

## DOCKETED

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**CMUA, NCPA, and SCPPA Joint Comments on the Draft Commission Report**

*Additional submitted attachment is included below.*

**BEFORE THE CALIFORNIA ENERGY COMMISSION**

**In the Matter of:**

*2017 Integrated Energy Policy Report*

**Docket No. 17-IEPR-06**

**RE: DRAFT COMMISSION REPORT:  
Senate Bill 350: Doubling Energy Efficiency  
Savings by 2030**

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**JOINT PUBLICLY OWNED UTILITIES' COMMENTS ON  
DRAFT COMMISSION REPORT: SENATE BILL 350:  
DOUBLING ENERGY EFFICIENCY SAVINGS BY 2030**

The California Municipal Utilities Association (“CMUA”), Southern California Public Power Authority (“SCPPA”), and Northern California Power Agency (“NCPA”) (collectively, “Joint POU”) appreciate the opportunity to provide these comments to the California Energy Commission (“Commission” or “CEC”) on the *DRAFT COMMISSION REPORT: Senate Bill 350: Doubling Energy Efficiency Savings by 2030* (“Draft Report”).<sup>1</sup>

The Joint POU commends the CEC staff for the significant progress made to date in the implementation of the very complex and ambitious doubling of energy efficiency provisions included in SB 350. The process has undertaken the unprecedented challenge of developing comprehensive, aggregated energy efficiency savings targets for the state based on a myriad of state, utility, and non-utility programs. The CEC implementation efforts reflect the tectonic shift in energy efficiency policy that has evolved in recent years—that while utilities will continue to play a critical role in the state’s EE endeavors, realizing the full potential on energy savings from EE requires a much broader coalition of stakeholders, improved modeling and data collection efforts (of non-utility programs in particular), and modification to existing state regulatory

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<sup>1</sup> California Energy Commission, 2017, *Senate Bill 350: Doubling Energy Efficiency Savings by 2030*, Publication Number: CEC-400-2017-010-CMD.

programs and policies. The Draft Report, appropriately so, does not seek to resolve all of these issues, but serves to identify needs and gaps to be addressed in other venues and proceedings. The Joint POU's, while we have concerns about specific portions and recommendations, support the overall approach of the Draft Report and seeing the report move forward.

## **I. 2030 ENERGY EFFICIENCY SAVINGS TARGETS OVERVIEW**

SB 350 directs the Commission to establish annual targets for statewide energy efficiency ("EE") savings and demand reduction that will achieve a cumulative doubling of statewide EE savings in electricity and natural gas final end uses of retail customers by January 1, 2030. The annual statewide targets shall be based on a doubling of the 2014 additional achievable energy efficiency savings ("2014 AAEE") adopted by the Commission and the 2013 targets adopted by POU's ("2013 POU targets")<sup>2</sup>, extended to 2030, to the extent doing so is cost-effective, feasible, and will not adversely impact public health and safety.<sup>3</sup>

The Joint POU's previously filed comments to this docket on June 30, 2017,<sup>4</sup> and August 3, 2017,<sup>5</sup> regarding the CEC's proposed framework for developing the SB 350 2030 EE savings goal. The Joint POU's reiterate our support for CEC staff's proposed bifurcation of the target setting to (1) establish an aspirational 2030 EE savings goal based on a literal doubling of the 2014 AAEE and 2013 POU targets, and; (2) to establish annual statewide EE targets that are cost-effective, feasible, and that will not adversely impact public health and safety based on modeling of the various state, utility, and non-utility programs. The Joint POU's concur with CEC staff that this approach facilitates comparison of annual EE targets to the 2030 goal to

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<sup>2</sup> 2014-2023 Annual Energy Efficiency Savings Targets, as reported by POU's in 2014: [http://www.ncpa.com/wp-content/uploads/2015/02/FINAL\\_SB1037\\_Report1.pdf](http://www.ncpa.com/wp-content/uploads/2015/02/FINAL_SB1037_Report1.pdf).

