



September 3, 2021

Submitted Electronically

Liane Randolph, Chair
California Air Resources Board
1001 I Street
Sacramento, CA 95814

**Re: Golden State Power Cooperative Comments on 2022 Scoping Plan Update;
Scenarios Concepts Workshop**

Dear Chair Randolph:

On August 17, 2021, the California Air Resources Board (CARB) held a Scoping Plan Workshop on scenario concepts for the 2022 Scoping Plan Update (August 17 Workshop). The Golden State Power Cooperative (GSPC) appreciates the opportunity to provide comments on the August 17 Workshop and the Staff Presentation.

GSPC is the statewide trade association representing California's three Electrical Cooperatives, as well as one rural public utility district: Anza Electric Cooperative, Plumas-Sierra Rural Electric Cooperative (PSREC), Surprise Valley Electric (collectively, "Cooperatives"), and Trinity PUD. Collectively, California's Cooperatives serve approximately 300 gigawatt-hours (GWh) of electricity in California, accounting for approximately 0.1% of the state's total electricity sales.

California's electric cooperatives are governed by Public Utilities Code section 2776. The Cooperatives provide electric service to their member-customers living in rural communities that were previously unserved or under-served by for-profit investor-owned utilities. By law, the Cooperatives are not-for-profit and organized for the distinct purpose of transmitting or distributing electricity exclusively to their members at cost.¹ This means that any costs the Cooperatives incur to maintain or expand their electrical infrastructure, as well as comply with regulatory mandates, is borne 100% by the member-customers served by the utility. The primary objective of each of GSPC members is to provide safe, reliable, and affordable electricity that is accessible to all of their members, which results from decision-making at the local level, made with long-term sustainability and rate stability in mind.

¹ PUC section 2776.

The electric cooperatives play a unique and integral role in California's electricity landscape; they are independent electric utilities, owned by the members they serve, and are closely regulated by their member/owners. GSPC members serve the most rural parts of California and maintain nearly 5,000 miles of powerlines, which serve an average of less than five consumers per mile of infrastructure. Many of the communities served by electric cooperatives are economically disadvantaged. For example, within Anza Electric Cooperative's service territory, 17% of the population lives at the poverty level.² Anza provides service to roughly 5,000 member-consumers in California, and has an average of 6 meters per mile of energized powerlines in Anza's service territory. Similarly, Surprise Valley Electrification Corp. has approximately 4,300 member-consumers in California, with just 2 members per mile on their distribution system. Unlike Anza, whose members are primarily residential (93% of the load), nearly half of Surprise Valley's load is for irrigation, with only a third residential. Surprise Valley's service territory has a declining population with 20.5% of the population living at the poverty level.³ PSREC serves approximately 6 member-consumers per mile of powerline. Their load is a mix of irrigation, residential, and government facilities with an average poverty level of 13.2%.⁴

The Cooperatives, by their very nature, are located in some of the most rural areas of the state. One of the biggest challenges that the Cooperatives face is reducing risks to the electric transmission and distribution system that spans thousands of miles, and which can be disrupted by natural disasters, extreme high-elevation weather, and wildfires. Wildfires have extensive impacts on the rural areas served by GSPC's members. As of September 1st, a substantial portion of the PSREC service territory in northern California has been devastated by the Dixie Fire and Beckwourth Complex Fires, including damage to electricity infrastructure. Wildfires have directly impacted the ability of PSREC to provide electricity in its service territory, cutting the utility off from the bulk of the transmission system. Compounding this tragedy is the fact that the fire is still burning, and continues to ravage the area and subject communities to more than two months of hazardous air quality.

