CALIFORNIA DEPARTMENT OF FISH & WILDLIFE MULTI-AGENCY OFFSHORE WIND MEETINGS WITH NORTH COAST FISHERMEN CRESCENT CITY HARBOR DISTRICT

101 CITIZENS DOCK ROAD CRESCENT CITY, CA 95531 WEDNESDAY, NOVEMBER 3, 2021 8:30 – 11:30 A.M. PT HYBRID MEETING

Meeting materials

- Meeting Agenda
- NC_OSW Fishing Reference Document

Presentations

• BOEM Leasing Presentation

Meeting participants¹

Mark DanielsonCalifornia Energy CommissionEli HarlandCalifornia Energy CommissionKate HuckelbridgeCalifornia Coastal CommissionMargarita McInnisCalifornia State Lands CommissionBecky OtaCalifornia Department Fish & WildlifeBrian OwensCalifornia Department Fish & WildlifeChris PotterCalifornia Department Fish & WildlifeAbigail RyderBureau of Ocean Energy ManagementJean Thurston-KellerBureau of Ocean Energy ManagementVito PomiliaCommercial FishermanVictor PomiliaCommercial FishermanGerry HemmingsenCommercial FishermanKavin PintoCommercial Fisherman	Amanda Cousart	California Coastal Commission
Kate HuckelbridgeCalifornia Coastal CommissionMargarita McInnisCalifornia State Lands CommissionBecky OtaCalifornia Department Fish & WildlifeBrian OwensCalifornia Department Fish & WildlifeChris PotterCalifornia Department Fish & WildlifeAbigail RyderBureau of Ocean Energy ManagementDonna SchroederBureau of Ocean Energy ManagementJean Thurston-KellerBureau of Ocean Energy ManagementVito PomiliaCommercial FishermanVictor PomiliaCommercial FishermanGerry HemmingsenCommercial FishermanRandy PincombeCommercial Fisherman	Mark Danielson	California Energy Commission
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Randy Pincombe Commercial Fisherman	Victor Pomilia	Commercial Fisherman
,	Gerry Hemmingsen	Commercial Fisherman
Kevin Pinto	Randy Pincombe	Commercial Fisherman
	Kevin Pinto	Commercial Fisherman

¹ Only those members of the public that used the sign in sheet are included here and the list of commercial fisherman at the meeting is not exhaustive because of this.

George Bradshaw Troy Wakefield John Beardon Todd Garrett Rick Shepherd Commercial Fisherman Commercial Fisherman Commercial Fisherman Deputy Harbor Master Harbor District Commissioner

Facilitation team participants

Eric Holmes	Kearns & West
Jasmine King	Kearns & West

MEETING SUMMARY AND DISCUSSION HIGHLIGHTS

Presentations

- Jean Thurston-Keller BOEM leasing process.
- Amanda Cousart California Coastal Commission federal consistency process.

Public Comment

Sociological/Economic Impacts

- If development does proceed, the fishing community prefers employment over compensatory mitigation.
- The power cables are of particular concern for the crab fishermen, since this would prevent them from fishing for crabs anywhere near the power lines, assuming there is a buffer area around the power lines where fishing wouldn't be allowed.
- Previously, other organizations offered monetary compensation to the fishing community for compliance with projects that has potential negative impacts on fishing operations. Monetary compensation is the last thing the fishing community wants. The loss of jobs is a real cost to fishermen, and in their perspective, not a fair tradeoff for energy development.
- Compensatory mitigation actions are not satisfactory to the fishing community, but it is difficult to speak to what actions would be agreeable without additional information being brought to the table by the participating organizations. Project development information would inform targeted discussions on mitigation actions.
- The community needs mitigation actions that incentivize work. Too many fishermen are being paid to not work and that is a toxic compensation approach for the fleet.
- A suggestion was made to open new fishing areas that are consistent in size with areas that are closed to maintain fishing opportunities.

- A suggestion was made to require the bidding organization to have a mitigation plan as part of the leasing process, which BOEM and other organizations could vet with the fishing community.
- A commenter expressed the desire to bring back the California pink shrimp fishery.

<u>Birds</u>

- The wind turbines will impact local bird populations, especially at night when flocks cannot detect and navigate turbines.
- Seabirds are often attracted to the bait used by fishing vessels and there is fear that the birds may intersect the windfarms while in transit to consume bait. Fishermen don't want to be held accountable for this externality or for this mortality to reduce the allowable bird bycatch in their respective fisheries.

Fish and Essential Fish Habitat

• It is possible that the turbine construction could lead to new hospitable habitat for marine life, although those waters wouldn't be open to fishing.

Comments on public comment process/engagement/educating public

- It will be difficult to keep the fishing community engaged if attending multiple meetings is expected by the agencies because attendance translates to lost income. Despite the community's interest in remaining engage and voicing a collective opinion, fishermen still have to maintain their livelihoods.
- Concern was expressed over the data gap survey that investigates fishing areas. Respondents may have withheld information on productive areas to protect their fishing operations. The survey was also being conducted after the coastal waters were extensively fished, so species range is only a fraction of what it historically was. This may have skewed survey results.
- A commenter asked that the fishing community only be engaged when participating organizations have information to save time, but before the development area is defined. Fisheries want to provide input and shape the permitting.

