

Ex Ante Review Findings Disposition

Table 1-1: Project Information

IOU	Pacific Gas and Electric (PG&E)
Application ID	2K1400006518
Application Date	9/26/2013
Program ID	PGE21011
Program Name	Commercial Calculated Incentives
Program Year	2013
Itron Project ID	X494
IOU Ex Ante Savings Date	5/7/2014
Measure Name	UPS Replacement
Project Description	Replacing two UPS units with three more efficient UPS units.
Date of CPUC Staff Review	4/23/14
Primary Reviewer / Firm	Ryan Matsumori/ Itron
Review Supervisor / Firm	Joseph Ball/ Itron
CPUC Staff Project Manager	[REDACTED]
CPUC Staff Policy Authorization (as needed)	
Type of Review (Desk, On-site, Full M&V, Tool)	Desk Review
CPUC Staff Recommendation	Commission staff waives further review of the project and recommends that the IOU adjust the baseline capacity to be sufficient with the retrofit capacity and update the IMC and savings claims accordingly and apply a GRR of 0.9 to the final savings estimates.

Measure Description

This is a customized project involving the replacement of two existing UPS units. A 500 kVa unit with 84.7% efficiency and a 300 kVa unit with 82.4% efficiency are to be replaced with three higher efficient units rated at 225 kVa with 96.2% efficiency. The baseline project type is claimed to be “normal replacement” because the pre-existing equipment is presumed to be beyond its effective useful life and a billing analysis was used to show that the pre-existing data center is less efficient than a baseline simulation model.

Summary of Review

As a normal replacement project the baseline UPS capacity was calculated using the guidelines suggested by the “2013 Energy Efficiency Baselines for Data Centers” baseline document¹. The baseline technology used to estimate savings and IMC calculations consisted of two standard UPS systems each with a capacity of 273.5kVA. As the proposed system consists of three UPS systems each with a capacity of 225 kVA, the proposed capacity is larger than the baseline calculation capacity. The baseline capacity for savings and IMC should be adjusted to sufficiently match that of the retrofit capacity.

In addition, this 24/7 facility operates during the DEER peak period days of July 17th, 18th and 19th in California climate zone four, therefore; the project qualifies for kW savings without adjustment. CS notes that this measure has HVAC interactive effects - in the form of additional electric savings and a therm penalty - which were not calculated.

Review Conclusion

Commission staff waives further review of the project and recommends that the IOU adjust the baseline capacity to be sufficient with the retrofit capacity and update the IMC and savings claims accordingly. The CS also requests that PG&E apply a 0.9 GRR to the final savings estimates.

Summary of ED Requested Action by the IOU

Commission Staff waives further review and requests that the IOU address the following items prior to submitting final ex ante savings claims for this project:

1. Update savings and IMC claims per baseline capacity adjustment and apply 0.9 GRR to those revised estimates.
2. Include in the project files itemized contractor invoices and all the Claim IDs associating this project with IOU tracker databases for ex post evaluation purposes.

¹http://www.pge.com/includes/docs/pdfs/mybusiness/energysavingsrebates/incentivesbyindustry/hightech/data_center_baseline.pdf

Table 1-2 Energy Savings Summary, Project Costs & Incentive

Description	IOU Ex Ante Claim	CPUC Staff Recommendations
First Year kWh Savings	78,144.9	TBD
First Year Peak kW Savings	8.92	TBD
First Year Therms Savings	Not provided	TBD; CPUC Staff would like confirmation maintained in the project documents to show that natural gas is not supplied to heating units at the DC
kWh Savings (RUL Period)	N/A	N/A
Peak kW Savings (RUL Period)	N/A	N/A
Therms Impact (RUL Period)	N/A	N/A
kWh Savings (RUL thru EUL Period)	N/A	N/A
Peak kW Savings (RUL thru EUL Period)	N/A	N/A
Therms Savings (RUL thru EUL Period)	N/A	N/A
Annual Non-IOU Fuel Impact (RUL Period)	N/A	N/A
Annual Non-IOU Fuel Impact (RUL thru EUL Period)	N/A	N/A
Project Costs for Baseline #1 (RUL or EUL)	Incremental Measure cost: \$191,113	TBD
Project Costs for Baseline #2 (EUL minus RUL period)	N/A	N/A
Project Incentive Amount	\$7,143.59	TBD