

CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE 22 T C 763 PRJ - 03088226 Service
CMPA Directory Link	https://deeresources.info/cmpa/projects/20334
PA	PGE
PA Application ID	PRJ - 03088226
PA Application Executed Date	
PA Program ID	PGE COM 004
PA Program Name	Nexant - Advanced Energy Program - Custom Retrofit
PA Program Year	
Date of CPUC Staff Review:	6/14/2022
PA CMPA Upload Dates Included in this review:	
First PA Upload	5/5/2022
Second PA Upload	NA
Third PA Upload	NA
Fourth PA Upload	
Fifth PA Upload	
Sixth PA Upload	
Seventh PA Upload	
Eighth PA Upload	
PA Measure Description(s):	
Measure 1	COMMISSIONING-RCX RESET CONTROL SETTING-HVAC-OTHER
Measure 2	COMMISSIONING-RCX RESET CONTROL SETTING-HVAC-ECONOMIZEROUTSIDE AIR
Measure 3	COMMISSIONING-RCX RECODE CONTROLS-HVAC-SETPOINT CHANGE
Measure 4	COMMISSIONING-RCX RECODE CONTROLS-HVAC-SETPOINT CHANGE
Measure 5	COMMISSIONING-RCX RESET CONTROL SETTING-HVAC-AIRFLOW REBALANCEADJUST
Measure 6	COMMISSIONING-RCX RECODE CONTROLS-HVAC-SETPOINT CHANGE
Measure 7	
Measure 8	
Measure 9	
Measure 10	
PA Project Description:	Implementing 6 BRO measures Heating Hot Water Plant HHW Lockout Cooling Tower Staging Condenser Water Pump VFD Opt AHU Economizer Opt AHU DSP Reset AHU Fan Speed Setback for Unoccupied Hours
Bi-Monthly Upload kW Demand Reduction	22.9
Bi-Monthly Upload Annual kWh Impacts	261,235.4
Bi-Monthly Upload Therm Impacts	13,071.9
PA Proposed Incentive \$ (to Customer)	\$22,210.08
Project Documentation kW Demand Reduction	23.0
Project Documentation Annual kWh Impacts	261,235.4
Project Documentation Annual Therm Impacts	13,071.9
Project Documentation Incentive \$ (to Customer)	22,210.1
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	Quantum Energy Analytics and DNV
CPUC Staff Review Supervisor Name	
CPUC Staff Review Supervisor Firm	Quantum Energy Analytics
PA Primary Reviewer Name	
PA Primary Reviewer Firm	
CPUC Staff Project Manager	
CPUC Staff Policy Authorization (as needed)	
CPUC Staff Recommendation:	Application ready to proceed with exception(s), as noted
For rejection, action required:	N/A
M&V Review:	Post M&V Review (M&V Results and Final Calculations) Required

Action Number:	Summary of CPUC Staff Required Action by the PA:	Action Category	PA Response	ED Resolution
1	Please resubmit this project for our review at the post-installation stage.	Continue Document Upload		

2	<p>The PA did not clearly state how BRO-RCx savings are expected to persist over the life of the project (3 years). Given this is a mixed-use building with air handler units (AHUs) that are connected to a common plenum serving various space types (labs and offices), the project has the potential to cause building operation issues (e.g., HVAC system not being able to maintain differential pressure for lab spaces). This can in turn result in building staff reversing the system operation back to the original setting. Therefore, the PA is required to provide information about strategies that will be in place to ensure measure persistence. Note that this is a general requirement for BRO measures. Please provide this information as part of the post-installation submission of this project.</p>	Missing required information		
3	<p>It is not clear whether PG&E HVAC Calculator Tool is designed for mixed-use building that may have different ventilation/air circulation requirements. We are requesting the PA to explain whether there are different ventilation requirements (recirculating vs once-through) for various space types (e.g., labs, offices, etc.) and, if yes, how the tool accounts for that. This information can be provided as part of the post-installation package.</p>	Analysis assumptions		
4	<p>The consumption data in the "Customer Information" tab of the PG&E HVAC Calculator Tool is blank. Please provide this information as part of the post-installation package for savings verification purposes. Also, per PG&E HVAC Calculator Tool, total AHUs gas consumption is about 30% less than the total boiler gas consumption. Please explain if the boiler is used for any other end-use other than AHUs. This information can be provided as part of post-installation package.</p>	Missing required information		

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	PA Response	ED Resolution
1	<p>It is not clear if the "HW Plant" tab of the PG&E HVAC Calculator Tool is connected to individual "AHU" tabs. It appears that each "AHU" tab has its own heating enable temperature and that is not connected to the post case heating enable temperature of the "HW Plant" tab. We recommend the PA to connect the baseline of the "AHU" tabs to the post case of HW lockout to avoid double counting of savings. The same applies to connecting "CHW Plant" tab to individual "AHU" tabs.</p>	Calculation tool		
2	<p>We suggest the PA to collect trend data on exhaust fans speed and exhaust duct static pressure in addition to the supply fans speed and supply duct static pressure. This should help verify the occupied/unoccupied supply fans speed. Note that supply and exhaust fans speed should follow the same pattern for all AHUs to maintain the differential pressure gradient. The exhaust fans are in fact the key players for the measure implementation.</p> <p>We also suggest the PA to collect trend data on space temperature setpoints. This data should be easily accessible through BMS.</p>	M&V plan		

CPUC Staff Recommendation Definitions	
CPUC Staff Recommendation	Definition
Application ready to proceed without exception	The PA will continue to upload application documents to the CMPA directory through the implementation and claims phases of the project. The PA may proceed to approve the project without waiting for CPUC Staff response. A project is waived from further review at the post-installation stage by CPUC staff, but the PA is responsible for post-installation (IR) review. There will not be conditional approval.
Application ready to proceed with exception(s), as noted	<p>The PA must make revisions or changes as noted in CPUC Staff's review comments before signed agreement with customer. The PA will continue to upload application documents to the CMPA directory through the implementation and claims phases of the project. The PA may proceed to approve the project without waiting for CPUC Staff response. If CPUC Staff decides to perform IR review of a project, CPUC Staff will notify the PA. The scope will be limited to determine if the project was carried out consistent with the application and notes provided during pre-installation review and to obtain information pertaining to whether the eligibility criteria or metrics should be revised.</p> <p>Unless the scope of work presented in project application has changed at IR review, the project will not be reviewed again in the areas specified below. Scope change is defined by substantial changes include significant modifications to the proposed equipment type, size, quantity, configuration, the expansion of a project to include additional retrofits, or the splitting of a project into multiple phases.</p> <p>The following areas will not be reviewed again by CPUC Staff:</p> <ul style="list-style-type: none"> • Calculation Tool • Calculation Methodology • M&V Plan • Baseline • Eligibility • EUL/RUL • Measure Type • Program Influence
Application rejected.	<p>The application is rejected as submitted. The PA shall promptly inform the applicant as to the reasons why the project was rejected and the specific recommendations for the conditions under which the project would be approved. CPUC Staff shall provide the reasons for the rejection or request for modification, including each basis as to why the project is rejected, or modification is requested. In addition, CPUC Staff shall provide specific recommendations for the conditions under which the project would be approved.</p> <p>If any party to the project is unsatisfied with the Commission's directions for the project, a dispute resolution process may be initiated by that party. The Commission shall adopt rules for the conduct of the dispute resolution process. – Section 381.2 (g) (3) (F)</p>
Advisory.	The PA is not formally required to follow instructions or recommendations given in an Advisory review. However, issues found will affect ESPI scoring and may come up again in Ex-Post review.