

Alliance of Communities for Sustainable Fisheries
256 Figueroa Street #1, Monterey, CA 93940
(831) 239-1219
www.alliancefisheries.com

California Energy Commission

February 10, 2023

Docket 17-MISC-01

715 P Street MS-14

Sacramento CA 95814

Email: docket@energy.ca.gov;

Re. Commission Report: Preliminary Assessment of Economic Benefits of Offshore Wind

Dear Chair David Hochschild, Commissioners, and Staff,

Please accept the following comments from the Alliance of Communities for Sustainable Fisheries (ACSF) on the California Energy Commission's (CEC) report, *Preliminary Assessment of Economic Benefits of Offshore Wind on the Economic Benefits of Offshore Wind* (OSW) ("Benefits Report"). We appreciate the ability to provide comments on this important topic.

Who we are:

The ACSF is a 22-year-old 501-c-(3) not-for-profit educational organization, founded for the purposes of connecting fishermen with their communities. It also represents fishing interests in state and federal processes. The ACSF is a regional organization, with the leaders of the port-based commercial fishing organizations from Monterey, Moss Landing, Santa Cruz, Morro Bay, and Pillar Point harbors, and Port San Luis, on our Board of Directors. The California Wetfish Producers Association (squid, sardines), a harbormaster from one of the ports, and several recreational fishing organizations also have representatives on our Board. Thus, the ACSF represents a large cross-section of fishing and community interests for the Central Coast of California near the Morro Bay Wind Energy Area (WEA). The term "fisherman" is used herein to denote our fishing women and men.

General Concerns:

Quoting the CEC report,

“This report provides a preliminary assessment of economic benefits of offshore wind as they relate to seaport investments and workforce development needs and standards.”

The ACSF does not believe that the report provides an accurate assessment of needed seaport investments.

We have deep concerns about the stated and unstated assumptions that underlie the CEC’s draft Benefits Report. As we will discuss, the report skips over the manufacturing and assembly potential of the state’s existing deep water cargo ports. The report reads like its task is to imagine billions of dollars in huge public investments in new ports and infrastructure in support of OSW, with the unstated goal being to create a maximum number of jobs, and therefore economic benefits. This is far different from an analysis identifying the most cost-effective, efficient, least impactful, method of supporting OSW manufacturing and assembly.

The ACSF is puzzled by the disconnect between the presentation provided to the CEC at its October 31, 2022 workshop (see footnote 72 of the Benefits report), and the Benefits report. Moffat-Nichols Engineers provided the CEC with a reasonably accurate description of the state’s existing ports to support OSW manufacturing, assembly, and maintenance of OSW components. The Benefits report largely ignores that information.

The Benefits report also fails to identify, even in a cursory way, the many environmental and socioeconomic costs that will be attributed to OSW development, with or without new port construction. The Benefits Report contemplates throwing billions of dollars at OSW development, without any discussion of how such development will cause the loss of fishing industry jobs, with resultant harm to fishing dependent communities. The ACSF can only hope that the pending CEC report documenting impacts from OSW on a variety of stakeholders will be competently done.

With so much emphasis being placed by the state on social, economic, and environmental justice and equity, we wonder why the state seems to have a blind spot regarding its food producers working in the seafood supply chain.

The ACSF believes that the state’s decision-makers, stakeholders, taxpayers and rate payers, deserve better.

Concern about the CEC Report’s Emphasis on New Harbor Construction Projects for OSW Manufacturing and Assembly

It is immediately concerning why a full assessment was not included of the state’s existing large port’s potential to accommodate OSW manufacturing and assembly, including what improvements may be needed, when this information is readily available. The report includes a blanket statement that these large ports are “not suitable”. A 2016 BOEM-commissioned report (Mott McDonald) is cited in support of this claim. However, this is not accurate. There is an additional reference against utilizing the large LA/LB port complex, dismissing it because there

will be a carbon footprint from long tows to Morro Bay. We think this is a silly argument, all things considered.

