California Energy Commission
Docket Number 13-CCEJA-1
1516 Ninth Street
Sacramento, CA 95814-5512

Re: California Energy Commission Proposition 39 Draft Guidelines – Comments of
The Sacramento Municipal Utility District

Introduction

The Prop 39 Project team at the Sacramento Municipal Utility District (SMUD) appreciates the opportunity to provide feedback on the Energy Commission's draft Proposition 39 Guidelines. The CEC staff has done an outstanding job in developing this guiding framework for this high profile and complex statewide program. We agree with your intentions to encourage comprehensive and effective energy improvements while ensuring that these taxpayer dollars are spent responsibly, balanced with the need to make program participation as simple as possible for local energy agencies (LEAs).

In that spirit, we respectfully recommend the following improvements to the guidelines. Our input largely addresses concerns expressed by the school districts in our service area that the draft guidelines present a number of constraints that will hinder their ability to identify and implement the projects that make the most sense in their school facilities, and to do so in a timely manner. We also include suggestions to clarify certain language and requirements in order to reduce the possibility of unintended interpretations and to improve the “first time through” approval rates of energy expenditure plans by aligning the expectations of LEAs across California with those of the CEC program staff.

Definition of “Project”

During the October 9 webinar on the guidelines, CEC staff stated the intention that a “project” is defined as one or more energy efficiency measures bundled together from a single school campus, but that more than one project may be included in a single Energy Expenditure Plan. However, several representatives of school districts that we serve have informed us that this definition of a project will make it difficult for them to identify and manage certain kinds of projects. For example, they may wish to aggregate lighting upgrades in classrooms across several campuses, or replace all package HVAC units at portable classrooms at numerous school sites. While limiting a “project” to one
school site will not prohibit them from defining the scope of work for such measures to span multiple sites, it would be extra work to split the project costs out by site and would place an unnecessary constraint on them for meeting the project cost-effectiveness test.

But most importantly, limiting a “project” to a single site means that LEAs with large awards are forced to implement at least $250,000 worth of measures at a single site even if there are more highly valued measures at other locations. Several of our large LEAs have told us that requiring them to spend half of their money in $250,000 portions per site each year would significantly constrain their ability to choose the best projects. One LEA stated that they will be forced to put $250,000 into a site even when there are greater needs in other school campuses that will provide a greater return on investment.

Please consider changing the definition of “project” to include multiple school sites and include the definition in Exhibit H. We suggest a definition along the lines of:

"Energy Project – a bundle of one or more energy measures at one or more LEA facility sites."

This would provide the following benefits:

- Would reduce the technical review process for the CEC since like energy measures in multiple campuses would be more often bundled together in the same project, while still allowing site-specific shares of costs and savings to be broken out.
- LEAs would have increased flexibility for matching up projects to meet the minimum cost-effectiveness threshold.
- Would better align project scope in energy expenditure plans with how many districts will structure their solicitations for implementation services.
- The average SIR across all facilities would be no worse than if calculated site by site. In fact, it could be improved if more LEAs were encouraged to do bulk procurement across multiple school sites and achieved economies of scale by doing so.
- Would make it easier for LEAs receiving more than $1 million to meet the $250,000 minimum project size, and would allow them to select the highest-value projects and improve more of their schools. Since “project” is the term used in relation to the $250,000 minimum expenditure in Section 26233 of Chapter 5, Division 16.3 of the Public Resources Code, changing the definition of “project” in the guidelines may be the simplest solution to achieve these benefits while adhering to this requirement in the code.

Please clarify the definition of “project measure.” We suggest substituting the term "energy measure" to cover discrete energy efficiency, renewable or distributed
generation measures in order to clearly distinguish from "project," which should consistently represent a bundle of one or more energy measures.

Please use a consistent term such as "LEA facility site" throughout the document to refer to the various types of facilities owned or leased by an LEA such as schools, administration buildings and corporation yards. Please substitute this term for "school site" in Exhibit H.

Please clarify the definition and references to "energy expenditure plan" to make it clear that several "projects" at multiple school sites may be included in each energy expenditure plan. This will alleviate the concern of our large LEAs that the annual limit of four expenditure plans would limit them to projects in only four schools per year, as is implied by the current language in the guidelines.

**Constraints on Planning Dollars**

Please allow more flexibility in how LEAs use their available planning dollars. Different LEAs have widely varying needs for auditing support, site screening and Prop 39 program assistance. One of our school district customers has determined that 15% of planning funds will not cover their needs for program assistance given the need for five to seven years of program administration and the depth of the program documentation and reporting required in these guidelines. Other LEAs may desire using all of their planning funds for screening and audits. Please consider raising the cap for Prop 39 Program assistance to 30%, with no cap on the category for screening and energy audits.

