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Comments on AB 525 draft report

Additional submitted attachment is included below.

California Energy Commission

Re: Docket # 17-MISC-01 – Assembly Bill 525 Draft Report on Maximum Feasible Capacity of Offshore Wind and Planning Goals for 2030 and 2045

The Natural Resources Defense Council (NRDC) is a non-profit membership organization with more than 125,000 California members who have an interest in receiving reliable and affordable energy services while reducing their environmental impact and combatting climate change.

On May 6, 2022, the California Energy Commission (CEC or Commission) released the draft report on the maximum feasible capacity and megawatt planning goals for 2030 and 2045 as required by Assembly Bill 525. NRDC appreciates CEC's work to advance offshore wind development in federal waters offshore California over the past several years and its central role in fulfilling the requirements of AB 525. Paired with the right policies, we believe that this work is a crucial step towards a cleaner, more reliable, equitable, and affordable grid. We offer the following recommendations to improve the final report:

- The CEC should commit to revising the maximum feasible capacity and the planning goals when it completes all the analyses required by AB 525 and by the time the strategic plan is due. While this is not in compliance with AB 525, we acknowledge CEC setting a reference point that will be revised is a pragmatic solution that will move wind development forward, and allow space to revise the targets as appropriate when more information becomes known.
- NRDC requests that the Commission schedule a workshop half-way through (e.g., in December 2022) to provide updates on the analyses and gather stakeholders' input.
- NRDC suggests that the following elements are expressly included in the definition of
 maximum feasible capacity: comprehensive cost-effective analyses; environmentally
 responsible offshore wind development; socially responsible offshore wind
 development; and local economic development.

 NRDC offers environmental factors and management practices that the CEC should consider when quantifying the maximum feasible capacity and establishing offshore wind planning goals.

1. CEC Should Commit to Revising the Maximum Feasible Capacity and the Planning Goals When It Completes Analyses Required by AB 525

The released draft discusses but does not quantify the maximum feasible capacity of offshore wind to achieve reliability, ratepayer, employment, and decarbonization benefits. The CEC argues that "identifying suitable sea space for wind energy areas in federal waters, including the considerations required by AB 525 to identify such sea space, is a condition precedent to being able to quantify the maximum feasible capacity of offshore wind to achieve reliability, ratepayer, employment, and decarbonization benefits." The need to complete this work, they claim, "prevents CEC staff from quantifying the maximum feasible capacity until the strategic plan is fully developed." (at 3)

Under those circumstances, and while this does not comply with AB 525, NRDC agrees with CEC that it is helpful to define a reference point (21.8 GW) for technically feasible capacity, which must be re-evaluated as the CEC continues the work to identify sea space, evaluate additional technical assessments of transmission need and grid integration strategies, assess port infrastructure, and analyze potential impacts on coastal resources and users, fisheries, Native American and Indigenous peoples, and national defense. Therefore, the maximum feasible capacity of offshore wind shall be revised once all relevant factors are accounted for and as technology evolves.

CEC also did not account for the 12 factors listed by AB 525 Section 25991.1(b) when establishing the planning goals for 2030 and 2045. Specifically, the Commission has not considered a key factor - "potential impacts on coastal resources (including ocean resources and marine ecosystems), fisheries, Native American and Indigenous peoples, and national defense," - stating that it will consider those impacts during strategic plan development and as more research sheds light on the potential impacts to those resources (at 45).

Further, CEC argues that "While all factors are important in establishing megawatt planning goals for the strategic plan," five of them have greater influence on shaping the megawatt planning goals than the others (at 36). AB 525, however, does not weight any factors

over others, nor it gives CEC the authority to neglect one of them, so the Commission must recognize that all factors are equally important and should be considered for planning goals purpose under Section 25991.1(b).

Although all the factors are and should be of equal relevance to the definition of the planning goals under AB 525, NRDC acknowledges that some factors impose greater challenges to the development of the offshore wind industry. For example, transmission requirements and competing coastal uses are among the foremost challenges. Rather than stating that some factors are more relevant than others, the CEC should point out what the most difficult challenges for the development of offshore wind are. The suggested approach elevates the needed actions to be addressed for the strategic plan while it complies with AB 525 Section 25991.1(b).

