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Energy Commission Report on AB 525 Offshore Wind Permitting Roadmap

Additional submitted attachment is included below.

June 2, 2023

Re: Docket 17-MISC-01: Energy Commission Report on AB 525 Offshore Wind Permitting Roadmap

On behalf of the Natural Resources Defense Council, Defenders of Wildlife, Environmental Defense Center, Environmental Protection Information Center, Humboldt Baykeeper, National Audubon Society and Surfrider Foundation, we submit these comments to the California Energy Commission (CEC) on the Energy Commission Report on AB 525 Offshore Wind Permitting Roadmap.

We appreciate the significant effort that the CEC has made to account for comments from a wide range of stakeholders on the draft permitting roadmap. The most recent report serves as a valuable resource for clarifying existing permitting requirements, and we encourage the CEC and other permitting agencies to continue this practice of clarifying the status quo before soliciting feedback on proposed changes. We support the CEC's intended process of revising the draft roadmap based on stakeholder input. We recommend extending the roadmap revision timeline beyond the June 30th Strategic Plan deadline if necessary to allow for full consideration of the alternatives currently before the Commission.

The contents of this comment letter are organized as follows:

We welcome any questions you may have regarding the enclosed comments and would be glad to address them in greater detail. We look forward to continuing our collaboration on sustainable offshore wind development. Thank you for your time and consideration.

I. Supported Proposals in the Roadmap Report

A. Joint Environmental Review Process

1. Joint NEPA and CEQA Review

We strongly support the joint NEPA and CEQA review process as proposed in the CEC's recent report. As recognized in the draft permitting roadmap and emphasized by numerous offshore wind experts and stakeholders, effective coordination and communication between federal and state agencies are critical for successful offshore wind development. A joint review process facilitates a more comprehensive evaluation of environmental impacts, leading to better-informed decisions. We believe this approach will yield both cost-saving and environmental benefits by enhancing interagency cooperation, public understanding, and efficiency.

The Office of Planning and Research has published a handbook on successful NEPA and CEQA permitting integration that outlines best practices for agency coordination.[1] Before developing NEPA/CEQA review and documentation, agencies should prepare a memorandum of understanding (MOU). This MOU should detail the project's purpose, the different agency responsibilities, and roles in NEPA/CEQA review. It should also establish processes for resolving conflicts and amending the MOU if necessary, as well as plans for post-review agency collaboration.[2] Additionally, agencies should agree upon and publish a shared review timeline, and should rely on the same data in performing their respective analyses.[3] To avoid potential project delays later in the process, agencies should conduct in-depth resource analyses (e.g., quantification of potential impacts to threatened and endangered species) as early as possible, which can help determine a project's viability.[4]

It is important that joint review documents fully comply with and clearly distinguish between the requirements of both CEQA and NEPA. For example, regarding significance determinations, CEQA Guidelines outline situations where mandatory findings of significance are required, while NEPA has no analogous requirements.[5] Any offshore wind project in California waters would need to thoroughly evaluate potential impacts in these areas, even if they may not be as explicitly required under NEPA. Similarly, the 'purpose and need' statement under NEPA and the 'project objectives' requirement under CEQA may be similar, but their interpretation can differ significantly.[6] It is essential for lead agencies to cooperatively review proposed project purpose and need statements, as well as project objectives statements. If necessary, these can be described in separate sections in a joint document, along with an explanation of why the agencies' goals differ. Finally, agencies must ensure the distinct alternatives analyses required by NEPA and CEQA are both conducted.[7] Following these best practices of early engagement, integrated analysis, and comprehensive documentation can support a joint review process that balances environmental protection with renewable energy development goals.

