

CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE 20 T I 575 PRJ - 02461620 HVAC
CMPA Directory Link	https://deeresources.info/cmpa/projects/18783
PA	PGE
PA Application ID	PRJ - 02461620
PA Application Executed Date	
PA Program ID	PGE21027
PA Program Name	Heavy Industry Energy Efficiency Program - Customized Retrofit
PA Program Year	
Date of CPUC Staff Review:	9/14/2021
PA CMPA Upload Dates Included in this review:	
First PA Upload	9/29/2020
Second PA Upload	11/3/2020
Third PA Upload	12/1/2020
Fourth PA Upload	
Fifth PA Upload	
Sixth PA Upload	
Seventh PA Upload	
Eighth PA Upload	
PA Measure Description(s):	
Measure 1	HVAC DATA CENTER - HOT/COLD AISLE CONTAINMENT - To-Code/Std
Measure 2	COMMISSIONING-RCX RESET CONTROL SETTING-PROCESS-OTHER
Measure 3	
Measure 4	
Measure 5	
Measure 6	
Measure 7	
Measure 8	
Measure 9	
Measure 10	
PA Project Description:	CRAH retrofits and chiller control RCx
Bi-Monthly Upload kW Demand Reduction	156.9
Bi-Monthly Upload Annual kWh Impacts	1,374,397.1
Bi-Monthly Upload Therm Impacts	0.0
PA Proposed Incentive \$ (to Customer)	\$114,646.27
Project Documentation kW Demand Reduction	95.7
Project Documentation Annual kWh Impacts	656,542.0
Project Documentation Annual Therm Impacts	0.0
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	Energy 350
CPUC Staff Review Supervisor Name	
CPUC Staff Review Supervisor Firm	SBW Consulting
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	Due Date	PA Response	ED Resolution
1	Please extend post-installation data collection to the minimum of 4 weeks (this is also required by 2016 PG&E Data Center Baseline and Measurement and Verification Guidelines).	M&V plan	N/A	CRAH fan amp, SAT, and RAT were collected from sample units for 4 weeks: From 5/5/2021 to 6/2/2021. Please see "PRJ - 02461620 POST Trends_4Wk -CONFIDENTIAL.xlsx"	Thanks for extending the post-installation M&V period. Post-installation temperature raw data included 4 weeks of post install supply air temperature (SAT) in 15-minute intervals and spot measurements of return air temperature (RAT). No further action is required.
2	Please resubmit the project after post-installation data has been collected and final savings are estimated. Final savings should be normalized based on the post-installation IT load. The amount heating load used to estimate final savings should include post-installation IT load as well as heat generated from lighting and UPS (if located in rooms that are impacted by this project).	Continue Document Upload	N/A	There was an increase in IT load at the data center, as evidenced by the data in the <M&V_Utility & IT Data> tab of the approved calculations. Trending occurred after this increase and captures the post-install operations. The baseline was adjusted to account for this increase in load, per the M&V plan at pre-install. Additionally, EEM-1.1 calculations were updated so that the baseline and post-install airflow is equal. This ensures savings for this measure quantifies just the improvement of higher efficiency CRAH fans. EEM-1.2 calcs were based on nameplate flows, so it did not need to be normalized.	Pre-installation savings were estimated to be 1,374,397kWh and 156.9kW. Post-installation savings are verified to be less (656,542kWh and 95.7kW). Incentives were also reduced from the pre-installation value of \$114,646 to the post-installation value of \$62,547. Please include updated savings and incentives in the next quarterly submission. Post-installation savings are normalized based on the post-installation IT load. The heat generated from the UPS load is not in the rooms impacted by the project and have been omitted. The lighting has remained unchanged from the baseline and omitted from the calculation. Claim #2 (EEM #2) was not implemented. No further action required.

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	Due Date	PA Response	ED Resolution
1	We may request a new standard practice study for data centers as the existing studies seem outdated. CPUC staff will follow up on this request with additional information.	Baseline	N/A		

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. 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.</p> <p>– Section 381.2 (g) (3) (F)</p>