

Final Ex Ante Review Findings

Table 1-1: Project Information

IOU	PG&E
Application ID	2K12128176
Application Date	Not provided
Program ID	PGE21021
Program Name	Industrial Calculated Incentives
Program Year	2013
Itron Project ID	X259
IOU Ex Ante Savings Date	11/13/2013
CPUC Staff Measure Name	High Bay LEDs
Project Description	Replace manually controlled high-bay metal halide fixtures with LED fixtures with occupancy and daylight-adjusted dimming controls.
Date of CPUC Staff Reviews	3/12/13 & 5/15/2014
Primary Reviewer / Firm	Sepideh Shahinfard & Tyler Layne / Itron
Review Supervisor / Firm	Joseph Ball / Itron
CPUC Staff Project Manager	
CPUC Staff Policy Authorization (as needed)	
Type of Review (Desk, On-site, Full M&V, Tool)	Desk
CPUC Staff Recommendation	Commission staff (CS) approves the IOU trued-up final ex ante savings of <u>277,021</u> 232,722 kWh and <u>58.8</u> 44.3 kW for the first baseline; and <u>187,735</u> 197,437 kWh and <u>43.0</u> 26.4 kW for the second baseline.

Measure Description

The project involves replacing the existing 170 manually controlled high bay metal halide fixtures with 170 LED lighting fixtures in the warehouse. The proposed LED fixtures are equipped with the automated occupancy and daylighting control. The fixtures also have the capability of monitoring the electrical energy load (kW). Baseline operating hours are determined based on an 18 hours/day weekday schedule (two nine hours work shifts a day, five days a week throughout the year).

Summary of Review

In response to the Phase I ex ante review, the Investor-Owned-Utility (IOU) submitted the installation report (IR) along with tried-up and revised project savings.

The Commission staff had previously reviewed PG&E's final post-installation savings calculations (version 1) and raised some issues about the second baseline savings. However, the difference was not a deal breaker and PG&E urgently wished to pay the incentives to the customer, so CS directed PG&E to pay incentives on its calculated final savings. Because CS approved the use of M&V-based HOU's prior to its clarification on this issue for this project, the use of DEER HOU's for this project is not required per the recent directions, which will apply prospectively to other projects.

For the final revised project savings (version 2) PG&E correctly calculated second baseline energy savings complying with all CS requested items including specs, photos, paid invoices, and provided nearly all of the CS-requested documents. **However, PG&E neglected to provide the following:**

- A copy of the pre-application or a copy of the signed PA agreement; this is a standard document submittal that should always be included in ex ante reviews, either part of the initial project documents or in the final IR package.
- The submittal of clearly identified IMCs for 2nd baseline - years 2 thru the EUL of this measure.

Review Conclusion

Final ex ante savings are approved at levels of ~~277,021~~ ~~232,722~~ kWh and ~~58.8~~ ~~44.3~~ kW for the first baseline, and ~~187,735~~ ~~197,437~~ kWh and ~~43.0~~ ~~26.4~~ kW for the second baseline. PG&E should retain all documentation from the post-installation data collection and verification efforts, as well as all itemized contractor and vendor invoices by measure for use by future ex post evaluation efforts along with the corresponding measure Claim IDs.

Table 1-3 Energy Savings Summary, Project Costs & Incentive

Description	IOU Ex Ante Claim	CPUC Staff Recommendations
First Year kWh Savings	<u>277,021</u> 232,722 kWh	Accepted
First Year Peak kW Savings	<u>58.8</u> 44.3 kW	Accepted
First Year Therms Savings	N/A	N/A
kWh Savings (RUL Period)	<u>277,021</u> 232,722 kWh	Accepted
Peak kW Savings (RUL Period)	<u>58.8</u> 44.3 kW	Accepted
Therms Impact (RUL Period)	N/A	N/A
kWh Savings (RUL thru EUL Period)	<u>187,735</u> 197,437 kWh	Accepted
Peak kW Savings (RUL thru EUL Period)	<u>43.0</u> 26.4 kW	Accepted
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)	\$169,934.35	Accepted
Project Costs for Baseline #2 (EUL minus RUL period)	Not provided	IMCs not provided
Project Incentive Amount	<u>\$19,731.05</u> 21,851.50	Accepted