

Phase I Ex Ante Review Findings

Table 1-1: Project Information

IOU	PGE
Application ID	2K13194182
Application Date	6/17/2013
Program ID	PGE
Program Name	Demand Response Program
Program Year	2013
Itron Project ID	X389
IOU Ex Ante Savings Date	7/24/2013
ED Measure Name	Process Retrofit/New Other Electrical Material Handling
Project Description	The measure is to replace two existing hammer mill corn grinders with one roller mill grinder
Date of ED Review(s)	08/27/2013
Primary Reviewer / Firm	Kunal Desai / Itron
Review Supervisor / Firm	Joseph Ball / Itron
ED Project Manager	██████████ / California Public Utilities Commission, Energy Division
ED Policy Authorization (as needed)	TBD
Type of Review (Desk, On-site, Full M&V, Tool)	Desk
ED Recommendation	Ex ante project is conditionally approved. Savings are subject to post M&V true up.

Measure Description

The project involves replacement of two (2) existing 300 HP hammer mill grinders with one (1) 150 HP roller mill grinder.

Summary of Review

Pacific Gas & Electric (PG&E) submitted the following documents to the Energy Division (ED) for the Phase I review process:

- Project Application,

- PA Review Form v2.0 and,
- Email correspondence,

PG&E is claiming an early replacement baseline for the hammer mill grinder retrofit. The two hammer mill grinders are documented by PGE to be in operating conditions. Maintenance records and 10 days of operating data along with the maintenance records were submitted to ED for review. Maintenance records verified that the equipment was maintained on regular intervals and has the last service date of April 2013. ED contacted the site contact to verify the RUL, the site contact was not able to provide a definitive answer but stated that the grinders are critical to their facility and cannot afford any downtime. He intended to regularly maintain the grinders and use it for a long time. For documentation purposes ED used a RUL value which was 1/3 of the EUL. ED also requested operating data for hammer mill grinders and did receive the production data for the last two years. The site contact also informed ED that roller mill grinders would be their choice whenever they replace their existing hammer mill grinders as they are more energy efficient and increasingly used in the market including their competitors. Based on this information ED zeroed savings for RUL through EUL period. The preliminary annual kW & kWh energy savings estimates using the forecasting method are 0 and 1,257,976, respectively. Likewise, the preliminary project cost and incentive is estimated to be \$217,075 and \$100,638 respectively.

Review Conclusion

Ex ante project is conditionally approved. Savings are subject to post M&V true up.

Summary of ED Requested Action by the IOU

ED requests and recommends that in order to complete an ex ante review the ED recommends that the IOU perform the following action:

1. Revise the M&V plan to perform a minimum of one month post-install M&V (using on-site SCADA), includes the following:
 - a. Power (kW) trends of the new roller mill grinder (15-minute intervals),
 - b. Operating hours of the new roller mill grinders
 - c. Grinder production data for the normalization of energy savings between pre- to post-retrofit, and
 - d. Evidence that the pre-existing hammer mill grinders have been decommissioned and removed from site.

2. After the project installation is complete. Provide cut-sheets or equipment specifications for the new roller mill grinder along with project invoices and post M&V data.

Table 1-2 Review Findings

Reviewed Parameter	Analysis
Project Baseline Type (Early Replacement, Normal Replacement, Capacity Expansion, New Construction, System Optimization, Add-on Measures) Note: For early retirement projects only, include RUL through EUL baseline)	IOU Proposal: Early Replacement
	ED Assessment: Early Replacement
	ED Recommendation: None
Project Baseline Technology (in situ equipment, Title 24 (specify year), other code or other efficiency level (specify), industry standard practice - ISP)	IOU Proposal: In situ equipment
	ED Assessment: In situ equipment
	ED recommendation: None
Project Cost Basis (Full Incremental, or Both. Note: For early retirement projects, include RUL through EUL cost basis treatment)	IOU Proposal: Full cost
	ED Assessment: Full cost
	ED recommendation: None. Provide project invoices when they become available
RUL (required for early retirement projects only, otherwise N/A)	IOU Proposal: Not provided
	ED Assessment: 1/3 of the EUL
	ED recommendation: 6.6 years
EUL (for each measure)	IOU Proposal: Not provided
	ED Assessment: 20 years
	ED Recommendation: 20 years
Savings Assumptions	IOU Proposal: IOU expects the plant will operate for 4,654 hours in the first year
	ED Assessment: kW trends of the roller mill grinder, decommissioning of the existing hammer mill grinders, operating hours for the new roller mill grinder

Reviewed Parameter	Analysis
	need to be verified using on-site SCADA data during the post-install M&V period.
	ED Recommendation: Post-retrofit M&V plan should include monitoring kW usage and operating hours of the roller mill grinder. Decommissioning of the hammer mill grinders should be verified.
Calculation Methods/Tool review	IOU Proposal: A live energy savings calculation spreadsheet was provided for ED review.
	ED Assessment: Calculation methodology is acceptable
	ED Recommendation: None
Pre- or Post-Installation M&V Plan	IOU Proposal: IOU plan has been submitted
	ED Assessment: Post M&V time period is not mentioned in the plan
	ED Recommendation: Provide the proposed post M&V time period for data logging; ED suggests at least one month
Net-to-Gross Review	IOU Proposal: Not provided
	ED Assessment: Not accessed
	ED Recommendation: A NTG interview may be warranted

Table 1-3 Energy Savings Summary

Description	IOU Ex Ante Claim	ED Recommendations
First Year kWh Savings	1,257,976	N/A
First Year Peak kW Savings	0	TBD
First Year Therms Savings	0	TBD
kWh Savings (RUL Period)	1,257,976	N/A
Peak kW Savings (RUL Period)	0	N/A
Therms Impact (RUL Period)	0	N/A
kWh Savings (RUL thru EUL Period)	0	TBD
Peak kW Savings (RUL thru EUL Period)	0	TBD
Therms Savings (RUL thru EUL Period)	N/A	N/A
Annual Non-IOU Fuel Impact (RUL Period)	N/A	N/A

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Description	IOU Ex Ante Claim	ED Recommendations
Annual Non-IOU Fuel Impact (RUL thru EUL Period)	N/A	N/A
Project Costs for Baseline #1 (RUL or EUL)	\$217,075	\$217,075 (RUL period only)
Project Costs for Baseline #2 (EUL minus RUL period)	Not provided	N/A, since no savings will accrue during this time frame
Project Incentive Amount	\$100,638	None