2. Programmatic Environmental Review under CEQA

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[1] Council on Environmental Quality & California Office of Planning and Research, NEPA and CEQA: Integrating Federal and State Environmental Reviews (February 2014) [hereinafter "NEPA and CEQA Report"].
[2] NEPA and CEQA Report, at 43.
[3] NEPA and CEQA Report, at 44.
[4] NEPA and CEQA Report, at 19-20.
[5] *See* NEPA and CEQA Report, at 35; Cal. Code Regs. Tit. 14, § 15065 (2018).
[6] NEPA and CEQA Report, at 56.
[7] For example, under CEQA, this includes discussion of alternatives "that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects," (14 CCR § 15126.6) while NEPA has no such requirement.

We support the approach of developing a Programmatic Environmental Impact Review (PEIR) under CEQA to ensure responsible and sustainable offshore wind development. As the roadmap report highlights, a PEIR enables a more comprehensive assessment of the cumulative impacts of multiple offshore wind projects. This allows for the consideration of potential interactions and amplification effects between projects on ecosystems, wildlife, and coastal communities. Adopting this holistic approach minimizes unintended consequences and provides a more complete understanding of the environmental implications of offshore wind development.

Moreover, the PEIR approach offers valuable opportunities for early stakeholder engagement and collaboration. Engaging a diverse range of stakeholders, such as local communities, environmental organizations, and industry representatives, fosters a more inclusive dialogue regarding the potential impacts and benefits of offshore wind development. This is crucial for identifying potential conflicts, addressing community concerns, and ensuring that offshore wind projects align with broader environmental and social objectives.

As the CEC recognizes, the offshore wind industry's emerging nature poses challenges for comprehensively identifying all impact parameters within a single PEIR, especially at an early stage. We advise against mandating a process that requires or even recommends tiered reviews. Such a process could inadvertently restrict the flexibility needed to adapt to emerging risks and mitigation measures. It may be necessary to conduct successive review processes to identify and address evolving risks and effectively mitigate harmful impacts on the environment, marine life, and coastal communities.

B. Coordinated Permitting Approach

We support the CEC's proposal to coordinate permitting between the relevant federal and state agencies, and we agree that consolidated permitting poses serious risks to the sustainability and efficiency of offshore wind development. The intended benefits of consolidation are better pursued through coordinated permitting, and an approach patterned after the Renewable Energy Action Team (REAT) or the Bay Restoration Regulatory Integration Team (BRRIT) could support these goals for offshore wind development. Useful elements of both approaches could be integrated into an agency coordination team that builds on the existing work of the Bureau of Ocean Energy Management (BOEM)-California Intergovernmental Renewable Energy Task Force. It is important to apply the lessons learned from the work of the REAT and the BRRIT, given the likelihood of similar challenges presenting themselves in the context of California's interagency planning for offshore wind.

In terms of governance lessons, the agencies involved in the REAT created a high-level planning body to help integrate agency policies and to bridge inter-agency cultural differences.[8] Designated structures for inter-agency collaboration proved critical to overcoming these differences and creating a shared language for effective communication.[9] In the BRRIT context, the permitting agencies each designated analysts to work together to identify potential conflicts early in the process and make recommendations on how to ensure compliance with applicable laws.[10] We recommend that California offshore wind permitting agencies consider using BRRIT and REAT practices to navigate inter-agency dynamics and foster inter-agency coordination.

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[8] A. Bengston et al., *Working at the Landscape Scale: Lessons from the Desert Renewable Energy Conservation Planning Process* 22, 43 (2016).
[9] *Supra* note 8, at 51-52.
[10] L. Grenier et al., *Advancing Ecosystem Restoration with Smarter Permitting: Case Studies from California,* Public Policy Institute of California 18, 19 (2021).

Additional important governance lessons from the BRRIT and REAT include those of timelines and adaptive management. Regarding timelines, agency employees involved in the REAT reported that overly ambitious and unrealistic timelines were unhelpful and sometimes reduced the quality of work that could be achieved.[11] California should keep this in mind with regards to offshore wind, as some AB 525 deadlines have already proved incompatible with the time required for properly conducted research, outreach, and planning. Regarding adaptive management, the BRRIT has incorporated lessons learned into annual reports to continuously improve permit review for multi-benefit restoration projects.[12] California should similarly apply adaptive management strategies to offshore wind development, enabling the updating of regulatory policies as the climate evolves.

