

## Phase I Ex Ante Review Findings

**Table 1-1: Project Information**

<b>IOU</b>	PG&E
<b>Application ID</b>	2K13188791
<b>Application Date</b>	4/28/13
<b>Program ID</b>	PGE21011
<b>Program Name</b>	Commercial Calculated Incentives (NRR Core)
<b>Program Year</b>	2013
<b>Itron Project ID</b>	X381
<b>IOU Ex Ante Savings Date</b>	TBD
<b>ED Measure Name</b>	Wireless Pneumatic Thermostats
<b>Project Description</b>	Installation of an internet based, centralized EMS system that can control the operation of the HVAC units at 5 remote locations.
<b>Date of ED Review(s)</b>	08/02/13
<b>Primary Reviewer / Firm</b>	Sepideh Shahinfard/ Itron
<b>Review Supervisor / Firm</b>	Joseph Ball/ Itron
<b>ED Project Manager</b>	██████████ / California Public Utilities Commission, Energy Division
<b>ED Policy Authorization (as needed)</b>	
<b>Type of Review (Desk, On-site, Full M&amp;V, Tool)</b>	Desk Review
<b>ED Recommendation</b>	The ex ante savings are not approved pending submission of documented date of HVAC unit replacement.

## **Measure Description**

The project involves installing wireless thermostats in five (5) locations within school district to control the HVAC units remotely through a centralized Energy Management System (EMS). The space conditioning is currently provided by a mixture of single zone packaged units, gas furnaces, and packaged terminal units. Three of the school campuses are equipped with 24 hour thermostats. The administration building and one of the campuses are equipped with seven day programmable thermostats. Currently 24-hour programmable thermostats operate from 6:00 AM to 4:00 PM seven days per week during the school year except during extended breaks. The seven-day thermostats currently operate from 6:00 AM to 4:00P M four days per week, and 6:00 AM to 2:00 PM one day per week during the school year except during extended breaks. The administration building currently operates from 7:00 AM to 4:00 PM year round. The proposed wireless thermostats will shut off the HVAC units that are currently controlled by 24 hr thermostat during weekends and holidays that are shorter than 1 week, as well as shortening Wednesday schedules. The proposed wireless thermostats will shut off the HVAC units that are currently controlled by 7 day thermostats during holidays that are shorter than 1 week. Estimated kWh and therm savings for this project are 37,810 kWh and 1,118 therms. There is no kW peak demand savings associated with this measure.

## **Summary of Review**

The Investor Owned Utility (IOU) submitted the following documents for Data Request (DR) 7892 on 7/1/2013 for this Phase I review:

- Signed program application;
- PA package; and
- Savings calculations spreadsheet.

This phase I review focused on the information provided by the IOU and verifying that both baseline and calculations are correct. PG&E indicated that for the buildings that were built more than 20 years ago - three school campuses that currently have 24 hr thermostats - all the packaged HVAC units have been replaced, and the mandatory requirements of Title 24 would have caused the thermostats of the packaged units to be replaced at the same time as the packaged units, if they did not meet the Title 24 requirements that were in effect at that time. ED requests PG&E to provide documented dates of the last HVAC replacements for each building. For the school and the administration buildings which were constructed in 2004 and 2005, 2008 T24 section 122 requires that each HVAC unit should be installed with control that is capable of automatically shutting off the system during periods of nonuse. Therefore, the savings associated with reduced operating hours of the HVAC units due to installation of new wireless thermostats are not acceptable.

## **Review Conclusion**

The ex ante savings are not approved pending submission of documented date of HVAC replacement.

**Summary of ED Requested Action by the IOU**

ED requests that the IOU undertake the recommended steps and submit the following information **due on 08/16/2013 (or 14 days from submittal date to IOU):**

1. Submit documented date of HVAC unit replacement in buildings.
2. Submit itemized contractor invoices for the installed measures breaking out equipment and labor costs to support the incremental measure costs and total project cost.