Staff Report 32

PARTY:

California State Lands Commission (Commission)

PROPOSED ACTION:

Consider delegation of authority for the Executive Officer to solicit Statements of Interest for consultant services, negotiate fair and reasonable prices, and award and execute agreements for the preparation of environmental documentation and mitigation monitoring for two proposed offshore wind energy projects in the Pacific Ocean, near Vandenberg Space Force Base, Santa Barbara County.

BACKGROUND:

Senate Bill (SB) 100, the 100 Percent Clean Energy Act of 2018, establishes a requirement that every retail seller of electricity procure 60 percent of its retail electricity sales from eligible renewable energy resources by 2030 and 100 percent by 2045. In 2021, the California Energy Commission, California Public Utilities Commission, and California Air Resources Board issued an SB 100 Joint Agency Report that presents modeling of offshore wind energy development showing that offshore wind could contribute at least 10 gigawatts of energy toward California’s 2045 clean energy policy.

Offshore wind is an established industry in Europe and quickly emerging on the East Coast of the United States, with developers investing heavily in job training, port infrastructure, and economic development. Most of the existing offshore wind turbines around the world use fixed bottom technology, meaning the foundations are drilled into the seafloor. This foundation technology is not possible offshore California due to its deep waters, as the continental shelf drops off sharply closer to shore than in other areas of the United States and around the globe. New floating platform design technologies, however, have sparked interest by developers in California’s offshore potential over the past several years, and in May 2021, the Biden-Harris Administration and Governor Newsom announced an effort to
advance offshore wind energy development off the northern and central coasts of California in federal waters.

Because offshore wind is a new industry for California, many of the components needed for successful installation and operation have not yet been tested, leading to an interest in the development of demonstration-scale projects. These pilot projects could be used to evaluate offshore wind business and logistics, port readiness, floating foundation performance and maintenance, impacts to coastal fisheries, and local workforce and supply chain development. Additionally, pilot projects provide an opportunity to evaluate potential environmental impacts and develop and test impact mitigation measures. While eventual commercial-scale offshore wind development will most likely be concentrated in federal waters over 20 nautical miles (nm) from shore, the construction of small-scale offshore wind demonstration/pilot projects in those locations is generally considered infeasible due to the costs for long subsea cables and trips for operations and maintenance vessels. Proximity to shore would make smaller-scale projects more easily accessible for research monitoring and modifications made based on collected data.

**PROPOSED PROJECTS:**

In 2019, the Commission received two lease applications for use of State sovereign land for offshore wind installations located in State waters. The applicants describe their proposals as demonstration or pilot projects to balance technology needs, environmental impact, and project economics. They are small-scale projects sited closer to shore in specific areas where the applicants believe they can meet minimum wind speeds, while minimizing impacts to the environment and other ocean uses.

CADEMO, a renewable energy development company, has applied for a General Lease – Industrial Use of State sovereign land under the Commission’s jurisdiction to develop an offshore wind demonstration project known as the CADEMO Floating Wind Energy Demonstration Project (CADEMO Project). The CADEMO Project is proposed to be located in State waters approximately 2.5 nm off the coast of Vandenberg Space Force Base (VSFB), Santa Barbara County. According to CADEMO's application No. A2222 submitted on August 23, 2019, the CADEMO Project would install four floating wind turbines with individual capability of generating 12 to 15 megawatts (MW) of renewable electricity to serve California ratepayers. A combined maximum of 60 MW could be generated from the proposed four wind turbines, which would be connected in a series with electrical inter-array cables. CADEMO proposes to examine the performance of two distinct
floating foundation platforms (barge and tension-leg) with their floating wind turbines. The turbines would be moored and anchored to the seafloor. The boundary of the CADEMO’s proposed lease area encompasses approximately 6.2 square miles. However, CADEMO estimates that with further site design and planning, a considerably smaller lease area could be possible, which would be evaluated further as part of an Environmental Impact Report (EIR).

IDEOL, a floating offshore wind technology company and project developer, has applied for a General Lease – Commercial Use of sovereign land under Commission jurisdiction to construct, operate, and ultimately decommission a floating offshore wind electrical generation pilot project (IDEOL Project). The IDEOL Project is proposed to be located in State waters off the coast of VSFB, Santa Barbara County. According to IDEOL’s lease application No. A2181 submitted on July 23, 2019, the IDEOL Project would install four floating wind turbines capable of generating a net 40 MW (10 MW each) of renewable electricity to serve a combination of VSFB and California ratepayers. This proposed Project would consist of up to four floating Damping Pool ® barge concrete foundations moored to the seabed. IDEOL is investigating two anchoring options for the proposed Project, including suction piles and drag embedment anchors. Medium-voltage electrical inter-array cables would connect the floating wind turbines to one another. As proposed, the lease area would encompass approximately 5.2 square miles.