Lessons learned from the REAT and BRRIT processes underscore the need for improved stakeholder outreach and agency coordination in developing offshore wind permitting processes. For example, while the REAT held multiple public meetings of significant length to explain their joint permitting process, many attendees stated after the fact that they would have preferred greater focus on the substantive impacts of the permitting, rather than on the legal foundation for the process.[13] To this end, we strongly recommend that public meetings on offshore wind focus on substantive impacts of permitting rather than primarily discussing the legal framework.

The appointment of a lead coordinator to liaise between all state agencies would significantly streamline the permitting process, eliminating confusion and maintaining consistency in responding to information requests. Similarly, a coordinated permitting application process would likely have environmental and economic benefits by facilitating a comprehensive and holistic review by the state of all application materials. However, we caution the CEC against recommending concurrent permitting, given that a more sequential permitting strategy would enhance the information available for later-stage permits. A focus on rapid permitting, although seemingly efficient, does not align with the broader timeframe of other crucial processes such as port and transmission development. We urge the CEC to adopt a rigorous and comprehensive permitting approach rather than hastily expediting the process. This strategy will not only minimize the associated risks and uncertainties of offshore wind development, but also ensure that the state's offshore wind goals are met within a reasonable and environmentally conscious timeframe.

II. Recommendations for Final Roadmap and Strategic Plan

A. Coordinate Transmission and Procurement Planning

We appreciate the CEC's efforts to develop a transmission chapter for inclusion in the strategic plan, and we eagerly anticipate the opportunity to review and provide feedback. In the meantime, we would like to emphasize the importance of accounting for advanced transmission planning and coordinating with permitting processes and timelines to ensure efficient and sustainable development. Neglecting or postponing consideration of transmission needs and timelines could create undue pressure to expedite permitting, despite permitting being just one component of the larger offshore wind ecosystem. Proactive transmission planning can help the state achieve its ambitious offshore wind deployment timelines by preventing transmission-related delays, reducing the risk of adverse effects, improving procurement, minimizing costs, and facilitating regional coordination.

Proactive transmission planning has already yielded significant economic and environmental benefits for offshore wind development, and it has the potential to maximize the benefits of offshore wind at state, regional, and national levels. For example, New Jersey's recently completed planning to integrate offshore

[11] Bengtson et al, *supra* note 8, at 55-56.
[12] Grenier et al., *supra* note 10, at 20.
[13] Bengtson et al*., supra* note 8, at 27.

wind production into onshore transmission resulted in cost savings of over $900 million.[14] This planning also minimized potential environmental and community impacts by reducing the need for additional transmission corridors.[15] Studies conducted on offshore wind in the United Kingdom and New England, as well as on onshore wind in the Midwestern U.S., have yielded similar results concerning the ecological, financial, and community benefits of forward-looking transmission planning.[16]

The California Independent System Operator (CAISO) 2022-2023 Transmission Plan advanced the critical task of transmission planning for offshore wind development by evaluating transmission needs to bring on up to 5GW of central coast generation. The identification of substantial transmission capability in the central coast provides a key resource for the central coast leases. The Plan also studied the need for transmission capacity from the North Coast, which remains a key issue, with expectations for a decision on North Coast transmission in next year's plan.

The Memorandum of Understanding among California's lead energy agencies regarding transmission and resource planning provides a clear framework to facilitate a coordinated and timely approach to transmission planning for offshore wind. We urge the CEC to further advance that planning process, working closely with the Public Utilities Commission and CAISO. The CPUC should continue to advance procurement plans for offshore wind, and we look forward to the proposed decision on North Coast transmission in the 2022-2023 plan.

Over the longer term, we support expanded coordination on transmission infrastructure development, both within the state and with regional partners. We urge the Commission to take notice of a January 2023 report by the Brattle Group, commissioned by multiple environmental conservation and clean energy organizations. This report offers multiple recommendations to improve transmission planning for offshore wind, including identifying feasible, cost-effective interconnection points to the existing grid for offshore wind, clarifying the relationships between leasing, procurement, and transmission processes, and developing a clear and actionable cost-allocation framework that encompasses transmission.