NRDC requests that the CEC revise the planning goals after all the 12 factors required by AB 525 are accounted for and by the time the strategic plan is due. NRDC also requests that the CEC schedule a workshop six months from now to both (i) offer an update on the analyses required pursuant to AB 525, and (ii) get stakeholders' input on these analyses through oral and written comments. This will allow enough time for the CEC to incorporate public feedback before the strategic plan is due on June 30, 2023.

2. NRDC Suggests Elements to Be Included in The Definition of Maximum Feasible Capacity

CEC proposes a holistic reading of "feasible capacity" built upon California Code of Regulations, title 20, section 1201(h), which defines "feasible" as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors." This definition "focus[es] on evaluating how California can realize development of offshore wind at utility scale but with realistic projections of what could be achieved by 2030 and 2045, considering a broad range of specified factors" (at 22). CEC also proposes defining "feasible capacity" in line with the findings of AB 525, which states "[o[ffshore wind should be developed in a manner that protects coastal and marine ecosystems. The State of California should use its authority under state

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¹ CEC, CPUC, and CARB. 2021 SB 100 Joint Agency Report Achieving 100 Percent Clean Electricity in California: An Initial Assessment, March 2021, at 107.

programs and policies to ensure (1) avoidance, minimization, and mitigation of significant adverse impacts, and (2) monitoring and adaptive management for offshore wind projects and their associated infrastructure" (at 22).

NRDC suggests that the CEC specifically include the following elements under the definition of feasible:

A. Comprehensive Cost-Effectiveness Analysis

California should not develop offshore wind at any cost; rather, the state must have offshore wind goals that are feasible and can be achieved in a cost-effective manner. To do that, the CEC should determine (i) the technical potential of offshore wind in California – i.e., the total amount of offshore wind that can be developed given ocean area and wind availability; (ii) the economic potential – i.e., the costs and benefits to develop the maximum amount of offshore wind according to the technical potential; and (iii) the feasible potential, which accounts for real-world constraints, such as environmental, ratepayer and reliability issues, to find the amount of offshore wind that can be developed in a cost-effective manner.

B. Environmentally Responsible Offshore Wind Development

We agree with the CEC's proposal to use a definition of "feasible" incorporating environmental factors, as well as the need to avoid, minimize, and mitigate significant adverse impacts and ensure monitoring and adaptive management for offshore wind projects. We set forth in Section 3 below specific environmental concerns and management practices CEC should take into account. We support CEC's acknowledgement that the 2045 goal will need to be refined as technology develops and we learn more about the impacts of offshore wind development. Rigorous monitoring protocols and publicly available monitoring data will be necessary to understand the impacts of offshore wind development. Further, a commitment to adaptive management that applies learnings from monitoring and mitigation is necessary to ensure that offshore wind is developed in a responsible manner and to ensure that Californians benefit to the maximum extent feasible from this clean energy resource.

C. Socially Responsible Offshore Wind Development

Socially responsible offshore wind development (i) minimizes negative impacts on other ocean users; (ii) includes robust consultation with Native American tribes and communities; (iii)

meaningfully engages state and local governments and stakeholders from the outset; and (iv) includes comprehensive efforts to avoid negative impacts to environmental justice communities.

D. Local Economic Development

The CEC shall consider the need to develop a skilled and trained offshore wind workforce. This allows for local economic development, and it is a crucial piece of an equitable clean energy transition. The CEC should focus on meaningful workforce standards, high quality jobs, and economic opportunities for local communities.

3. Environmental Factors and Management Practices CEC Should Consider When Quantifying Maximum Feasible Capacity and Establishing Offshore Wind Planning Goals

We appreciate that when defining "maximum feasible capacity" and establishing offshore wind planning goals, the CEC has committed to accounting for environmental considerations, as well as ensuring avoidance, minimization, and mitigation of significant adverse impacts, as well as monitoring and adaptive management (at 22). As CEC acknowledges, AB 525 also requires it to consider "potential impacts on coastal resources, fisheries, Native American and Indigenous peoples, and national defense, and strategies for addressing those potential impacts" (at 45). We recommend that CEC consider the following environmental impacts as it moves forward with evaluating maximum capacity and planning goals, as well as the following mitigation and management measures.

