

California Energy Commission
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1615 M Street, NW, Suite 800 Washington, DC 20036

Tel 202/822-0950 Fax 202/822-0955 http://www.naesco.org

The Honorable Andrew McAllister Commissioner California Energy Commission 1516 Ninth Street Sacramento, CA 95814

Re: Prop 39 Draft Implementation Guidelines

Dear Commissioner McAllister:

NAESCO and its member companies doing business in California appreciate the opportunity to submit these comments on the Proposition 39:California Clean Energy Jobs Act – 2013 Program Implementation Draft Guidelines.

NAESCO Concern

NAESCO member companies currently have about \$500 million of comprehensive energy efficiency and renewable energy projects under development in California schools and community colleges. We think that absent Prop 39 about half of these projects would be in construction within twelve months. Our experience with the ARRA program several years ago, in California and across the country, is that rather than accelerating the pace of project implementation, ARRA actually delayed the implementation of hundreds of millions of dollars worth of projects for 6-12 months. This kind of delay seems to be the exact opposite of the effect that the Legislature and the voters intend.

Our comments are divided into two sections. The first section describes general issues and suggests solutions. The second section addresses several specific issues in the Guidelines, issues that we urge the CEC to clarify in order to avoid unnecessary delay and costs.

1. General Issues

NAESCO believes that two major issues -- the imbalance of the proposed CEC administrative workload and its available staffing and the burden imposed on grantees by the legislated energy bill, benchmarking and reporting requirements -- threaten to seriously delay the implementation of Prop 39 projects.

1.1 CEC Staffing Levels

It appears to NAESCO that the Legislature did not appropriate sufficient funding to the Commission to adequately staff the implementation of Prop 39. To put the Commission's task in perspective, the ARRA Energy Efficiency and Conservation Block Grant (EECBG) program was roughly the size of Prop 39. EECBG disbursed about \$2.6 billion to about 2,000 local governments. Both Prop 39 and EECBG require that the grantees submit plans for the use of the funds to which they are entitled by formula. The US Department of Energy, which administered the EECBG program, had more than 100 people reviewing and approving the EECBG plans, and it took DOE about 9 months. Our understanding is that the Legislature gave the Commission funding for 8 new positions, which leads us to believe that processing the Prop 39 plans may take an extended period of time.

Suggested Approach: NAESCO suggests that the Commission divide the processing of the Prop 39 plans into three streams, and leverage its inhouse resources by using the existing infrastructure of engineers whose business is to represent customers in the development and implementation of comprehensive EE and RE projects. Our suggestion is detailed in the "Application Overview" paper, which is attached to these comments.

1.2 Projects in Development: As noted above, ESCOS currently have about \$500 million of projects in development. These projects leverage public funding with private investment. Our experience is that a comprehensive school project takes 12-24 months to develop. If these projects are forced to start over in the new Prop 39 process, the \$250 million of projects that would normally go into construction during 2014 will be delayed until 2015.

Suggested Approach: NAESCO suggests that that the projects that are within one year of starting construction be grandfathered, and allowed to receive their Prop 39 without going through the full Prop 39 project development process. We believe that the interests of the Commission in safeguarding the expenditure of the Prop 39 funds can be guaranteed by the use of the staff leveraging mechanism described above.

1.3 Benchmarking and M&V: Since the Commission is charged with ensuring that Prop 39 funds are used to achieve energy and savings and create jobs, there may be an inclination in the Commission to try to promote new systems to provide building energy use benchmarking and project savings monitoring and verification. The effort to promote these new systems can be time-consuming and expensive, and can delay project implementation, because the schools and the project ESCOs or contractors must wait for the new systems to make sure their projects conform. Again, this was our experience with ARRA.

Suggested Approach: the Commission should recommend that LEAs and community colleges the use of the ENERGY STAR Portfolio Manager system for benchmarking and the International Performance Monitoring and Verification Protocol (IPMVP) for project M&V. Both systems have been successfully used for more than a decade in tens of thousands of buildings (Portfolio Manager) and tens of billions of dollars worth of projects (IPMVP). Neither system is perfect, but they are proven, familiar to project engineers, ESCOs and contractors, and can be effectively used today without the need for any development work.

