

CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE 21 C A 628 PRJ - 02860006 Lighting
CMPA Directory Link	https://deeresources.info/cmpa/projects/19017
PA	PGE
PA Application ID	PRJ - 02860006
PA Application Executed Date	
PA Program ID	PGE21031
PA Program Name	Agricultural Calculated Incentives - Customized Incentive Program
PA Program Year	
Date of CPUC Staff Review:	7/26/2021
PA CMPA Upload Dates Included in this review:	
First PA Upload	3/16/2021
Second PA Upload	5/25/2021
Third PA Upload	6/15/2021
Fourth PA Upload	
Fifth PA Upload	
Sixth PA Upload	
Seventh PA Upload	
Eighth PA Upload	
PA Measure Description(s):	
Measure 1	LIGHTING RETROFIT/NEW-INT LED HORTICULTURAL
Measure 2	LIGHTING RETROFIT/NEW-INT LED HORTICULTURAL
Measure 3	
Measure 4	
Measure 5	
Measure 6	
Measure 7	
Measure 8	
Measure 9	
Measure 10	
PA Project Description:	0
Bi-Monthly Upload kW Demand Reduction	178.9
Bi-Monthly Upload Annual kWh Impacts	2,110,469.0
Bi-Monthly Upload Therm Impacts	0.0
PA Proposed Incentive \$ (to Customer)	\$279,688.92
Project Documentation kW Demand Reduction	179.1
Project Documentation Annual kWh Impacts	2,110,469.0
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	PA Response	ED Resolution
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1	<p>We do not agree with the baseline fixture type and wattage used to estimate savings for this project and request the PA to update the baseline, re-calculate savings and resubmit the project for our review at the post-installation stage.</p> <p>The PA used 1000-watt double-ended (DE) high pressure sodium (HPS) fixtures for flower rooms and vegetation rooms, stating that this fixture type is used in the Preliminary Design Drawings. The Preliminary Design Drawings does not show that there are multiple stacks in flower rooms. While 1000-watt DE HPS lighting may still be used for growing cannabis in single layer applications, they are not common for stacked operation due to amount of heat they generate.</p> <p>CPUC staff requested the PA to conduct a custom ISP study to support the baseline choice via SDRs. The PA performed the study but the approach for conducting this study was not appropriate. The PA interviewed three LED vendors/manufacturers. All three vendors stated that LEDs are the most common technology for stacked operation. Given these responses reflect the opinion of the manufacturers that only offer LED products, we do not think this study is valid. However, the PA also talked to a consultant which clearly stated that for stacked grows, single ended shielded and vented hoods are better for heat mitigation. DEs are too hot for most vertical applications. LEDs make vertical applications easier to tackle because of the lower heat output and they can get closer to plants. We agree with this response and do not think DE high intensity discharge fixtures are appropriate for vertical operations. There are lower-wattage Ceramic Metal Halide (CMH) fixtures (e.g., 630-watt CMH) available in the market that can be used for stacked operation but even those require additional fans that remove the heat to prevent plants from burning.</p> <p>Additionally, according to the customer statement included in the calculations workbooks ("BL fixture mix" tab in the Grow Green Calculator), the customer was planning to install 315-watt CMH and 750-watt DE MH fixtures. This is not consistent with the use of 1000-watt HIDs as currently used by the PA to estimate savings. Additionally, the Grow Green calculator has a very limited number of baseline fixtures that may not be appropriate for stacked grow architecture.</p> <p>Given all these issues, we recommend the PA to update savings to use appropriate baseline fixtures by considering all options that the customer would consider functionally and economically feasible for stacked operation and resubmit the project for our review after project has been installed.</p>	Baseline		

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	PA Response	ED Resolution

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. 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>