

Rajinder Sahota
Deputy Executive Officer
Climate Change & Research
California Air Resources Board

RE: AB 32 Draft 2022 Scoping Plan Update to Achieve Carbon Neutrality by 2045.

Dear Ms. Sahota,

Southern California Edison (SCE) appreciates the opportunity to provide comments on the AB 32 2022 Draft Scoping Plan Update (2022 DSP). SCE commends and supports CARB's Proposed Scenario for the 2022 DSP and notes that this scenario most closely aligns with SCE's Pathway 2045, our data-driven analysis of the steps that California must take to meet the state's 2045 carbon neutrality goals. SCE believes that the Proposed Scenario is the most equitable, feasible, and affordable alternative to achieve carbon neutrality by 2045 in alignment with state climate goals, the existing statute, and Executive Orders.

As CARB staff prepares to present the 2022 DSP to the members of the CARB Board on June 23 and 24, SCE urges CARB to consider the following comments guided by Pathway 2045¹.

The Proposed Scenario

SCE strongly supports the Proposed Scenario as it provides California with a roadmap of how to decarbonize the economy and achieve carbon neutrality by 2045. Similar to Pathway 2045, CARB's Proposed Scenario leverages feasible technologies such as transportation and building electrification, clean energy, and zero/low carbon fuels. More importantly, the Proposed Scenario balances decarbonization with affordability, a key concern given that achieving carbon neutrality should not negatively impact the welfare of the Californians that have historically been harmed the most by the impacts of climate change. Taking this into consideration, CARB's analysis demonstrated that the Proposed Scenario is the most affordable, reliable, and feasible of the four scenarios.

The Proposed Scenario is also ambitious in the rate and amount of decarbonization technologies that need to be adopted. For example, by 2045, the Proposed Scenario shows that nine out of ten residential water heaters will be powered by electric heat pump technologies. Today, this technology is present in fewer than one percent of homes in California. Similarly, as noted in the 2022 DSP, decarbonizing the electricity sector remains a key pillar in California's efforts to reach carbon neutrality², which will require transformative changes including over 150GW of new, utility-scale resources³. This amount of new generation resources will also require significant transmission investment. SCE remains committed to enabling the Proposed Scenario's roadmap and looks forward to coordinating with CARB, other state agencies, CAISO, and stakeholders to enable implementation and ensure that the grid is

¹ Pathway 2045. Edison International. November 2019. <https://www.edison.com/home/our-perspective/pathway-2045.html>

² Draft 2022 Scoping Plan Update, May 2022, p. 159. <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

³ Draft 2022 Scoping Plan Update, May 2022, p. 162. <https://ww2.arb.ca.gov/our-work/programs/ab-32-climate-change-scoping-plan/2022-scoping-plan-documents>

ready to support California’s carbon neutrality goals by enabling and implementing electrification technologies while also ensuring grid reliability and resiliency. .

Transportation Sustainability

SCE agrees with the 2022 DSP statement that “[w]hile CARB’s programs, along with local action, have made substantial progress over the past few decades, it is clear that California must transition away from fossil fuels to zero-emission technologies with all possible speed”.⁴ The transportation sector remains the largest source of carbon emissions in California, responsible for 40 percent of the state’s GHG inventory. Reaching California’s ambitious climate goals will require a significant portion of vehicles to be zero-emission. Legislative and regulatory actions, including Governor Newsom’s Executive Order (E.O) N-79-20⁵ and CARB’s Advanced Clean Trucks regulation provide a critical foundation for the transition to zero-emission vehicles (ZEVs). However, these efforts alone are not enough to ensure an equitable transition and appropriate support for the nearly 8 million ZEVs and 1.2 million public and shared private light-duty EV chargers that are projected to be needed by 2030 as a result of E.O. N-79-20.⁶ Additional actions and funding are needed to transform the transportation market.

SCE supports the 2022 DSP strategy to provide complementary policies and programs in support of the transition to ZEVs. Specifically, the 2022 DSP proposes to “[c]ontinue and accelerate funding support for zero-emission vehicles and refueling infrastructure through 2030 to ensure the rapid transformation of the transportation sector.”⁷ Although utility programs, such as SCE’s Charge Ready programs⁸, can be available to assist businesses and property owners with the design and installation of EV charging stations, attaining the ZEV targets will require reliable and adequate funding from multiple sources, including the federal government, utilities, private entities, and the state.

Additionally, SCE agrees with the 2022 DSP proposal to “continue to evaluate opportunities to harmonize our climate and air quality programs through innovative policymaking, such as by working with electric utilities to opt-in and generate residential electric vehicle (EV) charging credits under the Low Carbon Fuel Standard [LCFS], where some of the revenues are invested back into rebate programs that address air quality and climate pollution.”⁹ Because LCFS credit revenues are utilized by customers to help offset costs and invested by utilities into programs to benefit current and future EV drivers, SCE believes that CARB should reassess its LCFS regulation to determine if the mechanisms in place are sufficient to establish the regulatory certainty necessary to motivate appropriate market actions. SCE also recommends that CARB assess the LCFS regulation to ensure that the funding is equitably distributed and incentivizes vehicle adoption in low-income and disadvantaged communities. Accordingly, SCE supports the 2022 DSP strategy to “initiate a public process focused on options to increase the stringency and scope of the LCFS”¹⁰ and encourages CARB to expedite these efforts.