Each Project proposes subsea static cables to carry the generated electricity from offshore to onshore. The cables would be buried under the seafloor at a depth of 5 feet from the southernmost wind turbine to an onshore cable landing site connecting to proposed new electrical substations located south of Point Arguello within VSFB near the Vandenberg Dock. Each Applicant has included a new substation as part of their project description. CADEMO proposes to construct a new onshore overhead transmission line for approximately 11 miles from the proposed new substation to the existing Surf Substation for connection to the California Independent System Operator (CAISO) power grid. IDEOL proposes constructing approximately 4.2 miles of new overhead transmission line connecting the proposed new substation to Substation N for electricity distribution to VSFB. IDEOL also proposes to connect to the CAISO power grid; additional information is required from IDEOL to determine the location and extent of additional infrastructure to connect to the CAISO system.

Importantly, because these Projects are proposed to be located both on VSFB property as well as offshore VSFB in waters that are regularly used for national security training exercises, each applicant has initiated an application process with the Department of Defense (DoD) to determine what siting and operational
considerations are necessary for mission compatibility. Approval of a formal agreement between an Applicant and DoD would be required before any project could be implemented.

**Preliminary Environmental Assessment:**

The novelty of these applications for use of state sovereign lands necessitated the development of a thoughtful, comprehensive review process to ensure early engagement with stakeholders and thorough application review by staff. Staff held a series of early stakeholder engagement meetings between December 2020 and April 2021, receiving input from representatives from environmental non-governmental organizations, commercial and recreational fishermen, the offshore wind industry, labor unions, Native American Tribal governments, academic institutions, ports, and local, state, and federal government agencies. These meetings informed the development of a Preliminary Environmental Assessment (PEA) of the proposed projects. The PEA is not required under California law or the Commission’s application process. Its purpose is to provide stakeholders with background information on offshore wind development in California; the purpose, goals, and description of the proposed Projects provided by the applicants; and a preliminary, qualitative assessment of potential environmental impacts from the proposed Projects. The PEA also includes a summary of staff’s early federal, state, and local government consultation, tribal government outreach and consultation, stakeholder outreach, and the feedback received during these processes. The PEA is intended to serve as an early foundation to inform further project review under the California Environmental Quality Act (CEQA) process.

**Stakeholder, Public Agency, and Tribal Government Input**

As part of its review of the CADEMO and IDEOL lease applications, CSLC staff engaged in an early public consultation/scoping process. Staff conducted six virtual stakeholder outreach meetings between December 2020 and April 2021. Staff held its first virtual “general” stakeholder outreach webinar on December 8, 2020. This session included a large and diverse group of stakeholders with an interest in the proposed offshore wind Projects. Over 170 individuals attended this webinar, representing elected officials, State and federal agencies, Tribes, environmental groups, academia, building industry and workforce, fisheries, and ports. The webinar was recorded and posted on CSLC’s website for review by all interested parties. A copy of staff’s PowerPoint presentation was also posted on the web page.
Staff held five additional “focused” stakeholder outreach meetings during February, March, and April 2021. These virtual meetings were held with four targeted groups:

- **Federal, State, and Regional Agencies** – This session was held on February 3, 2021. More than 20 representatives from federal and State agencies attended and provided valuable feedback for the PEA.

- **Local Agencies, Elected Officials, and Ports** – This session was held on March 2, 2021. More than 10 representatives were present. On May 27, 2020, a specific outreach meeting was held with representatives from the Port of Hueneme.

- **Environmental and Non-Governmental Organizations (ENGOs)** – This session was held on March 9, 2021. More than 27 participants from various environmental organizations attended this meeting and provided valuable feedback for the PEA.

- **Commercial and Recreational Fisheries** – Two separate sessions were held on March 24 and April 1, 2021, and altogether, 67 representatives attended these two sessions.

In addition to these groups, many individual community members who did not identify with a particular organization or government agency attended the sessions.

