

Final Ex Ante Review Findings

Table 1-1: Project Information

PA	PG&E
Application ID	1445-13-1214 and 1445-13-1162
Application Date	02/12/2013
Program ID	PGE2222
Program Name	Energy Efficiency Services for Oil and Gas Production
Program Year	2013
CPUC Project ID	X308
PA Ex Ante Savings Date	2/28/2013
Measure Name	Pump Off Controllers (POCs) for Rod Beam Pumping Units
Project Description	<ul style="list-style-type: none"> - For Project ID: 1445-13-1214: Installation of 23 POCs on existing rod beam pumps. - For Project ID:1445-13-1162: Installation of 30 POCs on existing rod beam pumps
Date of CPUC Staff Review	3/26/2013, 12/03/2014
Primary Reviewer / Firm	Phani Pagadala/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
CPUC Staff Recommendation	The project is accepted as a Retrofit Add-On (REA) project type with an EUL of 10 years. The revised, combined ex ante savings estimates of 263,950 kWh and peak demand reduction of 30.93 kW are approved.

Measure Description

The proposed two projects entail installing POCs on a total of fifty three (53) rod beam pumps at the facility (23 for Project ID: 1445-13-1214 and 30 for Project ID: 1445-13-1162). The POC will shut the well down based on downhole conditions, resulting in energy savings. The baseline equipment for this project is claimed to be the existing rod beam pumps without any controls. According to the submitted project completion report, the combined annual energy savings estimated for the POC installation are 263,950 kWh with a demand reduction of 30.93 kW with a combined project incentive calculated at \$26,849.

Summary of Review

Included within the project completion report packet that was received and reviewed for the two separate projects were the following: Two sets of project completion reports (CRs), final savings calculations, certificates of project completion, post-installation verification reports, pre- and post-install power (logger data) analysis files, reviews of project CRs, and invoices.

From the initial show-stopper ex ante review CPUC staff determined that this minor oil and gas producer is not subject to the 2013 ISP Baseline Study for Artificial Lift Pumping, which determined that POCs on rod beam pumps are ISP for “major” oil producers but not “minor” oil producers for both retrofit and new construction projects.

The project’s energy savings estimates were calculated using CPUC staff approved M&V methodologies and also included the negative energy impacts associated with wells whose energy consumption increased after implementation of the measure. CPUC staff has reviewed the IOU/TPI calculations and approves the revised post-M&V results. The IOU/TPI removed two wells from project 1445-13-1162 based on post-installation verification findings that the measure was not installed for these wells. Per the project CR, both wells and associated project costs also have been removed from the final energy savings and project cost calculations.

Review Conclusion

The project post-M&V savings and incentives are approved at the combined annual energy savings of 263,950 kWh and demand reduction of 30.93 kW.

Summary of CPUC Staff Required Action by the PA

CPUC staff requires that the PA undertake the recommended steps:

For this project:

1. Upload all final documents to the CMPA folder for this project. Include a separate document with a file name “Claim ID” with the submission. The Claim ID document will include the PA claim ID number and the quarter claimed.

For all future projects (submitted after receipt of this review):

1. The POC ISP baseline study was released in 2013, and will need to be re-visited in order to research the most current ISP trends for both major and minor oil producing companies. The IOU/TPI should monitor these trends to be able to identify and update the ISP study when POCs are baseline across all oil and gas producers regardless of size.

Table 1-2 Review Findings

Reviewed Parameter	Analysis
Project Baseline Type (Early Replacement, Normal Replacement, Capacity Expansion, New Construction, System Optimization, Add-on Measures, Major Renovation) Note: For early retirement projects only, include RUL through EUL baseline)	PA Proposal: Retrofit Add-On
	CPUC Staff Assessment: IOU baseline selection is appropriate
	CPUC Staff Recommendation: none
Project Baseline Technology (in situ equipment, Title 24 (specify year), other code or other efficiency level (specify), industry standard practice - ISP)	PA Proposal: in situ
	CPUC Staff Assessment: accept
	CPUC Staff Recommendation: none
Project Cost Basis (Full Incremental, or Both. Note: For early retirement projects, include RUL through EUL cost basis treatment)	PA Proposal: Full cost of approximately \$3,542 per POC.
	CPUC Staff Assessment: accept
	CPUC Staff Recommendation: none
RUL (required for early retirement projects only, otherwise N/A)	PA Proposal: N/A
	CPUC Staff Assessment: accept
	CPUC Staff Recommendation: none
EUL (for each measure)	PA Proposal: None provided
	CPUC Staff Assessment: 10 years (based on IOU supplied EUL values for prior POC evaluation projects).
	CPUC Staff Recommendation: 10 years
Savings Assumptions	PA Proposal: Analysis using pre- and post-installation M&V data. This was consistent with CPUC Staff recommendations in a prior EAR phase for this project.
	CPUC Staff Assessment: accept

Final Ex Ante Review Findings

Reviewed Parameter	Analysis
	CPUC Staff Recommendation: none
Calculation Methods/Tool review	PA Proposal: Analysis using a custom spreadsheet using sample-based pre- and post-installation M&V data.
	CPUC Staff Assessment: accept
	CPUC Staff Recommendation: none
Pre- or Post-Installation M&V Plan	PA Proposal: Pre and post-install M&V data was used to true up the savings estimates. Measurements were performed in a manner consistent with CPUC Staff recommendations.
	CPUC Staff Assessment: CPUC Staff approves the IOU/TPI post-installation data collection activities.
	CPUC Staff Recommendation: none
Net-to-Gross Review	PA Proposal: Not addressed
	CPUC Staff Assessment: Not assessed
	CPUC Staff Recommendation: none

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

Description	PA Ex Ante Claim	CPUC Staff Recommendations
First Year kWh Savings	263,950	Accept
First Year Peak kW Savings	30.93	Accept
First Year Therms Savings	N/A	N/A
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)	263,950	Accept
Peak kW Savings (RUL thru EUL Period)	30.93	Accept
Therms Savings (RUL thru EUL Period)	N/A	N/A
Annual Non-PA Fuel Impact (RUL Period)	N/A	N/A
Annual Non-PA Fuel Impact (RUL thru EUL Period)	N/A	N/A
Project Costs for Baseline #1 (RUL or EUL)	\$187,709	Accept
Project Costs for Baseline #2 (EUL minus RUL period)	N/A	N/A
Project Incentive Amount	\$26,849	Accept