<sup>3</sup> Cal. Pub. Res. Code §25310(c)(1).

<sup>4</sup> *Joint POU Comments on Methodologies for 2030 EE Target Setting*, docketed June 30, 2017. Available: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=17-IEPR-06>.

<sup>5</sup> *Joint POU Comments on the Draft Staff Papers re: SB 350 Doubling EE Savings*

identify potential gaps, track progress of the various EE programs towards annual targets and the 2030 goal, and provide recommendations for EE program improvement and policy modifications.

## **II. CHAPTER 4: PUBLICLY OWNED UTILITY ENERGY EFFICIENCY**

Chapter 4 of the Draft Report explores the energy savings that electric POU energy efficiency programs can contribute to achieving the SB 350 statewide target. As noted in our June 30<sup>th</sup> and August 3<sup>rd</sup> comments, the Joint POU's support the proposed adjustments<sup>6</sup> to the POU adopted 2018-2027 energy efficiency targets for the purpose of determining the contribution of POU programs, as defined, to statewide annual EE savings targets.

The Joint POU's also appreciate the clarifications in responses to Joint POU concerns that CEC staff included regarding the purpose and intent of the Draft Report.<sup>7</sup> In particular, CEC staff made it expressly clear that the Draft Report simply adjusts recently adopted 2018-2027 EE targets to establish a consistent current statewide "baseline" for POU programs information provided to the CEC. Staff further clarified that the CEC is not requesting an increase or change in utility energy efficiency programs, and that the targets included by the CEC for the purposes of developing aggregated statewide EE targets do not supersede the goals set by local publicly owned electric utility governing boards. These important clarifications more accurately reflect the statutory responsibilities of both POU's and the CEC related to EE targets.

### ***(a) POU's adopted aggressive EE targets for 2018-2027***

In March 2017, POU's provided the CEC with 2018-2027 energy efficiency potential studies and goals, as required by statute.<sup>8</sup> POU's contracted with Navigant Consulting to develop the EE potential studies and goals using the Electric Resource Assessment Model (ELRAM),

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<sup>6</sup> Draft Report, pgs. 29-32.

<sup>7</sup> *Ibid*, pgs. 32-33

<sup>8</sup> Cal. Pub. Util. Code § 9505(b).

which is substantively similar to the modeling tool Navigant used for the investor-owned utility EE potential studies and goals. While the adopted targets for 2018-2027 are more aggressive both as a percent of load and in terms of total energy (kWh) saved than the previous goals adopted for 2014-2023, the targets still trend downwards over time.

The main driver of the downward trend over the 2018-2027 horizon is a recognition that codes and standards for appliances and buildings, at the state and federal level, are anticipated to become much more stringent in coming years. The push for Zero Net Energy (“ZNE”) new construction for residential buildings by 2020 and non-residential buildings by 2030, requires the maximum amount of energy efficiency measures to be included in future homes and offices. Likewise, *California’s Existing Buildings Energy Efficiency Action Plan*<sup>9</sup> (and the 2016 update)<sup>10</sup> is driving the adoption of more stringent building codes regarding existing building stock. Both of these efforts will have dramatic impacts on the attribution of future energy savings from utility EE programs. Absent more aggressive codes and standards, there would have been greater opportunities for POU’s to pursue some of the energy savings through their customer rebate and incentive programs for measures that will otherwise be included in the new building construct and retrofits.

In recognition that codes and standards will seek to build even greater efficiency into buildings—new and existing—POU’s are expanding their role in developing, implementing, and supporting compliance with future codes and standards updates. However, none of the POU investment of funds and resources to support codes and standards are attributable to POU’s under the framework included in the Draft Report. The Joint POU’s understand the need to differentiate

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<sup>9</sup> California Energy Commission. 2015. *California’s Existing Buildings Energy Efficiency Action Plan*. Publication No.: CEC-400-2015-013-F.

