California Wind Energy Association

May 14, 2021

Wade Crowfoot, Secretary
California Natural Resources Agency
1416 Ninth Street
Sacramento, CA 95814

Submitted via Public Input Questionnaire at
https://survey123.arcgis.com/share/32eb293a21ae434cadc603ff43729eb7

Dear Secretary Crowfoot,

With this letter, the California Wind Energy Association (CalWEA) provides additional input on Governor Newsom's Executive Order N-82-20, establishing the goal of conserving at least 30 percent of California's land and coastal waters by 2030 (the "30 x 30" goal) as part of the effort to combat the biodiversity and climate crises, which are closely related. CalWEA appreciates the Order's goal to accomplish this objective by fostering inclusive partnerships among all stakeholders, including those in the business community. To that end, we offer these initial comments on this vital effort.

As discussed below, CalWEA encourages the California Natural Resources Agency and its other state-agency partners to recognize two essential points in developing the strategy document for achieving the 30 x 30 goal by February 2022:

- Wind energy projects are compatible with the 30 x 30 goal, and
- Undeveloped high-quality wind energy resource areas, on land and offshore, must be preserved for exploration and potential development to enable achievement of the state's zero-carbon-electricity goals.

Wind energy development is compatible with 30 x 30 goals. The Executive Order describes the objectives of the 30 x 30 effort, in part, as safeguarding the state's economic sustainability and food security, protecting and restoring biodiversity, enabling enduring conservation measures in natural areas and working lands, and expanding equitable outdoor access and recreation for all Californians. Wind energy is not only compatible with these objectives but can foster them. Wind energy projects cause limited ground or ocean-floor disturbance and are inherently flexible, allowing careful micro-siting of turbines

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within high-quality resource areas to avoid potential impacts.[1] This siting flexibility and small footprint makes wind energy inherently compatible with 30 x 30 goals. As examples:

- The farming, ranching and other working-land activity that continues to occur on most land-based wind project sites can be candidates for enhancing soil health and biodiversity through the 30 x 30 initiative and related California Biodiversity Collaborative.

- Wind farm development provides landowners with an additional revenue source that enables them to continue farming, ranching, and forestry activities rather than sell off property for housing developments or other more-intensive land uses.

- Areas within wind project boundaries can support viable populations of many sensitive taxa, as well as wildlife movement, presuming the careful siting, mitigation and monitoring that is required under the California Environmental Quality Act. Indeed, wind projects can protect the project area from other types of disturbance that affect sensitive species, as has been shown with the desert tortoise.[2]

- While floating offshore wind foundations are in an early stage of study and deployment, evidence from Europe and the Atlantic Coast regarding fixed-bottom foundations indicates that ocean renewable energy and fisheries can coexist with responsible management. The reef effects of offshore wind can potentially benefit fisheries and fishers who can work in and around these structures.[3]

- California's Ocean Protection Council envisions the development of a commercial scale offshore wind project in California that minimizes impacts on marine biodiversity or habitat, currents and upwelling, fishing, cultural resources, navigation, aesthetic/visual, and military operations by 2026.[4]

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[1] Generally, only 2%-5% of the land-based project lease area is physically disturbed. 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.

[2] Lovich, Jeffrey. (U.S. Geological Survey). 2013. Assessing the Long-Term Survival and Reproductive Output of Desert Tortoises at a Wind Energy Facility near Palm Springs, California. California Energy Commission. Publication number: CEC-500-2014-005.

[3] Perry, R.L., and W.D. Heyman. 2020. Considerations for offshore wind energy development effects on fish and fisheries in the United States: A review of existing studies, new efforts, and opportunities for innovation. *Oceanography* 33(4):28–37, https://doi.org/10.5670/oceanog.2020.403.

[4] California Ocean Protection Council, *Strategic Plan to Protect California's Coast and Ocean 2020-2025 at* p. 28.

- Wind farms can be compatible with outdoor recreation.[5]

Wind resource areas must be preserved to enable achievement of the state's zero-carbon electricity goals. As shown by the 2021 SB 100 Joint Agency Report,[6] land-based and offshore wind resource development is an essential part of the strategy for achieving the state's zero-carbon electricity goals, accounting for one-fifth of total electricity production in the 2045 Core Scenario.[7] Absent the approximately 21 gigawatts (GW) of additional land-based and offshore wind energy, the cost of achieving the state's SB 100 goals would increase by $2 billion annually. Further, that 21 GW of wind would be replaced with substantially more total development (22 GW of additional utility-scale solar capacity plus 15 GW of storage), requiring substantially more land and materials overall.[8]
Wind resources are highly site-specific, however. Wind projects can only be built in areas with high-quality winds. If California is to achieve its SB 100 goals at least cost while minimizing total impacts, high-quality wind areas must be preserved for exploration and potential development. Within these areas, development will be planned to minimize impacts and otherwise promote 30 x 30 goals. To this end, the Agency's 30 x 30 plan should seek to preserve land and coastal high-quality wind resource areas that the state has already identified:

- The California Public Utilities Commission has identified potentially viable land-based wind energy sites as part of its Renewables Portfolio Standard Program, which evolved into its Integrated Resource Planning process. This assessment was based on a geospatial analysis that considered transmission capability and applied numerous environmental screens,[9] and was subject to considerable stakeholder input and review.

- The CPUC has recognized the offshore wind resource areas developed by the U.S. Bureau of Ocean Energy Management and the National Renewable Energy Laboratory, which include resources off the coast in the Morro Bay, Diablo Canyon, Humboldt Bay, Cape Mendocino, and Del Norte areas.[10] In addition, expanded or

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[5] For example, Tehachapi's Windmill-Wildflower Hike is six-mile walk on the Pacific Crest Trail adjacent to the wind farms in the area. See http://www.wind-works.org/cms/index.php?id=603.

[6] *SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future* (CEC-200-2021-001), March 2021. https://www.energy.ca.gov/sb100.

[7] *Id.* at Figure 29.

[8] *Id.* at pp. 88-89 and Table 15.

[9] CPUC R.16-02-007, Administrative Law Judge's Ruling Seeking Comment on Proposed Reference System Portfolio and Related Policy Actions, Attachment C: Inputs & Assumptions: 2019-2020 Integrated Resource Planning at Section 4.2.1 (Nov. 6, 2019).

[10] *Id.* at p. 43. Also see *2020 Offshore Wind Resource Assessment for the California Pacific Outer Continental Shelf*. National Renewable Energy Laboratory. NREL/TP-5000-77642. https://www.nrel.gov/docs/fy21osti/77642.pdf.

new coastal areas will be needed for port infrastructure to accommodate the assembly of floating offshore wind turbine foundations.

CalWEA strongly encourages the Agency to use these maps in its strategy document and seek to avoid recommending any restrictions that would remove these valuable resources from exploration and potential development or would restrict port infrastructure development in strategic areas. As described above, carefully planned wind energy developments can be compatible with the 30 x 30 goals and are an essential means of mitigating the climate crisis that imperils those same goals. We note that California lost most of its remaining high-quality wind resource areas with the federal government's adoption, in 2016, of the Desert Renewable Energy Conservation Plan (DRECP), which did not prioritize the preservation of high-quality wind energy resources.[11] It is therefore even more important that California preserve its remaining high-quality wind resource areas, onshore and off.

CalWEA would welcome the opportunity to discuss these issues with Agency representatives and looks forward to further participation in this important 30 x 30 initiative.

Sincerely,

Nancy Rader
Executive Director

[11] 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.