

## CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE_22_C_C_801_Site Specific Comprehensive - 40390_NMEC
CPMA Directory Link	<a href="https://deeresources.info/cmpa/projects/20486">https://deeresources.info/cmpa/projects/20486</a>
PA	PGE
PA Application ID	Site Specific Comprehensive - 40390
PA Application Executed Date	
PA Program ID	GPNMCUCC19
PA Program Name	University of CaliforniaCalifornia State University - NMEC Whole Building
PA Program Year	
Date of CPUC Staff Review:	10/21/2022
PA CMPA Upload Dates Included in this review:	
First PA Upload	8/4/2022
Second PA Upload	10/6/2022
Third PA Upload	N/A
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:	Before next CMPA upload date7182022
Bi-Monthly Upload kW Demand Reduction	21.0
Bi-Monthly Upload Annual kWh Impacts	578,058.0
Bi-Monthly Upload Therm Impacts	13,491.0
PA Proposed Incentive \$ (to Customer)	\$97,176.21
Project Documentation kW Demand Reduction	0.0
Project Documentation Annual kWh Impacts	775,629.0
Project Documentation Annual Therm Impacts	13,793.0
Project Documentation Incentive \$ (to Customer)	97,176.0
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	DNV
CPUC Staff Review Supervisor Name	
CPUC Staff Review Supervisor Firm	Quantum
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 NOT Required

Action Number:	Summary of CPUC Staff Required Action by the PA:	Action Category	PA Response	ED Resolution
1	The PA did not provide the code that was used to develop the baseline model. According to the NMEC Rulebook, all analytical methods including tools, algorithms and software used in savings and incentive or compensation payment calculations must be made available to Commission staff and its consultants upon request. In an SDR, we asked for this information. The PA did not share the main library that implements the algorithm and includes the details of the approach; and only provided access to the code that imports functionalities from that library and runs them. Hence, we are not able to fully review the code.	Calculation tool		

2	<p>According to the PA, the existing high pressure sodium lighting used in the greenhouses are fire hazards, regularly burn out, and replacements are very difficult to source. Based on this information, it appears that the existing lighting system is not able to meet the level of service required by the customer. Therefore, it's not appropriate to include the lighting measure in this NMEC project. The existing baseline used for NMEC projects should be reflective of the baseline equipment that are able to meet the customer functional needs.</p> <p>Please note that the PA is responsible to perform site inspections for all projects to document the baseline conditions and to make sure existing equipment are able to meet the customer functional needs. It appears that the PA did not preform any onsite verification at this facility.</p>	CPUC Policy		
3	<p>The PA estimated the EUL (effective useful life) of the lighting measure by dividing 50,000 hours of lifetime for non-horticultural LEDs by the facility operating hours. This is not appropriate because the non-horticultural LED fixtures use the L70 measurement (hours a fixture will maintain 70% of the total original lumen output) but the horticultural lighting uses either the L90 or Q90 measurement (the number of hours a fixture can maintain 90% of its original output). This should be used as the basis for the EUL of horticultural LED lighting. We raised this issue in an SDR. The PA revised the EUL for the lighting measure and used 36,000 hours instead of 30,000 as required by L90/Q90. Given the lighting measure is not eligible for this project (see above), this issue will not impact the savings weighted EUL of this project. However, the PA is required to address this EUL issue for future horticultural lighting project.</p>	EUL/RUL		
4	<p>According to the NMEC Rulebook, incentives for behavioral, retrocommissioning, and operational measures shall only be paid once participant commits to a maintenance plan for a minimum of three years (evidence should be made available to Commission staff upon request).</p> <p>The PA did not provide a maintenance plan for BRO measures. There is no indication of the participant committing to a maintenance plan in the project package.</p>	Missing required information		
5	<p>The PA provided savings weighted EUL for the project but did not explain how these values were estimated. For future NMEC projects, please provide all underlying assumptions (e.g., Measure Application Types) used to estimate savings-weighted EULs.</p> <p>For this project, please revise savings weighted EUL to exclude the lighting measure.</p>	EUL/RUL		

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	PA Response	ED Resolution
1	The bi-monthly upload (BMU) address ( [REDACTED] ) doesn't match the address provided in the project documentation ( [REDACTED] ). Please make sure the correct address is included in the next quarterly upload. The project description in the BMU is also incorrect and needs to be updated in the next quarterly submission.	Other 1		
2	The savings provided in the BMU do not match savings in the project documentation (see above for savings from BMU and project documentation). Please make sure the correct savings are included in the next quarterly submission.	Other 2		
3	The total incentive amount in BMU and project documentations are both incorrect. Please make sure correct incentive values (capped at the project cost) are included in the next quarterly submission.	Other 3		
4	The PA used an old version of the "VSD for HVAC Fan Controls" measure package to estimate savings for adding VFDs to exhaust fans. The current version of the measure package does not include exhaust fans.	Analysis assumptions		
5	It is not clear if the VAV operation of Lab AHUs (measure 1a, BRO) can be fully functional without installation of VFDs on exhaust fans (measure 1b, AOE). If this is the case (i.e., exhaust fan VFDs are needed for the VAV operation of the AHUs), then both measures should be combined as a single measure.	Measure type		
6	The PA did not include gas interactive impacts for the lighting measure in the engineering estimates of the savings. This project includes a gas model so the impact should be reflected in the final savings.	Analysis assumptions		
7	There are a number of projects developed under UC/CSU IOU partnership program for this customer that are relying on 1) an ongoing relationship between the PA and the customer, and 2) lack of project funding to establish the influence. Most of these projects have not fully documented program influence as required by E-5115. For this project, our review indicates that the PA did not provide technical services to the customer (the customer developed the project and the measure list in house, the customer also performed the billing analysis and the engineering calculations. The PA didn't do a site visit). However, the university stated that this project would not happen absent of the program due to lack of funding.	Program influence		
8	Future NMEC projects should clearly document how meters used in the billing analysis are mapped to project measurement boundaries and various loads served in the building. This project did not clearly document whether various equipment (exhaust fans, chillers, AHUs, lighting) are served by the same submeter used in the analysis or not. Please include this information for all future projects.	Missing required information		

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"> <li>• Calculation Tool</li> <li>• Calculation Methodology</li> <li>• M&amp;V Plan</li> <li>• Baseline</li> <li>• Eligibility</li> <li>• EUL/RUL</li> <li>• Measure Type</li> <li>• Program Influence</li> </ul>
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.