<sup>10</sup> California Energy Commission. 2016. *2016 Existing Buildings Energy Efficiency Plan Update*. Publication No.: CEC-400-2016-023CMF.

between traditional utility programs and statewide codes and standards to avoid double-counting for the purposes of the 2030 doubling of EE savings goal, but this differentiation must still recognize the totality of the POU efforts in effecting greater EE savings and achieving the *statewide* savings target.

The Joint POU's and their member utilities were well aware of the Legislature's and Governor's 2030 goal for energy efficiency when the 2018-2027 targets were being developed. In support of this goal, when developing their 2018-2027 energy efficiency potential studies and goals, a number of POU's reported on their plans to participate in the promulgation and implementation of codes and standards in their 2018-2027 EE savings targets. Some POU's reworked the inputs of the ELRAM runs by Navigant to generate greater energy savings as the initial runs were unacceptably conservative. Still other POU's adopted energy savings stretch goals that exceeded even the reworked ELRAM output. The CEC, after a more thorough review and assessment of the reported POU targets, may determine that there are additional savings potential, such as in programs or technologies that were not considered that could be effective in specific POU communities. Such findings are appropriate to be considered in future POU potential studies and goals, but such findings should not be assumed prior to actual analysis being completed. The Joint POU's understand that the CEC has contracted with Navigant to provide just such an assessment of the reported POU 2018-2027 EE savings targets.

To the extent unlocking greater energy savings from energy efficiency will be more challenging, in particular as POU's focus on low-income households and disadvantaged communities, the Joint POU's are in complete agreement that we, as well as the State, should all be expected to "do more" to achieve the goals of SB 350. However, expending greater effort to reach underserved constituents does not necessarily mean that a commensurate amount of energy

savings will be achieved, especially as “non-utility” programs—and codes and standards, in particular—are anticipated to deliver significantly greater energy savings between now and 2030 that would have otherwise been achievable through utility interventions.

The Joint POU's share a great deal about the successes—and failures—of their programs with each other and the public with the goal of identifying best practices. Similarly, we have learned a great deal from the programs offered by IOUs, program administrators, and other EE stakeholders. California public power also welcomes suggestions from the CEC and stakeholders about successful programs and emerging technologies that could be of interest and a benefit to the customers we serve. The Joint POU's encourage the CEC, when evaluating the adopted POU targets and potentially offering recommendations, to account for each POU's unique characteristics of their local constituents and communities, including but not limited to building stock vintage, local economic factors, climate zone, and customer segments.

#### **IV. CHAPTER 5: POTENTIAL ENERGY EFFICIENCY PROGRAMS NEEDING ADDITIONAL ANALYSIS**

##### ***(a) Fuel Substitution Programs***

The California Air Resources Board (“CARB”) included electrification of buildings, along with aggressive EE energy savings, in *The 2017 Climate Change Scoping Plan Update* (“Scoping Plan”) as a key strategy to achieving a statewide reduction in greenhouse gas emissions of 40 percent below 1990 levels by 2030.<sup>11</sup> In addition, the Legislature included electrification of buildings—defined by the CEC as “fuel substitution” in the Draft Report—as a source of potential energy savings to include in the statewide 2030 doubling of EE savings targets.

The Joint POU's support the CEC's recognition that fuel substitution, or appliance

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<sup>11</sup> California Air Resources Board, 2017, *The 2017 Climate Change Scoping Plan Update*, pg. 62.



electrification, reduces both energy consumption and GHG emissions. Specifically, high performance heat pump water heating (HPWH) and heat pump space heating (HPSH) systems are considered eligible fuel substitution technologies. The Joint POU's share CARB's perspective that the electrification of buildings, or fuel substitution programs, have the potential to reduce GHG emissions, as well as the CEC perspective that the programs also need to deliver energy consumption savings in a cost-effective manner.

