

CPUC Staff Ex Ante Review

CPUC Staff Project ID Number	PGE_22_None_C_800_PRJ - 03802478_HVAC
CMPA Directory Link	https://deeresources.info/cmpa/projects/20485
PA	PGE
PA Application ID	PRJ - 03802478
PA Application Executed Date	
PA Program ID	PGE210911
PA Program Name	On-Bill Financing Alternative Pathway
PA Program Year	
Date of CPUC Staff Review:	
PA CMPA Upload Dates Included in this review:	
First PA Upload	8/17/2022
Second PA Upload	10/18/2022
Third PA Upload	11/15/2022
Fourth PA Upload	
Fifth PA Upload	
Sixth PA Upload	
Seventh PA Upload	
Eighth PA Upload	
PA Measure Description(s):	
Measure 1	OBF - VFD on HVAC PumpsMotorsFans
Measure 2	PROCESS RETROFITNEW-FAN-EFFICIENT UNIT
Measure 3	
Measure 4	
Measure 5	
Measure 6	
Measure 7	
Measure 8	
Measure 9	
Measure 10	
PA Project Description:	OBF-NI NR CPN20 and AOE CPN10 New Construction of Ag Ventilation fans with VFD controls The scope of this project is to install high efficiency dairy ventilation fans with VFD controls to provide better cow comfort and increased milk production in this dairy facility Existing 52 fans will be replaced with 72 fans with VFD units
Bi-Monthly Upload kW Demand Reduction	35.7
Bi-Monthly Upload Annual kWh Impacts	1,267,843.6
Bi-Monthly Upload Therm Impacts	0.0
PA Proposed Incentive \$ (to Customer)	\$0.00
Project Documentation kW Demand Reduction	35.7
Project Documentation Annual kWh Impacts	1,267,844.0
Project Documentation Annual Therm Impacts	0.0
Project Documentation Incentive \$ (to Customer)	0.0
CPUC Staff Primary Reviewer Name	
CPUC Staff Primary Reviewer Firm	Verdant
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 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>This project was originally part of the On-Bill Financing Alternative Pathway (OBF-AP) program but was later screened out of the OBF-AP program. PG&E submitted this project as a regular custom project for custom project review (CPR) in July 2022 after the OBF loan was approved (February 2022) and the project was implemented by the customer. The savings used for the OBF loan did not follow custom rules. However, according to PG&E, final savings will be updated prior to submitting a claim (OBF loan will stay the same).</p> <p>Given this project was part of the OBF-AP program, has already been approved and installed, and does not have any cash incentives, we are issuing an advisory review for this project.</p> <p>We request the PA to 1) update the process for future projects that are screened out of the OBF-AP program via the EO-2020-06, and 2) update savings for this project per recommendations provided in this disposition before submitting a claim. Please note that the customer payback and loan terms are tied to savings and the PA should take proper steps to inform the customer about the correct payback and savings.</p>	CPUC Policy		
2	<p>The submitted non-IOU fuel source analysis is not appropriate. According to the Energy Efficiency Savings Eligibility at Sites with non-IOU Supplied Energy Sources Guidance Document, monthly consumption and demand reduction credit should only be counted to the extent those reductions are less than the monthly energy use and demand for the building net of the on-site PV generation. The PA did not do a monthly analysis to show that savings from both measures (fan replacement + VFD) does not exceed the net purchase from the grid on a monthly basis. Please perform this analysis and adjust savings as needed before submitting a claim.</p>	Self generation		
3	<p>The PA did not follow the appropriate steps to establish the standard practice baseline for this normal replacement project:</p> <ul style="list-style-type: none"> - The project involves installing 72 inch fans (3 phase, 460V). The PA used fan efficiency data for 50-53 inch fans (1 phase, 230V) to establish the baseline for 72 inch fans. The standard practice baseline efficiency should be established using the efficiency of equipment that have similar characteristics as the installed equipment. The same dataset includes test data for larger fans but it's not clear why this data was not used by the PA. - The standard practice data appears to be outdate (some fans were tested over 15 years ago) and may not representative of fans that are currently available to be purchased in the California market. - The PA established a 75% efficiency level that should have been used as the minimum eligibility requirement. The installed fans efficiency is below this threshold. <p>Before claiming this project, the PA should revise the baseline to use efficiency values that are associated with equipment that are similar to the installed equipment and are currently available in the California market to be purchased by the customer. We also recommend establishing a minimum requirement for efficiency of the measure to make sure the installed fans are highest efficiency fans available in the market and not just above standard practice.</p>	Baseline		
4	<p>The PA incremental cost calculations are incorrect. For the fan replacement measure, the PA used the baseline cost from the Ventilation Fan measure package (SWPR001-01) that is used for smaller fans (up to 48 inch). Using the smaller fan costs for the baseline, the PA estimated an IMC of \$11K. This measure will likely have a zero IMC using the correct fan size for the baseline.</p>	Measure cost		
5	<p>The Ventilation Fan measure package (SWPR001-01) uses an EUL of 10 years. Please revise the EUL to be consistent with the workpaper. This revision is only needed if the revised baseline (see recommendation above) and IMC show savings for the fan replacement measure.</p>	EUL/RUL		

6	<p>The program influence was not documented properly. According to the PA, some of the communications between the customer and the implementor happened verbally and not documented. Please note that for all custom projects, the project developer is required to collect information from the customer and provide written documentation (a narrative) with supporting material (evidence) to demonstrate program influence. The supporting evidence documents should demonstrate interactions with the customer that show program developer providing input that is accepted by the customer and results in the customer changing their plans.</p> <p>Please use the EO-2020-06 to document how program influence will be documented for future custom projects that are screened out of the OBF-AP program.</p>	Program influence		
7	<p>For future projects that are screened out of the OBF-AP program, please document reasons why they were screened out of the OBF-AP program.</p>	Other 1		

Note or Instruction Number:	CPUC Staff Notes or Instructions:	Instruction Category	PA Response	ED Resolution
1	<p>Our review indicates that savings for adding VFD to fans are over estimated. The PA used savings from the VSD for Ventilation Fan measure package (SWPR006-02) for this measure. The same implementer (TRC) has done two similar projects for adding VFD to larger fans. Data from these two projects were included in the measure package (see Energy Savings Calculation - 2 new custom projects (2021).zip files here: https://www.caetrm.com/media/reference-documents/SWPR006-02_Custom_Project_Data_HDmwr7M.zip) and show much lower savings for larger fans. We recommend the PA to review savings from adding VFDs to larger fans and adjust savings accordingly.</p> <p>This project should have been treated as one single project with the baseline of 72 inch fan and an installed measure of 72 inch fan with VFD.</p>	Analysis assumptions		
2	<p>All of these issues listed here directly impact customer savings and payback. The OBF loan terms is finalized at this point but the customer will not see the savings used for the loan.</p>	Other 2		
3	<p>For future projects, additional research is needed to study whether VFDs are standard practice.</p>	Baseline		

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.