

Rajinder Sahota
Division Chief
Industrial Strategies Division
California Air Resources Board

RE: Public Workshop Series to Commence Development of the 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 Public Workshop Series to Commence Development of AB 32 2022 Scoping Plan Update to Achieve Carbon Neutrality by 2045, held on June 8-10, 2021 by the California Air Resources Board (CARB), in collaboration with other State agencies.

SCE welcomes and supports the inclusion of equity and affordability as key criteria for the Scoping Plan Update. Consequently, we support prioritizing measures coming from all sectors of the economy that reduce greenhouse gas (GHG) and criteria emissions simultaneously, which in turn will have the greatest impact on improving the health and welfare of underserved communities. SCE likewise welcomes the active and present role that the Environmental Justice Advisory Committee (EJAC) will have in the 2022 Scoping Plan Update.

I. Climate Ambition, Equity and Environmental Justice and the Role of Electrification

The presentations by the state agencies and other experts in these opening workshops reflected a vision and will of the state to achieve the ambitious climate goals for 2030 and 2045 while addressing the continuing need for affordability and environmental justice in our communities. SCE supports these objectives. Critically, a significant gap has emerged between those goals and the projected amount of GHG emission reductions that would be achieved by the existing policies, especially for the more imminent 2030 climate goals established by AB 32. For example, in the California Energy Commission's 2019 'California Energy Efficiency Action Plan,' the report notes that California is not on track to meet the doubling of energy efficiency from 2015 levels by the 2030 goal set forth by SB350.ⁱ Importantly, the associated GHG savings from the energy efficiency goal would also not be reached.ⁱⁱ In addition, SCE's analysis, Pathway 2045, calls for significant building electrification by 2030 for about 30% of residential and commercial space and water heating.ⁱⁱⁱ While California has taken some initial steps to encourage building electrification, the rate of building electrification needs to increase significantly to reach California's 2030 climate goals. A more coordinated, statewide plan for achieving the decarbonization, equity, and environmental justice goals combined with meaningful enforcement mechanisms, should be the central policy to eliminate this gap. The 2022 Scoping Plan Update can play a key role in establishing that statewide plan.

Accelerating the pace of electrification of the building and transportation sectors, implementing net zero policies, and establishing ambitious intermediate goals, in addition to closing this gap, will help to bring the much-needed immediate benefit of significantly reducing the criteria pollutants that disparately impact our most vulnerable communities. Along with a just economic transition for affected

workers, rapid electrification will also make customers' overall energy bills more affordable, especially for those in the most vulnerable communities as identified by the EJAC.

II. Building Electrification

In the *CPUC Perspectives on Scoping Plan Update*^{iv} presentation during the kickoff workshop, the *Carbon Abatement Cost Curve in the High Electrification Scenario*^v identified building energy efficiency as the most cost-effective GHG emission reduction approach available across all sectors of the economy. Even though residential buildings are not the largest source of GHG emissions, eliminating combustion emissions and their associated criteria pollution within and directly adjacent to people's homes from gas stoves, water heaters, and similar equipment, will have a disproportionately greater health impact than reducing emissions from more distant sources. This will also ensure that CARB is pursuing a more cost-effective GHG emissions reduction strategy. By prioritizing residential emission sources located within underserved communities, CARB can also focus on the oldest equipment with the greatest overall emission reduction potential from within the residential category. Pursuing similar combustion-eliminating retrofits for commercial buildings located in underserved areas will also contribute to health and air quality improvements in these areas.

Other than the CPUC presentation mentioned above, Building Electrification had a very limited presence in these opening workshops and yet multiple studies, including the California Energy Commission's May 2021 Draft Building Decarbonization Assessment, confirm that buildings are a major part of California's decarbonization solution. Further, in the 2017 Scoping Plan, on page 68, CARB states, "Through a public process, evaluate and set targets for the electrification of space and water heating in residential and commercial buildings and cleaner heating fuels that will result in GHG reductions, and identify actions that can be taken to spur market transformation in the 2021-2030 period." The 2017 plan also states, "It is anticipated that there will be workshops and other stakeholder forums in the years following finalization of the Scoping Plan to explore these potential actions." SCE's understanding is that these actions have happened in other forums, where a record demonstrating the need for and appropriateness of a significant investment in building electrification has been established. However, these conclusions have not yet been incorporated in CARB's processes, and therefore more discussion about the critical role of Building Electrification should be included within the 2022 Scoping Plan Update process. SCE urges CARB to build the record needed to set both short- and long-term plans for removing the combustion of fossil fuels from buildings as a key component of the 2022 Scoping Plan Update.