In order to successfully realize the multiple benefits of fuel substitution, a concerted strategy of customer outreach and incentives will be necessary to overcome prevailing market barriers, including high upfront prices and limited market awareness. For decades, public power in California has played a critical role in facilitating market transformation of energy efficient technologies. As the customer uptake of the energy efficient alternatives increases, prices of the energy efficient products decline, eventually the efficient products become the norm, and, in some cases, are incorporated into the state's appliance or building standard.

Currently, HPWH sales account for less than 2% of the water heater market in United States. Most consumers, and many contractors, remain unaware of heat pump water heating or heat pump space heating products.

In early 2017, the City of Palo Alto explored mandating electric heat pump water heating/space heating as part of the City's green building code. The study found that in new construction of an all-electric single family home, a low-rise multifamily building, or a small office building without natural gas connections, electric heat pump water heating/space heating is cost-effective under the current Title 24 Building Energy Code.<sup>12</sup> Installation of heat pump space heaters was also found to be cost effective in single family and low-rise multifamily new

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<sup>12</sup> See City of Palo Alto Utilities Advisory Commission staff report, dated March 1, 2017, available at: <http://www.cityofpaloalto.org/civicax/filebank/documents/56134>.

construction projects.

An effective market transformation in California will need programmatic support from investor-owned utilities, public power and community choice aggregators across (“CCAs”) the state, as well as clear regulatory policies from the CPUC and CEC. POU’s and CCA, in particular, are well-connected with their local communities and are best positioned to influence the energy choices of residents and businesses.

The Joint POU’s support the CEC recommendation to develop an appropriate approach to implement of fuel substitution programs that maximizes GHG emission reductions in collaboration with CPUC, CARB, utilities, and stakeholders.<sup>13</sup> The process should include reviewing the methodologies and assumptions relied upon to guide the development of updates to the Title 24 Building Energy Efficiency Standards; in particular, analyze whether the statewide time-dependent valuation methodology, which is based on IOU assumptions, facilitates fuel substitution projects. In addition, the public process should discuss alignment between the CPUC three-prong test for fuel substitution projects and the CEC interpretation of Section 25310(d)(10) of the Public Resources Code.

### **III. CHAPTER 6: NON-UTILITY ENERGY EFFICIENCY PROGRAMS**

There are a number of programs listed in the Draft Report of “programs not funded by ratepayers” that would not exist were it not for the direct involvement of utilities and the expenditure of fund collected from ratepayers: building standards; appliance regulations; behavioral and market transformation programs; benchmarking; smart meters and controls; fuel substitution; behavioral, retrocommissioning, operational savings; industrial savings; agricultural savings. These programs warrant specific strategies and considerations to more fully realize their cost-effective and feasible energy savings potential. The characterization, however, that these

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<sup>13</sup> Draft Report, pg. 53.

programs do not involve utilities or ratepayer funds, is inaccurate and misleading.

The Joint POU's appreciate the clarification provided by CEC during the workshop that for the purposes of establishing statewide annual EE savings targets through 2030, the CEC identified these programs as not being explicitly included in either the IOU or POU EE targets. The Joint POU's recommend adding this clarification to Draft Report. For our own part, the Joint POU's are pursuing updates to some of our reporting, modeling, and tracking tools to more clearly report our own investments in these various programs so that are not double-counted, and to make sure that POU investments are accurately identified as "ratepayer funded" programs in the future.

#### **IV. CHAPTER 7: RECOMMENDATIONS**

The Joint POU's offer their strong support for the following recommendations proposed by CEC staff in Chapter 7 of the Draft Report:

- Maintain or expand current levels of funding of financing programs, including the Water Energy Grant, LIWP, and Proposition 39, and others. Coordinate with state and local agencies that deliver energy efficiency programs and stakeholders.
- Increase the funding of the ECAA program to allow more access to schools, cities, counties, and special districts for energy efficiency projects.
- Improve code compliance by increasing interagency collaboration, stakeholder engagement, and funding for outreach and education at the local level, especially for local building permit offices and the contractor communities.
- Create new energy efficiency programs that capture additional savings in collaboration with utilities, state and local governments, and stakeholders.
- Expand the workforce training available to improve the quality of energy

efficiency equipment installation, consistent with recommendations from the Low-Income Barriers Report and the EBEE Action Plan.