In January 2021, CSLC staff sent letters to local culturally affiliated Tribal Nations notifying them of the applications and inviting them to engage in government-to-government Consultation. Three Tribes responded to these letters, and individual government-to-government Consultation meetings were held in April. These Tribal Consultations were held individually and were not part of the “stakeholder outreach” meetings. Consultation with these Tribes is expected to continue throughout the scoping and evaluation of the applications. In the coming months, additional outreach and engagement meetings will be scheduled for interested Tribes who did not request individual Consultation.

As part of the Commission’s Environmental Justice Policy, staff engaged in early outreach with environmental justice (EJ) groups. Staff identified EJ communities adjacent to the location of the proposed Projects in Santa Barbara County as well as the community of Oxnard in Ventura County. Additionally, staff solicited input from Port communities in Long Beach, Los Angeles, Oakland, and San Francisco. Outreach letters were sent to 46 EJ organizations in February 2021. In addition, 28 emails were sent to EJ groups lacking a dedicated mailing address. Follow-up phone calls were made to all recipients of letters and emails in early March. Similar to our Tribal Consultation, staff will continue to outreach and engage with EJ
communities in the coming months. Section 2.3.4 of the PEA summarizes the input received during the early consultation process as part of the development of the draft PEA.

The draft PEA was released for public review and comment on July 16, 2021. The public comment period was 60 days and ended on September 13, 2021. Staff received comments from 27 organizations and individuals. Through staff’s stakeholder outreach efforts and public comments on the draft PEA, the Commission has received extensive stakeholder opposition to these applications (see Appendix G within the final PEA for copies of all comments received during the draft PEA review period). Notably, in receiving comments on the draft PEA, it is evident that many of the stakeholders also oppose the Commission moving forward with the proposed projects by undertaking CEQA review. To these stakeholders, the Commission’s decision to conduct CEQA review will foreshadow its approval of at least one application. Exhibit B is a summary of the public comments received in response to the draft PEA.

During September and October 2021, staff modified the draft PEA in response to public comments and added new information and data sources. The final PEA is currently published on the Commission’s website.

**STAFF ANALYSIS AND RECOMMENDATION:**

**AUTHORITY:**
Public Resources Code sections 6005, 6106, 6216, 6301, 6890, 6895, 6897, 6898, and 6899; Government Code sections 4526 and 19130; Public Contract Code sections 6106 and 10335; State Contracting Manual, vol. 1, ch. 11; California Code of Regulations, title 2, section 2980 et seq., and title 14, section 15045.

**PUBLIC TRUST AND STATE’S BEST INTERESTS:**
The climate crisis and its effects on the ocean, land, and people are among the most urgent issues of our time. A just transition from fossil fuel energy to renewable energy sources is becoming more and more realistic as technologies advance, and development of new renewable energy sources, including offshore wind, will almost certainly be necessary to achieve the State’s 2045 carbon neutrality target. As an emerging market, however, the floating offshore wind industry in California faces numerous challenges, ranging from technical and performance questions, to supply chain development, social acceptance, and environmental impact concerns.
Because the Projects would cause an environmental effect, analysis of the impacts of the proposed offshore wind facilities will require the preparation of an EIR in compliance with CEQA. Preparation of an EIR for the two applications would provide the Commission and public with valuable, scientifically rigorous information about the potential environmental impacts of small-scale floating offshore wind facilities in nearshore waters of the state. While many stakeholders have expressed concern about potential impacts from the proposed projects, particularly to biological resources and fisheries, the scope and severity of such impacts have not been scientifically identified and evaluated, resulting in uncertainty and speculation. Development of an EIR would include identification of data gaps and necessary baseline studies, disclosure and analysis of potentially significant impacts, identification of feasible measures to avoid, minimize, and mitigate those impacts, and identification of feasible alternatives, all in a transparent, inclusive public process.

Despite concerns expressed by some stakeholders during the early public consultation and PEA development, authorization from the Commission to prepare an EIR would not approve the two project applications. The Commission would still have to consider the applications at a future properly noticed, public meeting to both certify the EIR and determine whether issuing leases for their development is in the State’s best interests (Pub. Resources Code, § 6005). The information from an EIR will help inform the Commission’s determination of whether the proposed projects are in the State’s best interests.