**Validity of Audits and Surveys**

The guidelines state on page 17 that audit or data analytics report completed within the past three years may be used to identify projects. For past audits this seems reasonable. However, since the CEC is encouraging planning activities including surveys and audits to occur in Year 1, these audits and surveys should be valid for the full duration of the Prop 39 program. It is possible that projects resulting from a survey in Year 1 will not be submitted in an energy expenditure plan until Year 5, at which time the planning activity will be older than 3 years.

Please clarify in the guidelines that audits and surveys performed after July 1, 2013 will be valid through June 30, 2018 for the purpose of identifying energy measures in an energy expenditure plan.

**CEC Review Process**

The CEC may have to review thousands of energy expenditure plans in a single fiscal year which will make it challenging to ensure timely review and approval of the plans.
We are concerned that this large workload could result in a delay in the approval of applications of six months or more, even for expenditure plans that are complete and well-documented. Any delay in the approval process is in addition to the time required by the CDE’s quarterly apportionment process and disbursement through the state controller and county treasurers, which could total another three to four months. If a backlog occurs, the total time for an LEA to receive funds for a submitted project could easily approach nine months or more.

Please indicate the CEC’s expected or desired turn-around time for review and approval of plans and how the CEC will ensure timely review and approval of the plans. Please consider contracting with a third party to perform technical review of the plans and interact with the LEAs to correct any problems. At a minimum, this could be an option for a contingency plan should a significant backup in workload begin to accumulate.

**Validation of Data Analytical Approaches**

Please clarify what constitutes acceptable documentation of prior technical validation of data analytical tools and whether the validation study must include school facilities specifically. Please clarify whether the term “local utility” in section 26235 (b) of the Public Resources Code means any utility in California, or must it be the utility providing electric and/or gas service to the LEA wishing to use the validated analytical tool. If the latter, and if the validating utility provides gas service to the LEA but not electricity, please clarify whether the analytical tool can be used by the LEA for both gas and electric end uses if the validation encompassed analysis only of electric usage data.

Also, the Guidelines are not clear as to whether validated analytical tools may be used as a substitute for an ASHRAE level 1 or level 2 audit, or only for screening and prioritizing projects “to better focus [on-site] ASHRAE level 2 work.” Please clarify allowed uses, and whether the CEC intends to leave the door open for broader use of analytical tools in the future pending adequate validation.

**Project Tracking and Reporting, Site-Level Energy Savings**

While the proposed method of calculating a net change in energy usage intensity before and after Prop 39 projects are installed is simple, it is of limited value for estimating the net energy savings that result from the projects. Variations in weather, occupancy, floor area, and equipment (e.g. adding air conditioning) can contribute to changes in energy use that are greater in magnitude than the savings resulting from many energy projects. Given the trend of increasing population in California, the net change in energy use is certain to understate the program savings. Furthermore, there are numerous school sites that are not separately metered. Even more challenging to attempts to verify site-level savings: there are several charter schools in our area that lease only some of the classrooms on other LEAs’ campuses.
For the purpose of evaluating the overall effectiveness of the program, we recommend aggregating the measure-level savings estimated in the energy expenditure plans, adjusted for any final changes in project scope.

Please provide a template to report site level energy savings as described on page 26 and that clearly specifies the data required. Please clarify whether LEAs are expected to report to the CEC the net change in kWh and therm usage before and after the projects are installed, or just the change in energy use intensity.

Eligibility of LEAs in Leased Facilities

Please clarify how two LEAs must coordinate submittal of an energy expenditure plan when one leases a portion of the building space from the other, and the space is on one meter. Please clarify whether the two LEAs must combine their measures in one energy expenditure plan. SMUD recommends that LEAs in this circumstance have the option to submit one expenditure plan or separate plans, and that energy usage estimates for the different parts of the facility be divided on a square foot basis.

Eligible Measures

The CEC has been a strong supporter of measures that go beyond equipment efficiency and address efficient operation of the equipment. We see the Prop 39 program as a major opportunity to promote energy efficient behavioral measures that can capture significant additional energy savings at low or no cost. These include improved operations and maintenance practices, feedback on energy usage and costs, normative comparisons, and education and prompts for energy conserving practices of students, faculty and O&M staff.

Please consider adding language in the guidelines to encourage behavioral measures and allow them to be eligible for Prop 39 funding. Please also consider allowing any documentable savings from such efforts to be included in cost-effectiveness calculations. Savings could be based on M&V results from behavioral programs that have been conducted in schools and other buildings across the US.