Sustainable Manufacturing and Buildings

SCE commends CARB for the 2022 DSP adopting a zero-emission standard for new space and water heaters sold in California beginning in 2030¹¹ and setting a goal for all new appliances sold in

⁴ Draft 2022 Scoping Plan Update, May 2022, p. 147.

⁵ E.O. N-79-20 established that 100 percent of new passenger cars and trucks sales will be zero-emission by 2035. See www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-Climate.pdf

⁶ Draft 2022 Scoping Plan Update, May 2022, pp. 2-3.

⁷ Draft 2022 Scoping Plan Update, May 2022, p. 151.

⁸ See www.sce.com/chargeready

⁹ Draft 2022 Scoping Plan Update, May 2022, pp. 14-15.

¹⁰ Draft 2022 Scoping Plan Update, May 2022, pp. 150-151.

¹¹ Draft 2022 Scoping Plan Update, May 2022, p. 172

California to be zero-emission by 2035 for installation in homes, and by 2045 for installation in commercial buildings.¹² SCE supports these measures that are critical in reaching carbon neutrality by 2045. To achieve the state’s ambitious air and climate goals, building electrification must play an immediate and vital role in the state’s decarbonization.

For a zero-emission standard for building electrification starting in 2030, actions must accelerate now to ramp up technology adoption for heat pumps and other appliances. As such, **SCE strongly recommends that CARB establish quantifiable statewide targets for building electrification, electric heat pumps, and other electric end-uses in the resolution approving the final 2022 Scoping Plan Update to set the path for achieving decarbonization within this sector.** Setting a 2030 target will serve two purposes: (1) help ensure that California meets its 2030 GHG decarbonization targets, and (2) ramp up building electrification technology adoption to prepare for CARB’s proposed zero-emission standard.

SCE’s analysis indicates that the 2030 heat pump adoption gap statewide¹³ equates to 5 million heat pumps, after projecting today’s programs growing through the decade and the adoption of building codes mandating electric water and space heaters for new construction in the 2025 Title 24.¹⁴ This is aligned with CEC’s recently released Final 2021 Integrated Energy Policy Report (IEPR), which recommends a goal of installing at least 6 million electric heat pumps statewide by 2030.¹⁵

Additionally, SCE agrees with CARB that we need to ensure equity and affordability, and prioritize working with the communities most impacted to ensure the Scoping Plan addresses the needs of these communities. Air pollution more heavily impacts disadvantaged communities, and they will be most negatively impacted if they are addressed last. Furthermore, low-income families and disadvantaged communities would be impacted more by market volatility (e.g. inflation). As a result, SCE recommends CARB prioritize disadvantaged communities as the state sets policies toward a zero-emission standard.

Lastly, SCE recommends that CARB allow flexibility in its plan to accommodate regional needs (e.g., California Building Code). For example, the South Coast Air Basin is the most impacted area, and each air quality management district should be allowed to develop its own plans for decarbonizing its region while addressing local disadvantaged communities with various incentives, in collaboration with local utilities.

Conclusion

SCE thanks CARB for considering the above comments on the AB 32 Draft 2022 Scoping Plan Update. We will make sure to engage with your staff and all other stakeholders during the summer activities announced by CARB because these will be a great opportunity to share and learn from each other’s assumptions and methodologies. We therefore respectfully request that SCE be invited to participate in those activities to keep providing feedback in the process leading to the approval of the 2022 Scoping Plan Update by the CARB Board at the end of the year. Please do not hesitate to contact

¹² Draft 2022 Scoping Plan, May 2022, Appendix F Building Decarbonization, p.1

¹³ Application of Southern California Edison Company for Approval of its Building Electrification Programs, Application (A.)21-12-009. (December 20, 2021).

<https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M432/K773/432773552.PDF>

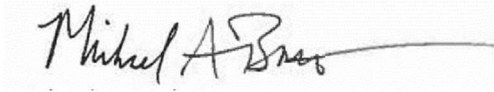
¹⁴ California Energy Commission. Building Energy Efficiency Standards - Title 24.

<https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards>

¹⁵ California Energy Commission. 2021 Integrated Energy Policy Report. <https://www.energy.ca.gov/data-reports/reports/integrated-energy-policy-report/2021-integrated-energy-policy-report>

me at (626) 302-8442 with any questions or concerns you may have. I am available to discuss these matters further at your convenience.

Sincerely,

A handwritten signature in black ink that reads "Michael A. Backstrom". The signature is written in a cursive style with a long horizontal line extending to the right.

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