Additionally, while the scientific information and impacts analyses in the EIR would be specific to the CADEMO and IDEOL proposals, much of the information developed as part of the process would be valuable to the state’s broader offshore wind planning efforts, whether related to information on impact minimization technology, impact of export cables on the benthos, or logistics and ports (supply chain, labor, etc.). For example, because no floating offshore wind technology has been deployed from California, the state’s ports’ capacity for staging, assembly, or fabrication of offshore wind infrastructure remains unknown. The EIR analysis may reveal port modifications or retrofitting challenges that would need to be addressed to effectively develop an offshore wind industry in California and reveal the capacity of the ports as decommissioning of the offshore oil and gas platforms begin.

California’s understanding of the issues associated with offshore wind development could be improved through an analysis of the proposed projects, which could, in turn, facilitate advancement of the industry at a commercial scale with fewer missteps. Thus, moving forward with CEQA review would enable the state to gain
valuable information about perceived and potential environmental impacts as described above. Lastly, evaluating the applications together in one EIR could provide an ancillary benefit to future permitting processes for federal waters proposals. It is possible, even likely, that the federal government, acting through the Bureau of Ocean Energy Management, will issue leases in federal waters to more than one developer. In that case, having an example to follow could be beneficial and even contribute to the development of the “permitting roadmap” required by Assembly Bill (AB) 525 (Chiu).

Staff recommends delegating authority to the Executive Officer or her designee to engage a consultant for preparation of an EIR. Consultant selection will be conducted pursuant to the requirements of the California Public Contract Code and current State policies and procedures, including those specified in the Commission’s regulations and the State Contracting Manual and will be based on demonstrated competence and professional qualifications necessary for the satisfactory performances of the services required. The cost for preparing the EIR, including staff time, would be jointly paid by the applicants.

If authorization to prepare an EIR is granted, staff would continue the stakeholder and public outreach process, including coordination and consultation with state, federal, and local agencies, communities, environmental organizations, academic institutions, Tribal governments, and fishermen. Staff’s goal would be to elicit ideas, facts, and data on potential impacts, mitigation, and alternatives. Any prospective consultant would be expected to have resources, local contacts, and expertise in organizing and managing this outreach process in coordination with Commission staff.

The CEQA analysis undertaken would evaluate potential impacts to sensitive habitat of state and federally listed species, aesthetics, cultural resources, marine biological resources, air quality, and all other potentially significant impacts from proposed Project activities. If the proposed Projects would cause significant impacts that could not be avoided, the document would include proposed mitigation measures to reduce impacts to the extent feasible. Before considering the lease applications for the offshore wind energy projects, the Commission must certify the environmental document and adopt a monitoring plan pursuant to CEQA (Pub. Resources Code, § 21081.6) to ensure that any mitigation measures imposed to mitigate or avoid significant effects will be implemented.

For the reasons above, staff believes the proposed authority for the Executive Officer to solicit Statements of Interest for consultant services is in the State’s best interests.
OTHER PERTINENT INFORMATION:

1. Authorization to solicit proposals is not a project as defined by CEQA because it is an administrative action that will not result in direct or indirect physical changes in the environment.

   Authority: Public Resources Code section 21065 and California Code of Regulations, title 14, section 15378, subdivision (b)(5).

2. Approval of the recommended action by the Commission does not constitute approval or support of the proposed offshore wind projects or their lease applications; it only authorizes consultant contracts for engineering and environmental review to assess the impacts of proposed future activities associated with offshore wind development of in State waters off the coast of VSFB, Santa Barbara County.

3. This action is consistent with Goal 4 of the Commission’s Strategic Plan “Meeting Evolving Public Trust Needs,” Section 2 – Ensure informed decision-making for Commission actions by augmenting decision criteria to evaluate and address:

   a. Balancing of competing demands for Public Trust lands and resources,

   b. The essential role of the Public Trust in enriching the lives of the public and protecting the environment for future generations,

   c. The need to implement and execute environmentally conscious practices that support inclusive job growth, living wages, healthy communities, and a resilient economy.

EXHIBITS:

A. Map of proposed Vandenberg Offshore Energy Projects
B. Summary of Comments on the Draft PEA

RECOMMENDED ACTION:

It is recommended that the Commission:

1. Find that the services are of limited duration and are of such urgent, temporary, and occasional nature that the delay in their implementation under civil service would frustrate their purpose as specified in Government Code section 19130, subdivisions (b)(3) and (10).
2. Find that the selection of consultants under this process does not affect small businesses as defined in California Government Code section 14837, subdivision (d)(1)(B) because they will be accorded equal opportunity to submit statements of qualifications and performance data.

