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Description:	Email Conversation
Filer:	Harinder Kaur
Organization:	Anaheim Public Utilities/Mei Pan
Submitter Role:	Public
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## Kootstra, Mark@Energy

From: Mei Pan <MPan@anaheim.net>

**Sent:** Thursday, September 06, 2018 1:36 PM **To:** Kootstra, Mark@Energy; Carrie Thompson

Cc: Deaver, Paul@Energy; Vidaver, David@Energy; Jones, Melissa@Energy

**Subject:** RE: Information Request for Anaheim's IRP Filing

## Hi Mark,

Thank you for summarizing the additional information request. APU responses are in the email below. Please let me know if there's anything else you may need.

## Thanks.

Mei

## Mei Pan

From: Kootstra, Mark@Energy < Mark.Kootstra@energy.ca.gov>

Sent: Wednesday, September 05, 2018 3:45 PM

To: Carrie Thompson <CaThompson@anaheim.net>; Mei Pan <MPan@anaheim.net>

Cc: Deaver, Paul@Energy <Paul.Deaver@energy.ca.gov>; Vidaver, David@Energy <David.Vidaver@energy.ca.gov>;

Jones, Melissa@Energy < Melissa.Jones@energy.ca.gov > **Subject:** Information Request for Anaheim's IRP Filing

Hi Carrie and Mei,

Thank you for talking with us yesterday afternoon. As discussed in our call we are requesting some additional information to inform our review.

1. Line 9 in the EBT asks for the estimated annual LD PEV electricity consumption or the incremental net energy for load. Based on the projected load growth of 63,261 MWh by 2030, it appears these numbers are the incremental load added each year, rather than the total load in each year with a baseline load of 6,888 MWh. Converting these incremental annual additions into growing LD PEV electricity consumption would provide us with the following data set. Can you confirm that this is correct?

Numbers shown in the table below match APU calculations, with only minor rounding differences as indicated in blue font.

	Light Duty PEV
	electricity
Year	consumption
2017	
2018	9,104
	<del>11,833</del>
2019	11,832
	<del>15,038</del>
2020	15,037
2021	18,679

2022	22,711
2023	27,084
2024	31,751
2025	36,661
2026	41,766
2027	47,019
2028	52,375
2029	57,799
2030	63,261

2. How did you arrive at the 16,985 MT of incremental emissions associated with the 63,261 MWh of additional EV load in 2030.

It is calculated as follows: for every year during the planning period,

GHG Emission Increase Due To LD PEV Load = [Estimated # of EVs]\* [Estimated MWh/EV]\*[% non-RPS Load]\*[Estimated Emission Factor]

To ensure APU reserves sufficient carbon allowances to meet its GHG obligation throughout the planning period, a conservative approach was taken to establish two assumptions: Estimated MWh/EV, and Estimated Emission Factor.

3. Both the capacity and energy reporting tables show no AAEE. Page 156 of Anaheim's IRP says "The energy efficiency targets are incorporated into APU's demand forecast." We were unable to identify either annual AAEE or committed energy efficiency estimates in the IRP, forms, or supporting documentation. Can you provide the annual energy values for AAEE in the table below, and the cumulative energy savings from energy efficiency measures and programs in 2030?

Year	AAEE
2017	N/A - Historical
2018	28
2019	56
2020	83
2021	109
2022	134
2023	159
2024	182
2025	204
2026	225
2027	244
2028	264
2029	283
2030	303

According to the table above, the cumulative energy savings from energy efficiency measures and programs in 2030 is 303 GWhs.

4. Based on the numbers in the CRAT and EBT tables, the Anaheim CTG appears to retire in early 2025, but we cannot find any specific reference to the retirement in the text. Can you confirm that it would be correct to say that "APU hope to retire Anaheim CGT as early as mid-2025, but the decision to do will be based on a number of factors, including the price of energy and capacity from other sources and reliability needs"? Please suggest other wording if desired.

As discussed over the phone, this would be the earliest at which APU would look to retire the plant, and it is based on many factors. Including but not limited to cost of energy or gas supply, cost of Local Capacity within the CAISO, needs of the CAISO to manage Variable Energy Resources and maintain reliability, and most importantly customer rate impacts. The statement provided thus has been modified to the following:

"The earliest APU would look to retire Anaheim CGT is mid-2025, but the decision to do will be based on a number of factors such as, the price of energy and capacity from other sources needed to maintain reliability, variable energy resource integration costs, as well as cost impacts to retail customers of APU."

5. When minor differences are found between the numbers provided in the text of the IRP and the standardized tables, can you confirm that the values in the tables take president?

Yes. When minor differences occur in the text and the standardized reporting tables, the values in the standardized reporting tables take president.

6. Can you confirm that APU's demand forecast was compared to the "California Energy Demand 2018-2030 Revised Forecast" adopted in February 2018, which is associated with the 2017 IEPR cycle.

Yes. APU's demand forecast was compared to the "California Energy Demand 2018-2030 Revised Forecast" adopted in February 2018, which is associated with the 2017 IEPR cycle.

Thank you again for talking with us. Please let us know if you have any questions.

Sincerely,
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