A. Environmental Factors to Consider

NRDC has written extensively in prior comment letters to the Bureau of Ocean Energy Management (BOEM) about environmental considerations that must be taken into account when making wind energy siting decisions on the West Coast and we summarize them briefly here.²

² See NRDC et. al., Comments on the Call for Information and Nominations for Commercial Leasing for Wind Power Development on the Outer Continental Shelf Offshore California [Docket No. BOEM-2019-0045] (Jan. 28, 2019); NRDC et. al., Comments in Response to the Bureau of Ocean Energy Management's Draft Environmental

Assessment for Commercial Wind Lease and Grant Issuance and Site Assessment Activities on the Pacific Outer Continental Shelf, Humboldt Wind Energy Area, BOEM-2021-085 (Feb. 10, 2022); NRDC et. al., Re: Request for Comments of Outer Continental Shelf Offshore Morro Bay, California Wind Energy Area, Environmental Assessment Scoping [Docket No. BOEM-2021-0044-0061] (Jan. 11, 2022).

BOEM's Wind Energy Call Areas are located within the California Current System and adjacent to the Davidson Current, which makes the region highly dynamic and productive, and an ecologically important habitat for many fish species, marine mammals, and seabirds. Environmental factors that must be considered in planning for wind energy infrastructure include:

- Impacts on benthic habitat for fish and other sea life and life cycle impacts³ the federal waters proposed for future wind development include habitat for key commercial fisheries, and areas encompassing Essential Fish Habitat, and wind infrastructure could result in habitat loss and degradation, and impact fish life cycles; the noise and electromagnetic fields generated by construction and operation may also affect species;
- Impacts on seabirds⁴ many seabird species inhabit the California Current
 Ecosystem, including species protected by the Endangered Species Act and other
 species of concern, and wind infrastructure could result in habitat loss or damage, and
 could also pose collision risks;
- Impacts on marine mammals and sea turtles⁵ the California Current Ecosystem provides habitat for an array of cetacean species and other marine mammals, many of which are protected under the Endangered Species Act and Marine Mammal Protection Act, and wind infrastructure could change the movements of these species and also pose entanglement risks; and as with fish, the noise and electromagnetic fields resulting from construction and operation could affect marine mammals and sea turtles;

In addition to considering species impacts, habitat and other regional impacts, CEC should also consider cumulative environmental impacts. Meeting the targets outlined in CEC's report will require development beyond the Morro and Humboldt areas. Given that the California Current Ecosystem hosts species with wide ranges and/or migratory species, the cumulative impacts of wind infrastructure along the California coast should be part of CEC's environmental analysis.

³ NRDC Jan. 28, 2019 Letter at 5-11, 15-16, 20-22.

⁴ *Id.* at 12-13, 16, 19-20.

⁵ *Id.* at 13-14, 16-19, 20-22.

Further, because the state contemplates scaling up wind energy, it should also consider the impacts of increased wind development over time. Finally, CEC should consider environmental effects of onshore build-outs (such as upgrading transmission infrastructure).

B. Mitigation and Management Measures to Consider

NRDC has also written extensively about measures that can be used to avoid, minimize, and mitigate significant adverse effects, and monitoring and adaptive management practices. We encourage CEC to consider the following measures as it develops its offshore wind targets.

- CEC should work closely with partner agencies to fill in data gaps related to impacts in designated wind areas and impacts from floating offshore wind technology⁶;
- CEC should work with fellow agencies to conduct baseline surveys and conduct ongoing monitoring to capture environmental impacts⁷;
- CEC should consider infrastructure design and the environmental impacts different designs might have⁸; and it should also ensure a process for assessing environmental impacts as infrastructure design evolves and changes;
- CEC should consider how different operating conditions could influence environmental impacts and work with sister agencies to ensure conditions that avoid, minimize and mitigate serious adverse effects⁹;
- CEC should work with partner agencies to develop conditions such as construction and operation conditions, additional monitoring during assessment and construction phases, mandatory shutdowns to protect marine mammals, vessel speed restrictions¹⁰ that avoid, minimize and mitigate serious adverse effects.

4. Conclusion

NRDC appreciates the CEC's commitment to a cost-effective, reliable, affordable, environmentally responsible, and equitable clean energy transition, and thanks for the opportunity to comment on AB 525 Draft Report.

⁶ *Id.* at 37-40.

⁷ *Id.* at 43.

⁸ Id.

⁹ *Id.* at 44

¹⁰ NRDC Jan. 11, 2022 Letter at 19-22; NRDC Feb. 11, 2022 Letter at 7-11.