2. Specific Issues in the Draft Guidelines

NAESCO believes that several key provisions of the Guidelines are not sufficiently defined, and that further definition by the CEC in the final Guidelines will accelerate the implementation of Prop 39 projects.

2.1 Project Start

The Guidelines on page 29 state clearly that there will be no retroactive funding of projects, but do not clearly define what constitutes a project start. Could the Commission clarify which if the following is the start of a project that must occur after the issuance of the final Guidelines:

- Beginning of project construction
- Execution of project contracts
- Selection of the project ESCO or contractor
- Beginning of the project planning process
- Selection of the project planning consultant (if different from the ESCO or contractor)

2.2 Savings to Investment Ratio (SIR)

NAESCO would like to raise several issues with respect to the calculation of the Savings-to-Investment Ratio (SIR), which is described in the Guidelines on pages 19 and 47-49. Our issues are as follows.

2.2.1 Energy Cost Escalation Rate: the Guidelines stipulate a rate of 2.1%, but offer no reference to a paper or other document that shows how this rate was established. It seems very low, given the shift of California electricity generation from coal to natural gas and renewables, the demise of the San Onofre nuclear plant, the expected rise in gas prices to a long-term equilibrium price of \$4-6 per MMBtu, and other factors. We suggest that instead the final Guidelines allow grantees to use documented escalation rates from recognized, publicly available third party experts as an alternative to the rate specified by the Commission.

- **2.2.2 Discount rate:** the stated rate of 5.1% is significantly higher than the current average market cost of private capital for a K-12 or community college energy efficiency project. We suggest that the project discount rate be variable, and be set at the cost of capital for a particular project at the time of the project financing commitment.
- **2.2.3 Annual Maintenance Cost (O&M) Savings:** the Guidelines set a maximum value of 2% of the project installation cost per year. This may be an unrealistically low number for some measures, which will eliminate from consideration measures that are actually very cost effective (e.g., LED lighting in auditoria where changing a bulb involves the use of a cherry picker). We suggest that, as an alternative to this fixed value, grantees be allowed to submit documentation to demonstrate annual O&M savings higher than the Commission specified value.
- **2.2.4 Terminal Value of Measures:** the description of the SIR calculation tool in the Guidelines does not appear to allow for the assignment of terminal values to measures in the NPV calculation. For example, a boiler has a useful life that is significantly longer than the 20 years given in the table on page 49 of the draft Guidelines. After 20 years, it may be cost effective to replace the boiler, but that does not mean that the boiler has no remaining value. It can continue to heat the building almost indefinitely if it is properly maintained. We suggest that the Guidelines revisit this topic and provide for a method of assigning a terminal value to measures, based on their un-depreciated value, that is the difference between their DEER EUL and the useful life that is either guaranteed by their manufacturers or assigned to them in the IRS depreciation schedules.

2.4 Project Financing

As we understand the enabling legislation and the Guidelines, the purpose of Prop 39 is to enable the implementation of comprehensive retrofit projects that will maximize the energy savings and job creation produced by taxpayer funds. For many LEAs and community colleges, the best way to implement comprehensive projects is to leverage Prop 39 funds with other sources of funding. The Guidelines on page 11 introduce the subject of leverage and list some possible sources of funds that might be used to leverage Prop 39 funds. We suggest, however, that the Guidelines need to be expanded to provide more detail about how this leverage might actually work in a real project.

ESCOs today deliver virtually all of the comprehensive projects implemented by LEAs and community colleges. These projects, according to data from the LBNL/NAESCO ESCO Project Database of about 4,500 projects, typically have

12-14 year paybacks. They are financed by combining all available sources of funds, including grant programs like Prop 39, all of the sources of leverage listed on page 11 of the Guidelines, and substantial private financing in the form of bonds, loans or municipal leases. In most projects, these private funds constitute the majority of the total project financing, and the total project financing package, composed of these various pieces, equals the total cost of the project.