3. Find that the selection of consultants under this process for professional services of architectural, landscape architectural, engineering, environmental, land surveying or construction project management services will be consistent with procedures and policies adopted by the Commission as specified in Government Code section 4526 and California Code of Regulations, title 2, sections 2980 et seq.

4. Find that the authorization below does not constitute approval of, nor shall it be interpreted to constitute any support of, the two offshore wind project applications. The Commission will consider the two offshore wind project applications at a future properly noticed, public meeting after completing the CEQA process.

**AUTHORIZATION:**
Authorize the Executive Officer or her designee to solicit Statements of Interest for consultant services, negotiate a fair and reasonable price, award and execute agreements, and take any other steps reasonably necessary to undertake public outreach, and prepare a feasibility report and environmental documentation for the proposed Vandenberg Offshore Wind Energy Projects, pursuant to the requirements of the Public Contract Code and current State policies and procedures.
COMMENTED AGENCIES

- California Coastal Commission
- California Department of Fish and Wildlife and California Ocean Protection Council (Joint Letter)
- National Oceanic and Atmospheric Administration, National Marine Fisheries Service
- National Oceanic and Atmospheric Administration, Office of National Marine Sanctuaries
- Ventura County Air Pollution Control District

MAJOR THEMES

Impacts on marine resources and supported habitats

- Specific statutes of concern
  - Several agencies express concerns about impacts on marine resources and their supported habitats, especially those protected under specific statutes:
    - Endangered Species Act
    - California Endangered Species Act
    - Marine Mammal Protection Act
    - National Marine Sanctuaries Act
    - Magnuson-Stevens Fisheries Conservation and Management Act
    - Fisheries Management Plans
    - Fish and Wildlife Coordination Act
    - Reorganization Plan No. 4 of 1970

- Collision and entanglement of marine species
  - Agencies bring up concerns about collision and entanglement of marine mammals and sea turtles with project vessels, floating wind turbines, mooring systems, or transmission lines. There is also a concern about secondary entanglement resulting from fishing gear becoming entangled in mooring systems and transmission lines.
  - Agencies urge the projects avoid and minimize wildlife entanglement, and recommend the development of a marine species entanglement plan to prevent, monitor, and respond to entanglements.
Additionally, concerns have been raised about sea bird and bat collisions with turbine rotor blades.

Agencies recommend baseline studies and ongoing monitoring of sea bird and bat activity and mortality in the project areas.

- **Noise, electromagnetic fields, and heat**
  - Agencies express concern over the impacts of noise and vibrations from vessel traffic, equipment, and transmission lines on marine life—including marine mammals, fish, and invertebrates—which could cause stress, hearing loss, or interfere with communication or predator/prey detection.
  - Some agencies point out potential impacts of electromagnetic fields and/or heat emitted from cables on marine life, which could result in behavioral changes induced by attraction to or repulsion of the cables.
  - They recommend baseline studies and ongoing monitoring to track the effects of noise, vibrations, electromagnetic fields, and heat on marine life.

- **Submerged infrastructure as fish aggregating devices**
  - Some agencies point out that floating foundations and mooring systems may act as artificial reefs where hard habitat is normally absent, recruiting invertebrates and attracting fish. This could lead to altered fish migration routes and increased risk of capture by fishermen. Alternatively, hard substrate provided by floating foundations could also allow for invasive species to settle.

- **Seafloor disturbance**
  - Agencies express concerns about the impacts of trenching and cable burials on benthic communities and potential long-term impacts on ecosystem functions.

- **Water quality and invasive species**
  - There are concerns about the degradation of water quality by project construction, cable laying, and unintentional discharges from vessels. Impacts to marine life include light limitation and disruption to species feeding and breathing mechanisms.
  - Agencies also express concerns about the introduction of invasive species through biofouling and ballast water during vessel transport and construction activities.

- **Ocean circulation patterns and currents**
  - Some agencies point out the potential for these projects to alter ocean circulation patterns and currents, which could affect sedimentation and larval transport in the area.
  - They recommend collecting baseline data and conducting hydrodynamic modeling to assess these impacts.
Impacts on onshore biological and water resources

- **Microclimate and vegetation**
  - There are concerns about the effects of floating wind turbines on downwind atmospheric conditions and weather patterns (e.g., temperature and fog), which are essential for coastal vegetation and sensitive plant species in the region.
  - Agencies recommend baseline mapping of vegetation in onshore project areas.

