

CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	SCE 22 T C 805
CMPA Directory Link	https://deeresources.info/cmpa/projects/20529
PA	SCE
PA Application ID	
PA Application Executed Date	
PA Program ID	SCE 3P 2020RCI 005
PA Program Name	Willdan Commercial Energy Efficiency Program
PA Program Year	
Date of CPUC Staff Review:	11/29/2022
PA CMPA Upload Dates Included in this review:	
First PA Upload	8/27/2022
Second PA Upload	10/17/2022
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	WB-21715- Site-level whole building comprehensive retrofit
Measure 2	
Measure 3	
Measure 4	
Measure 5	
Measure 6	
Measure 7	
Measure 8	
Measure 9	
Measure 10	
PA Project Description:	The proposed project is an NMEC project Below are the complete list of measures EEM-1 Lighting Retrofit The proposed equipment for the lighting retrofit includes replacing the 2x2 troffers with two 2' x 2' W 2 ft lamps in the corridors will all fluorescent 4 ft lamps in all types of fixtures will undergo Type C lamp replacement and the CFL fixtures in the offices will undergo type B lamp replacement EEM-2 Motor Replacement The proposed measure will decommission remove and replace the current supply fan motor which is an NEMA efficiency motor with a brand new NEMA efficiency motor with similar load specifications EEM-3 Belt Replacement The proposed measure is to remove and discontinue the existing conventional non-notched V-belts and replace them with cogged V-belts of size This will help reduce slip losses which will increase the fan-motor system efficiency of energy transfer and increase the life expectancy of the motors EEM-4 and EEM-5 Airside and Chiller Plant Control Retrofit and Optimization The proposal is to decommission and remove all pneumatic control components including the control panels and air compressor then replace them with a DDC system The scope includes inserting additional pressure and temperature sensors in key areas as well as actuators control panels and connectors to gain full control over HVAC system components EEM-6 Domestic Water Pump Scheduling The proposed solution is to connect the domestic hot water boiler to the new DDC system and schedule the pump based on need The boiler pump will be expected to run approximately half the time it is currently running since the current domestic hot water DHW boiler has a small water circulation pump that runs 24/7
Bi-Monthly Upload kW Demand Reduction	
Bi-Monthly Upload Annual kWh Impacts	
Bi-Monthly Upload Therm Impacts	
PA Proposed Incentive \$ (to Customer)	
Project Documentation kW Demand Reduction	
Project Documentation Annual kWh Impacts	
Project Documentation Annual Therm Impacts	
Project Documentation Incentive \$ (to Customer)	
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	
CPUC Staff Review Supervisor Name	
CPUC Staff Review Supervisor Firm	
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	<p>The PA did not provide enough information to explain how the savings weighted EUL was calculated for this project.</p> <p>The PA assigned a 5 year EUL to EEM3-AHU Belt Replacement measure without explaining how this value was estimated. The only information provided by the PA is a DEER EUL ID of "HV-CoggedBelt". This EUL ID references a 24,000 total hours to calculate EUL of this measure for various building types. It is unclear to us how the PA concluded that for a [REDACTED] the EUL of this measure would be 5 years.</p> <p>Another example is EEM 1-Lighting Retrofit measure that uses an EUL of 12 years. The measure includes a mix of fixture and lamp replacements measures. Both LED fixtures and LED lamps have lower EULs for [REDACTED]. Therefore, it's not clear to us how the PA assigned an EUL of 12 years to the entire lighting measure.</p> <p>Similarly, EEM 4 and EEM 5 involve the replacement of the existing HVAC pneumatic control system with DDC but it's not clear why the PA assigned an EUL of 15 years to these measures. Lack of clarity on how measure level EUL values are estimated is a recurring issue for the NMEC projects implemented by this PA (e.g., 789). Please provide all underlying assumptions (including MATs) used to estimate savings weighted EULs for future NMEC projects. For this project, please update the savings weighted EULs per above recommendations.</p>	EUL/RUL		
2	<p>We asked the PA to provide information (e.g., minimum required standard practice efficacy for lighting as defined by the standard practice analysis for the Modified Lighting Calculator) to show that the proposed lighting meet the minimum standard practice requirements. The PA stated that "based on the review of NMEC policy, NMEC projects are not subject to ISP, but must meet or exceed the applicable Title 24 and Title 20 California Code."</p> <p>Please refer to the resolution E-4939 that adopted the re-naming of the code baseline to the standard practice baseline and the standard practice baseline definition.</p> <p>All measures proposed under NMEC project are required to meet minimum standard practice requirements. Please provide this information at the measure level for future NMEC projects. For this project please remove lighting measures that do not meet minimum standard practice efficacy values.</p>	Eligibility		
3	<p>Please include gas interactive impacts in final tried up savings claim for this project. DEER and/or workpaper values can be used to estimate gas interactive impacts when gas modeling is not done.</p>	Analysis assumptions		
4	<p>The [REDACTED] financial statement shows that the customer struggled with a major decline in [REDACTED] volumes during the pandemic. The PA did not discuss the occupancy and whether that should be factored in the modeling approach.</p>	Analysis assumptions		
5	<p>Our review indicates that the customer was already planning to implement the DDC measures (EEM 4 and EEM 5) before the program initial contact. This contradicts the program influence narrative indicating that "the customer was only made aware of these measures after Willdan presented recommendations to them". The program influence narrative and timeline should explain what the customer was planning to do prior to the program intervention and how the customer decision was changed after the program involvement in a clear and transparent way.</p>	Program influence		

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	PA Response	ED Resolution
1	The PA is planning to replace a [redacted] hp [redacted] % NEMA efficiency supply fan motor in AHU-2 with a new [redacted] % NEMA efficiency. The return fan motor in the same AHU is a [redacted] hp motor with NEMA efficiency of [redacted] %. AHU-1 also has a [redacted] hp [redacted] % NEMA efficiency supply fan motor and a [redacted] hp [redacted] % NEMA efficiency return fan motor. This measure seems to be a standard practice measure for the customer. Under regular (non-NMEC) custom rules, this measure could only qualify for RUL savings.	Other 1		
2	According to the PA the lighting retrofit will not trigger Title 24 requirements for control as the site is considered a [redacted] facility and exempt from Title 24 control requirements. Although this is true for most Title 24 lighting control requirements, Automatic Daylighting Controls and Demand Responsive Lighting Controls don't have any exemptions for [redacted] facilities. Please make sure applicable Title 24 lighting control requirements are implemented as part of this project.	Analysis assumptions		
3	It appears that some lighting measures have associated deemed savings values that were not used in the analysis.	Analysis assumptions		
4	EEM 3 has an error in the calculations (an efficiency of [redacted] is used instead of [redacted]).	Analysis assumptions		

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>
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.