**DOCKETED**

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<th><strong>Docket Number:</strong></th>
<th>19-DECARB-01</th>
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<td><strong>Project Title:</strong></td>
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<td><strong>Document Title:</strong></td>
<td>Robert Raymer on behalf of the Industry Coalition Comments - Docket 19-DECARB-01 AB 3232 Workshop Comments</td>
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<td>Robert Raymer on behalf of the Industry Coalition</td>
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Docket 19-DECARB-01 AB 3232 Workshop Comments

Additional submitted attachment is included below.
Date: January 6, 2020

To: California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

From: California Building Industry Association
California Business Properties Association
Building Owners and Managers of California
International Council of Shopping Centers
Retail Industry Leaders Association
NAIOP of California, the Commercial Real Estate Development Association
California Apartment Association
California Association of Realtors
California Retailers Association
California Natural Gas Producers Association

RE: Docket Number 19-DECARB-01:
AB 3232 Commissioner Workshop on Building Decarbonization

The groups cited above, hereafter referred to as the “Industry Coalition,” respectfully submit these comments in response to the AB 3232 Commissioner Workshop on Building Decarbonization conducted on December 4, 2019.

Background:
Industry initially opposed AB 3232 (Friedman) as introduced on February 16, 2018. However, the Industry Coalition worked with the author, her staff, and interested parties and agreed to a package of amendments (5/29/18), which allowed us to support the passage of this measure.

Specific Directives in the Statute:
While much of the discussion has focused on the evaluation and assessment for the state to reduce greenhouse gas emissions, there were four specific directives in the statute which requires the CEC to consider and evaluate:

- **Cost-effectiveness:** The cost-effectiveness of strategies to reduce emissions of greenhouse gases from space heating and water heating in both new and existing residential and commercial buildings.

- **Low-Income and Multifamily Building Challenges:** The challenges associated with reducing emissions of greenhouse gases from low-income housing, multifamily housing, and high-rise buildings.

- **Energy Storage and Load-Shifting:** Load management strategies to optimize building energy use in a manner that reduces the emissions of greenhouse gases and how these may have a beneficial impact on monthly utility bills.

- **Impact on Ratepayers, Construction Costs & Grid Reliability:** And most importantly, AB 3232 requires the CEC to assess the potential impacts of emission reduction strategies on ratepayers, construction costs, and grid reliability with special focused being placed on:
  - The solar mandate for new, low-rise residential buildings that takes effect on 1/1/20
  - The increased load and impact on electrical infrastructure due to EV-Charging

The Industry Coalition recognizes the complexity of the topics cited above, and we are looking forward to working with the CEC and other interested parties to get a better understanding of the potential impacts of these fundamental policy issues.
For example:

- What will it take in terms of construction design changes (and cost) to build a zero-emission home with an adequate supply of on-site PV, energy storage, and EV charging for two vehicles compared to a typical mixed-fuel home built to the 2019 Building Energy Efficiency Standards? How will this best be accomplished in two-and three-story dwellings and multifamily construction? And will this increased cost negatively impact the ability of potential homebuyers to qualify for a home loan? If so, how do we address this problem to NOT exacerbate California’s already historic housing crisis?

- As we make the shift towards electrification and replace gas water heating and gas cooking devices with those powered by electricity, how is that “fuel switch” going to impact the typical peak-load electrical energy use? More importantly, how is this going to impact the average monthly utility bill now that California has moved to Time of Use rates?

- Is California’s existing electrical grid ready to handle this significant and ever-growing increase in electrical load? Will this increase the existing fire safety concerns?

- While load-shifting technologies will allow for EV charging during off-peak hours, this also presents increased and long-term stress on pad-mounted transformers, which were designed to have a “cooling down” period once every 24 hours. Soon, these devices will be running hot 24-hours a day. Will the standard pad-mounted transformer design need to change? Will builders need to increase the number of these devices per project?

Lastly, there is a level of urgency to assessing these issues as numerous local jurisdictions are already in the process of adopting “reach codes” which either require all-electric construction or at least push new construction in that direction, at a level greater than that mandated by California’s minimum energy efficiency code. At present, most of these issues are not being addressed by the local jurisdictions considering these types of reach codes. The sooner the CEC can assess and advise on these critical issues; the more informed these local adoption proceedings will be.

For reference, the content of AB 3232 is reprinted below:

AB 3232 (Friedman)
Section 25403 is added to the Public Resources Code, to read:

Public Resources Code §25403
(a) By January 1, 2021, the commission, in consultation with the Public Utilities Commission, the State Air Resources Board, and the Independent System Operator, shall assess the potential for the state to reduce the emissions of greenhouse gases in the state’s residential and commercial building stock by at least 40 percent below 1990 levels by January 1, 2030. The assessment shall include consideration of all of the following:
(1) An evaluation, based on the best available data and existing analyses, of the cost per metric ton of carbon dioxide equivalent of the potential reduction from residential and commercial building stock relative to other statewide greenhouse gas emissions reduction strategies.
(2) The cost-effectiveness of strategies to reduce emissions of greenhouse gases from space heating and water heating in both new and existing residential and commercial buildings.
(3) The challenges associated with reducing emissions of greenhouse gases from low-income housing, multifamily housing, and high-rise buildings.

(4) Load management strategies to optimize building energy use in a manner that reduces the emissions of greenhouse gases.

(5) The potential impacts of emission reduction strategies on ratepayers, construction costs, and grid reliability. In assessing the impact on grid reliability, the commission shall account for both of the following:

(A) The commission’s 2019 Building Energy Efficiency Standards, effective January 1, 2020, that propose to require solar energy systems on all new single-family and low-rise residential dwellings.

(B) The increased load and impact on electrical infrastructure due to transportation electrification.

(b) (1) By June 1, 2021, the commission, pursuant to Section 9795 of the Government Code, shall report to the Legislature the findings from the assessment.

(2) Pursuant to Section 10231.5 of the Government Code, this subdivision is inoperative on June 1, 2026.

(c) Beginning with the integrated energy policy report due on November 1, 2021, and in all subsequent integrated energy policy reports, the commission shall include a report on the emissions of greenhouse gases, based on existing data, associated with the supply of energy to residential and commercial buildings, by fuel type. The commission shall make this information publicly available on its Internet Web site.