Please also consider allowing off-site energy savings to be included for water-conserving projects. CEC staff stated at the workshop that water-saving measures may be eligible for Prop 39 funds if there is an energy savings benefit. Our LEAs are interested in including water efficiency projects such as for irrigation systems, but the energy benefit is realized by the water district which embeds those energy costs in the commodity water rates to the LEAs. Water efficiency projects save significant pumping and treatment electrical use, and we believe they are a good complement to other measures that save energy directly in school facilities.
Effective Useful Life for Measures

Exhibit F lists the acceptable useful life for many energy measures that are appropriate for schools. Some of the measures listed lump categories of measures together that may have different measure lives. For example, the measure lives for exterior lighting, interior fixture retrofits, and interior lamp replacements do not appear to account for the longer measure life of LED or induction fixtures and lamps. The list also excludes more current measures that are likely to be of interest to LEAs such as advanced lighting controls. Even basic traditional measures are missing from Exhibit F. Examples include envelope improvement measures such as weather stripping, insulation, cool roofs, window film and window replacements as well as demand response, cogeneration, and pool measures.

Please expand Exhibit F to cover additional measures likely to be considered by LEAs. Please also specify the methods LEAs should use to adequately document assumptions about measures not covered by Exhibit F, or that can be demonstrated to have a different measure life than the best-fit category in Exhibit F. For example, the guidelines could clarify that Exhibit F will be used for all measures fitting the descriptions. Second, the guidelines might specify that DEER will be considered an acceptable source for any specific measures found in DEER that are not covered adequately by the broader categories in Exhibit F. Third, the guidelines might specify that the LEA may provide measure lives for measures not found in DEER and not fitting within one of the categories in Exhibit F but must document the source of the measure life or other rationale if no source is available, subject to CEC review and approval on a case by case basis. Finally, the guidelines should encourage LEAs to seek technical guidance from their local energy utility with estimating project savings and measure life.

AHRAE Level 2 Audit Requirements

The description of Option 2 on page 18 states that the ASHRAE level 2 energy audit must include “a proposed schedule for implementation of the projects.” A project implementation schedule is not a normal part of an ASHRAE Level 2 audit, and is not information that an energy audit provider is in a position to provide. Rather, the schedule should be included in the required information in an energy expenditure plan as detailed on page 21. This will provide flexibility to LEAs regarding which party develops the project schedules.

Cost Effectiveness Calculator
SMUD agrees with the legislature’s intent that Prop 39-funded projects be cost effective. The technical staff at SMUD and other utilities have considerable experience in methods of determining cost effectiveness. Please allow utility stakeholders to review the calculation tool and its underlying assumptions prior to finalizing it.

Limits on Maintenance Savings and NEBs in SIR calculation

Please raise the limit on maintenance cost savings that can be counted in the net present value calculation to 25% of project cost. Exhibit E on page 47 currently limits maintenance savings to 2% of project costs. There are certain measures such as LED lighting retrofits where maintenance costs are substantially greater than 2 percent of project costs. This will allow LEAs to consider additional projects that have substantial long-term maintenance cost savings benefits.

Some energy efficiency projects generate non-energy benefits that total substantially more than 3% of project costs, such as future capital cost savings resulting from early equipment replacement. Since it would add a significant burden for LEAs to document, and the CEC to review projects with higher NEBs, SMUD recommends increasing the calculation for non-energy benefits from 3% of total project installation cost to 10% of total project installation cost. 10% is a rule of thumb used in a number of energy evaluation practices and was referenced on page 25 in the Proposition 39 Guidance Document from May 2013.

Required Documentation for Expenditure Reports

Please clarify in the guidelines that funds requested for planning, training and energy managers as described on page 12 will not be included in cost effectiveness calculations (savings to investment ratio), as was stated during the October 9 webinar.

Please detail reporting requirements for planning activities that will be required with the first energy expenditure plan “following planning work” (top of page 11). Please define “following:” will this be the first expenditure plan that is submitted when the last of the planning work is completed under that expenditure plan, or for all Prop 39 work conducted by that LEA?

Please detail the procedure for requesting funds for energy efficiency training of classified school employees and hiring an energy manager, as well as any reporting requirements to document expenses made for these purposes.

Education

The extensive project identification and retrofit work that will be taking place in thousands of schools is an excellent opportunity to teach the students—our future engineers, administrators, teachers and architects—about the value of energy
efficiency. SMUD recommends including language to encourage student participation in the California Conservation Corps, Bright Schools, or other programs to assist with the audits, energy surveys, benchmarking, etc. (p.15). We also recommend adding an entire section on education that encourages LEAs to integrate energy efficiency preparation and projects with classroom learning.

Conclusion

The SMUD Prop 39 project team looks forward to working with the school districts and community colleges in our region to take full advantage of the unprecedented resources that will be made available to California schools to reduce their long-term energy burden. Our intent is to help make our schools customers the model of success envisioned by the Energy Commission. To that end, we hope our suggested changes to the guidelines help improve the success of the program.

Thank you very much for considering our feedback.

Sincerely,

Bruce Ceniceros
Principal Demand Side Specialist
Customer Retail Strategy
Sacramento Municipal Utility District
(916) 732-6747