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Additional submitted attachment is included below.

BEFORE THE CALIFORNIA ENERGY COMMISSION

CA Existing Buildings Energy Efficiency
Action Plan – Draft March 2015

Docket # 15-IEPR-05

**COMMENTS FROM THE SOUTHERN CALIFORNIA REGIONAL ENERGY
NETWORK ON CA EXISTING BUILDINGS ENERGY EFFICIENCY ACTION PLAN**

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For the Southern California Regional
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1. Introduction

The County of Los Angeles, on behalf of the Southern California Regional Energy Network (SoCalREN), submits these Comments to the California Energy Commission's California Existing Buildings Energy Efficiency Action Plan Draft (Action Plan). The SoCalREN's comments strive to support effective and expeditious implementation of the Action Plan.

The SoCalREN is a local government regional energy network (REN), authorized by the California Public Utilities Commission (CPUC), that is serving public agencies and their constituents in the Southern California Edison (SCE) and Southern California Gas Company (SCG) service territories.

2. Comments on Action Plan Goals and Strategies

Goal 1 - Proactive and Informed Government Leadership in Energy Efficiency

➤ Strategy 1.1 State and School Buildings

The SoCalREN recommends linking Strategy 1.1 to the Governor's Executive Order B-18-12 and targeted grid-impact load reduction. We also recommend implementing a simple and effective web-based tool to support transparent performance tracking and broader customer participation.

➤ Strategy 1.2 Nonresidential Benchmarking and Disclosure

The SoCalREN encourages the California Energy Commission (CEC) to continue engaging Local Governments in the development of policies and tools supporting both benchmarking and disclosure. We urge the CEC to develop appropriate metrics that can be used to track load reduction and GHG emission reduction that are linked to benchmarking and disclosure initiatives.

➤ ***Strategy 1.4 Uniform Energy Asset Ratings to Compare Building Properties***

The SoCalREN supports close collaboration with the Department of Energy (DOE), leveraging federal resources and initiatives in the development of tools and standards for assessment and asset rating.

The SoCalREN recommends the adoption of performance-based code requirements that use existing conditions as the code baseline. This approach will provide a logical and robust link between code compliance, building benchmarking, and audits.

➤ ***Strategy 1.5 Building Efficiency Standards Development and Compliance***

The SoCalREN endorses the Action Plan's view that the disconnect between codes and standards and existing voluntary energy efficiency programs could "*cause the attractive upgrades of existing buildings to go unrealized or be driven underground – done without a permit.*"¹ To create improved pathways for capturing these stranded savings opportunities, we encourage CEC participation in the discussions on energy savings measurement based on existing conditions versus "to code" that are currently underway within California Public Utility Commission (CPUC) Rulemaking R.13-11-005.

The SoCalREN advocates re-examination of the cost-effectiveness protocol used in code development. The protocol needs to be modified to accommodate existing conditions as the appropriate baseline for assessing actual costs and benefits to property owners/customers. Additionally, the SoCalREN suggests the re-evaluation of assumptions and supporting documentation related to end-of-useful-life (EUL) policy determinations as, based on empirical data, we believe that the current standards are overly conservative and consequently fail to incentivize the replacement of a substantial inventory of very inefficient and poorly performing equipment in all categories of buildings. These overly conservative EUL factors also understate the equipment retrofit

¹ CA Existing Buildings Energy Efficiency Action Plan, page 7

opportunities which the CPUC uses to inform its energy efficiency Potential and Goals studies.

Finally, the SoCalREN believes that the lack of permitting tool/software standardization across the State may be a significant barrier to Strategy 1.5. For example, the effectiveness of the State's equipment serial number tracking system is suspect if serial numbers and Title 24 Energy Code compliance information is not being electronically collected. The SoCalREN strongly supports the implementation of uniform standards for the collection of this permit data. These standards should be applied to the permitting tools that local governments have already invested in and already use for their ongoing permit processes.

➤ ***Strategy 1.6 Plug-Load Efficiency***

An excellent opportunity exists for accelerating the inter-connection of appliances and equipment to maximize the benefits of smart grid, smart building, and data-driven behavior change initiatives. The SoCalREN urges the CEC to support Title 20 and Zero Net Energy (ZNE) code development to accommodate standards for broader equipment connectivity.

➤ ***Strategy 1.7 Local Government Leadership***

The SoCalREN supports the CEC's ongoing engagement with local governments and leveraging of all relevant existing initiatives in the development of Strategy 1.7. We also encourage the Action Plan to leverage the success of SoCalREN's comprehensive energy efficiency upgrade program for public agencies as a promising model for retrofitting existing buildings in other market sectors.