Comments on the Project (e.g., technology, safety, engineering)

- Area weather conditions are exceptionally powerful. Winds can reach 30-40 knots and swells average 16 feet. In a previous year, a tsunami wiped out the harbor. Considering the formidable forces of nature, it is unlikely that any wind turbine could survive.
- There are concerns around the capacity of vessels to conduct regular maintenance on deployed turbines. The 42 block is probably the worst possible area to develop in.
- Ocean winds can blow boats out of the harbor. Violent gusts could tear apart any turbines along the coast and it's important that agencies recognize that.
- There is an active subduction fault line in the area that generates monthly earthquakes, which could damage transmission cables.
- There don't appear to be transit lanes between the individual turbines. If there is a straight shot between the towers, a vessel would take it, despite the waters being closed to traffic.
- There is concern that coastal wind farms will be left behind like oil and gas platform, which would make navigation difficult.
- When fishing equipment becomes entangled in a telecoms line, the vessel is required to wait until help arrives and cut off the ensnared gear, which is costly. Adding power cables from a wind farm could complicate and create more obstacles for fishing.

- Offshore wind development will have a significant carbon footprint and a commenter asked whether new construction and grid retrofits have a smaller environmental/carbon impact in contrast to using existing infrastructure.
- Concern was expressed around how water above the power cables will be regulated. Closing waters would contribute to a considerable loss of fishing grounds.
- When fishing is confined to smaller and smaller areas, the impacts are concentrated, and environmental consequences are more tangible. The proposed project would push fishing communities into smaller and smaller spaces.
- There are major risks to marine life and migratory behavior when running a power conduit underwater.

Public Q&A

Sociological/Economic Impacts

- How will this project support the local community?
 - That depends on a lot of factors but there is potential for local job creation, and the community could be offered other benefits as well.

Fish and Essential Fish Habitat

- What are the long-term impacts on marine life?
 - Impacts are unknown, but a comprehensive study would be conducted if a wind farm were to be developed.
- How will the underwater transmission lines impact marine life? There are electromagnetic fields coming off the wires.
 - Recent research suggests that the electromagnetic currents in the cables do not have any detectable effect on marine animal behavior. Each transmission line is insulated such that a bridge over water has an EMF 10X stronger than what is emitted at the surface of a cable.

Comments on the Project (e.g., technology, safety, engineering)

- Where are the site assessments?
 - Only off the coast of Eureka thus far, but there is interest in areas outside of the Eureka coast as well. Each new site would require its own assessment.
- What is the lifespan of the project?
 - The lease for the wind farm area is 33 years, but the wind turbines could be in operation for 50-75 years.
- When will this wind development begin construction?
 - There are two proposed California offshore development areas. One along the Central Coast and the northern area discussed today. There are several stages left in the evaluation, leasing, and proposal process, which could take more than five years to complete before construction is considered.
- How will the power generated from the project be distributed? What is the geographic span of the power distribution? What will power rates look like?
 - Power will be transmitted via underwater cables that rest on the seafloor or are buried, depending on local conditions. Due to infrastructure constraints, the power will be distributed to a local region where the utility company will set the price for the energy based on their rate structures.
- Why can't the wind farm be moved inland or on land?
 - To meet California renewable energy goals, BOEM has to consider all options, including renewables on land and in the sea.

- Why are we not using information from the already established BOEM offshore wind projects on the East Coast?
 - There are key differences in the construction of the East Coast wind projects that, in conjunction with differing ecosystems and marine biology, makes the identified West Coast projects significantly different. There are similar offshore wind developments in Scotland and Denmark that are sharing data with us, but we still have a lot to research.
- How big will the project off the coast of Eureka be?
 - It could be up to 100 turbines.
 - Is there a map of where the cables would run from the turbines to shore?
 - Not yet. There is flexibility in the route the cable could take inland, but developing that map would take place later in the planning process.
- What are the restrictions fishermen face with travel near the windfarm?
 - The Coast Guard will develop those guidelines based on safety factors, national security, search and rescue logistics, and more. There is already a Coast Guard study underway regarding navigation topics around windfarms.
- Why can't the wind farm be placed in protected areas to overlap with unfishable waters?
 - There is no way to go about permitting that at this moment, and it would be a very difficult process to make happen.
- Would it be possible for the fishing community to put in a bid to develop the wind project?
 - There are minimum requirements that bidders must demonstrate to qualify for the bidding process, one of which is through experience in wind turbine construction.
- Will offshore wind energy power California?
 - Offshore wind will not solely power California, but it is a significant part. Onshore solar power is another large component. The power curves for solar and wind energy production are complimentary and that is why investing in wind is a priority.
- What is the carbon footprint of constructing, moving, implementing, and maintaining a wind turbine project like this?
 - That has yet to be fully studied. California's goal is to rely on carbon free technologies for power by 2045 and wind turbines are an effective carbon free energy technology.
- Who will be bidding on the lease? Are they foreign companies?
 - It is an open bidding process and it's expected that some of the bidders will be international organizations.
- Has the cost of renewable energy gone down such that projects like this offshore windfarm will be economically feasible, and citizens can afford the energy?
 - Renewable energy has become increasingly affordable to develop, however the electricity rates are dictated by local utility agencies and are not determined.

Other Comments

- What is happening with the Vandenburg project site?
 - It is going through a small-scale development with approximately three turbines.

Agency Q&A

• Is there a desire from members in the fishing community to continue fishing in the wind areas if possible?

- Yes. The fishing community is losing fishing waters far too fast. Any fishable space that can be retained would be a win for the fleet.
- How should we stay engaged moving forward? CDFW could host a meeting early next year on mitigation issues identified by the fishing community.
 - We could hold our own meetings as fishing members to discuss what we would like to see in terms of mitigation, then we can explore that topic further together.
- The community in this room is hungry for information. Can you produce a list of questions for us to take to other organizations involved in the planning process?
 - We expressed all our questions during this meeting. Perhaps you can have your notetaker sift through what was said and produce that list of questions.
- Where would you like to have future meetings?
 - A larger room to accommodate more people would be ideal. Using Zoom as a hybrid solution is fine.

Meeting adjourned at 11:30 a.m. PT.