



August 20, 2021

California Energy Commission
Docket No. 21-SIT-01
Docket Office
1516 Ninth Street
Sacramento CA 95814

Submitted Electronically via CEC website to Docket 21-SIT-01

Re: Comments on August 12, 2021, Joint Agency Workshop on Next Steps to Plan for Senate Bill 100 Resource Build – Resource Mapping

I. Introduction and Summary

The California Wind Energy Association (CalWEA) appreciates this opportunity to provide written comments on the subject matter of the August 12, 2021, Joint Agency Workshop on Next Steps to Plan for Senate Bill 100 Resource Build – Resource Mapping. As explained at the August 11, 2021, workshop, the resource mapping effort is intended to inform the CAISO’s 20-year transmission planning effort and ongoing SB 100 implementation work.

In summary, we request that the Joint Agencies take the necessary time and conduct sufficient public outreach to ensure that this process is based on the best available indications of commercial-grade wind energy resource potential. In addition, we strongly urge that none of the state’s very limited remaining wind resource potential be eliminated based on high-level mapping of possible resource conflicts.¹ The latter request is supported by lessons from the Desert Renewable Energy Conservation Plan (DRECP), which dramatically curtailed wind energy development potential in California’s vast desert region.

¹ These comments address California’s onshore wind resources only, as the August 12, 2021, Joint Agency presentation does not indicate that the resource mapping initiative is aimed at offshore wind resources. This is appropriate, as offshore wind resource areas are being intensively studied by BOEM and a variety of state and federal agencies as they define and refine available resource areas. These areas will continue to be studied by lease holders.

Moreover, any need to eliminate renewable resources for transmission planning purposes will be greatly reduced if the state and CAISO seek to improve the efficient use of the existing grid --which would accommodate more wind and solar resources without additional network transmission upgrades -- and to plan holistic transmission solutions that accommodate a of range of possible resource futures.

II. Comments

A. Updated Wind Resource Development Potential Should Be Used in the Resource Mapping Process

In developing wind energy resource potential for use in the resource mapping process, the Joint Agencies should acquire and use updated wind resource maps, and consider commercial potential based on current and expected wind technologies. As advised by the Lawrence Berkeley National Lab:

wind energy cost reductions have accelerated in recent years—faster than previously predicted by most forecasters and experts, and faster than historical rates of decline. Modelers, analysts, investors, planners and policymakers should avoid outdated assumptions and forecasts.²

The accuracy of resource mapping has improved since 2010, when NREL produced a California wind resource map at 80 meters.³ Moreover, taller towers now allow turbines to be placed with hub heights exceeding 100 meters. Improved wind technology creates the potential for commercial development in wind resource areas with annual average windspeeds of 6 meters/second and above, which will expand the areas previously considered.

Finally, the resource mapping effort should consider the latest indications of commercial interest in wind energy development as evidenced by resources in the CAISO interconnection queue.

The August 12, 2021, workshop provided no indication of considerations along the lines above. The Joint Agencies should take the time and conduct the public outreach

² Lawrence Berkeley National Laboratory, “Expert Elicitation Survey Predicts 37% To 49% Declines in Wind Energy Costs By 2050” (April 2021). (Available at: <https://Emp.Lbl.Gov/Publications/Expert-Elicitation-Survey-Predicts-37>)

³ <https://windexchange.energy.gov/maps-data/12>.

necessary to ensure that the state's full wind energy potential is being considered in this process.

B. Important Lessons Should Be Taken from the DRECP Experience

As the Joint Agencies embark on this resource mapping process, CalWEA strongly urges the agencies to take some important lessons from the DRECP and process, which the present process seeks to build upon. This is particularly necessary in relation to wind energy resources.⁴ The bottom line is that the state's limited remaining commercial-grade wind energy resources should not be eliminated from planning efforts based on cursory, high-level mapping studies.

1. The DRECP largely ended wind energy development in the California desert

The development and 2016 adoption of the DRECP caused an almost total collapse of wind and solar energy development activity on the extensive land area managed by the federal Bureau of Land Management (BLM) in California. In the case of wind energy, approximately a dozen wind energy projects were being pursued at the time that the DRECP effort was announced in late 2008; none of those projects survived the DRECP process and, to our knowledge, no wind energy applications have been filed with the BLM within the DRECP area in the five years since the DRECP was adopted despite growing demand for renewable energy. Similarly, it is CalWEA's understanding that very few, if any, new applications for solar developments have been filed. This need not, and should not, have been the result of this planning effort, which billed as an effort to focus and streamline renewable energy development. The following points describe important course corrections for future land use planning efforts.

2. Wind energy resource impacts cannot effectively be studied by high-level models and datasets

Wind and solar projects were essentially treated as equivalent in the DRECP process, even though wind energy projects are very different from solar energy projects. First, wind resources are far more limited than solar resources, particularly within California, which means that it is very important not to screen out any high-quality wind resource areas without a very clear and compelling demonstration of incompatibility with other land uses. Yet, in the DRECP process, wind energy conflicts were presumed, not investigated.