B. Develop and Implement an Adaptive Management Framework

1. Overview of Adaptive Management

Adaptive management is a crucial consideration for the uncharted environmental impacts of floating offshore wind systems in U.S. waters, particularly in California's interconnected ecosystems. In developing the permitting roadmap and the strategic plan, the CEC should recommend that responsible agencies include adaptive management conditions in their permits. Adaptive management is a cyclical process of learning and applying lessons from previous projects to improve future management, minimize uncertainties, and promote institutional learning.[17] Key components of adaptive management include: (i) stakeholder engagement and Tribal consultation; (ii) clear management objectives; (iii) performance assessment criteria; (iv) consideration of alternatives; (v) models to test hypotheses and select from management alternatives; (vi) monitoring protocols to validate models and reduce uncertainty; and (vii)

[14] J. Pfeifenberger et al., *The Benefit and Urgency of Planned Offshore Wind Transmission,* 4 (Brattle, 2023) [hereinafter "Pfeifenberger et al."] (available at www.brattle.com/wp-content/uploads/2023/01/Brattle-OSW-Transmission-Report_Jan-24-2023.pdf).
[15] *Id.*
[16] Pfeifenberger et al., *supra* note 14, at 5.
[17] L. Hanna et al., Adaptive Management White Paper, *IEA Wind Task 32: Assessing Environmental Effects* (WREN) 8 (2016) [hereinafter "IEA White Paper (2016)"].

the incorporation of independent expert scientific guidance to ensure rigorous and sound decision-making processes.[18]

2. Addressing Challenges to Adaptive Management: Unclear Management Objectives and Fragmentation

We strongly recommend that the CEC prioritize establishing data guidelines and identifying potential actions under adaptive management as early as possible in the development process. This will help ensure the process is oriented to effectively gather, interpret, and utilize pertinent data. Framing adaptive management as one of the inaugural elements of the permitting roadmap and strategic plan would emphasize its importance and ensure that agency decisions are data-driven.

Effective adaptive management requires defining success with measurable criteria to assess outcomes and adapt accordingly.[19] The main knowledge gap in offshore wind adaptive management is how to establish actionable triggers and appropriate responses.[20] Improperly set management objectives have hindered adaptive management implementation in the U.S. A "data-rich, information-poor" condition often results from failure to set clear objectives, leading to data that cannot be meaningfully interpreted, and wasting resources and reducing stakeholders' trust.[21] This can be avoided with a clear, hypothesis-driven framework.

Fragmentation in adaptive management is a challenge on multiple levels, from establishing shared conceptual definitions to setting data collection and mitigation requirements.[22] This can be avoided at the project level by monitoring species and habitats at scales relevant to their life cycles and ranges.[23] Adaptive management within project plans represents "single-loop" learning, where outcomes feed back into updating hypotheses and management decisions.[24] However, avoiding fragmentation by practicing adaptive management at higher levels is crucial for achieving greater conservation, renewable energy development, and scientific certainty.[25] This "double-loop" learning requires sharing information from individual projects at institutional or regional levels, necessitating increased coordination for data and analyses at greater scales.[26] Post-consent surveys and data collection can inform future project planning and impact assessments. To facilitate this process, decision-making architecture must integrate ongoing findings and revise decision-making processes accordingly.[27]

