

DOCKETED

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CSE Comments on 2019 California Energy Efficiency Action Plan

Additional submitted attachment is included below.

May 15, 2019

California Energy Commission
Docket Unit, MS-4
Re: Docket 19-IEPR-06
1516 Ninth Street
Sacramento, CA 95814-5512

**Re: Docket No. 19-IEPR-06 – Comments of Center for Sustainable Energy®
regarding the Development of the 2019 California Energy Efficiency Action Plan**

I. Introduction & Summary

The Center for Sustainable Energy® (CSE) appreciates the opportunity to provide comments to support development of the *2019 California Energy Efficiency Action Plan*. CSE also applauds the California Energy Commission's (Energy Commission) inclusive stakeholder engagement process through a series of public workshops and request for input to help inform this important effort.

CSE strongly supports the Energy Commission's goals of doubling energy efficiency (EE) savings by 2030, expanding EE in low-income and disadvantaged communities (DACs), and decarbonizing buildings. As the Energy Commission develops the updated 10-year roadmap to advance EE and achieve these goals, CSE encourages close coordination with other state agencies, such as the California Public Utilities Commission (CPUC) and California Air Resources Board (CARB) to ensure the creation of efficient and consistent policy frameworks around the various topics addressed within this plan. Such coordination will help leverage expertise and existing programs as well as reduce complexities and streamline stakeholder engagement. CSE is pleased to provide comments in response to the specific questions posed by the Energy Commission to inform the development of the *2019 California Energy Efficiency Action Plan*.

II. Responses to Stakeholder Input Request

Building Standards

- *One goal from the 2016 Existing Buildings Energy Efficiency Plan Update was to make the 2019 Building Energy Efficiency Standards easier to use/understand than previous iterations. In your view, was this goal achieved?*

The leveraging of web-based technologies for the *2019 Building Energy Efficiency Standards* will help make code compliance documentation easier to use and increase understanding compared to previous iterations. Specifically, the creation of dynamic PDF forms with online interface for code compliance documentation is an example of a positive step in achieving this goal. This new format was developed by Energy Code Ace (ECA) under the California Statewide Codes and Standards Program for the 2019 Non-Residential Certificate of Compliance documentation. Dynamic features include hyperlinks to code language for simplified cross-referencing, links to guidance, and automatic calculations, as well as additional functionality to automatically customize according to the size of a project and the user's job function. Moreover, the update of these compliance forms has allowed for a significant reduction in the number of forms, from a total of 47 compliance forms for the 2016 Non-Residential Energy Code to 10 for the 2019 Non-Residential Energy Code. Such streamlining and utilization of dynamic online forms improve the ease of use and understanding, and CSE encourages the Energy Commission to continue to identify opportunities to leverage web-based technologies for processes within code and standards programs.

- *What are the immediate steps you recommend taking to improve compliance with building energy standards?*

As noted above, CSE recommends establishing processes that leverage web-based technologies. Online permitting for certain over-the-counter measures in existing building projects (e.g., HVAC systems, Domestic Water Heaters) represents an opportunity to significantly improve compliance. Such efforts can be informed by the Energy Commission's continued work in pursuing improved energy compliance of HVAC systems under the direction of Senate Bill 1414 (Stats. 2016, ch. 678). CSE provided comments to Docket No.17-EBP-01 on August 20, 2018, expressing support for, among other things, the establishment of streamlined compliance processes for HVAC systems,¹ and filed a report CSE developed for the Energy Commission recommending the development of a statewide online permitting system.²

Benchmarking

- *Are building owners looking at their energy consumption or just reporting to benchmarking?*

While this depends on the individual building owner, overall, jurisdictions where benchmarking disclosure and transparency ordinances are passed see energy

¹ CSE Comments on Improving Energy Compliance of Central Air Conditioning and Heat Pump Systems, <https://efiling.energy.ca.gov/GetDocument.aspx?tn=224547&DocumentContentId=55095>.

² Statewide Online Permitting Platform for Residential HVAC Alterations: Recommendations and Cost Estimates <https://efiling.energy.ca.gov/GetDocument.aspx?tn=226405&DocumentContentId=57180>.

savings of anywhere between 2-8% over time,³ implying that some building owners who are benchmarking are also taking action to see those results.

- *What type of encouragement or support, beyond monetary, would lead to improved benchmarking scores over time?*

Social norming efforts, such as providing building owners with information about their building performance relative to their peers, can be an effective way to nudge energy saving actions and improve benchmarking scores. Providing a customized reporting template that shows building owners how they directly compare with peers, not just nationwide, but specifically within their market, may help further spur positive change in building performance over time. Moreover, this information should include clear, actionable steps to save energy based on building-specific data. In addition, programs such as the San Diego Regional Energy Partnership's Benchmarking Coach program help building owners and managers with one-on-one technical support and public in-person benchmarking trainings. Through this program, CSE has given presentations on using ENERGY STAR Portfolio Manager and complying with benchmarking regulations like Assembly Bill 802 (Stats. 2015, ch. 590) and the City of San Diego's Benchmarking Ordinance. Past attendees have expressed desire for step-by-step training videos and identified issues navigating utility data request portals. This demonstrates the potential need for further engagement with utilities to help streamline the data request process for benchmarking purposes.