- **Stream and riparian resources**
  - Agencies point out that construction could lead to changes in drainage patterns, runoff, and sedimentation, which could affect aquatic, riparian, and wetland habitats.
  - Agencies ask that water pollution is minimized during onshore construction and that water resources remain accessible to the public for enjoyment.

Impacts on commercial and recreational fisheries

- Several agencies raise concerns about the environmental impacts on fisheries-dependent resources and ecosystems.
- There are also concerns about the impacts of additional closed areas, which could further displace fishing activities and exacerbate fishing impacts on areas that remain open.
- Some agencies raise concerns about the loss of fishing gear from snagging on project infrastructure.
- Many of these direct impacts to fishermen could lead to indirect impacts on local fishing communities, who rely on the industry for economic stability.
- All agencies emphasize the need to engage the fishing community early and often to minimize impacts to the fishing industry.

Impacts on port-dependent activities

- With the construction of floating infrastructure slated to occur at one or more nearby ports, there are concerns about how construction activities may impact port-dependent industries.
- Agencies state that updates to port facilities would be needed to increase load capacity, and an offshore construction site may even be necessary for final assembly of floating platforms.

Navigation risks

- There are some concerns about navigational hazards as vessels try to navigate around or in between floating wind turbines.
- Agencies recommend conducting a navigation safety risk assessment.
Impacts on cultural and Tribal resources
- Potential overlap with the proposed Chumash Heritage National Marine Sanctuary
  - Agencies point out that the project area lies within the proposed Chumash Heritage National Marine Sanctuary, which was nominated in 2015 and may be designated as a sanctuary in the future. Coordination among agencies would be needed if the project construction were to move forward within the sanctuary area.
  - Agencies recommend that the potential designation be considered a part of the cumulative impacts analysis.

- Cultural sites and shipwrecks
  - Agencies recommend that offshore surveys be conducted to detect shipwrecks and other culturally significant sites.

- Support for Tribal consultation
  - Agencies emphasize the need for consultation with local Tribal representatives to mitigate impacts on Tribal resources.

Scenic and visual impacts
- Some agencies are concerned about protecting visual resources and ocean views from beaches and rail routes, which is an important component of California’s coastal resources.

Development of project alternatives
- Agencies state strong support for the development of project alternatives, particularly those that consolidate and combine project elements, to reduce environmental impacts.
- They also support the inclusion of alternative locations in areas with lower densities of marine life and sea birds.

Data collection, monitoring, and mitigation
- Some agencies recommend all data collection and monitoring be pre-determined in a monitoring and management plan and remain the sole responsibility of the project proponents, and not public institutions.
- Agencies recommend monitoring marine species, acoustics and noise, marine mammals, species responses to electromagnetic fields, bird and bat collisions, entanglements, invasive species, and fisheries impacts. Monitoring methodologies should remain consistent for year-to-year comparison and should be comparable to data collection efforts at onshore wind facilities.
COMMENTED GROUPS

- Environmental Defense Center (Joint Letter)
  - Defenders of Wildlife, California
  - Sierra Club California
  - Natural Resources Defense Council
  - Center for Biological Diversity
  - Santa Barbara Audubon Society
  - Ventura Audubon Society
  - Gaviota Coast Conservancy
  - Surfrider Foundation
  - American Bird Conservancy
  - National Audubon Society
  - Ocean Conservation Research
  - Monterey Bay Aquarium
- National Audubon Society
- San Diego Audubon Society

MAJOR THEMES

**Acknowledgement of the need for renewable energy resources to address climate change**

- ENGOs express they have long advocated for policies and actions to bring renewable energy to scale in an environmentally protective way, including offshore wind. They emphasize the importance of developing offshore wind in a responsible way by creating a planning process that minimizes environmental impacts, is inclusive of stakeholders, and is science driven.
Recommendation for a robust planning framework

- NGOs propose that, instead of developing offshore wind on an ad hoc basis, California agencies should utilize long-term and large-scale seascape planning to identify priority areas for offshore wind development. This would ensure that the determined locations minimize impacts and conflicts, thus balancing California’s goals of clean energy with wildlife habitat and productive fisheries.

- They encourage a shift in focus and resources to prioritize projects in federal waters, stating such locations are less likely to have impacts on marine and coastal resources.

