

CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE 22 C C 764 Site Specific Comprehensive - 43665 NMEC
CMPA Directory Link	https://deeresources.info/cmpa/projects/20335
PA	PGE
PA Application ID	Site Specific Comprehensive - 43665
PA Application Executed Date	
PA Program ID	COWBSSEA21
PA Program Name	Commercial - Site Specific Comprehensive
PA Program Year	
Date of CPUC Staff Review:	3/25/2024
PA CMPA Upload Dates Included in this review:	
First PA Upload	5/6/2022
Second PA Upload	5/24/2022
Third PA Upload	2/7/2024
Fourth PA Upload	
Fifth PA Upload	
Sixth PA Upload	
Seventh PA Upload	
Eighth PA Upload	
PA Measure Description(s):	
Measure 1	NMEC Whole Building
Measure 2	
Measure 3	
Measure 4	
Measure 5	
Measure 6	
Measure 7	
Measure 8	
Measure 9	
Measure 10	
PA Project Description:	The customer is replacing the refrigeration system including compressors and condensers to reduce energy usage at the facility
Bi-Monthly Upload kW Demand Reduction	29.0
Bi-Monthly Upload Annual kWh Impacts	264,904.7
Bi-Monthly Upload Therm Impacts	0.0
PA Proposed Incentive \$ (to Customer)	\$37,660.56
Project Documentation kW Demand Reduction	29.0
Project Documentation Annual kWh Impacts	264,905.0
Project Documentation Annual Therm Impacts	0.0
Project Documentation Incentive \$ (to Customer)	37,597.0
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	DNV
CPUC Staff Review Supervisor Name	
CPUC Staff Review Supervisor Firm	DNV
PA Primary Reviewer Name	
PA Primary Reviewer Firm	
CPUC Staff Project Manager	
CPUC Staff Policy Authorization (as needed)	
CPUC Staff Recommendation:	Advisory
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 post-installation review.	Continue Document Upload		Regression model review: The use of the maximum 15-minute kW reading per hour for demand models is not standard. Instead, the average of the 15-minute readings should be used for each hour. This is equivalent to the sum of kWh readings used for the kWh model, and therefore a single hourly model should be used for both kWh and kW savings calculations. Otherwise, regression modeling and savings calculations are accurate and meet standard methods and criteria.
2	The PA did not provide enough details (e.g., equipment quantity, full description of the control strategy and/or control equipment, etc.) on baseline and installed refrigeration systems. The PA included a very limited information about these systems in the project feasibility study (PFS) and stated that full details are provided in the savings analysis. The savings analysis does not provide all details about baseline and installed systems (e.g., whether additional VFDs will be installed on condenser fan) and in some cases include conflicting information (e.g., compressor quantity for the proposed Rack refrigeration system). Therefore, the CPR team is unable to fully review the calculations and evaluate whether the new system will meet standard practice baseline requirements. Please note that projects implemented under NMEC programs are not exempt from providing full details on existing and installed systems characteristics and operation. Please provide this information as part of future submissions of this project.	Missing required information	More details are included in the post-install report. Some typos and errors are also corrected in the calculation.	The post-installation report has included more detailed information on the project, including the quantity of impacted compressors and condensers in the pre- and post-installation configurations. The project file "SSC - 43665 POST Refrigeration As-Built Set-CONF.pdf" has provided the approved drawings and a summary of compliance with various applicable sections from Title 24 related to variable speed condenser fans, floating suction pressure, condenser design specific efficiency, and condenser fin density. The submitted post documentation appears to confirm that the installed systems comply with applicable codes.
3	The engineering calculations submitted for this project have several errors that impact both energy and peak demand savings. It appears that the total heat rejection capacity for the proposed system references the evaporator capacity associated with the lead compressor for non-lead compressors (see Column T of the "Proposed Rack Calc" sheet). The peak demand calculations are based on an outdated definition of DEER peak demand hours. Also, the baseline peak demand calculations include a pump power (along with compressor and condenser power) that is not included in the proposed calculations.	Analysis assumptions	The errors in the references are also corrected in the calculation. The existing system has evaporative condenser with a pump, but the proposed system is air cooled condenser without pump.	The review team has no further comments on the pre-installation savings calculation.
4	Provided cost documentation does not include details of equipment that will be installed as part of the project. Please provide a full description of equipment and other costs included in the project cost calculation as part of future submissions of this project.	Measure cost	The actual project invoices are provided in the post-install report which includes the material and labor costs. The equipment description and specs are included in the post-install report.	The post-installation file 'SSC - 43665 POST Project Invoice Summary.xlsx' has provided the cost breakdown for installation labor and material. The PA also provided the cost invoices.
5	The PA provided very little evidence of program influence (i.e., only two emails from May 2021). According to the PFS, the implementer has had an ongoing relationship with the customer since 2015, conducted an audit to identify specific refrigeration retrofits in 2021, and that the customer has agreed to an expanded scope of work. However, the PA provided no evidence to support this narrative. Please provide supporting program influence documentation (audit reports, emails and or meeting logs documenting discussions on scope and customer decision making criteria) for future submissions of this project.	Program influence	Additional documentation is provided. "Influence Documentation.zip"	The PA documented the multiple emails and communication log to support the program influence. The communication log has documented the date of communication through emails and meeting among various stakeholders.

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	PA Response	ED Resolution
1	This is a normal replacement (NR) project with only one option available for the upgrade. Under traditional custom policy, this project will have less (potentially zero) savings. The PA did not provide any documentation that indicates this can actually be an accelerated replacement project, claimed NR and used existing condition as the baseline.	CPUC Policy	Different design options were proposed for the customer consideration by the design engineer. The details were provided in the file "SSC - 43665 PRE Design Options.pdf" in response to the CPUC Supplemental Data Request.	The review team has no further comments.
2	Fractional savings uncertainties are based on a savings fraction that is set to 10%, not based on the 27% savings calculated in the spreadsheet analysis.	Other 1		Not relevant in Post M&V review
3	Calculated incentives are slightly different than the bi-monthly upload.	Other 2		

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.