Assuming that the Commission does not intend to disrupt this method of project implementation, which has delivered billions of dollars of projects in California during the last decade and currently has about a half billion dollars worth of projects under development, the question is how Prop 39 funds can be blended with other funds to finance Prop 39 projects. Specifically, can the final Guidelines specify that:

- Prop 39 funds can be used with other sources of financing to finance projects whose cost will be paid over an extended period, which in many cases will extend beyond the sunset of the Prop 39 program.
- Prop 39 funds can be committed to the repayment of project costs as the Prop 39 funds are received, with the understanding that the funds will actually be disbursed over five years, and with the LEA or community college taking the risk on the amounts of the funding in years 2 through 5.
- Prop 39 funds can be used to make regular payments on the private financing as the Prop 39 funds are received, <u>OR</u>, Prop 39 funds can be used only to pay down the principal amount of the private financing.

In considering this question, we urge the Commission to take note of the fact that it is usually advantageous for the LEA or community college to obtain the total amount of private financing required for the whole project immediately, rather than incrementally, for three reasons. First, interest rates are near historically low levels today, and most observers expect the rates to increase over the life of the Prop 39 program. Second, the LEA or community college can minimize the transaction costs of financing (e.g., the cost of bond issuance) by having a single financing rather than multiple financings. Third, the Net Present Value of comprehensive projects is very sensitive to the savings that are irretrievably lost when project implementation is delayed. The US EPA has developed a software tool for public sector managers called the Cash Flow Opportunity Calculator (CFOC) designed to illustrate this fact, which can seem counterintuitive. The tool is easy to use and available on the ENERGY STAR website at the following URL: http://www.energystar.gov/buildings/tools-and-resources/cash-flow-opportunity-calculator-excel

2.5 Expenditure Plans for Large LEAs

Given the advantages of an LEA's implementing a comprehensive project as soon as possible (see discussion above), it would be very helpful if the final Guidelines clarify that large LEAs can submit five-year Expenditure Plans in 2014, or multi-year Expenditure Plans in subsequent years. Forcing the large LEAs to defer projects for as long as five years will literally cost these LEAs millions of dollars, because the savings that they can realize in the intervening years can never be recovered.

2.6 Definitions of "Project" and "Measure"

Can the Commission clarify the meanings of the words "project" and "measure" in the Guidelines, because they do not seem to correspond to the common usage of these terms in the ESCO industry, and the energy efficiency industry in general.

The common usage of the terms, as we understand them, is as follows:

- A "measure" is a specific retrofit, (e.g., the replacement of incandescent exit signs with LED exit signs).
- A technology is the grouping of a set of related measures (*e.g.*, all lighting measures).
- A "project" is all of the work that is done under the terms of a single contract, which typically includes multiple measures, and often includes multiple technologies and multiple buildings owned by the same LEA or community college.

The issue seems further confused by the Guidelines glossary, which does not define "project," but does have a definition of a "project measure" as "an energy project located at one LEA facility site." This definition appears to conflate terms that are normally separate into one term, and to cross-cut the way that the terms are used in both project construction and in utility incentive programs.

- In construction, a "project" typically consists of the work to be performed by a contractor. For an ESCO or general contractor, the work is the entirety of the project (all measures, all technologies, all buildings). For a subcontractor, the work is a related set of measures, typically a "technology," that require a certain skill set or licensing. A "measure" is a specific retrofit defined by the construction specifications.
- In utility incentive programs, a "measure" is typically a specific retrofit that is defined by construction specifications, with its corresponding cost/benefit calculations.

We think the current use of the terms in the Guidelines will cause unnecessary confusion and work, and can be remedied by simply re-defining the terms used in the Guidelines to correspond to the normal usage.

Another issue in the definition of a project goes beyond the terms into the substance of a project: is a "project" all of the materials and labor required to implement a measure or set of measures, or can a project be split into material and labor components. For example, it might be advantageous for an LEA, as it formulates its five-year Expenditure Plan, to purchase more materials immediately that it will be able to install in the first year. The local utility might be offering a time-limited incentive program on a specific type of lighting equipment, or a chiller manufacturer my have a chiller available because of an order cancellation that normally has an 18-month backlog. So can the LEA separate the materials and labor into two separate contracts, or "projects" in the current Guidelines terminology?

