CALIFORNIA DEPARTMENT OF FISH & WILDLIFE
MULTI-AGENCY OFFSHORE WIND MEETINGS WITH NORTH COAST FISHERMEN
HARBOR BAY HARBOR DISTRICT
601 STARTAIRE DRIVE
EUREKA, CA 95501
WEDNESDAY, NOVEMBER 3, 2021
2:30 – 5:30 P.M. PT
HYBRID MEETING

Meeting materials

- Meeting Agenda
- NC_OSW Fishing Reference Document

Presentations

- BOEM Leasing Presentation

Meeting participants[1]

Amanda Cousart	California Coastal Commission
Mark Danielson	California Energy Commission
Eli Harland	California Energy Commission
Kate Huckelbridge	California Coastal Commission
Margarita McInnis	California State Lands Commission
Becky Ota	California Department Fish & Wildlife
Brian Owens	California Department Fish & Wildlife
Abigail Ryder	Bureau of Ocean Energy Management
Donna Schroeder	Bureau of Ocean Energy Management
Jean Thurston-Keller	Bureau of Ocean Energy Management
Ken Bates	Commercial Fisherman
Harrison Ibach	Commercial Fisherman
Jake McMaster	Commercial Fisherman
Wayne Heikkela (by phone)	Commercial Fisherman
Larry Oetker	Humboldt County Harbor District

[1] A signup sheet was not provided at this meeting to capture meeting participants, so any participants listed here are based on memory from staff.

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

- Fishermen are constantly losing ground to new mandates, restrictions, and regulations. Most recently, whale migration routes led to new laws impacting fishing operations. With each new rule, it becomes harder to make a living as a California fisherman. The community hopes to regain opportunities over time rather than lose them.
- Vessels won't be able to get within a few miles of the turbines and will face restrictions in areas near the transmission lines. Additional navigation around the restricted areas will add up to increased fuel consumption and lost time.
- Members of the fishing community will have difficulty transitioning employment after years of service.
- Turbine construction could clog local ports. The fishing fleet will be forced to wait for a wind turbine to be towed out of channels, resulting in significant financial losses.
- The fishing community is unclear on what is under consideration and needs to see development plans to brainstorm mitigation. A fisherman suggested that mitigation options should focus on port infrastructure upgrades like cold storage.

Comments on public comment process/engagement/educating public

- There needs to be more information when future meetings are conducted.
- These meetings need to be venues for agencies to listen to the fishing community. The fishing community is cynical about the outcomes.
- BOEM needs to create a fisherman's stakeholder group so that fishing communities have influence in the process.

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

- In theory, the cable landings will run near existing routes to minimize impacts to fishing and navigation.
- Turbines will be clustered to reduce impacts and allow anchors and cables to be shared.
- Because maintenance crews need to be able to easily grapple cables, there must be ample space between cables. Typically, the deeper the water, the further apart the cables must be.

- The proposed lease area overlaps violent waters, which are inhospitable to man-made devices. Failure is likely.
- Additional considerations need to be taken about what will happen if a wind turbine falls over (e.g., pull mooring and anchors out, float vs. sink, impact other structures).

Public Q&A

Fish and Essential Fish Habitat

- Does the call area encompass the essential fish habitat?
    - It does not, but additional resources would be invested for a detailed picture of what is on the seafloor before building in the area.
- There are a lot of marine life resources like sponges and corals in that area, which the fishing fleet can't touch, but here we are looking at building in the region. Recently there was a meeting on new closures for corals. Why can't we fish there but apparently you can build there?
    - The NEPA process will take into consideration the potential environmental impact of proposed activities. This review process will take place down the line, but the state and other organizations will consider proposed actions sooner. The lease holder will have to take their plan to BOEM for review.
- What work has been done on the electromagnetic fields the cables produce?
    - Dungeness crab, sturgeon, and salmon species have been studied, and it has been determined that the magnetic fields from the cables have no detectable effect on animal behavior.

Marine Mammals

- Will the wind farm impact whale behavior?
    - We are not sure how marine life would interact with a development in this area. The best we can do is infer from what has happened in other offshore wind developments like Scotland and Denmark, but those locations have disparate environments and different marine species.

Comments on public comment process/engagement/educating public

- What is the frequency of future meetings?
    - Our organizations are happy to be flexible and work with the fishing community to accommodate meeting times and frequencies that work best for you.
- Impacts on the fishing community are never heard or communicated. Our industry will be seen only as a negative impact on the development of wind energy.
    - Your industry is being impacted by regulations and not the other way around. It is our intent to reflect that outside of this meeting.

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

- How will the wind power plug into the grid?
    - It will link up to existing infrastructure on land. The total power output from the project is limited by what infrastructure already exists on land, but the initial scope of the project is modest to match what already exists. Technology can be developed within the grid to accommodate growing offshore wind development.
- What if the Coastal Commission and state lands determine that there is a problem with the proposed project?
    - There is a point at which organizations convening the leasing process need to concur or object to a proposed development, and that is where the process can

be paused. The proposed project can then be amended and brought into agreement to proceed.

- Why is the state so committed to putting this development on the water when you could put it on land and get the same amount of wind?
    - There will be many types of renewables developed to allow California to reach its 2045 energy goal. Solar energy will be a large part of the equation and wind power compliments the energy curve of solar well. By placing the wind turbines on water as opposed to land we can avoid conflicts and challenges.
- Why don't you push the wind farm another 20 miles out into the ocean?
    - Because of depth and finding acceptable depth ranges for the project.
- I was contacted by NOAA to retrieve a buoy and instructed to leave the mooring behind. In the event the turbines are partially developed and then removed what happens to the mooring? Our vessels can't fish in areas where these pieces of infrastructure are left behind.
    - We can't say for sure at this point what is likely to happen, but a company can submit a proposal to engage in removal of derelict and abandoned gear.
- What happens if a turbine loses its mooring and the line drifts out into navigable waters, endangering vessels?
    - The Coast Guard will perform the risk assessment for those scenarios, and develop mitigation strategies to ensure safety on the water.
- Will the shielding/coating around the cable wear off over time?
    - That is a question for an engineer on the project, but the shield should last the lifespan of the wind farm.
- Sharing anchors and mooring for multiple turbines in an area that turbulent will result in incredible stress placed on the structure. Are you confident it can handle that?
    - Research and development on wind turbines and wind farms is accelerating. Research is leading to creative solutions that will address these challenges. These projects are developed to withstand 100-year storms, so should be able to handle extreme weather events.
- No one in this room is against renewable energy if it is done properly, but it must make sense. Has a study been done to compare the carbon footprint of the project vs. what is already in place?
    - BOEM has evaluated the greenhouse gas life cycle assessment of floating OSW (https://tethys.pnnl.gov/publications/life-cycle-assessment-greenhouse-gas-emissions-floating-offshore-wind-energy), but there is not an analysis of the offshore wind project compared to other energy options.
- What is the lifespan of a turbine?
    - These turbines are still in development, so we don't know yet.
- How will the turbines get out of the harbor?
    - They will be towed out during high tide on a calm day. There won't be any need for additional dredging of the main channel.
- Oil companies have a history of coming in and building infrastructure and then as soon as productivity declines or there are major maintenance issues, the organization sells or abandons them. How can the government ensure there that wind turbines will not be abandoned?
    - Lessons have been learned from a long history of oil and gas leasing. Previously, some oil and gas leases did not have an end date, but the wind area leases have a 33-year timeframe, and the leasing companies will be subject to review at the end of the lease to prevent abandonment.

Meeting adjourned at 5:17 p.m. PT.