

CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE 21 T A 679 PRJ - 02875364 Lighting
CMPA Directory Link	https://deeresources.info/cmpa/projects/19151
PA	PGE
PA Application ID	PRJ - 02875364
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:	2/3/2022
PA CMPA Upload Dates Included in this review:	
First PA Upload	8/3/2021
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 EEM is classified as a New Construction (NC) measure, as defined by the CPUC Statewide Guidance Document.
Bi-Monthly Upload kW Demand Reduction	204.7
Bi-Monthly Upload Annual kWh Impacts	1,241,964.0
Bi-Monthly Upload Therm Impacts	0.0
PA Proposed Incentive \$ (to Customer)	\$149,035.68
Project Documentation kW Demand Reduction	204.7
Project Documentation Annual kWh Impacts	1,241,964.0
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 NOT Required

Action Number:	Summary of CPUC Staff Required Action by the PA:	Action Category	PA Response	ED Resolution
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1	<p>The project used a baseline efficacy of 1 $\mu\text{mol}/\text{J}$ to estimate savings for adding LEDs to a greenhouse used for the vegetative stage of cannabis grow. This assumption is based on a customer statement simply indicating that the customer would have installed Metal Halide (MH) fixtures in the absent of program incentives. CPUC staff finds this assumption to be inappropriate because (1) it is not representative of the technology mix (i.e., high pressure sodium [HPS] and MH) commonly used for the vegetive stage, and (2) it uses the lowest efficacy of HID fixtures (HPS and MH) that are available to growers for 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&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 $\mu\text{mol}/\text{J}$ which is the lowest efficacy available for this fixture type. A quick internet search shows that efficacy of horticultural MH lighting available in the market can be as high as 1.7 $\mu\text{mol}/\text{J}$. It is not clear to us why PG&E only included the lowest efficacy MH fixture in the tool. It is also not clear to use why the project developer used such a low efficacy to estimate savings.</p> <p>Additionally, a recent market characterization study by SCE (Market Characterization of Indoor Cannabis Cultivation, Emerging Products, Customer Service, SCE, April of 2021) shows that the most common fixtures used for vegetative stage of cannabis grow are HPS and MH fixtures (Table 7). The same study suggests that efficacy can range from 1-1.5 $\mu\text{mol}/\text{J}$ for MH and 1.3-2 $\mu\text{mol}/\text{J}$ for HPS (Table 6).</p> <p>To avoid penalizing the customer for PG&E and project developer not using correct baseline and not including a more representative sample of fixtures in the tool and given the phase I of this project has already been implemented, CPUC staff is allowing this project to move forward as approved with exception. However, PG&E is required to update the tool to include a more representative sample of HID fixtures within 60 days of this disposition. Please note that the same direction has been provided to PG&E during bi-weekly calls held on 8/2/2021 and 8/16/2021.</p>	Baseline		
2	<p>The project developer estimated incremental measure cost (IMC) as the difference between the contractor quoted price for LED fixtures and an eBay listed price for baseline MH fixture. Please note that IMC must be estimated using product pairs priced by the same or equivalent suppliers so that the calculated IMC equals the likely real equipment cost differential. Also, the pricing should be done for the actual quantity of equipment for the project. Please consider these when estimating IMC for future projects.</p>	Measure cost		
3	<p>The Final Assigned net to gross ratio (NTGR) for this project is 0.85. Please calculate final savings claims, incentives and contractor performance payments using the Final Assigned NTGR according to the RP.20 Pilot Program Implementation Plan.</p>	Program influence		

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"> • 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>