Thank you in advance for considering our comments.

Sincerely

Donald D. Gilligan President

dgilligan@naesco.org

Attachment 1: Introduction to NAESCO

NAESCO is the leading national trade association of the energy services industry. NAESCO numbers among its members some of the world's leading energy services companies, including: ABM Energy, AECOM Energy, Aireko Energy Solutions, Ameresco, Burns & McDonnell, CM3 Building Solutions, Chevron Energy Solutions, Clark Energy Group, ClearEnergy Contracting, Climatec, Comfort Systems USA EnergyServices, ConEdison *Solutions*, Constellation New Energy, Control Technologies and Solutions, CTI Energy Services, Eaton Corporation, Energy Control, Energy Solutions Professionals, Energy Systems Group, Excel Energy, The Fulcrum Group, NextEra Energy Solutions, Green Campus Partners, Honeywell, Johnson Controls, M360, McClure Energy, Navitas, NORESCO, NXEGEN, Onsite Energy, Pepco Energy Services, Performance Services, Schneider Electric, Siemens Industry, Synergy Companies, Southland Industries, Trane, UCONS, Wendel Energy Services, and Wipro Limited. Utility members include the New York Power Authority, Pacific Gas & Electric, and Southern California Edison.

During the last twenty years, NAESCO member companies have delivered thousands of energy efficiency, renewable energy, demand response, distributed generation and combined heat and power projects in California. Nationally, NAESCO member company projects have produced:

- \$45 billion in projects paid from savings
- \$50 billion in savings guaranteed and verified
- 400,000 person-years of direct employment
- \$30 billion of infrastructure improvements in public facilities
- 450 million tons of CO2 savings at no additional cost

Attachment 2: Prop 39 Sample Application Process Overview

Three Tracks

The application process will separate school districts into three tracks, based on an initial two-page application form (see sample form below):

- Funding Track -- School districts that have developed a preliminary or final scope of work and project cost and who are assisted by an identified energy services company that will implement a performance contracting project or by experienced technical consultants.
- 2) Design Track -- School districts that have a preliminary concept of the type of improvements that they want to implement (e.g., lighting, boiler, chiller, etc.) and seek funding and design assistance to develop a project scope of work and cost.
- 3) Education Track -- School districts that need basic education in the potential of energy efficiency and the improvements that might be applicable to their facilities.

Initial Application Form

The following two pages present a sample initial application form that would be used to allow each school district to self-identify which of the three tracks it fits into. These applications will enable the CEC to begin to gauge its technical assistance workload and the timing of Prop 39 funding cash flow.

Project Application Processing Work Flow

The pages following the Sample Initial Application Form outline a process that can be used to process applications in the three tracks.

1) Funding Track – Assumes that the customer is doing a performance contract, and has identified the project ESCO and technical consultants who will check the work of the ESCO on behalf of the customer. ESCOs and technical consultants are pre-qualified by CEC. Alternately, customer is sophisticated enough to self-perform the project with technical consultants. In either case, the CEC needs to provide minimal assistance, primarily checking that the project ESCO and/or technical consultants are on the pre-qualified list, that the project meets the minimum standards for energy savings, job creation and emissions reductions, and that the final project contract(s) are in the correct legal format and contain an M&V plan that uses the appropriate IPMVP options.

- 2) Design Track Assumes that the customer does not have even a preliminary project scope and has decided not to do a performance contracting project, but rather has a concept of what improvements it wants to implement. CEC provides this type of customer with technical assistance in soliciting design proposals from the prequalified technical consultants, funding for the project design. Once he design is completed, and the customer decides to proceed, the project goes into the Funding Track.
- 3) Education Track Assumes that the customer is starting from square one. CEC provides basic education in energy efficiency theory, economics and improvements applicable to the customer's facilities. If customer decides to develop a project, it either selects an ESCO and goes into the Funding Track, or decides not to do a performance contract and enters the Design Track.

