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Defenders of Wildlife and The Nature Conservancy's Comments on draft SB 100 Report

Additional submitted attachment is included below.

December 18, 2020

California Energy Commission
Dockets Office, MS-4
1516 Ninth Street
Sacramento, CA 95814-5512

Submitted via electronic comment system

RE: Docket 19-SB-100
Comments on December 2020 Draft SB 100 Joint Agency Report

Introduction

On behalf of The Nature Conservancy (TNC) and the Defenders of Wildlife (Defenders), we respectfully submit these comments in response to the December 2020 Draft SB 100 Joint Agency Report (draft Report). Both our organizations are committed to achieving a low carbon energy future; a future that centers on the health of California communities, our economy, and the environment. Over the last year, we have been pleased to see the Joint Agencies integrate land use considerations into the SB 100 planning process. Land use is a foundational issue in the efforts to move the state towards implementation of the 100% zero-carbon energy goal, and California's landscapes will have a central role in realizing this goal.

The achievement of the goals set forth under SB 100 will result in significant land conversion and development in California and the West. Under the high electrification scenario[1] shown in Slide 23 of the Draft Modeling Results, we see that an average of 2.7 GW/year of solar and 0.9

[1] Slide 23, SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future, Presentation - SB 100 Draft Results available online: https://www.energy.ca.gov/event/workshop/2020-09/senate-bill-100-draft-results-workshop

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 the order of ~36,500 acres for wind and ~22,100 acres for solar[2] each year for the next 25 years, resulting in more than a million acres of land needed.

When one considers that California's entire development footprint (not including agriculture) is estimated at 6.28 million acres[3], it is clear that such a large and rapid conversion of land will require immediate attention to reduce the risks of unintended impact, conflict, and disputes to ensure timely build out. The state has an opportunity to plan for and coordinate this effort and it must happen now.

I. We recommend the Joint Agencies along with the California Natural Resources Agency, the Governor's Office of Planning and Research, and the California Department of Fish and Wildlife convene quarterly workshops focused on land use, biodiversity protection, and environmental justice.

We are concerned that a once-a-year workshop between reports is not sufficient to comprehensively address the important land use questions that will arise each year. Beginning in the first quarter of 2021, the Joint Agencies should convene quarterly workshops that focus on renewable energy infrastructure build out, transmission and land use, consultation with communities, cultural and biodiversity values, permitting processes, and spatial approaches to reduced air pollution. These issue areas are consistent with statutory language and are a key part of meeting the goals in the statute.

As the agencies have pointed out in the modeling results, SB 100 requires unprecedented builds of wind and solar resources each year through midcentury. Accordingly, every year will be critical to achieving the targets in the statute. Given the many other state commitments to protect natural resources, including Governor Newsom's Executive Order N-82-20 that sets a

[2] Grace C Wu et al 2020 Environ. Res. Lett. 15 074044, available online: https://iopscience.iop.org/article/10.1088/1748-9326/ab87d1/pdf
[3] https://www.nrcs.usda.gov/Internet/NRCS_RCA/reports/nri_ca.html

state goal to conserve 30 percent of the state's lands and waters by 2030 and identify and implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities, it is especially urgent that increased attention and agency coordination occurs in the next nine years to ensure that California's pursuit of its clean energy goals does not undermine its natural resource and climate goals. A track in this proceeding focused on land use should bring in relevant agencies, like the California Natural Resources Agency, the Office of Planning and Research, and Department of Fish and Wildlife, to ensure consistency in state goals.

Furthermore, a dedicated land use track within the SB 100 proceeding would support informed decision making, advance strategies that fit community needs, and accelerate the development of renewable energy. Land use should be prioritized as its own track within this proceeding, given the critical role it plays in this process. These workshops should present the land use and environmental planning data and modeling under development to support SB 100 decision making and implementation. This would allow stakeholders to understand planning progress and what issues have been identified.

II. We recommend the Joint Agencies analyze scenarios to aggressively identify land use impacts and opportunities to avoid or mitigate environmental impacts.