Goal 2 – Data Drives Informed Decisions

➤ Strategy 2.1 Modern, Accessible Data Resources

The SoCalREN strongly supports strategy 2.1 to “ensure that Californians have access to appropriate data sources to make informed decisions related to energy efficiency.” At a minimum, a critical action item would be to direct the local system operators to provide appropriate access to local substation interval data in a manner similar to the California Independent System Operator (CAISO) Market Price Map². The advanced metering infrastructure (AMI) data on load demand and system capacity at the local substation level provides the pre-then-post data for macro-level assessments of whether the locational and temporal targeting objectives of a Program Administrator’s (PA) Business Plan³ were met.

➤ Strategy 2.2 Consumer-Focused Energy Efficiency

Strategy 2.2 identifies behavior and operations as being key elements of energy efficiency programs. The SoCalREN supports this position and strongly recommends that any evaluation, measurement and verification (EM&V) protocol should evaluate actual impacts (using AMI data) as a pathway to integrating behavior and operations elements into future energy efficiency program design and implementation.

Moreover, the SoCalREN recommends emphasizing energy efficiency program designs that drive market-wide adoption of effective energy management tools, as we believe them to be key enabling technologies for successful behavior-based programs.

² <http://www.caiso.com/pages/pricemaps.aspx>

³ See the SoCalREN’s proposed Integrated Policy Framework in Section 3 of SoCalREN’s Comments on AB-758 EBEE Action Plan, page 9

Goal 3 – Building Industry Delivers Innovation and Performance

➤ Strategy 3.1 Streamlined and Profitable Industry

The SoCalREN believes the critical elements of this strategy are:

- Evaluation of the actual impact of efficiency retrofits by using existing conditions as the baseline. This evaluation approach would align with the benefits that a customer sees on their own bill as opposed to the status quo evaluation protocol that calculates only hypothetical savings utilizing the current code as the baseline.
- The use of AMI data that provides a reliable and real-time verification of actual customer and grid impacts.

Additionally, the SoCalREN believes that requiring uniform program design across the large and diverse markets in California would hinder PAs from delivering solutions tailored to the geographically unique needs of customers. We support standardization of goals, targets and expected outcomes while maintaining flexibility, autonomy and accountability for PAs and implementers to deliver customized energy solution for regional markets.

➤ Strategy 3.2 Performance-Driven Value

The SoCalREN supports performance-based program design that focuses on reducing demand and GHG emissions. We reiterate the importance of using AMI or other near-real-time data to support performance-based program designs.

➤ Strategy 3.3 High-Performance Workforce and Education

The SoCalREN encourages strategies that incorporate workforce development programs throughout the state and leverage community colleges, universities, other

educational institutions and community-based NGOs to help develop a high-performance workforce for sustainable energy initiatives.

➤ *Strategy 3.4 Zero Net Energy Retrofits*

The SoCalREN concurs with the Action Plan that deep energy efficiency retrofits of existing buildings, where the remaining energy use can be met with on-site or near-site distributed generation, need to expand exponentially. As such, energy efficiency offerings must be fully *integrated* with other demand-side management program resources (i.e., energy efficiency, demand response, distributed generation, distributed energy storage, behavior change, financing, etc.) to offer a cohesive and complete integrated demand side management (IDSM) energy solution for customers. The continued separation of energy efficiency program portfolios from other demand-side management activities results in the non-optimization of customer and grid benefits and jeopardizes the achievement of the state's ZNE goals.

Goal 4 - Californians Recognize and Benefit from the Value of Efficiency Upgrades

➤ *Strategy 4.1 Real Estate Value*

Strategies that support these objectives would include:

1. Ensuring that efficiency features are accurately captured in property valuations which will better inform real estate professionals and consumers, expand the demand for energy efficient properties and, concurrently, expand the demand for energy efficiency investments in existing properties.
2. Ensuring that potential property buyers and renters are provided with easy to understand information that allows them to accurately comprehend the full added value of efficiency features.

In the action plan, rating (sub-strategy 4.1.1.) and savings (sub-strategy 4.1.2.) are mentioned, but they are *not* explicitly linked to each other. The SoCalREN recommends that the rating system should be directly connected to the assessment of savings.

➤ ***Strategy 4.2 Marketing, Education, and Outreach***

The SoCalREN supports a marketing, education and outreach (ME&O) approach that is “*customer-centric, targeted, data-and-research-driven, disruptive, and comprehensive.*”⁴ However, the sub-strategies outlined are not sufficient to support Strategy 4.2’s broad objectives. Thus, we encourage the design of additional sub-strategies that can support strategy 4.2. Additionally, all proposed strategy objectives should be quantifiable and relevant to adopted goals and targets.

Goal 5 – Solution is Accessible and Affordable for All Californians

The Action Plan states that the average annual investment that will be needed to stay on track to meet the State’s goals is at least \$8 billion, the bulk of which will come from private capital. The Action Plan highlights the HERO Financing Program as one of the larger capital investment vehicles currently operating. The SoCalREN recommends additional market assessments be performed to determine the opportunity for expansion of other local government-sponsored PACE programs. Additionally, other project finance vehicles sponsored by local governments, Regional Energy Networks and Community Choice Aggregators (CCAs) should be evaluated for their market potential and scalability.