For these reasons, GSPC's comments focus on two key areas discussed in the August 17 Workshop: concept options for carbon-free electricity grid, and concept options for woody biomass and solid waste biomass. **GSPC recommends the following scenarios:**

² <https://www.census.gov/quickfacts/fact/table>

³ *Id.*

⁴ *Id.*

- Carbon-Free Electricity Grid: The Cooperatives believe the most feasible option is *Option D*: carbon neutrality by 2045 with SB 100 Core Scenario, using all available technologies.⁵
- Woody Biomass and Solid Waste Biomass: The Cooperatives believe the most viable and beneficial option is *Option C*: carbon neutrality by 2045, and include biomass derived fuels from forest, agriculture, and municipal solid waste streams.

THE SCENARIOS USED TO INFORM THE 2022 SCOPING PLAN UPDATE SHOULD REFLECT A REALISTIC TRAJECTORY TO DECARBONIZATION BY 2045

The Cooperatives are similarly situated to publicly owned utilities, and GSPC endorses the comments submitted by the Joint Publicly Owned Utilities (Joint POUs). Like the Joint POUs, **the Cooperatives urge CARB to develop scenarios that focus on viable and feasible pathways to achieving carbon neutrality by 2045.** A failed path to an accelerated decarbonization timeline would not only increase the total costs to be borne by Californians, but would also have adverse consequences on the entire state, and on California's role as a leader in addressing the impacts of climate change. Many scenario concepts used to inform the August 17 Workshop discussion were informed by the *2021 SB 100 Joint Agency Report*.⁶ While that report provides an informative discussion of potential options for reaching the state's objectives, it is imperative that the 2021 SB 100 Report be viewed in context, that is, part of an ongoing effort; "The analysis in the 2021 Senate Bill 100 Joint Agency Report (2021 Report) is intended to be a **first step in an iterative and ongoing effort** to assess barriers and opportunities to implementing the 100 percent clean electricity policy."⁷ As CARB staff mentioned during the August 17 Workshop, the modeling and assessments that were done for the report must be updated, and the report itself acknowledges that "[a]dditional modeling is needed to evaluate whether the projected portfolios meet system reliability requirements," and a reliability assessment "will provide the joint agencies a more substantiated assessment of pathways to achieve SB 100 while maintaining reliability."⁸

⁵ Assuming that "all available technologies" includes zero-carbon firm resources as modeled in the SB 100 study scenarios.

⁶ California Energy Commission, California Public Utilities Commission, and California Air Resources Board 2021 SB 100 Joint Agency Report – Achieving 100 Percent Clean Electricity in California: An Initial Assessment; https://www.energy.ca.gov/sb100#anchor_report (2021 SB 100 Report).

⁷ 2021 SB 100 Report, p. 1, emphasis added.

⁸ 2021 SB 100 Report, pp. 133, 106.

SCENARIOS MODELED MUST REFLECT THREE KEY ELEMENTS

The scenarios CARB uses for the modeling that will inform the 2022 Scoping Plan Update must reflect three key elements:

- reliability of the electric grid;
- impacts on the accessibility and affordability of electricity;
- consequences of wildfires and impacts of increased wildfire mitigation costs.

The Scoping Plan Update Must be Informed by Scenarios that Address Reliability of the Electricity Grid

The scenarios used to inform the Scoping Plan Update must reflect the latest information and modeling, including the impacts and effects of the various scenario assumptions on the reliability of the electric grid. For rural communities, like those that the Cooperatives serve, it is imperative that reliability not be compromised in a rush to decarbonization when the ultimate goal can be reached by a measured approach to 2045. Reliability of rural electric distribution and transmission infrastructure is not only vital to ensuring typical electrical loads, but for the vast majority of the rural Cooperatives consumers, electricity is also necessary to pump water from wells.