We have long supported and look forward to collaborating with Agency staff to develop tools to assess the total land area required to implement SB 100 and the potential areas across the state where new resources could be located. Recommendation 3 (pg. 140) in the draft report rightly identifies that the understanding of how land use impacts vary across scenarios and the assessment of the relative environmental impacts in different areas are foundational to identifying strategies to avoid or mitigate environmental impacts and maximize environmental co-benefits. Identification of least conflict lands will enable local and regional jurisdictions, tribal governments, and stakeholders, to plan for future development that can balance clean electric grid infrastructure needs while supporting efforts to restore, conserve, and strengthen natural and working lands. This planning in turn will facilitate timely development and address

many of the concerns regarding bottlenecks as discussed in Recommendation 12 in the draft Report.

Landscape level planning efforts for renewable energy including the DRECP and the San Joaquin least conflict projects have benefited from land use technical workgroups that provided key insights on environmental setting, land use, impact analysis, and identification of least and high conflict lands. We recommend that the Joint Agencies promptly convene a similar land use technical workgroup for the SB 100 process to ensure that California's energy planning aligns with the areas of best promise for development.

We also support Recommendation 4 (pg. 141), to model and develop metrics for land use considerations. TNC has developed and led robust electricity modeling tools and analysis that factor in land use, for example *Power of Place: Pathways for Land Conservation and Clean Energy Pathways for California*, which align with the modeling tools used in the SB 100 process, and the Integrated Resources Planning Process. Incorporating land use in the modeling efforts is critical to understanding and planning for different pathways to achieve the infrastructure necessary to address our climate and energy goals.

An essential part of the incorporation of land use data is the consideration of cultural resources and sacred lands, and the consultation with Indigenous Peoples and marginalized communities. We encourage the agencies to devote resources to consultation with underrepresented groups and Tribal Nations, and those that are most impacted by climate change, to best understand where conflicts may arise and where opportunities to ensure a just and equitable build out of infrastructure may be appropriate.

Lastly, planning tools for this type of analysis have languished in the past due to inadequate and inconsistent funding. We urge the Joint Agencies to prioritize and provide adequate, consistent funding to advance and maintain these planning tools and activities.

III. We recommend the Joint Agencies prioritize the development of renewable resources in low impact areas, to accelerate permitting timelines and lower overall project costs.

Recommendation 12 (pg. 143) in the draft Report addresses the need to "identify and address bottlenecks in project permitting and development." As a first step to achieve this goal, we urge the agencies to implement a process that identifies the lowest-impact areas and then drives development of renewable energy there first. As we have stated in previous comments, TNC research suggests that permitting timelines are faster in low-impact areas, eliminating some of the bottlenecks that go along with the development of utility scale projects.[4]

Implementation of Recommendation 3 (pg. 140) will provide the foundation for resolving project development "bottlenecks" addressed in Recommendation 12. In particular, we believe that California should look closely at the Central Valley for opportunities for new projects as farmland is retired in response to the work to implement the Sustainable Groundwater Management Act. TNC has developed maps and partnerships with local Groundwater Sustainability Agencies that could facilitate early conversations for siting of transmission and projects in these areas.

IV. We recommend the agencies seek opportunities for collaboration with the California Independent System Operator to ensure transmission planning is consistent with goals set forth in SB 100.

The Preliminary Root Cause Report[5] for the mid-August heat storm outages states:

> *"Building on the Senate Bill (SB) 100 (De Leon, 2018 scenarios, consider where diverse resources can be built and the transmission and land use considerations that must be taken into account. Establish a transmission technical working group (CAISO, Bas, CEC, CPUC) to evaluate the transmission options and constraints from the AB 100 scenarios."*

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[4] Stephanie Dashiell, 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

[5] http://www.caiso.com/Documents/Preliminary-Root-Cause-Analysis-Rotating-Outages-August-2020.pdf at pg. 68

We support this recommendation as it is similar to what was done during the DRECP quite successfully and request the final Joint Agency Report include a parallel recommendation that establishes a transmission technical working group. Again, this effort should be undertaken as soon as possible to ensure that California's transmission decisions are aligning with the areas of best promise for development.

Conclusion

Thank you for the opportunity to provide comments on the December 2020 Draft SB 100 Joint Agency Report. We deeply appreciate the Joint Agencies and their staffs' time at the workshops and their hard work on the report. We look forward to actively participating in the development of the SB 100 Report. Please contact Kate Kelly at kate@kgconsulting.net or Maya Batres at maya.batres@tnc.org with any questions.

Sincerely,

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California Program Director

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