere or are no tax credits assumed for storage?

No Tax Credits are assumed.