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[18] IEA White Paper (2016) at 12; *see also* R. Craig et al., *A Proposal for Amending Administrative Law to Facilitate Adaptive Management*, 12 Environ. Res. Lett. 3, 4 (2017).
[19] B.K. Williams & E.D. Brown, *Adaptive Management: The U.S. Department of the Interior Applications Guide* 23 (2012).
[20] *See,* K. Sinclair et al., *Resolving Environmental Effects of Wind Energy*, 7 Wiley Interdisc. Rev. Energy & Env't 291, 6 (2018).
[21] T.A, Wilding & A.B. Gill, T*urning off the DRIP ('Data-rich, information-poor') – rationalising monitoring with a focus on marine renewable energy developments and the benthos*. Renew. Sustain. Energy Rev., 74 (2017), 848-859 [hereinafter "Turning off the DRIP"].
[22] *See, e.g.,* M.C. Allen & M. Campo, *Ecological Monitoring and Mitigation Policies and Practices at Offshore Wind Installations in the United States and Europe* 21 (2020), prepared for the New Jersey Climate Change Alliance (available at: https://njadapt.rutgers.edu).
[23] Andrea Copping et al., Enabling Renewable Energy While Protecting Wildlife: An Ecological Risk-Based Approach to Wind Energy Development Using Ecosystem-Based Management Values, 12 Sustainability 9352, 6 (2020) [hereinafter "Enabling Renewable Energy"]..
[24] Andrea Copping, et al., The Role of Adaptive Management in the Wind Energy Industry, *Wind Energy and Wildlife Impacts*, 5, 12, 16 (2019) [hereinafter "The Role of Adaptive Management"].
[25] IEA White Paper (2016) at 34.
[26] *Id.* at 17.
[27] B.K. Williams & E.D. Brown, *Double-Loop Learning in Adaptive Management: The Need, the Challenge, and the Opportunity*, 62 Environmental Management 1003 (2018).

III. Opportunities to Incorporate Adaptive Management into the Permitting Process

A. Stakeholder Engagement

Stakeholder engagement is important for defining management objectives, metrics, and unacceptable thresholds of change.[28] We recommend that agencies make a draft of the adaptive management framework publicly available. This would provide stakeholders an opportunity to comment and subsequently participate in implementing the final version. Furthermore, a clear adaptive management framework will significantly enhance inter-state collaboration, a requirement for effective adaptive management at the regional level.

Public comment periods provide an immediate and practical opportunity for California to integrate adaptive management principles into offshore wind development planning. In the interest of transparency and public participation, scientific queries, potential development impacts, and proposed mitigation actions should be shared with the public.[29] We advocate for regular public meetings about offshore wind to ensure ongoing stakeholder engagement.[30] Given that stakeholders' perspectives on offshore wind may evolve throughout the management process, we recommend identifying and addressing potential conflicts proactively.[31] We propose the establishment of an adaptive management governance or advisory body. Alongside regular meetings, this would empower stakeholders to play a more significant role in adaptive management. Committees should also be established to review monitoring data and set operating specifications. These committees should consist of independent scientific and subject-matter experts, as well as other stakeholders, to ensure meaningful and diverse stakeholder involvement beyond legal requirements.

B. Tribal Consultation

Native American tribal consultation promotes and benefits from adaptive management by fostering collaboration, information sharing, and mutual understanding among stakeholders. The existing requirement for a Native American Tribes Communications Plan (NATCP) gives tribes an early, active role in discussing potential project impacts. To enhance this process, we recommend that the CEC mandate developers to actively integrate inputs from both federally and state-recognized tribes into the project's adaptive management framework, making their plans adaptable to new information, changing circumstances, and the priorities of Native American communities. We further recommend that the CEC develop and enforce guidelines that ensure ongoing engagement with tribes during every stage of the project, from planning through to decommissioning. These guidelines should help guarantee that the voices and concerns of Native American communities are meaningfully incorporated into offshore wind development, and their rights and interests are adequately protected.

