

***LAW OFFICES OF SUSIE BERLIN***

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*Submitted electronically*

April 4, 2022

Ms. Rajinder Sahota  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95812

Re: ***Northern California Power Agency Comments on 2022 Scoping Plan Update;  
Initial Modeling Results Workshop***

Dear Ms. Sahota:

The Northern California Power Agency<sup>1</sup> (NCPA) appreciates the opportunity to provide these comments to the California Air Resources Board (CARB) on the preliminary modeling results for the 2022 Scoping Plan Update (SPU) presented at the March 15, 2022 workshop.

NCPA and its member agencies are committed to doing their part to help California reach its climate, social justice, and clean energy goals, all while ensuring that their residents and businesses have safe, reliable, and affordable electricity. The SPU plays an important role in the state's strategy to meet these goals, as it will lay the foundation for cost-effective and technologically feasible programs and measures necessary to reach carbon neutrality. As part of that strategy, the electricity sector is an essential element; the programs, measures, and policies set forth in the SPU must make certain that social and environmental equity is paramount, and also recognize that electricity reliability is absolutely necessary, and electricity ratepayers must be able to afford this essential service. NCPA is pleased to share these comments with CARB for the purpose informing this iterative process and helping to ensure that CARB's assessment appropriately evaluates all relevant factors. As the modeling results

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<sup>1</sup> NCPA is a nonprofit California joint powers agency established in 1968 to construct and operate renewable and low-emitting generating facilities and assist in meeting the wholesale energy needs of its 16 members: the Cities of Alameda, Biggs, Gridley, Healdsburg, Lodi, Lompoc, Palo Alto, Redding, Roseville, Santa Clara, Shasta Lake, and Ukiah, Plumas-Sierra Rural Electric Cooperative, Port of Oakland, San Francisco Bay Area Rapid Transit (BART), and Truckee Donner Public Utility District—collectively serving nearly 700,000 electric consumers in Central and Northern California.

are preliminary, further analysis of the cost effectiveness, feasibility, and air quality and public health impacts, is needed to fully evaluate each of the 4 alternatives presented thus far.<sup>2</sup>

**The Initial Modeling Results Are Only the First Step in Assessing Alternatives.**

*Until all of the economic and health-impact modeling results are incorporated into these initial results, feedback and assessments will be necessarily limited.*

The presentations from CARB and E3 on the initial modeling results provided much needed insights into the kinds of actions that California will need to take. It is important, however, to remain cognizant of the fact that the information presented reflects only the *initial* modeling results, which is but one step in the process of assessing viable alternatives. As NCPA has noted in previous comments, the provision of 24/7 electricity at affordable prices is not just a luxury, but a basic human necessity. It is imperative that the impacts on electricity ratepayers be accounted for in all of the alternatives and recommendations set forth in the final SPU. Importantly, the initial modeling results do not reflect any of the costs implications for the referenced technologies, nor do they address how those costs will impact electricity rates. Until that information is available, CARB and stakeholders will be unable to make an informed assessment of the technologies identified in the initial modeling results. Since these results reflect just one element of the total analysis, they cannot be relied upon solely to make decisions about optimal alternatives or specific programs, measures, or technologies.

**Each of the Alternatives Must Reflect the Ability to Ensure Electricity Reliability.**

*Any recommendations reflected in the final SPU must not only discuss impacts on electricity reliability, but must also address how any such adverse impacts would be mitigated in their entirety should the option be pursued.*

The electricity sector analysis does not adequately address reliability of the electric grid, or the implications associated with zero combustion alternatives. Alternatives 1 and 2 appear more likely to result in disruption of electricity supply, especially given their accelerated timelines and exclusion of available technologies. As the August 2020 weather event demonstrated, the state is reliant upon a safe and steady supply of electricity; this electricity is needed not only to drive our economy and keep businesses open, but for health and safety, as well as education. Of particular concern is the reliance in Alternative 1 on “no combustion” sources, and a 0 MMT electricity sector GHG target. The E3 presentation notes that electric loads are expected to increase by 30-80% relative to today by 2035, and 60-90% by 2045. Added to this, the loads associated with direct air capture and hydrogen production, which can be extensive and would ostensibly be a part of all 4 alternatives, are not even reflected in the analysis as they are assumed to be provided by off-grid renewables. It does not appear, however, that the development of these resources or their associated infrastructure are included in the direct

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<sup>2</sup> NCPA is a joint sponsor of the Joint Utility Group (JUG) comments on the Initial Modeling Results Workshop, and supports the positions and concerns set forth therein.

assessment for the sector. The timelines for development of renewable resources, as well as the infrastructure necessary to bring the energy to the source, must be factored into the overall assessment in order to determine the full scope of the impacts of the alternatives on electricity reliability. Further, the costs of the resources and associated infrastructure must also be reflected in the final analysis, as those costs are likely to be borne by electricity ratepayers, and therefore will have a direct impact on electricity rates.

During the Scoping Plan Update Electricity Sector Workshop, the magnitude of the challenges and opportunities facing the electricity sector, including electricity ratepayers, were discussed. In particular, the Electricity Sector Workshop highlighted the critical role electric utilities will play in the state's transition to carbon neutrality, and the importance of ensuring that electricity is reliable and affordable for all Californians. None of this seem to be reflected in the initial modeling results. The initial modeling results do not appear to address how each of the alternatives will impact the electric grid, or ensure electricity reliability during all hours of the day. During the SPU Electricity Sector Workshop, stakeholders emphasized the fact that an assessment of the benefits and impacts on electricity reliability is necessary, and pointed to the CARB's own role in the Joint Agencies SB 100 Report analysis that called out the need for a reliability assessment.