- They further encourage use of the California Offshore Wind Energy Gateway to identify and visualize data gaps—and recommend allowing sufficient time and resources for scientific studies to fill those gaps—before siting areas for offshore wind development.

- They recommend avoiding biologically/ecologically significant and protected areas in the siting, design, and operation of offshore wind projects.

Specific concerns about the proposed projects’ location

- **Biologically diverse and productive marine region**
  - ENGOs express concern over the projects’ location in a biologically diverse and productive marine region that includes sensitive marine and terrestrial habitats and species.
  - There are concerns about the increased densities of seabirds and marine species in nearshore waters, and the cumulative impacts of offshore wind development in state waters compared to sites farther offshore.

- **Protected and important species in and around the region**
  - ENGOs convey concern for certain types of marine organisms, including marine mammals, sea turtles, sea birds, and bats. There is a heightened concern for protected species—leatherback sea turtles, humpback whales, gray whales, and blue whales. Additionally, hard-bottom habitats, home to deep sea corals, are mentioned.
  - They indicate the proximity of the project area to six onshore Audubon Important Bird Areas, which cover over 20 bird species and are used by fisheries, aquaculture, and recreation.
  - They indicate that the project area overlaps with federally designated critical habitat for humpback whales.
  - They recommend ongoing biological monitoring of flora and fauna in onshore and offshore project areas, and request that impacts to wildlife be mitigated.
• **High land-sea connectivity in the region**
  o ENGOs indicate the excellent land-sea connectivity in this region, due to the presence of the relatively undeveloped Vandenberg Space Force Base onshore and the Vandenberg State Marine Reserve in nearshore waters, facilitating nearshore-to-offshore migration of certain rockfish species throughout their life history.

• **High-use fishing area**
  o ENGOs assert that, as a result of the high biodiversity in the region, fisheries productivity is also high.

• **Loss of fishing grounds and “squeezing” of fishing grounds in the surrounding areas**
  o ENGOs express a concern for the economic livelihoods of recreational and commercial fishermen and reliant fishing communities as they lose access to more fishing grounds, pointing out that fewer and fewer areas in the region remain open to fishing. The concentration of fishing activities in the surrounding areas would exacerbate fishing impacts on the environment.

**Concerns about marine mammal ship strikes, entanglements, and noise impacts**
• ENGOs express concerns about vessel traffic associated with project construction increasing ship strikes with marine mammals.
• Additionally, there are concerns about fishing gear getting caught in wind turbine support cables and creating entanglement risk for marine mammals and sea turtles.
• ENGOs further point out that ocean noise, only to increase as a result of these projects, is already a concern for marine mammals.

**Concerns about sea bird and bat collisions with wind turbines**
• ENGOs express concerns for sea bird and bat injury and mortality due to potential collisions with floating wind turbines.
• They recommend ongoing monitoring of birds and bats in the area, and the development of a management plan should they choose to nest or roost on the floating turbines.
• They request that wind turbines have the capability to immediately cease operations, and they be shut off during periods of bird migrations.

**Support for Tribal consultation**
• ENGOs emphasize that coastal areas are often culturally and archeologically significant and urge the State Lands Commission to engage with local Tribal representatives and archeologists.
STATE LANDS COMMISSION OFFSHORE WIND

Summary of Fishermen/Fishing Industry Comments on Draft PEA

COMMENTED GROUPS

- Alliance of Communities for Sustainable Fisheries
- International Law Offices of San Diego Representing Various Commercial and Sportfishermen
- Pacific Fishery Management Council
- Pacific Coast Federation of Fishermen's Associations
- Port San Luis Fisherman Association
- Various Unaffiliated Fishermen

MAJOR THEMES

Acknowledgement of the need for renewable energy resources to address climate change
- Fishermen recognize the need to transition to renewable energy resources to slow and reverse the effects of climate change. They emphasize that this should not come at the expense of other essential industries, such as the fishing industry.
- Many fishermen believe solar and onshore wind to be better renewable energy alternatives than offshore wind energy.

Specific concerns about the area of the proposed projects
- Not representative of potential future offshore wind projects farther offshore
  - Fishermen state that physical and biological conditions at the current location of the proposed projects will not be representative of conditions in federally designated call areas for future, larger-scale offshore wind projects.

