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# **Comments of The Nature Conservancy on the Senate Bill 100 Draft Results Workshop**

Additional submitted attachment is included below.

California Energy Commission 1516 Ninth Street Sacramento, CA 95814-5512 Docket 19-SB-100 Submitted via electronic comment system

September 15, 2020

RE: Comments of The Nature Conservancy on the Senate Bill 100 Draft Results Workshop

## I. Introduction

On behalf of The Nature Conservancy's California chapter we want to congratulate the joint agencies on the presentation of the draft results modeling results at the September 2<sup>nd</sup> workshop. We recognize the extensive process the agencies have gone through to identify important issues and collaborate with stakeholders and community to bring those topics to light, and we are appreciative that we have been able to participate over the last year.<sup>1</sup>

We'd be remiss if we didn't first acknowledge the importance and urgency of this work in reaching a clean energy future, especially in light of the recent energy crisis related to the record heat waves and devastating fires across the state, which have left millions of Californians without power and clean air. The events of the last few weeks have highlighted the critical need for an electric grid that is resilient to a changing climate, and, as many panelists pointed out, have revealed the devastating health impacts of the reliance on polluting fossil energy to provide resiliency. The Nature Conservancy believes that California can and must work towards an affordable, reliable, and *clean* energy infrastructure system for all, as embodied in SB 100.

We're encouraged with the increased conversations around land use and impacts to communities and biodiversity, and the broad range of stakeholders who have named it as an important part of the pathway to decarbonization. With regards to the September 2<sup>nd</sup> presentation, we look forward to a more detailed description of the land use methodology mentioned in the presentation.

Our substantive comments are twofold:

- 1. Comments on the build rates needed to achieve SB 100 goals
- 2. Recommendations for next steps in the implementation process

<sup>&</sup>lt;sup>1</sup> This letter adopts by reference all previous comments submitted by The Nature Conservancy as a part of the 19-SB-100 Docket.

We look forward to further engagement with the joint agencies.

#### II. Resource Build Rates

The draft model results show that to achieve the goals in SB 100 California will need to build unprecedented amounts of wind and solar resources in the next 25 years. Under the high electrification scenario<sup>2</sup> shown in Slide 23 of the Draft Modeling Results, we see that an average of 2.7 GW/year of solar and .9 GW/year of wind will need to be built each year to stay on track for 2045 goals. A back of the envelope calculation on the land use needed each year suggests that is on order of ~36,500 acres for wind and ~22,100 acres for solar<sup>3</sup> each year for the next 25 years. Historically California has averaged only ½ of that of those averages for solar, and ½ of that for wind per year.

Planning for this build out is imperative. In the next section of these comments we discuss potential opportunities to start to do this.

# III. Land Use and Next Steps in SB 100 Implementation Process

Given the significant build rates needed to stay on track in the next nine years, we recommend that the joint agencies prioritize a land use planning stakeholder process as part of the SB 100 implementation 'next steps.' This is supported by the text of SB 100 which expressly states that the joint agencies should implement "the state's transmission and land use planning activities related to development of eligible renewable energy resources."<sup>4</sup> A standalone public process that focuses on renewable energy infrastructure build out, transmission and land use, labor agreements, consultation with communities, cultural and biodiversity values, permitting processes, spatial approaches to reduced air pollution<sup>5</sup> is consistent with statutory language and is a key part of meeting the goals in the statute.

Undertaking a process that is dedicated to land use issues would have many benefits, from acceleration of the development of renewable energy, to education for communities and community informed decision-making to advance strategies that fit local needs. For example, in a case study TNC published in 2019, the *Green Light Study: Economic and Conservation Benefits of Low Impact Solar Siting in California*, we found that permitting timelines were 2.5 times

<sup>&</sup>lt;sup>2</sup> Slide 23, SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future, Presentation - SB 100 Draft Results available online: <a href="https://www.energy.ca.gov/event/workshop/2020-09/senate-bill-100-draft-results-workshop">https://www.energy.ca.gov/event/workshop/2020-09/senate-bill-100-draft-results-workshop</a>

<sup>&</sup>lt;sup>3</sup> Grace C Wu et al 2020 Environ. Res. Lett. 15 074044, available online: <a href="https://iopscience.iop.org/article/10.1088/1748-9326/ab87d1/pdf">https://iopscience.iop.org/article/10.1088/1748-9326/ab87d1/pdf</a>

<sup>&</sup>lt;sup>4</sup> 100 Percent Clean Energy Act, Cal. SB 100 § 2, 399.11, (b)(9), Cal. Stat 2018.

<sup>&</sup>lt;sup>5</sup> For example, https://www.psehealthyenergy.org/california-power-map/

faster on average for projected sited in low-impact areas.<sup>6</sup> Identifying these efficiencies and putting them to action will be important to stay on the path to a 100% zero-carbon electric grid by 2045. Several stakeholders reflected the need for education on land use related issues and we agree. Developing a better understanding of land use trade-offs and implications from environmental, justice and economic perspectives could help in the community planning and procurement processes for clean and green zero-carbon energy. Finally, as the state sees an increase in wildfires, considering fire impacts to landscapes that support wind and solar energy will be important to understanding how to build a system that is resilient to climate change.

There are also opportunities to leverage the work in the SB 100 process in ongoing long-term energy planning processes, like the Integrated Resources Planning process at the CPUC. As we have stated in previous comments, the integration of spatial data to long-term energy models is one that is actionable now.

The ambition of SB 100 goals must be met with the strategies and people that will support real-world implementation.

### III. Conclusion

We thank the joint agencies for the opportunity to provide comments on draft results of the SB 100 report. The state of California can set a precedent in charting a path forward to achieve climate, clean energy, equity, and natural resource conservation goals. We look forward to working with the joint agencies to implement these principles and recommendations moving forward.

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<a href="https://www.scienceforconservation.org/products/power-of-place">https://www.scienceforconservation.org/products/power-of-place</a>

<sup>&</sup>lt;sup>6</sup> Stephanie Dashielle, Mark Buckley, Dustin Mulvaney, *Green Light Study: Economic and Conservation Benefits of Low-Impact Solar Siting in California* available online: https://www.scienceforconservation.org/products/green-light-study