CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE_22_C_C_773_Site Specific Comprehensive - 40391_NMEC
CMPA Directory Link	https://deeresources.info/cmpa/projects/20366
PA	PGE
PA Application ID	Site Specific Comprehensive - 40391
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:	8/9/2022
PA CMPA Upload Dates Included in this review:	
First PA Upload	5/25/2022
Second PA Upload	6/22/2022
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:	None
Bi-Monthly Upload kW Demand Reduction	0.0
Bi-Monthly Upload Annual kWh Impacts	211,572.0
Bi-Monthly Upload Therm Impacts	58,249.0
PA Proposed Incentive $ (to Customer)	$127,325.00
Project Documentation kW Demand Reduction	0.0
Project Documentation Annual kWh Impacts	211,572.0
Project Documentation Annual Therm Impacts	58,249.0
Project Documentation Incentive $ (to Customer)	127,324.6
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	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:	**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 the project for our review at the post-installation stage.	Continue Document Upload		
2	The PA classified this project as an Add-On Retrofit (AOE) project. According to the Statewide Custom Project Guidance Document, the New Construction (NC) Measure Application Type (MAT) is used where there is no reference operation for existing conditions, such as with new construction, expansions, added load, a change in the function of the space (e.g., office to laboratory), or a substantial change (e.g. ~30% or more) in design occupancy. The customer has been converting the buiding from labs to offices (change to the function of the space) slowly over a period of time and the PA did not provide satisfactory evidence to show that the building was completely repurposed to offices when this project was initiated. The PA is required to provide evidence (e.g., building sketches, photographs, plans, etc.) that clearly shows the building was used as an office building during the baseline period. **This information should be provided no later than 30 days from this disposition.**	Measure type		
3	The PA did not file the program-level M&V plan as part of the program implementation plan (PIP) for "University of CaliforniaCalifornia State University - NMEC Whole Building" program. According to page 7 of the Rulebook for Programs and Projects Based on Normalized Metered Energy Consumption, version 2.0, PAs must submit a program-level M&V plan for each site-level NMEC program. The program-level M&V plan must be included in PIP filings for the program. Please post this on CEDARS and let us know when it's posted.	CPUC Policy		

4	There is no documentation to show how the actual supply airflow values used in the analysis were calculated. The documentation only states that the actual supply airflows used are from a 1990 air balancing report. Note that all calculations assumptions should be documented and supported by data in the project package and NMEC projects are not exempt from this. Please provide logged data to verify the supply airflow and the continues operation during the baseline period. It is not appropriate to just mention a 1990 air balancing report and used that to estimate savings. Given the slow conversion of this building from lab space to office, we need actual data that supports the current operation of the equipment. **This information should be provided no later than 30 days from this disposition.**	Missing required information		
5	The airflow reduction is a hard coded value in the engineering analysis notebook. Please provide the supporting calculations used to come up with the airflow reduction of 41,329 cfm.	Missing required information		
6	Please explain how the balance temperatures were selected and why different temperatures were used for different parts of the analysis. In the custom calculation file "SSP-40931 PRE Savings Calc Estimate," the baseline balance temperature is set at 55 degree F on tabs such as "Base Case" and "Post Case_Early Morning," but 65F is used to calculate HDD and CDD for the binned analysis in tabs such as "OATbins_base schedule" and "OATbins_post_day schedule". Additionally, the M&V report indicates that a balance temperature of 65F was used for the baseline model. Please explain how the balance temperatures were selected and why different temperatures are used for different parts of the analysis.	Analysis assumptions		
7	In the NMEC model for electric and steam usage, there is an indication that the building steam and electric usage were impacted by COVID 19. For the electric model, usage after March 2020 has a different pattern of usage compared to the values after March 2020. For the steam model, the steam usage from January 2020 through September 2020 has a different usage pattern from the usage prior to January 2020 and after September 2020. These periods are in line with when COVID 19 had the most significant impacts on building operation. In addition, for both steam and electric usage in 2021 seem to have a different usage pattern to the one in 2019, which indicates that the building energy consumption may still be impacted by COVID 19 changes. Please note that the final savings for all three models should be normalized based on comparable operations.	Analysis assumptions		
8	The electric model has heating degree hours as one of the predicting variables. Please provide supporting document that the building utilizes electric heat. The steam model has cooling degree hour as one of the variables, please provide supporting document that the building utilizes steam in cooling season. The chilled water model has heating degree hour as one of the variables, please provide supporting document that the building utilizes chilled water in heating season.	Analysis assumptions		
9	Based on review of the model fit plots, we observed a potential non-routine event (NRE). The electricity and chilled water models each begin to diverge from the baseline use at the end of November 2020. We suggest a discussion with customer to identify potential reasons for divergence.	Analysis assumptions		
10	It is not clear how the PA estimated fractional savings uncertainty for each model. According to the M&V plan, these values are 22% for CHW, 31% electric, and 27% for steam. According to the "SSP-40391 PRE Manual Model.xlsx", these values are 27% for CHW, 21% for elec, and 42% for steam. We are unable to verify either sets of values and the PA did not provide live calculations to show how these values are estimated. Please provide that as part of the post-installation package. In addition to this the M&V plan states that the true expected savings of this project are 13.3% for CHW, 2.8% for elect, and 4.5% for steam. It is not clear how these values are estimated.	Analysis assumptions		
11	The PFS for this project (similar to other NMEC projects) lacks the level of information needed for custom projects. For example the bottom-up calculation approach is not described in the PFS. The program influence documentation is also lacking several key program influence documentations such as evidence of any recent upgrades or component replacements, and whether the equipment have increased maintenance or reliability issues. It is not clear why the PA does not provide the information laid out in the PFS template (e.g., program influence, description of calculation approach, etc.) as part of the project package for NMEC projects. We have mentioned this in several dispositions but the PA is disregarding this.	Missing required information		

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	PA Response	ED Resolution
1	Several projects are being implemented for this departed load customer that is paying PPP charges on the departed load. According to PG&E, there is no end date for the customer PPP payments. The departed load tariff filed by PG&E is from 2022 and shows PPP as payable until ended. Therefore, it appears that the customer will stay on the grid paying PPP through the EUL. However, it is not clear to us why the departing load charges that represent recovery of sunk costs calculated based on historic load do not have an end date. Also, PG&E does not have a separate incentive structure (e.g., lower incentives) for distribution-only customers. We asked PGE for a list of projects implemented by this customer after 2019. The cumulative amount of incentives paid and savings claimed did not exceed the kWh distributed to the customer.	Eligibility		
2	Therm savings in the PFS are much higher than calculated and bi-monthly upload (BMU) savings. In addition to this, there are some differences between equipment quantities in various section of the project feasibility study. For example, Section 1 (Executive Summary) lists 21 exhaust fans, whereas section 3.2 (Facility Equipment Inventory) lists 22 exhaust fans. Please update the documentation be consistent in these details.	Other 1		
3	The site address in the BMU does not match the address of the Storer Hall.	Other 2		
4	The project cots calculated in the "SSP-40931 Project Cost Estimate.xlsx" is higher than what is listed in other documents (technical review and PFS). Please submit the final cost for the project at the post-installation stage.	Measure cost		
5	The baseline model total uncertainty analysis does not include measurement uncertainty. The PA will provide this at the post-installation stage.	Calculation method		

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	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. 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. The following areas will not be reviewed again by CPUC Staff: • Calculation Tool • Calculation Methodology • M&V Plan • Baseline • Eligibility • EUL/RUL • Measure Type • Program Influence
Application rejected.	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. 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)
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.