

**CPUC Staff Ex Ante Review**

CPUC Staff Project ID Number	PGE_21_T_A_732_PRJ - 03114898_Lighting
CMPA Directory Link	<a href="https://deeresources.info/cmpa/projects/19364">https://deeresources.info/cmpa/projects/19364</a>
PA	PGE
PA Application ID	PRJ - 03114898
PA Application Executed Date	
PA Program ID	PGE_Ag_001
PA Program Name	TRC - Agricultural Energy Savings Action Plan (AESAP) (Ag) - Customized Retrofit
PA Program Year	
Date of CPUC Staff Review:	1/25/2022
PA CMPA Upload Dates Included in this review:	
First PA Upload	12/14/2021
Second PA Upload	N/A
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	LIGHTING RETROFIT/NEW-INT LED HORTICULTURAL
Measure 2	
Measure 3	
Measure 4	
Measure 5	
Measure 6	
Measure 7	
Measure 8	
Measure 9	
Measure 10	
PA Project Description:	This is an added load measure that will add the necessary amount of lighting for plant growth without adding any additional growing space.
Bi-Monthly Upload kW Demand Reduction	419.8
Bi-Monthly Upload Annual kWh Impacts	2,546,508.0
Bi-Monthly Upload Therm Impacts	0.0
PA Proposed Incentive \$ (to Customer)	\$254,650.80
Project Documentation kW Demand Reduction	419.8
Project Documentation Annual kWh Impacts	2,546,508.0
Project Documentation Annual Therm Impacts	0.0
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	SBW Consulting
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>This is Phase 3 of a previously reviewed project. In the disposition issued for Phase 2 of this project (refer to disposition for CPR project 679 issued on 8/18/21), CPUC staff provided detailed instructions requiring updates for future cannabis lighting projects. The PA did not follow these instructions for this Phase of the project.</p> <p>This project is using a baseline efficacy of 1 <math>\mu\text{mol}/\text{J}</math> to estimate savings for adding LEDs to a greenhouse that will be used for the vegetative stage of the cannabis grow. This assumption is based on a customer statement simply indicating that the customer would have installed Metal Halide (MH) fixtures absent of program incentives. CPUC staff finds this assumption to be inappropriate because it uses the lowest efficacy of HID fixtures that are available to growers for vegetative stage of cannabis grow. MH (both single-ended and double-ended) and Ceramic MH (CMH) are common HID lighting types that are used for the vegetative stage of cannabis grow.</p> <p>The project developer used the Grow Green Calculator—Horticultural Lighting tool that was developed and/or adopted by PG&amp;E—to estimate savings for this project. The tool only provides one MH option to the user. This available MH option is a 1000-watt iPower fixture with an efficacy of 1 <math>\mu\text{mol}/\text{J}</math> which is the lowest efficacy available for this fixture type. Efficacy of single-ended MH cannabis grow lights can range from 1 to 1.44 <math>\mu\text{mol}/\text{J}</math>. Efficacy of double-ended MH cannabis grow lights can range from 1.25 to 1.80 <math>\mu\text{mol}/\text{J}</math>. Efficacy of CMH grow lights can range from 1.25 to 1.95 <math>\mu\text{mol}/\text{J}</math>. It is not clear to us why PG&amp;E only included the lowest efficacy MH fixture in the tool. It is also not clear to us why the project developer used such a low efficacy to estimate savings.</p> <p>To avoid penalizing the customer for PG&amp;E and project developer not using correct baseline and not including a more representative sample of fixtures in the tool and given the phase 1 and 2 of this project have already been implemented, CPUC staff is allowing this project to move forward as approved with exception. However, we are requesting PGE to update savings at the post-installation stage and resubmit this project for our review.</p> <p>As requested in the disposition issued for Phase 2 (CPR project 679) on 8/18/2021, PG&amp;E is required to update the tool to include a more representative sample of HID fixtures. Please note that the same direction has been provided to PG&amp;E during bi-weekly calls held on 8/7/2021 and 8/16/2021.</p>	Did not follow previous CPUC guidance		
2	<p>Please resubmit the project for post-installation review. Please also provide an update on the process of adding installed fixtures to DLC QPL at the post-installation stage.</p>	Continue Document Upload		

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.</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>