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## 350 Bay Area comments on SB 100 2025 Joint Agency Report Kickoff Workshop

comments attached

Additional submitted attachment is included below.



350 Contra Costa 350 East Bay 350 San Francisco 350 Marin 350 Sonoma Napa Climate NOW!

Docket 23-SB-100 SB 100 2025 Joint Agency Report

Comments of 350 Bay Area on the August 22, 2023 SB 100 2025 Joint Agency Report Kickoff Workshop

September 8, 2023

The energy sector has been the primary source of California's success in decreasing emissions over the past 10 years. Modeling from the CEC for the 2021 SB100 report recognized that to continue decreasing electricity sector emissions requires markedly accelerating construction of new renewable energy sources, especially in the face of building and transportation electrification. The Joint Agencies have done a remarkable job in analyzing issues and developing sophisticated models which will have an impact on reaching the SB100 goal.

At the kickoff workshop, commenters were asked to address "tradeoffs" among different pathways. This framing could result in paying "lip service" to EJ and climate concerns if these are not incorporated upfront into actual decision making. California appropriately recognizes that we are in a climate crisis and that addressing past environmental injustices is long overdue. Modeling to date takes as a pre-established and defined output that California will meet GHG targets and the renewable target. We argue that California should also prioritize objectives such as the phase out of methane gas generation in EJ communities, and the 30 by 30 preservation of biodiversity and natural lands *before* consideration of energy resource portfolios.

We support prioritizing the "DER Focus" pathway to realize the opportunities optimized DER can bring to the California electricity sector. This is compatible with California's "loading order" which prioritizes energy efficiency, which is a core DER category. DER can dramatically assist with shaping the load of the projected growth from transportation and building electrification to minimize peak capacity and "right-size" investments in distribution grid infra-structure and new transmission. As demonstrated through the CPUC's recent Electrification Impact Study Phase 1, electric vehicle charging can either be the primary driver of new infrastructure need and cost, or an enormous mitigation resource if managed through appropriate rates and incentives. DER contribute to resilience through local resources and microgrids. Local storage may provide an alternative to gas generation in Environmental Justice communities. Generation and storage capacity located on the distribution grid can fully replace acres needed for utility scale solar and transmission, decreasing the loss of habitat and carbon sequestration by forests and deserts, compatible with the 30 by 30 initiative. The potential scale of distribution grid solar and storage must be recognized and tapped. Even without policies to support in front of meter midsized distributed solar (see below), over half of the 16.5 GW of solar installed in California in the five years 2017 to 2021 was on the distribution grid.<sup>1</sup> DER can also be implemented more rapidly than generation and storage on remote sites given the increasingly long lead time for evaluating and permitting for transmission and utility scale solar and storage projects.

Currently the plan apparently assumes that these "non-energy benefits" (health impacts, air quality, resilience, land use) will be considered AFTER a portfolio is assembled, as was done in creating CARB's 2022 Scoping Plan. We propose an alternative — quantification of these crucial community benefits should be incorporated during the initial resource selection phase—for example when "least cost selections" are made in RESOLVE in the IRP modeling process. That way the true value of DER—and the true cost of utility scale resources—would be considered on a level playing field and would be incorporated when decisions are made about resources to be acquired. We realize this

<sup>&</sup>lt;sup>1</sup> <u>https://www.californiadgstats.ca.gov/</u>; https://www.woodmac.com/industry/power-and-renewables/us-solar-market-insight/

would be a substantial change in how the Joint Agencies have approached planning in the past.

Recommendation: Incorporate non-energy benefits *during* agency analyses which result in resource selection.

Optimized DER also can make a major contribution to affordability. A 2021 CPUC study showed that a substantially escalating portion of electricity costs over the subsequent 10 years are due to the cost of the building and maintaining the long distance transmission grid, and spending on distribution infrastructure<sup>2</sup>. Two independent modeling studies and analyses (Vibrant Clean Energy<sup>3</sup> and Stanford<sup>4</sup>) show that optimizing distributed energy resources (DER) (ie energy efficiency, storage, solar, and flexible load management on the distribution grid) **consistently results in decreasing electricity rates over time** compared to meeting clean energy goals by investments in utility scale PV. The VCE study, for example, shows that California saves \$120 billion dollars by optimizing DER.

We therefore urge the Commission to consider the cost of both generation and transmission capacity required in whatever initial model is used for resource selection, and consider the value of reduced need for additional transmission where energy demands can be alternatively met through efficiency and other local resources.

While we urge prioritizing the DER Focus pathway, we are concerned that the "pathways" not become straitjackets—specifically, we urge that DER be optimized as an

<sup>2</sup> 

https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/office-of-governmental-affairs-division/reports/2021/senate-bill-695-report-2021-and-en-banc-whitepaper\_final\_04302021.pdf

<sup>&</sup>lt;sup>3</sup>Vibrant Clean Energy Executive Summary Why Local Solar For All Costs Less: A New Roadmap for the Lowest Cost Grid p12-13

<sup>&</sup>lt;sup>4</sup> Jacobson MZ et al Zero air pollution and zero carbon from all energy at low cost and without blackouts in variable weather throughout the U.S. with 100% wind-water-solar and storage. Renewable Energy 184 (2022) 430e442 " "Whereas transitioning more than doubles electricity use, it reduces total end-use energy demand by ~57% versus business-as-usual (BAU), contributing to the 63 (43-79)% and 86 (77-90)% lower annual private and social... energy costs, respectively, than BAU."

initial step for the other pathways. The options are not mutually exclusive— there may well be additional benefits from a diversity of resources and appropriate use of the Energy Imbalance Market and the Energy Day Ahead Market once DER have been optimized

Recommendation: Incorporate optimized DER in all pathways

At the SB100 kickoff Workshop, Liane Randolph, chair of CARB, asked for comments on the barriers which have been experienced in implementing the 2021 plan. We urge that the 2025 SB100 report include consideration of each agency's accountability, to assure that the meeting the SB100 plan is explicitly considered in relevant agency decision making as those decisions are being made. Two specific examples:

- Agency modeling which cannot assess the value of DER undercuts the ability to meet accelerated targets for renewable generation. Optimizing DER requires the potential for selecting DER. Specifically, in 2021 the CPUC's Integrated Resource Planning model RESOLVE did not have the capacity to select distribution grid PV as a least cost resource to meet California's climate goals. We appreciate that in the June 2023 IRP draft inputs and assumptions document, distributed solar is an option. We will be interested to see how transmission costs and other relevant variables are considered in current modeling, as failure to incorporate these cost differences will continue to bias the output results.
- 2) Policy selection. The presentations from SMUD and LADWP highlighted policies specifically designed to accelerate DER such as feed in tariffs and appropriate assignment of transmission costs. In contrast the Investor Owned Utilities bill ratepayers the Transmission Access Charge on every kilowatt hour of energy consumed, whether or not that energy required transmission, penalizing selection of local non-transmission resources such as in front of the meter distributed solar. Policies under consideration which will address compensation for DER such as Energy

Efficiency, batteries, and rooftop solar should incorporate a quantitative estimate for impact on acquiring DER needed to meet the SB100 goal.

Recommendation: Agencies need to be accountable for incorporating SB100 objectives into decisions and policies that have an impact on their electricity sector planning

/s/ Claire Broome for 350 Bay Area