To meet the more immediate 2030 climate goals, SCE recommends that CARB take bold policy action in the 2022 Scoping Plan Update, and adopt a quantitative target for electric heat pumps and a technology adoption trajectory, so that state agencies can develop clear and coordinated transition plans to shift buildings towards electric end-uses, reduce direct emissions, and put California on a cost-effective path to carbon neutrality by 2045. The California Energy Commission (CEC) recently released the Draft AB3232 Building Decarbonization Assessment,^{vi} which states that California must reduce 32.6 MMT CO₂e by 2030 to meet a 40% direct emissions reduction target^{vii} and that accelerating efficient electrification of building end-uses in both new and existing buildings represents the most predictable pathway to achieve deep reductions in building emissions.^{viii} SCE urges CARB to utilize the analysis in the AB3232 Assessment, along with stakeholder input, to adopt a quantitative target for electric heat pump targets. SCE looks forward to working with CARB and stakeholders in the 2022 Scoping Plan Update process to provide additional information and analysis as needed to support the development of such a target.

As explained above, this policy has direct impacts on GHG emissions as well as local air pollution that impacts all our communities, especially low-income and communities of color. We suggest that in addition to setting specific quantitative goals for building electrification, the State also explores setting more aggressive standards for appliances and evaluates a path for transitioning away from the sale of combustion appliances for use indoors, particularly heating appliances. The state should develop and fund the full portfolio of actions necessary to meet quantitative building electrification targets, including additional incentives for electric appliances. Aggressive decarbonization actions like these are required now to meet the 2030 and 2045 state's climate goals.

III. Transportation Electrification

SCE also supports prioritizing transportation sources that are responsible for the greatest source of criteria pollutant emissions within underserved communities, such as medium- and heavy-duty diesel vehicles, as well as light-duty diesel and gasoline vehicles. The 2022 Scoping Plan Update should prioritize the electrification of diesel vehicles that operate within or adjacent to underserved communities to achieve significant ambient air quality improvements in those areas concurrent with the associated decrease in GHG emissions.

Additional public funding for programs such as electric panel upgrades, electric vehicle (EV) charger installations, used EV purchase incentives, battery assurance programs, and low-cost EV vehicle loans focused on underserved community residents are needed to assist these customers in transitioning to electric vehicles in an expedited fashion.

IV. Conclusion

SCE thanks CARB for consideration of the above comments on the opening workshops and we look forward to working with CARB and stakeholders toward the development of the 2022 Scoping Plan Update. Please do not hesitate to contact 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,



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ⁱ '2019 California Energy Efficiency Action Plan,' California Energy Commission, December 2019, p. 3.

ⁱⁱ Ibid. p. 4-5.

ⁱⁱⁱ 'Pathway 2045,' Southern California Edison, November 2019, p. 11. <https://www.edison.com/home/our-perspective/pathway-2045.html>

^{iv} CPUC Perspectives on Scoping Plan Update. Simon Baker, Director of Cost, Rates & Planning. Energy Division. California Public Utilities Commission. June 8, 2021. https://ww2.arb.ca.gov/sites/default/files/2021-06/cpuc_sp_kickoff_june2021.pdf

^v Slide 11

^{vi} CEC Draft Building Decarbonization Assessment Report, May 2021, available here:
<https://efiling.energy.ca.gov/getdocument.aspx?tn=237733>

^{vii} CEC Draft Building Decarbonization Assessment Report, p. 8

^{viii} CEC Draft Building Decarbonization Assessment Report, p. 16