



October 25, 2013

California Energy Commission
Re: Docket No. 13-CCEJA-1
1516 Ninth Street
Sacramento, CA 95814
VIA EMAIL (docket@energy.ca.gov)

California Energy Commission

DOCKETED
13-CCEJA-01

TN 72185

OCT. 25 2013

RE: Docket # 13-CCEJA-1: Comments on the Prop 39 Program Implementation Draft Guidelines

Retroficiency, Inc. is pleased to submit comments in response to the California Energy Commission's Proposition 39 Draft Guidelines. Retroficiency applauds the Commission's commitment to develop Guidelines that ensure maximum economic and environmental impact for California's schools and the state at large.

Retroficiency provides an energy analytics software platform that enables utilities, energy service providers and other organizations to evaluate commercial and institutional buildings for energy efficiency at scale. Our Building Efficiency Intelligence platform solutions include Virtual Energy Assessment, which leverages advanced meter data analytics and publicly-available information to rapidly determine a building's energy savings potential and operational and retrofit opportunities on a 'no touch' basis; Automated Energy Audit, which streamlines and improves the ASHRAE Level I, II and III on-site audit; and Efficiency Track, which provides measurement and verification of implemented measures and ongoing identification of new opportunities. Combined, since March 2011, these solutions have evaluated more than 400 million square feet of building space to identify more than two billion kilowatt hours of annual savings. We are enabling commercial efficiency programs for investor-owned utilities such as Pacific Gas & Electric and Connecticut Light & Power, energy efficiency entities such as Efficiency Maine and Efficiency Vermont, program administrators/implementers such as CLEAResult and PECL, and large energy service providers such as Schneider Electric and Jones Lang LaSalle.

Retroficiency has reviewed the Draft Guidelines in full and is providing comments regarding the Energy Project Identification – Option 3: Other Tools: Data Analytics.

Retroficiency fully supports the inclusion of Data Analytics as an approved method for Local Education Agencies (LEAs) to help identify efficiency projects. We agree that sophisticated data analytics that leverage interval meter data will enable LEAs to rapidly and cost-effectively "prioritize retrofit projects and better focus ASHRAE level 2 work."

Furthermore, we also fully support the Commission's goal of ensuring that only high-quality, market-tested Data Analytics solutions are eligible for Proposition 39 award funds. Advanced data analytics solutions based on building energy science and domain expertise can be extremely effective for

achieving the Commission’s stated objectives. Likewise, data analytics solutions that are not sufficiently robust can lead to inaccurate results that waste valuable Proposition 39 funding and LEA resources.

Retroficiency recommends the Commission incorporate the following changes to the Energy Project Identification – Option 3: Other Tools: Data Analytics of the Proposition 39 Guidelines:

1. The basic technical capabilities and features of data analytics and ‘no touch’ virtual energy audits must be further defined in the Proposition 39 Guidelines. While data analytics solutions are still emerging, there are several key pieces of functionality that all stakeholders would agree are required in a robust, technically-sound virtual energy audit.

Further defining these features will help LEAs understand the basic functionality a virtual energy audit should provide, determine whether virtual energy audits or more traditional approaches are most appropriate for their specific situation, and will ultimately ensure that eligible data analytics solutions are wedded in sound building science and will deliver high-quality results.

Retroficiency recommends that the Commission supplement the guidelines with the following Minimum Requirements:

“At a minimum, a data analytics-driven virtual energy audit must include for each building assessed the following information:

- **An estimate of energy savings potential at the whole building level and for each end use (e.g., lighting, cooling, heating);**
- **A unique disaggregation of energy consumption into the building’s end uses based on that building’s specific meter data;**
- **A comprehensive set of recommendations related to both retrofit and operational improvements applicable to the building;**
- **Relevant commentary, data/analysis, and visualizations to support recommendations.”**

2. In lieu of devising its own method for validation at this time, the Commission correctly chartered local utilities as playing a key role in the validation process. The overall class of energy analytics software includes many vendors with different capabilities, some which can provide the type of solution that the Commission is recommending, and others that do not.

California utilities – through their ongoing investigation of the market, related request for proposals for data analytics offerings, and piloting / testing of these solutions – are well-positioned to determine which vendors are able to deliver the robust, no touch virtual energy audits the Commission supports.

As currently written in the Draft Guidelines, there is, however, uncertainty as to what constitutes sufficient technical validation for data analytics-driven virtual energy audits.

In order to streamline the process of validation for LEAs, vendors, and utilities, the Commission should seek to leverage the significant diligence already performed by many California utilities. This diligence has come in the form of viewing demonstrations of virtual energy audit solutions, deploying these solutions in energy efficiency programs through competitive RFP processes, and other studies of virtual audit results.

As such, the Commission should insert language in the Guidelines that states:

“A given data analytics vendor can achieve technical validation if a single California utility certifies that, based on its experience (e.g., working with, piloting and / or reviewing outputs) with a given data analytics provider, the provider has demonstrated the ability to meet the Minimum Requirements stated above.” (the reference to Minimum Requirements being to those we list above in #1).

This language will ensure that only robust virtual energy audits are eligible for Proposition 39 funding, as well as provide a clear path for both data analytics providers and utilities around technical validation. LEAs will have the opportunity to request and review additional types of technical validation papers and case study as part of their decision process when selecting vendors.

Conclusion

By offering mechanisms for LEAs to identify projects through Energy Surveys, ASHRAE Level II audits, and/or virtual energy audits, Retroficiency supports the Draft Guidelines because they provide LEAs with the flexibility they need to determine the best approach to evaluate energy efficiency projects. By defining the minimum requirements for data analytics providers and clarifying the Commission’s expectations for technical validation of data analytics solutions, stakeholders will achieve greater confidence in the innovative data analytics approaches used to achieve Proposition 39’s objectives.

Respectfully,

Michael Kaplan
Vice President of Marketing
Retroficiency
mike.kaplan@retroficiency.com
1-845-304-2346