

Hon. Steven S. Cliff, Ph.D.
Executive Officer
California Air Resources Board
1001 "I" Street
Sacramento, California 95814

RE: Recirculated Draft Environmental Analysis for the Draft 2022 Scoping Plan Update.

Dear Dr. Cliff,

Southern California Edison (SCE) appreciates the opportunity to comment on the California Air Resources Board (CARB) Recirculated Draft Environmental Analysis (Recirculated EA) for the Draft 2022 Scoping Plan Update.

Renewable Generation and Grid Reliability

SCE supports CARB's inclusion of offshore wind in the Recirculated EA. Offshore wind represents a potential option to provide clean energy to help meet California's carbon neutrality goal and decarbonization efforts. SCE notes that offshore wind was selected as a potential resource to decarbonize the electric sector in the CPUC's Integrated Resource Plan.¹ In addition, with the recent announcements from the Department of Energy² and the Biden administration³ of establishing a goal to advance federal leasing for 15 GW of floating offshore wind and achieving a \$45/MWh levelized cost by 2035, floating offshore wind is likely to become part of California's clean energy resources in the future. Thus, including offshore wind in the Recirculated EA to inform the 2022 Scoping Plan Update is appropriate and needed.

SCE applauds CARB's continued commitment to decarbonizing the electric sector. California will continue to "transition away from fossil fuel-based electricity generation,"⁴ embracing clean and renewable sources. However, SCE does note that some fossil generation may still be necessary for California's electric sector to maintain grid reliability, as noted in SCE's Pathway 2045⁵. Similarly, SDG&E's Path to Net Zero indicated the need for both fossil-based and clean, dispatchable resources to

¹ California Public Utilities Commission. Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes. Rulemaking 20-05-003. On page 87 of Decision 22-02-004 of February 15, 2022, about 1,700 MW of offshore wind was selected by 2032.

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M451/K412/451412947.PDF>.

² U.S. Department of Energy. Energy Earthshots. Floating Offshore Wind Shot™: Unlocking the Power of Floating Offshore Wind Energy. DOE/EE-2634. September 2022. <https://www.energy.gov/sites/default/files/2022-09/floating-offshore-wind-shot-fact-sheet.pdf>.

³ Fact Sheet: Biden-Harris Administration Announces New Actions to Expand U.S. Offshore Wind Energy. New Floating Offshore Wind Shot to Lower Costs by 70 Percent. September 15, 2022.

<https://www.whitehouse.gov/briefing-room/statements-releases/2022/09/15/fact-sheet-biden-harris-administration-announces-new-actions-to-expand-u-s-offshore-wind-energy>.

⁴ California Air Resources Board. Recirculated Draft Environmental Analysis for the Draft 2022 Scoping Plan for Achieving Carbon Neutrality. September 9, 2022 (Recirculated EA), p. 11.

⁵ Pathway 2045. Edison International. November 2019. <https://www.edison.com/home/our-perspective/pathway-2045.html>.

maintain grid reliability. Ultimately, California’s electric sector will be significantly cleaner than today due to the push toward decarbonization.

Additionally, SCE recommends CARB coordinate with the California Independent System Operator (CAISO), California Energy Commission (CEC), and the California Public Utilities Commission (CPUC) to develop and model scenarios to meet the goals that will be established by the 2022 Final Scoping Plan.

CARB should continue engaging with the state agencies responsible for planning the energy system and leverage interagency activities such as the Joint Agency Steering Committee to lead and coordinate the modeling that can be used in respective system planning processes. For example, this past year’s Inter-Agency Working Group effort to develop long-term high electrification and decarbonization scenarios could serve as a template for future decarbonization planning.