The Cooperatives have long partnered with the state in advancing the clean energy goals, and will continue to do so, as they are committed to helping California achieve its climate objectives. However, in achieving these objectives, the state must be mindful of the very real and practical constraints on electricity production that impact reliability. For example, unpredictable rainfall and drought severely reduce the amount of electricity that can come from hydropower generation. In instances when that occurs – as it is now with a severe drought plaguing the majority of the western United States – 100% of the replacement power may not always be available from zero-carbon resource. These extreme conditions – which are occurring more frequently now than in the past – must be fully assessed and incorporated into the scenarios used for the Scoping Plan Update modeling. Given these many variables that influence the reliability of the electric grid, the Cooperatives strongly urge CARB to keep in mind that achieving the state’s climate goals cannot be done at the expense of ensuring that the electricity grid – which will be relied upon to an even greater degree as we decarbonize – remains able to *reliably* deliver electricity to homes and businesses. In doing so we must also ensure that our most vulnerable residents – whether they are located in officially designated disadvantaged communities or not – are not harmed by the transition and that electricity remains accessible and affordable for all Californians.

Scenarios Used to Inform the Scoping Plan Update Must Assess the Impacts of Affordability of Electricity Rates

The Cooperatives know that cost is not the sole factor in determining which scenarios are appropriate, but neither should the total costs – which go directly to electricity affordability – be ignored. This is especially relevant today, when electricity customers and their utilities are dealing with the financial ramifications of the pandemic, as well as the substantial costs associated with mitigating wildfire risks around utility infrastructure. And for many rural parts of the state, the adverse impacts of both the pandemic and wildfires have exacerbated economic hardships. Accelerating the state’s decarbonization target will be more costly than setting a trajectory that meets the SB 100 goal, and thus, will directly impact the affordability of electricity.⁹ For the Cooperatives, as small utilities in economically disadvantaged communities, there is not a large enough pool of consumers to socialize the burden of significantly higher electricity costs. Electric cooperatives have always been in the quality-of-life business and are founded on the concept that electricity should not be a luxury. Ensuring that electricity is accessible and affordable for all Californians must remain a paramount factor throughout the state’s transition to net-zero emissions.

Impacts from Wildfires and Wildfire Mitigation Costs Must be Addressed in Scenario Development

When looking at the totality of the electricity sector and the feasible modeling scenarios to reach the state’s 2045 decarbonization goals, CARB must also look at the impacts from wildfires. Those impacts are not limited solely to the devastating results on the land itself, the loss of forested areas as a carbon sink, and the extraordinary amount of PM2.5 emissions and black carbon that comes from these fires. The adverse impacts also directly impact the electricity sector in the form of compromised or damaged infrastructure; in particular, transmission lines. Due to the vulnerability of certain transmission infrastructure, particularly across overgrown public land, wildfire exacerbates the risk to reliability. As such, CARB’s scenarios and modeling to inform the Scoping Plan Update need to take into account this risk to electricity reliability that comes from compromised infrastructure due to wildfire.

⁹ “Accelerating the SB 100 timeline to achieve the 2045 target by 2030, 2035, or 2040 results in increased total resource costs and required additional capacity in the target year. All scenarios resulted in similar annual resource costs and resource portfolios by 2045.” 2021 SB 100 Report, p. 17

WOODY BIOMASS SERVES AN IMPORTANT ROLE IN CALIFORNIA'S DECARBONIZATION STRATEGY

The Cooperatives believe that controlled combustion of biomass for the production of energy must be part of the holistic plan to address climate change and wildfire risks. Of the three scenarios presented by CARB staff during the August 17 Workshop on this topic, the Cooperatives believe that modeling should be developed around Staff's proposed "Option C," **which would achieve carbon neutrality by 2045, and include biomass derived fuels from forest, agriculture, and municipal solid waste streams.** The Staff Presentation asks: *"Should biomass should play a role in producing energy?"*¹⁰ The answer is an emphatic "yes." The use of woody biomass for generation of energy serves multiple purposes and can help the state meet a myriad of climate, sustainability, and safety objectives. While this involves the combustion of woody biomass, that alone does not obviate the need for the state to utilize woody biomass in this way. It is important to acknowledge that while combustion of woody biomass is not zero emissions energy, it must be viewed holistically to reflect the overall reduction in emissions from catastrophic wildfires. Utilizing woody biomass to prevent wildfires not only reduces a source of wildfire emissions, but also creates more resilient forests that are essential sinks for emissions.