Market Transformation

- *How can local governments continue to support and/or expand energy efficiency efforts?*

CSE believes local governments should continue to adopt local ordinances that require building projects to reach beyond state standards for both building performance and decarbonization goals.

Building Decarbonization

- *What are the main concerns with implementing programs that focus on reducing carbon emissions from buildings?*

³ Antonoff, J. 2017. *Impact Assessment: A Guide for City Governments to Estimate the Savings from Energy Benchmarking and Energy Efficiency Programs*. Washington, DC: IMT (Institute for Market Transformation). imt.org/wpcontent/uploads/2018/03/PuttingDatatoWork_ImpactAssessment.pdf Mims, N., S. Schiller, E. Stuart, L. Schwartz, C. Kramer, and R. Faesy. 2017. *Evaluation of U.S. Building Energy Benchmarking and Transparency Programs: Attributes, Impacts, and Best Practices*. Prepared by Berkeley Lab. Washington, DC: DOE. emp.lbl.gov/sites/default/files/lbnl_benchmarking_final_050417_0.pdf.

The Energy Commission's *2018 Integrated Energy Policy Report* recognizes a growing consensus that building electrification is the most viable and predictable path to zero-emission buildings.⁴ As a result, building decarbonization measures are largely focused on electrifying natural gas end uses, which presents challenges that must be addressed through thoughtful and deliberate policy. Primary concerns include: exacerbating peak load through addition of uncontrolled electrified end uses; increasing utility bills, especially for low-income households; and developing a clear transition plan for stranded natural gas distribution assets. To the extent possible, building decarbonization programs should focus on controllable load that can be utilized during off-peak hours, provide financial support as customers transition to new technologies, and develop a strategic and holistic approach to address declining natural gas customers that avoids cost-shifting and ensures sufficient investment in safety measures.

- *Heat pump water heaters and space conditioners are expected to play a role in building decarbonization, they currently occupy a small portion of the market; what actionable steps do you think are viable to improve the market potential of the technology?*

Building a market for high efficiency heat pump water heaters (HPWH) and space conditioners will require additional support and investments. Specifically, midstream and downstream incentives can help reduce upfront costs and encourage the development of best practices and improved processes around the technology. In addition, the development of workforce training programs is necessary for the success of this market transformation effort. In addition, clarification is needed regarding contractor licensing to address current disconnects among electrical, HVAC, and plumbing contractors. CSE believes programs focused on market transformation will benefit from statewide implementation, which is consistent with the findings in the CPUC's Decision 16-08-019.⁵ State regulators should also consider introducing electricity tariffs or programs, such as demand response programs, that result in significant utility bill reductions on an ongoing basis to provide a compelling value proposition to customers on a continuing basis. The value proposition of these technologies will also be enhanced by emphasizing health and comfort benefits; therefore, CSE encourages the recognition of non-energy benefits, such as indoor air quality improvements.

Standards Compliance

- *In your experience, what are the primary drivers of non-compliance with building standards?*

⁴ California Energy Commission staff. 2018. *2018 Integrated Energy Policy Report Update, Volume II*. California Energy Commission. Publication Number: 100-2018-001-V2-CMF, page 20.

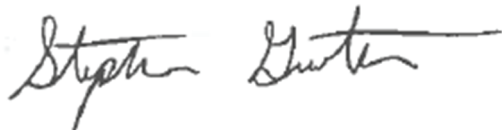
⁵ California Public Utilities Commission. D.16-08-019, *Decision Providing Guidance for Initial Energy Efficiency Rolling Portfolio Business Plan Filings*, August 18, 2016, pages 57-62.

A general lack of enforcement and/or consequences for non-compliance is a significant issue and is exacerbated by the resource constraints of local building departments and prioritization of other non-energy related codes and standards. In addition, compliance systems for permitting requirements are often difficult and expensive to navigate, resulting in non-compliance with building standards.

III. Conclusion

CSE appreciates the opportunity to comment on these important issues and looks forward to continued engagement with the Energy Commission, other state agencies, and stakeholders in the development of the *2019 California Energy Efficiency Action Plan*.

Sincerely,

A handwritten signature in black ink that reads "Stephen Gunther". The signature is fluid and cursive, with a long horizontal stroke extending from the end of the name.

Stephen Gunther
Policy Manager, Distributed Energy Resources
Center for Sustainable Energy®