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To: California Energy Commission
From: Ted M. Tiffany
RE: PROPOSITION 39: CALIFORNIA CLEAN ENERGY JOBS ACT -2013 PROGRAM
IMPLEMENTATION DRAFT GUIDELINES

California Energy Commission

DOCKETED
13-CCEJA-01

TN 72161

OCT. 23 2013

PG 19 Step 6 Cost Effectiveness Determination: This SIR Calculation tool isn't available yet to play with, but they mention upon final draft it will be ready. The criteria required to calculate SIR is only available from a ASHRAE Level 2 audit, which won't work for the energy survey, or "No touch audit". This makes the ASRHAE Level 2 the only way to qualify the SIR results unless there is another "process" added for the energy survey or no touch audit procedures to extract a reasonable SIR. Suggest adding processes for smaller projects with typical lighting retrofit or common mechanical system upgrades that will have similar cost and energy savings over the whole portfolio so that the energy survey method can qualify for the SIR determination, otherwise the other two audit options are non-starters.

PG 48: Energy Cost Escalation Rate: The escalation rates listed at 2.1% constant likely won't reflect the market in this relatively short program cycle. This estimate likely covers the entire electricity and gas market which includes industrial, agricultural, and other historically flat escalations. The energy escalation rates should be separated into electricity and gas focused only on the small and medium commercial markets. These fuel escalation rates are more volatile and are progressing faster than the whole market, especially for demand charges and on peak commodity rates. Even in the economic turndown (2008-2011) Commercial Electric went up 6% overall with a 9% increase on demand charges alone. (Gas went up 11% just this year). This may be better off with expected rate increased outlined for the implementation period.

General Comments: With limited funding for smaller school districts a developed "common retrofit" metric should be in place that will produce the SIR calculation without having to complete the detailed ASHRAE Level 2 audit procedures which involves detailed calculation models. With many of these smaller districts common retrofits of HVAC equipment and lighting should be ready with "prepared packages" which involved the following items that occur at many of the school districts. This would allow the "energy survey" method to develop counts of equipment into typical packages that automatically calculate savings and SIR requirements. This can be used commonly throughout the state modifying only utility rates and climate savings easily. Items include but are not limited to:

1. T-8 to 3rd Gen T-8 fixtures with low ballast factors
2. Occupancy sensor controls.
3. LED downlight replacements
4. Photocell controls for exterior lights
5. LED site lighting replacements
6. Packaged DX replacements to high SEER/EER with economizer/CO2 control function.
7. District controls (BMS) upgrades allowing appropriate scheduling and common set-point controls throughout. This allows for seasonal, holiday, and evening shut-down control

that is normally absent in older schools. This is the most common energy wasting HVAC element.

Thank you for your consideration of these comments.

Sincerely,



Ted M. Tiffany LEED® AP BD+C, CEPE
Associate Principal
Energy & Building Performance Manager
(P) 707.523.3010 x 302 (F) 707.523.3210

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