C. Site Assessment

Site assessment plans (SAPs) are vital components of an adaptive management approach, as the data they provide can guide decision-making in the construction and operations phases. A strategic approach is

[28] *See* Turning off the DRIP at 852, 855.
[29] *See* F. Kershaw et al., *Monitoring of Marine Life During Offshore Wind Energy Development—Guidelines and Recommendations* 55 (Mar. 2023), 3 https://tethys.pnnl.gov/sites/default/files/publications/Offshore-Wind-Monitoring-Guidelines_Mar-6-2023.pdf [hereinafter Monitoring of Marine Life].
[30] Enabling Renewable Energy, *supra* note 23, at 23.
[31] Craig et al., *supra* note 18, at 4, 8 (also noting the tradeoff between full adaptive management in which management decisions can be made immediately in response to triggers vs giving public notice before decisions)

needed to ensure that SAP monitoring protocols and impact predictions are tailored to the specific needs of their respective projects, as well as informed by the larger ecosystem needs in which they are situated. Agencies should prioritize monitoring species and habitats most likely to be impacted by offshore wind, aligning with existing management frameworks in the California Current Ecosystem (CCE). Given the high costs and practical challenges of long-term monitoring, it is important to prioritize data-poor, ecologically significant, or vulnerable species to reduce scientific uncertainty and fill crucial data gaps.[32] Developing multiple population models that predict potential offshore wind impacts on marine species further aids adaptive management.[33] These models should address hypotheses about projects' effects on marine species' distribution, behavior, and health, with assigned reliability measures indicating their predictive accuracy and robustness.

Passive acoustic monitoring (PAM) is a valuable tool for recording species presence, distribution, and ambient noise levels to inform mitigation requirements.[34] Combining PAM with visual and other types of detection data provides a more comprehensive record of species' behavior, habitat use, abundance, and presence. As offshore wind development expands, a standardized approach to PAM data collection and analysis across regions will be increasingly beneficial for informed decision-making. Long-term data collection, beginning 3 to 5 years before construction and continuing after construction throughout the lifetime of a project, helps identify annual species presence, occupancy, and distribution, discern other impacts like climate change, and observe changes in acoustic presence due to construction activities or turbine operation.[35]

Agencies should also plan to minimize and adaptively manage the noise that will be generated during the site assessment process. The deeper waters of the CCE may require the use of lower-frequency, higher-power survey technologies. When operated at the surface, these technologies have been associated with impacts on marine mammals,[36] and may pose increased risk to other noise-sensitive species. Agencies should require the use of the lowest power levels possible to attain the necessary data, and require that survey equipment be deployed at depth using an autonomous underwater vehicle, as carried out by other industries.[37] Agencies should also require a shift to different survey technologies if data indicates undue harm from a certain technology.

D. Construction and Operations

For construction and operations, agencies should require a project-specific adaptive management plan based on site assessment findings. The Construction and Operations Plan (COP) Best Management Practices developed by BOEM recommend that lessees develop a project-level monitoring program that includes adaptive management strategies for construction, operation, and decommissioning phases and

[32] IEA White Paper (2016) at 32.
[33] *See, e.g.,* Adaptive Harvest Management, *supra* note, at 9, 13, 31.
[34] S. M. Van Parijs et al., *NOAA and BOEM Minimum Recommendations for Use of Passive Acoustic Listening Systems in Offshore Wind Energy Development Monitoring and Mitigation Programs*, FRONT. MAR. SCI. (2021) at 2.
[35] Parijs et al., *supra* note 33, at 10.
[36] B. Southall et al., Final report of the Independent Scientific Review Panel investigating potential contributing factors to a 2008 mass stranding of melon-headed whales (*Peponocephala electra*) in Antsohihy, Madagascar (2013); D. Cholewiak et al., Beaked whales demonstrate a marked acoustic response to the use of shipboard echosounders, R. SOC. OPEN SCI. (2017).
[37] For example, the 2018 proposed rulemaking for oil and gas activities in the Gulf of Mexico assumes that high resolution geophysical survey equipment (including multibeam echosounders and chirp sub-bottom profilers) is deployed using an AUV and towed 40 meters above the seafloor where water depth exceeds 100 meters. 83 FR 29212 (Jun. 22, 2018) at 29221.

aims to mitigate potential adverse impacts.[38] Data collection should remain question-driven to inform regional or industrial management.[39] This requires large-scale, high-quality data to reduce scientific uncertainty and achieve statistical power.[40] Agencies should mandate specific methods of data collection and management as conditions for adaptive management plan approval.[41]