Sample Prop 39 Grant Initial Application Form

The State of California via the CEC is seeking to fund energy projects per the voters approval of Proposition 39, as enacted into legislation in bill XXXXX Please indicate the funding or assistance that you are seeking by checking one of the following boxes:

		1) Applicant seeking funding for a project that has a preliminary or final scope of work and cost.
		2) Applicant seeking funding for design services for project development with a placeholder for project funding in the future
3) Applicant seeking technical assistance to understand energy potential and applicable.		3) Applicant seeking technical assistance to understand energy efficiency potential and applicable.

1a) If you are seeking funding for a project that has a preliminary or final scope of work and cost, please complete the table below. Projects will be funded based on meeting the criteria of Proposition 39, which include energy savings, annual general fund savings, emissions reductions, and job creation.

chilssions reductions, and job creation.		
Total estimated project size	\$	
Total estimated project cost	\$	
Proposition 39 funding requested	\$	
Total estimated electricity savings	kWh/year	
Total estimated natural gas savings	Therms/year	
Total estimated energy savings (all sources)	Btu/year	
Total estimated emissions reductions	Tons of CO ₂ /year	
Total jobs created		
Total energy saved per dollar of Proposition 39 funding ¹	Btu	
Total emissions reduction per dollar of Proposition 39 funding ²	Tons of CO ₂	
Total jobs created per dollar of Proposition 39 funding ³	Jobs	

I) Minimum threshold for preliminary approval is	Btu
2) Minimum threshold for preliminary approval is	$\underline{}$ Tons of CO_2
3) Minimum threshold for preliminary approval is	Jobs

1b) Please indicate whether you have identified the ESCO and the technical consultants (architects and/or engineers) you plan to work with.

ESCO (leave blank if no	
ESCO involved in project)	
Technical Consultant	

1c) Please indicate the approximate date by which you experinvestment grade audit (IGA) and submit a final project fun Date	
2) If you are seeking funding for a project that does not have work and cost, please complete the table below. Provide the indicate with a check the improvements that you want to con-	size of your facilities and
Approximate size of facilities	Square feet
Lighting	
Boiler replacement	
Chiller replacement	
Ventilation system	
Computerized building control system	
Building envelope (roof, doors, windows, insulation)	
Distributed generation, CHP or renewable energy	
3) If you are seeking assistance with understanding the pote projects in your facilities and education in the application of facilities, please indicate the type (elementary, middle, high size of the facilities.	various technologies in your school, K-12) and approximate
Type of School	Facility Size

Sample Prop 39 Application Process Work Flow Initial Application Form

Funding Track	Design Track	Education Track
Customer submits preliminary or final scope of work and cost plus names of project ESCO and/or technical consultants	Customer submits project concept and potential project technologies	Customer submits request for basic education in energy efficiency and applicable technologies
CEC checks the submittal against the pre-qualified list of ESCOs and technical consultants and the checks the preliminary or final scope of work and cost against the established minimum thresholds for energy savings, job creation and emissions reductions	CEC estimates the project design cost and provides customer with technical consultant RFP forms	CEC provides basic education to customer
CEC provides customer with preliminary project approval and funding commitment with an expiration date	Customer uses RFP forms to solicit design proposals and choose design consultants from pre- approved list	Customer chooses to use Funding Track, Design Track or to not proceed with a project
ESCO completes IGA and customer technical consultant reviews and approves or technical consultant completes the IGA fro the customer	CEC disburses design funding to customer	

Customer submits IGA to CEC	Customer submits project scope of work and cost to CEC	
CEC checks the credentials of the ESCO and technical consultants and reserves funding for project	CEC checks the credentials of the technical consultants and reserves funding for project	
Customer negotiates contract with ESCO or completes the project bidding process and submits payment application with final project contract(s) and M&V plan (using the appropriate IPMVP options) to CEC	Customer completes the project bidding process and submits payment application to CEC	
CEC checks customer submittal and disburses grant to customer	CEC checks customer submittal and disburses grant to customer	