

Conditional Approval Follow-Up: Commercial DC Pool Pumps

Conditionally Approved at 11/20/14 Cal TF Meeting

Summary of Workpaper Developer Follow-Up on Conditions of Approval for Commercial DC Pool Pumps Workpaper

Condition for Approval	Update from Workpaper Developer
1. Limit the measure to direct install delivery channels because of the concern of proper quality installation.	Even if this measure is limited to direct install contractors only, the newly added Title 24 GFCI electrical requirement for adding a dedicated circuit breaker panel for adding on the DC pool pump to the existing system. Furthermore, there is an opportunity to pursue this as a deemed measure pending Program Administrator's feedback. Please see item 2 below.
2. To help address the quality installation concern for downstream deem offering, add a workforce training/QI component to the workpaper <ul style="list-style-type: none"> a. Phase II ET study may suffice to address this recommendation 	<p>After having a discussion with Michael Orr and Neha Arora, a downstream deemed approach is still viable if it is coupled with an education component or if the terms and conditions of the program require that installations must be done by a C-10 certified contractor (if he has plumbing experience), C61-D35 swimming pool maintenance contractor, or C-53 Swimming Pool Contractor, B General Contractor.</p> <p>A Phase II ET study may be initiated, but will be dependent on PA priority, budget and schedule. Thus, it is recommended to move forward with the wp and should a new Phase II ET study come out, the wp can be calibrated at that time.</p>
3. Share the ET report with Michel Orr (FPSIE) and Gary Fernstrom to get their expert opinion ask about viability opportunity of this measure compared to other competing technologies like the variable speed drive AC pool pump	Conference call was held on 12/4/2014 with Michael Orr. Michael was very supportive of the DC pool pump technology.
4. Confirm that the total cost (\$2,410) accounts for cost of inverter	There are no external inverters needed and the cost does include the inverter. However, the Title 24 GFCI cost for labor (\$50), materials (\$100), and to pull the permit (\$50) will increase the total implementation cost.
5. Verify other benefits beyond the linkage to solar PV deployment programs.	Easy to install and will not cannibalize the VSD pool pump market because the DC pool pump technology will be capped at 1.5 hp and below while VSD pool pumps can target larger motors.