As California faces escalating wildfire risks that have been compounded by years of drought and forest overgrowth, removing dead, dying, and dangerously-located trees can help mitigate the risk of wildfires around utility infrastructure. However, without removing the felled growth, there is no wildfire mitigation. This mitigation is important to both alleviate the potential for utility equipment-ignited wildfires, but also to protect the infrastructure in the event of an ignition caused by an external source, even lightening. The state's electric transmission system is essential to bringing renewable generation from outside the area to the urban centers and rural communities; that infrastructure, however, is vulnerable during wildfires. Clearing out the excessive forest fuel, and using that woody biomass to generate electricity, reduces the risk of wildfires and helps to protect the essential transmission lines. The combustion of the woody materials that result from these necessary forest preservation practices ensures that the combustion is controlled – i.e., not the result of a catastrophic wildfire, thus reducing the black carbon and emissions that would result from uncontrolled burns.

Combustion of woody biomass for energy production also reduces the need to bring natural gas or other fuel sources into the area where the fuels are consumed. The combustion of biomass for energy occurs predominately in close proximity to the origin. Since both the source and the produced energy are local, the local community

¹⁰ Staff Presentation, p. 25.

also benefits from added reliability and economic development, providing a just transition for rural communities that are bearing the brunt of both climate impacts and economic hardships. Furthermore, the need for this local resource to help ensure electricity reliability is especially critical in periods when generation of electricity from clean, hydroelectric resources has been reduced due to drought. The controlled combustion of woody biomass close to the source of origin is far preferable to the utilization of emergency generation from other sources to address extreme weather events and energy shortfalls resulting from the west-wide drought.

While wildfire mitigation through vegetation and forest management can be achieved with prescribed burns, the resulting emissions and black carbon have the same adverse impact as wildfires. The controlled combustion of woody biomass to produce energy is preferable, as it results in fewer overall emissions, with the added benefit of providing a local energy source. It is essential that we recognize the important role of woody biomass electricity to help us meet our forest health, community safety, rural economy, local air quality, and climate resilience goals.

CONCLUSION

As CARB finalizes the scope of scenarios that will be modeled to inform the final 2022 Scoping Plan Update, it is imperative that those scenarios reflect consideration of:

- reliability of the electric grid
- impacts on the accessibility and affordability of electricity
- consequences of wildfires and impacts of increased wildfire mitigation costs

Furthermore, in developing the scenarios that inform the Scoping Plan Update, GSPC urges CARB to ensure the following:

- that a feasibility analysis, including a robust electric system reliability assessment and an electricity affordability analysis, including the impacts of wildfires on the sector, is included in each of the carbon neutrality scenario CARB considers;
- that the role of the electricity sector – as a provider of electricity and partner in advancing the decarbonization of other sectors – be viewed holistically;
- that CARB work with the CEC and CPUC, in coordination with the California balancing authorities, and utilities, to assess the feasibility of all scenarios considered for the Scoping Plan, including modeling impacts due to electrification, assessing electric system reliability and resiliency, and estimating affordability impacts;
- an opportunity for stakeholder review and feedback of all proposed scenarios, and results being considered to inform the Scoping Plan prior to developing the draft Scoping Plan presented to the Board;

- that a diverse portfolio of renewable and low-carbon resources be considered, including the use of woody biomass as a combustible fuel source.

The preliminary scenario concepts presented at the August 17 Workshop provided a sound starting point for more pointed discussions, and the Golden State Power Cooperative appreciates the opportunity to work with CARB staff and other stakeholders to refine the appropriate scenarios upon which to base the range of pathways to achieving California's important climate goals.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jessica Nelson", with a stylized flourish at the end.

Jessica Nelson
General Manager