

Phase I Ex Ante Review Findings

Table 1-1: Project Information

IOU	PG&E
Application ID	2K13187836
Application Date	June 19, 2013
Program ID	
Program Name	Customized Retrofit – Demand Response
Program Year	2013
Itron Project ID	X375
IOU Ex Ante Savings Date	TBD
ED Measure Name	Opaque Insulating Pool Cover
Project Description	Pool Cover at Outside Pool
Date of ED Review(s)	July 12, 2013
Primary Reviewer / Firm	Rachel Murray/ DNV KEMA
Review Supervisor / Firm	Amit Kanungo/ DNV KEMA
ED Project Manager	██████████ / California Public Utilities Commission, Energy Division
ED Policy Authorization (as needed)	
Type of Review (Desk, On-site, Full M&V, Tool)	Desk
ED Recommendation	Savings not approved pending fulfillment of data request for more information.

Measure Description

This project includes the installation of an opaque and insulating pool cover for an outdoor, Olympic-size pool. The pool dimensions are 75 by 114 feet (ft.) with an average depth of 7.5 ft. The pool is heated by a dedicated natural gas-fueled pool water heater that is said to have an efficiency of 90 percent, though no documentation was provided. The site contact indicated that the pool is maintained at a temperature of 82°F, but for the purposes of producing a more conservative estimate for the annual energy savings, the input to the spreadsheet was 80°F. The pool is said to be heated for all but six weeks of the year, beginning in mid- to late-January and ending in early- to mid-December. When open, the operating hours of the pool are nominally between 6:30 am and 8 pm daily, though they vary throughout the year. The baseline for this project assumes that no pool covers were in use in the recent past. The installation of the automatic pool cover is estimated to save 22,512 therms annually.

Summary of Review

The Investor Owned Utility (IOU) submitted the following documents for this Phase I review:

- Project Description and Prefield Report – XXX.doc;
- z-2K13187836 PA Review Form v2.xlsm;
- Vendor Provided Project Scope and Cost.pdf;
- Vendor Provided Analysis – XXX Pool Cover Energy Analysis.pdf;
- Pool Cover Calculator – XXX.xlsm;
- EnergyEfficiencyOIR-Post-2008_DR_ED_434_EEGA_6861.doc;
- 12Month Usage – XXX.pdf;
- 2K13187836 XXX PA Package.pdf;
- 2K13187836 XXX - Application.pdf;
- 2K13187836 Incentive Recipient Certification.pdf;
- (A)Customized Retrofit Application – XXX (Sales Lead ID 33020).msg;
- Influence – CMT Time Records – XXX.pdf;
- photo 1.jpg;
- photo 2.jpg;
- photo 3.jpg;
- photo 4.jpg; and
- photo 5.jpg.

The project review has found the baseline of pool heating without a pool cover to be incorrect based upon finding several recent photographs of the pool that show manual pool covers located

on the pool deck as recently as November 2012. These photographs can be found via the following links:

- [REDACTED]
- [REDACTED]
- [REDACTED]

Furthermore, a reference to pool covers appears in item #3 within the instructions intended for the users of the pool at the following link:

- [REDACTED]

Given that the baseline for the project application assumed that no pool cover had previously been in use, the energy savings calculations in the application are incorrect. Using a revised baseline of an opaque pool cover of similar insulating properties, the savings could be as low as zero.

As an aside, the review of the submitted photographs showing that there was some shielding from the wind on two sides by building structures that were not considered in the spreadsheet calculator. When the “Wind Speed Divisor” (parameter C in the spreadsheet) is revised from a dimensionless value of 2 to 6, the resulting savings are reduced from those shown in the application.

Review Conclusion

Savings not approved. The eligibility determination of measure is pending submission of the additional data requested.

Summary of ED Requested Action by the IOU

ED requests that the IOU undertake the recommended steps and submit the following information due on *07/30/2013* (or 14 days from submittal date to IOU):

1. Determine the insulation property, R-value, of the previous manual pool covers to determine the baseline energy usage.
2. Modify the “Wind Speed Divisor” to account for the shielding provided by adjacent building structures and/or trees.

Note: *Table 1-2 Review Findings* deleted due to undetermined ex ante savings.

Table 1-3 Energy Savings Summary

Description	IOU Ex Ante Claim	ED Recommendations
First Year kWh Savings	N/A	N/A
First Year Peak kW Savings	N/A	N/A
First Year Therms Savings	22,512	TBD
kWh Savings (RUL Period)	N/A	N/A
Peak kW Savings (RUL Period)	N/A	N/A
Therms Impact (RUL Period)	N/A	0
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	TBD
Annual Non-IOU Fuel Impact (RUL Period)	N/A	N/A
Annual Non-IOU Fuel Impact (RUL thru EUL Period)	N/A	N/A