For the assessment of energy system planning needs to be brought more in alignment with long-term decarbonization goals, the Inter-Agency Working Group developed a set of scenarios that reflect those needs for the state’s resource, transmission, and distribution planning processes. While those scenarios were an improvement and more accurately reflected longer-term decarbonization goals than previous assessments, the most aggressive of scenarios, while meeting 2030 targets, did not achieve carbon neutrality by 2045. Therefore, SCE recommends the Inter-Agency working group develop a new ‘Carbon Neutrality by 2045 Scenario’ to help the state understand and assess system and reliability needs to meet state goals.

CARB can incorporate the lessons learned in this latest demand scenario development to ensure that the appropriate agencies and processes are well coordinated and aligned to assess the system needs for maintaining reliability in a decarbonized future.

Building Electrification

SCE supports the added project objective in the Recirculated EA to include “3 million climate-ready and climate-friendly homes by 2030 and 7 million homes by 2035, supplemented through the deployment of 6 million heat pumps statewide by 2030. The terms Climate-ready and climate-friendly are applied as electric-ready and all-electric for the purposes of the Scoping Plan.”⁶ This fulfills Governor Newsom’s request to Chair Randolph, as the Governor recognized that “buildings are a large source of carbon pollution, and decarbonization of California’s buildings must be accelerated to achieve our climate targets. This will also help us reduce harmful air pollution both inside and outside of people’s homes. Transforming the market for climate solutions in buildings will lower costs for consumers in California and across the nation while spurring increased domestic manufacturing and installation jobs.”⁷

SCE also supports the Recirculated EA recognizing the importance of expansion of electrical infrastructure actions. In addition to emphasizing the need for additional transmission and distribution infrastructure, the Recirculated EA also underscored that “additional compliance responses associated with retrofits would include upgrading or replacing electric panels to accommodate the increased load, as well as circuitry for appliance fuel switching.”⁸ SCE submitted a Building Electrification Application

⁶ Recirculated EA, p. 15. <https://ww2.arb.ca.gov/sites/default/files/2022-09/2022-draft-sp-appendix-b-draft-ea-recirc.pdf>.

⁷ Office of the Governor of California, Gavin Newsom, letter re: California Climate Crisis, dated July 22, 2022, p.2. <https://www.gov.ca.gov/wp-content/uploads/2022/07/07.22.2022-Governors-Letter-to-CARB.pdf?emrc=1054d6>

⁸ Recirculated EA, p. 23.

request to the CPUC in December 2021 to install 250,000 heat pumps and provide 65,000 households with electrical upgrades (e.g., panels, circuits, and wiring).⁹ Panel upgrades will future-proof the home to prepare for whole-house electrification, including electric vehicle charging, solar panels, battery storage, induction cooking, and electric dryers. Mobilizing customers to electrify buildings is time-consuming, costly, and complex. Therefore, future-proofing homes before the customer needs to replace a gas appliance quickly and affordably will address a key adoption market barrier for many clean electric technologies.

Carbon Removal

SCE supports CARB's inclusion of Governor Newsom's carbon dioxide removal goals and alignment with Senate Bill 905 within the Recirculated EA of CARB's Draft 2022 Scoping Plan Update. As noted in CARB's modeling, carbon neutrality cannot be accomplished without carbon dioxide removal from natural working lands or engineered solutions. Thus, California must begin to plan for and develop paths to increase carbon dioxide removal since such efforts will take time to implement.

Conclusion

SCE thanks CARB for considering the above comments on the Recirculated Draft Environmental Analysis for the Draft 2022 Scoping Plan Update. We also would like to thank CARB Staff for their hard work and the CARB Board's leadership and guidance during the 2022 Scoping Plan Update process. Finally, SCE reiterates its commitment to collaborate in all future processes to help achieve the state's carbon neutrality goal by 2045 or sooner.

Please do not hesitate to contact me at (626) 302-3297 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, appearing to read 'Erica Bowman', with a long horizontal flourish extending to the right.

Erica Bowman
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⁹ California Public Utilities Commission. Application of Southern California Edison Company (U 338-E) for Approval of its Building Electrification Programs. Application 21-12-009. December 20, 2021. <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M432/K773/432773552.PDF>.