### **The Scoping Plan Update Should Not Prejudge Technologies or Resources.**

*The impacts on health and air quality, as well as electricity costs and affordability, underscores the need for the SPU recommendations to be as technology-neutral as possible, keeping the door open for refined, emerging, or completely new alternatives to play a part.*

In each of the four alternatives, the initial modeling shows heavy reliance on certain technologies to meet the carbon neutrality goals. For example, carbon dioxide removal (CDR) is a critical part of all 4 alternatives. Not only has the environmental justice community expressed opposition to many forms of CDR, but the initial modeling results provide no information upon which to base the readiness of various technologies to meet the stated objectives. NCPA agrees with CARB Executive Officer Richard Corey's statement during the March 24, 2022 Board meeting that we "cannot afford to let the perfect be the enemy of the good," and that it is necessary to keep all technologies on the table. However, further assessment of the viability of carbon capture and other carbon removal technologies is necessary given the prominent reliance on these resources in each of the 4 alternatives presented. Misplaced or over-reliance on a specific technology will do more to hinder the decarbonization transition than advance it, and would likely result in even more costs.

Additionally, clean hydrogen can play an important role in electricity generation, while utilizing existing infrastructure to do so. The benefits include both grid-reliability and cost-reductions. The analysis correctly shows that hydrogen will play a role moving forward, but

emphasis on industry-only applications appears to be misplaced. More information is needed on how and why these limitations were imposed in the initial modeling results.

The timelines associated with developing particular technologies, such as CDR and even hydrogen productions, are also missing from the assessment. The siting, permitting, and new construction of resources and their associated infrastructure are essential elements of determining the viability of the resources themselves, and must be considered. So too, should the SPU take into account the supply chain and product deliverability challenges currently facing the market, which are not expected to abate anytime in the near future.

NCPA urges CARB to remain open to different technologies and alternatives for clean energy, which will be necessary to ensure that carbon neutrality is not reached at the cost of electricity reliability, or by pricing the cost of electricity beyond most Californians. Given the magnitude of the task before us, it is imperative that the state not overly rely on a single alternative, and preclude the use of others without fully assessing all of the implications of doing so.

### **The Selected Alternatives and Proposed Timeline Must be Feasible.**

*Given the uncertainties and known challenges the state will face, the SPU focus should be on ensuring that the path forward represents a feasible trajectory to carbon neutrality, with a focus on emissions reductions in the most-impacted communities.*

The initial modeling results provide four alternatives for reaching carbon neutrality, with Alternatives 1 and 2 accelerating reaching the state's carbon neutrality target to 2035. These alternatives, and in particular Alternative 1, do not reflect a feasible pathway to success without severely compromising electricity reliability and adding significant cost burdens. Zero-combustion mandates would require an unprecedented buildout of renewable resources, massive transformation of the transportation sector, substantial changes to the industrial sector, and significant reliance on economy-wide electrification. All of these will require new investments and new technologies, much of which will have to be funded by electricity ratepayers, placing additional stress on already escalating electric bill. Added to this, precluding any combustion alternatives, as outlined in Alternative 1, also comes with the challenges associated with forcing consumers and businesses to change out vehicles and appliances before their end of useful life. Requiring the early retirement and replacement of appliances and vehicles would be especially burdensome for low-income residents, and would have significant cost ramifications for communities and residents alike. There are also likely to place even greater strains on already taxed manufacturing and supply chains.

Further, as noted herein, the timelines for developing and building the necessary technologies are also a constraining factor. NCPA and its member agencies are supportive of implementing cost-effective and technologically feasible options to reach carbon neutrality. However, NCPA strongly cautions against rushing to implement overly aggressive targets without full analysis of the technological feasibility and economic viability of doing so. As Board Member Sperling

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stated during the March 24, 2022 Board meeting, it is going to be hugely difficult, disruptive, and expensive to reach the state's carbon neutrality goals by 2035.

**Natural and Working Lands Modeling Must be Included in the Overall Assessment.**

*NCPA urges CARB to ensure that measures and programs that provide the greatest total benefits to areas most impacted by wildfires are highlighted in the SPU.*

NCPA appreciates that the modeling efforts for the natural and working lands are more extensive and more comprehensive than ever before. In order to meaningfully inform the SPU, that information must now be incorporated into the overall assessment. The impact of wildfires on the NWL and statewide emissions must be addressed in the context of the SPU recommendations, taking into account their immediate impact on health, as well as implications on the provision of electricity. The state cannot meet its carbon neutrality goals as long as there continue to be uncontrolled wildfires. Neither can the state meet its air quality goals while wildfires go unchecked. The NWL scenarios should focus on alternatives and policies that will reduce the adverse impacts from wildfires across the state.

NCPA appreciates the herculean effort that has gone into the developing of the SPU to date, and the extent of the additional work that will be needed to incorporate the results of the cost and health impact modeling into the scenarios, as well as the development of options that will address all these key factors while ensuring that electric grid reliability is not compromised, and that all California's electricity ratepayers can afford their bills. Please do not hesitate to contact the undersigned or Scott Tomashefsky at 916-781-4291 or [scott.tomashefsky@ncpa.com](mailto:scott.tomashefsky@ncpa.com) if you have any questions regarding these comments.

Sincerely,



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**Attorneys for the Northern California Power Agency**