⁴ For more detail, see CalWEA letter to the U.S. Department of the Interior regarding BLM's Proposed Amendments to the DRECP (Feb. 8, 2021).
<https://www.calwea.org/sites/default/files/documents/CalWEA%20Letter%20re%20DRECP%20EIS%20%282-8-21%29.pdf>.

Second, while wind projects have a large lease area, their actual footprint in terms of land disturbance is relatively small (approximately 3% of the lease area⁵). The small footprint of wind energy allows for careful micro-siting of turbines to avoid terrestrial, bat and avian impacts and enables compatibility with other land-use objectives, including conservation as well as farming, ranching and other working-land activity. This siting flexibility and ability to avoid impacts simply cannot be studied at the very high level contemplated in the agencies' resource mapping effort.

While the August 12 presentation admitted the need to use existing data to “drill down and identify environmental implication ‘drivers’” with regard to wind energy (slide 17), there is no substitute for the detailed studies required under California Environmental Quality Act (CEQA) and often the National Environmental Policy Act (NEPA) for proposed projects, conducted by the jurisdictional siting authorities and funded by developers to study each development site in detail (often costing millions of dollars). These field-level studies simply cannot be reproduced by a desktop study of any sort.

3. Sufficient renewable resources must serve as a constraint on the process

In any land-use planning effort, wind and other renewables must be a constraint on the process – that is, the process must ensure that sufficient renewable resources are preserved to make certain that we can meet our SB 100 goals. “Sufficient” must include multiples of the acreage needed for actual development, because we cannot be sure that development will occur in areas that may be identified as “preferred,” given the numerous factors that go into a successful wind energy development.

In the DRECP process, preserving any, let alone sufficient, high-quality wind resource areas was not a priority in developing the plan.⁶ Essentially, the Development Focus Areas (DFAs) that were identified were what was left over after prioritizing all other DRECP objectives. As a result, very little commercial-grade wind resources were included in DFAs.⁷

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⁵ See, e.g., *20% Wind by 2030; Increasing Wind Energy's Contribution to U.S. Electric Supply*, U.S. DOE (May 2008) at p. 110. http://www.20percentwind.org/20percent_wind_energy_report_05-11-08_wk.pdf.

⁶ Note 2 *supra* at p. 6.

⁷ *Id.* at Map 2.

C. The Joint Agency Resource Mapping Process Should Not Be Used to Screen Out Wind Energy Resources, and the DRECP Should Be Reconsidered

For the reasons described above, and because California's remaining areas containing commercial-grade wind resources are very limited (in large part due to the DRECP), the agencies should exclude wind energy from the present high-level land-use screening endeavor (other than identifying areas where wind development is already clearly prohibited, which has already been accomplished by the CPUC). Further, the agencies should reconsider the DRECP, which was completed prior to the adoption of SB 100 and was not based on achieving California's more ambitious carbon-reduction goals.⁸ Moreover, the DRECP was focused only on the desert, and did not compare the impacts of wind energy development in the desert with development in other, more biologically rich, areas of the state. In addition, the efficiency of wind energy technology has improved in the years since it was evaluated under the DRECP. Finally, the extreme temperatures and drought now occurring in the desert will make it an increasingly uninhabitable area for flora and fauna.⁹

D. Instead, the Joint Agencies Should Promote the Efficient Use of the Existing Grid and Holistic Grid Planning

The Joint Agencies are pursuing resource mapping on the assumption that the state must hone-in on the resource areas that should be prioritized due to the need to plan for transmission system upgrades. As CalWEA discussed at length in our August 11, 2021, comments in this docket relating to transmission planning, the existing grid is not being efficiently used because of the CAISO's overly conservative deliverability assessment methodology, which requires modification in line with the CPUC's planned reforms of its Resource Adequacy Program. A significant amount of wind, solar and other resources could be added to the existing grid when such reforms are implemented.

Further, CalWEA explained in its August 11 comments that, rather than planning for specific resource areas, the state should focus on holistic transmission solutions that accommodate a of range of possible resource futures. Such an effort could be informed by this effort without being unduly limited by it.

⁸ See CalWEA's February 23, 2015, comments on the Draft DRECP at section 1.a. (Available at: <https://www.calwea.org/public-filing/comments-draft-desert-renewable-energy-conservation-plan-drecp-and-eiseir>.)

⁹ See, e.g., *Los Angeles Times*, "Imagine No Joshua Trees in Joshua Tree National Park" (June 4, 2021). (Available at: <https://www.latimes.com/california/story/2021-06-04/joshua-trees-climate-change-desert-jim-cornett>.)

CalWEA appreciates this opportunity to comment.

Sincerely,

/s/

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