- High-use fishing area containing many commercially and recreationally important fish stocks
  - Fishermen indicate that the area of the proposed projects has high fisheries productivity and hosts up to 10 different fisheries. They assert that the fishing opportunities in this area are too valuable to lose.
• Loss of fishing grounds and “squeezing” of fishing grounds in the surrounding areas
  o Commercial fishermen express a concern for their economic livelihood, and for that of reliant fishing communities, as fewer and fewer areas in the region remain open to fishing due to existing protected areas and marine reserves. As commercial and recreational fishermen continue to lose access to fishing grounds, fishing activities will become increasingly concentrated in the surrounding areas.

Concerns about environmental impacts of the projects
• Noise impacts on marine life
  o Several fishermen are concerned about the impacts of noise on the health and behavior or marine mammals, turtles, fish, and invertebrates.

• Bird and whale collisions with turbine infrastructure
  o Some fishermen express concerns about whale collisions with supporting cables.
  o Fishermen also express concerns about bird collisions with turbine blades.

• Benthic disturbances
  o Several fishermen are concerned about the impacts of cable and anchor installation on benthic habitats.

• Electromagnetic fields in the water column
  o Fishermen express concerns about the impacts that electromagnetic fields may have on fish behavior and movement patterns, potentially driving them away from the area.

• Concerns about downwind impacts of floating wind turbines on marine upwelling
  o Some fishermen are concerned about the reduction of wind speeds downwind of the floating wind turbines. Reduced wind speeds could potentially reduce upwelling, and in turn, fisheries productivity.

Concerns about navigational hazards
• Fishermen express concerns about the potential for the projects to disturb marine radar systems, which would create safety issues should vessel collisions or sinkings occur.

Request for a mutual benefit agreement
• Fishermen request that certain measures be taken to preserve their economic livelihoods. This may involve a formal mitigation agreement with project developers, potentially modeled after other recent fishing agreements. An agreement would establish a dialogue between fishermen and project developers, enhancing communication and reducing conflict.
Request for a reduction in the quantity of wind turbines

- Should the project(s) move forward, fishermen request that the number of turbines be reduced or that only one project move forward.

Request for more engagement of fishermen in decision-making processes

- Fishermen request more engagement and participation in the decision-making process for any future issues or operations that may be relevant to them, suggesting that working groups with fishing representatives be established to amplify the voice of the fishing community.
- Should the project(s) move forward, fishermen request that CSLC engage with them to better understand the level and spatial/temporal distribution of fishing activity in the region.
STATE LANDS COMMISSION OFFSHORE WIND

Summary of Community and Labor Comments on Draft PEA

COMMENTED GROUPS

- Attorneys for Southwest Regional Council of Carpenters
- Various Community Members

MAJOR THEMES

**Concern about the efficiency and environmental friendliness of wind farms**

- Will not produce adequate energy
- Will continue to need government subsidies and not be profitable
- Have high carbon footprint due to manufacturing and use of materials that may not be recyclable
- High maintenance cost
- Concern about ocean pollution during operations due to corrosion/breakdown

**Concern about land use / community benefits**

- Interest in well-ordered land use planning
- Concern about addressing environmental impacts and equitable economic development
- Request future notifications for EIR
- Request that Applicants provide additional community benefit
- Recommend project “built to standards exceeding the current 2019 California Green Building Code” to mitigate the project’s environmental impacts
- Recommend adopting additional CEQA measures to mitigate public health risks from construction
- Request requiring safe on-site construction work practices as well as training and certification for any construction workers on the project site
- Provide specific recommendations for construction site design, COVID-19 testing procedures, and request the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures
Use of local trained / experienced labor

• Consider utilizing skilled and trained workforce policies and requirements to benefit the local area economically, including using local hire provisions, which will mitigate greenhouse gas emissions, improve air quality, and address transportation impacts
  o Require that a certain percentage of workers reside within 10 miles or less of the project sites
• Require that workers with adequate California-approved training or experience be hired in one of the following categories:
  o Graduated from a Joint Labor Management apprenticeship training program approved by the State of California
  o Experienced with at least as many hours of on-the-job experience required to graduate from such a state-approved apprenticeship training program
  o Registered apprentices in an apprenticeship training program approved by the State of California

Technical Paper for Additional Information

• Provided paper titled “Local Hire Requirements and Considerations for Greenhouse Gas Modeling study” by SWAPE (Technical Consultation, Data Analysis and Litigation Support for the Environment) by Matt Hagemann, P.G, Ch. & Paul E. Rosenfeld, PhD