

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION STAFF
RESPONSE TO DATA REQUEST

DATE PREPARED:	April 4, 2016	WITNESS:	Jeremy Twitchell
DOCKET:	UE-152253	RESPONDER:	Jeremy Twitchell
REQUESTER:	Pacific Power & Light	TELEPHONE:	(360) 664-1302

REQUEST NO. 14: Please refer to Exhibit JBT-1CT, Direct Testimony of Jeremy Twitchell, page 20, line 21 through Page 21, line 3. Provide all documents or statements prepared in full or in part by Mr. Twitchell that relate to Pacific Power's 2015 IRP, including briefing materials and information related to the Commission open meeting where the IRP was presented (excluding documents on the Commission's website for this docket).

RESPONSE: Please refer to the following attachments:

- Attachment 14-1: Mr. Twitchell's 2015 IRP review notes and questions
- Attachment 14-2: Mr. Twitchell's 2015 IRP briefing packet for the Commission

Docket UE-140546
Pacific Power & Light Company 2015 Integrated Resource Plan
Staff Briefing Packet

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Docket UE-140546
Pacific Power & Light Company 2015 IRP
Staff Briefing

Attachment C
Summary of 2015 Plan's Compliance with 2013 Acknowledgment Letter

Commission Request	Company Response	Plan Citation
Model the east and west balancing areas separately	The analysis was conducted in sensitivity case S-10. See pages 11-12 of staff's briefing for more information.	Pages 202-203
Use a non-zero cost of carbon in the preferred portfolio	The company's preferred portfolio does not include a price on carbon, though it does reflect the carbon regulations embodied in the EPA's Clean Power Plan. Cases 14, 14a and S-11 present the portfolio impacts of carbon prices incremental to the Clean Power Plan.	Pages 178-181 and 204-205
Analyze how the company can help Washington reach its goal of reducing carbon emissions to 1990 levels by 2020, and evaluate the rate impacts of such measures	The company provided a list of portfolios that would meet that goal and their costs. ¹⁵	Page 209
Update energy storage cost assumptions	Two sensitivity cases (S-06 and S-13) were added to evaluate the impact of adding pumped and compressed air storage facilities to the company's system. See pages 12-13 of staff's briefing for more information.	Page 205-206
Perform a potential analysis for anaerobic digesters within the company's Washington territory	The company conducted the requested analysis. High-level conclusions are that there is a potential for 16 to 26.6 MW of capacity, which would generate 129 to 214 GWh of energy per year and avoid 310,000 to 514,000 tons of CO ₂ -equivalent emissions per year.	Appendix P, Volume II
Provide a more robust analysis of smart grid technologies	The company does not appear to have responded to this request.	N/A
Quantify the impacts of the Energy Imbalance Market	This analysis was not done, but the request may have been premature. The EIM had barely commenced when the models were run.	N/A

¹⁵ The preferred portfolio's emissions would be 108 percent of the company's 1990 emissions, at a present value revenue requirement (PVRR) of \$27.5 billion. Eight portfolios would meet Washington's 2020 emissions goal, at incremental PVRR of \$301 million to \$2.8 billion.