Stakeholder engagement is also important to ensure that COP ratification is informed by data obtained from preceding phases of site assessment and preconstruction monitoring and to avoid the appearance that COP review is a box-checking exercise.[42] Transparent and thorough public discussion of how the COP comports with the state's adaptive management framework will foster better understanding of adaptive management principles and may increase support for public spending on monitoring efforts. The CEC should develop and publish a clear communication strategy outlining how stakeholders can remain engaged throughout the process and how their inputs will be utilized. This should include dedicated public forums for discussion regarding the compatibility of the COP with the state's adaptive management framework.

E. Post-construction Monitoring

Post-construction monitoring is vital for understanding long-term effects and adjusting management, and should adopt a question-driven approach.[43] This includes assessing project performance, determining the need for corrective actions, and implementing changes when necessary. Monitoring plans should detail data collection, scope, and reporting frequency, while corrective actions should address changes, new information, and unintended effects.[44] These results inform the adaptive management cycle by evaluating success, identifying unforeseen events, and addressing uncertainties.[45] Monitoring for the collision of birds and bats with turbine blades should include real-time data documenting the interaction of volant species with the turbine blades and infrastructure. This monitoring should also measure collision and avoidance rates, with a focus on identifying species to the highest possible degree. New technologies for documenting collision and avoidance rates are rapidly advancing, with financial and research support from entities such as the Department of Energy, CEC EPIC program, NYSERDA and other research funding sources. Monitoring should persist throughout the life of the project to assess performance, determine the need for corrective actions, and implement changes when necessary. Regular reporting requirements should be determined based on the seasonal variation in species presence and potential impacts, with additional reports required when notable events or significant impacts are observed.

IV. Conclusion

We appreciate the CEC's efforts towards sustainable offshore wind development, and we are encouraged by the report on the permitting roadmap. The CEC's proposals of joint NEPA and CEQA review, adoption

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[38] U.S. Dep't of the Interior, Officer of Renewable Energy Programs, Bureau of Ocean Energy Management, *Guidelines for Information Requirements for a Renewable Energy Construction and Operations Plan* 24 (2020) [hereinafter "COP Guidelines"].
[39] IEA White Paper (2016) at 15, 31.
[40] *Id.* at 15-16.
[41] Turning off the DRIP at 854.
[42] *See* T. Boling et al., From Policy to Power 5 (Ocean Conservancy 2022) (noting that "BOEM's active engagement of stakeholders and communities must address concerns that its decision-making process is pre-ordained to ratify the proposed action and will not make effective use of more recent information.") [available at https://oceanconservancy.org/wp-content/uploads/2022/05/OC-PC-From-Policy-to-Power.pdf].
[43] The Role of Adaptive Management, at 3.
[44] *See*, *e.g.*, Deepwater Horizon Natural Resource Damage Assessment Trustees, *Monitoring and Adaptive Management Procedures and Guidelines Manual Version 2.0,* 19 (2021) [hereinafter "Deepwater Horizon"].
[45] *See, e.g.,* Deepwater Horizon, at 18.

of a PEIR under CEQA, and coordinated permitting will support an efficient and environmentally sound wind energy development process. We also seek to underscore the importance of continuing stakeholder engagement, ensuring transparency in data collection and analysis, and practicing adaptive management. Adaptive management is necessary for California to effectively meet its ambitious offshore wind development goals while complying with existing law and policy. Since data often lack the statistical power to support robust evidence-based conclusions, integrating adaptive management into California's offshore wind industry from the start is essential for minimizing ecological harm and maximizing collective benefits from this industry. We remain committed to collaborating with the CEC and relevant agencies throughout the implementation of AB 525, and we look forward to seeing our recommendations reflected in the revised roadmap and strategic plan. Thank you for considering our input, and we eagerly anticipate further productive discussions to advance sustainable offshore wind development in California.

Sincerely,

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