- Develop an appropriate approach to implement of fuel substitution programs that maximizes GHG emission reductions in collaboration with CPUC, California Air Resources Board (CARB), utilities, and stakeholders.
- Establish formal EM&V activities at the Energy Commission to measure savings projections for target setting for Energy Commission Title 24 and Title 20 standards, and to use as the basis for improvement in compliance and enforcement activities.
- Place a high priority on understanding energy efficiency savings decay to obtain a better understanding of this topic for use in improving projections of cumulative savings.

With regards to Future Energy Efficiency Savings Projections recommendations, the Joint POU's are open to discussions with the CEC and other stakeholders regarding "consistent reporting conventions and assumptions for the target-setting." The Joint POU's recognize the complications raised by the use of varying assumptions and methodologies, which is why we support the proposed adjustments to the adopted 2018-2027 EE targets. However, there is a significant potential that the ideal modeling envisioned by the CEC will cost the customers of POU's significantly more to undertake than current modeling efforts. In addition, the CPUC policies for IOUs regarding their EE programs and modeling are not applicable to POU's. CPUC policies on key factors such as free-ridership, cost-effectiveness tests, and below-code savings are inconsistent with many of the program practices of public power. In order to continue to foster POU innovation and initiative in EE program design and offerings, as well as to support

the continued tailoring of POU programs to meet the specific needs and interests of their respective customers, CEC needs for consistency should be tempered with POU customer needs for tailored programs.

The Joint POU's reaffirm their commitment to transparency and continuing to improve how we report EE program data to the public and CEC. Based on discussions throughout this proceeding, the Joint POU's have already initiated an update to the reporting tool used to generate the annual EE report required by Section 9605(a) of the Public Utilities Code. Beginning with the March 2018 report, POU's will provide more specific data on programs targeting EE rebates for low-income and multifamily customers in support of the implementation of the *Low Income Barriers Study, Part A*.<sup>14</sup> For future annual reporting cycles, the Joint POU's are exploring reporting tool modifications to: calculate cumulative energy and demand savings; update POU-specific load-shapes and avoided costs; align existing EE measure categories with CEC/CPUC measure categories; expand measure categories to include Fuel Substitution programs, Conservation Voltage Reduction ("CVR") programs, Behavioral, Retrocommissioning, and Operator ("BROs") programs, and Financing programs.

In addition, the Joint POU's have contracted for the development of *Energy Efficiency Best Practices Guideline* ("EEBPG"). The EEBPG will be a public document and serve to provide not only direction to POU's on EE program administration and reporting, but also inform the CEC and public about the principles, assumptions, and methodologies on which public power programs are based. The EEBPG, as well as an updated POU technical reference manual, will be completed and publicly available by the end of the year.

## V. CONCLUSION

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<sup>14</sup> California Energy Commission, 2016, *Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-income customers and Small Business Contracting Opportunities in Disadvantaged Communities*. Publication Number: CEC-300-2016-009-CMF.

The Joint POU's appreciate the opportunity to provide these comments to the Commission. Implementation of the SB 350 doubling of EE savings goal promises to be an iterative process. The CEC has done an admirable job in compiling the Draft Report, and the Joint POU's sincerely appreciate accessibility, responsiveness, and collaborative efforts of the CEC staff and Commissioners throughout the process. We look forward to continuing to work with the CEC and the diverse stakeholders on advancing energy efficiency policies and programs in furtherance of California's broader climate strategy.

Respectfully submitted,

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