➤ ***Strategy 5.1 Foster Private Capital Market***

Sub-strategy 5.1.2 suggests that the investment community requires more project standardization and reliable financial and energy performance data in order to finance energy efficiency projects more readily and broadly. The SoCalREN recommends that

⁴ CA Existing Buildings Energy Efficiency Action Plan, page 80.

this standardization approach be nuanced enough to incorporate any notable regional variations in energy efficiency efforts and markets.

Sub-strategy 5.1.5 proposes trigger point financing to ensure availability of finance products that are matched to energy efficiency project trigger points. The SoCalREN concurs and recommends that the Action Plan promote the development of such a mechanism to reliably capture trigger events and accurately disseminate the data to financial markets as well as inform the marketing strategies for the various financial products.

3. Implementation Mechanics for The Action Plan

Summary of Action Plan

The Action Plan lays out an impressive 10-year roadmap for mobilizing market forces to transform California's existing building stock into high-performance buildings. The Action Plan aims to deliver substantial energy savings and GHG emission reductions that will contribute to climate change mitigation while enhancing the resiliency of the State's energy system and economy. The Action Plan would achieve the aims mentioned above by establishing an implementation framework around five key goals with associated objectives and strategies.

The SoCalREN believes the Action Plan's success in delivering these significant energy savings and making meaningful impacts on grid operations and GHG emission reductions will greatly depend on overcoming key challenges, outlined below, that have hampered the State's energy efficiency efforts from reaping their full potential.

Current System Challenges

- *Siloed energy policies* across the State’s energy agencies as well as unintegrated proceedings within agencies that have resulted in duplicative efforts, non-cohesive initiatives, and market confusion;
- *Lack of uniform and consistent metrics* to evaluate energy efficiency effectiveness across agencies and programs;
- *Inconsistent and uncoordinated goals and targeted outcomes* that prevent full consideration of energy efficiency benefits in supply-side planning and procurement;
- *Lack of clear linkages* between targeted program outcomes and the State’s goals of making energy efficiency a reliable supply-side alternative to carbon-based energy sources and avoiding expensive transmission and distribution system upgrades.
- *Over emphasis on standardizing program processes and achieving program administrative efficiency* that has eroded the focus on customer needs and on delivering more meaningful impacts to the grid; and

Integrated Policy Framework for Implementing the Action Plan

The SoCalREN envisions that a critical step toward successful implementation of the Action Plan is the establishment of an *integrated policy framework* by the appropriate State agencies (e.g., CEC, CPUC, CAISO, Air Resources Board). This integrated policy framework should include specific strategies to (1) establish a set of unified goals and outcomes that directly link to State energy policies for demand and GHG emission reductions; (2) approve capable plan administrators (PAs) who will develop effective Business Plans to achieve set goals and outcomes; (3) ensure that selected PAs deliver

the established goals and outcomes with transparent timelines and budgets; and (4) provide criteria for replacement of non-performing PAs.

Based on the lessons learned from energy efficiency programs implemented over recent decades, the SoCalREN also recommends that the appropriate State agencies jointly establish a policy framework for guiding program design and implementation. The elements for such an integrated policy framework would also aim to:

- *Assess “remaining gaps”* between the current market condition and the targeted outcome of delivering energy efficiency resources at the right place and time to mitigate locational system demand and prevent expensive new investments in generation, transmission and distribution facilities.
- *Use “remaining gaps”* information to update goals and inform PA’s ongoing adjustments to their Energy Efficient Program Business Plans.

4. Conclusion

The SoCalREN appreciates the CEC’s efforts in developing a comprehensive Action Plan that can mobilize market forces and transform California’s existing building stock. We believe the Action Plan is an effective pathway to Governor Brown’s goal of doubling the efficiency of existing buildings by 2030. We also agree with the CEC’s belief that our ultimate success in achieving this goal will rely substantially on leveraging the efforts and initiatives by key stakeholders, like the SoCalREN, that are already underway as well as fully engaging and encouraging private market actors and institutions to play an essential supporting role.

The SoCalREN supports Governor Brown’s call to action to deliver energy efficiency as a reliable and cost-effective alternative energy resource to fuel the State’s vibrant

economy and growing energy needs. We look forward to working with the CEC and other stakeholders in the effective and expeditious implementation of the Action Plan.

April 21, 2015

Respectfully submitted,
COUNTY OF LOS ANGELES AND
SOUTHERN CALIFORNIA REGIONAL
ENERGY NETWORK

A handwritten signature in black ink, appearing to read 'H. Choy', with a long, sweeping tail stroke extending to the right.

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