The 2016 Mott McDonald/BOEM report actually has this to say about utilizing California's existing large ports:

"Fabrication and Construction Ports (FCP)

Based on the pre-screening analysis, the following are classified as a potential FCP (fabrication and construction port) for either OFW (offshore floating wind) or MHK (marine hydrokinetic) technologies, for the purposes of focusing the study:

• San Diego • Los Angeles • Long Beach • Hueneme • Oakland • Richmond • San Francisco • Humboldt Bay • Benicia • West Sacramento

The ports appear to meet preliminary requirements of labor force, manufacturing ability, supply chain connections, and navigation access to be analyzed as potential FCPs. At Humboldt Bay the supply chain connections will need to be analyzed further to determine if it is a viable port for this need. Its remote location and lack of rail connection may be an issue. Overall, the Bay Area and Southern California may be expected to provide the majority of the import/export, fabrication, and construction services, as ports located here are among the largest in the world.

Assembly Ports (AP)

Based on the pre-screening analysis, the following ports are classified as a potential AP for OFW technologies, for the purposes of focusing the study: • San Diego • Los Angeles • Long Beach • Hueneme • Humboldt Bay These ports are not restricted by air draft for transit of assembled OFW devices, such as is the case for ports in the San Francisco Bay which are affected by the Golden Gate Bridge and as well as other bridge crossings. San Francisco, Oakland, and Richmond have been classified as potentially providing assembly services for MHK devices as the air draft restrictions will be significantly less for these technologies."

And

"Key Findings:

The pre-screen analysis classified ports as potentially providing different roles to be assessed in Chapter 6 against more specific criteria. In addition to providing focus to the port assessment, results of this analysis were useful in focusing detailed data collection and communications with Ports. Below are key findings by region. • Southern California: Southern California appears to have several ports meeting cursory level requirements for further investigation of fabrication and construction ports for OFW and MHK. Several ports in Southern California may be able to provide facilities for OFW and MHK assembly, but require further assessment. • Northern California: OFW assembly port capability is limited by the presence of the Golden Gate Bridge, which precludes OFW assembly in the San Francisco Bay. Northern California Southern

California appears to have several ports meeting cursory level requirements for further investigation of fabrication and construction supporting OFW and MHK." (Emphasis added).

The October, 2022 Moffat-Nichols presentation to the CEC makes clear that the state's existing ports have great potential.

As if this information is not clear enough to convey the state's existing deep-water ports' ability to provide for OSW manufacturing and assembly functions, the Port of Long Beach has been publicly open about its interest. See:

Port of Long Beach pitches 'largest offshore wind facility in US' for California 25GW goal, by Tim Ferry, *Recharge News*, January 31, 2023

And,

Port of Long Beach Plans Offshore Wind Turbine Assembly Terminal, by Aileen Cho, *ENR – Engineering News Record*, January 26, 2023

It is likely that the state's large ports may need dredging and fill work to accommodate OSW manufacturing and assembly; however, the costs of doing this type of work will be a small fraction compared to the public money needed to create brand new calm and deep-water port infrastructure in Central California, with far fewer environmental costs.

The CEC report focuses on areas where investment in new port infrastructure will maximize state spending, therefore creating economic benefits (jobs during construction). However, this is very different from asking:

What are the most efficient, cost effective, least-impactful methods of enabling OSW development?

These questions will be critical factors in California Environmental Quality Act (CEQA) analysis. As we discuss later, the CEC report's approach also completely skips-by significant environmental, cultural, and socioeconomic costs and impacts.

We assert that the distance from port-to-project is among the LEAST important considerations, compared to the cost and environmental consequences of OSW development including building brand new port structures sufficient for manufacturing and assembly. A tow from Long Beach to the Morro Bay leases is approximately 240 miles; tows from the Eureka area to offshore Fort Bragg are about 130 miles, and to Bodega Bay, about 240 miles. Tows of OSW equipment in this range seem inevitable.

We note that the report does not reference the California Marine and Navigation Conference (CMANC--About CMANC). CMANC is a sixty-plus year-old association of small craft harbors and

the state's largest ports, nearly all of which are public agencies. One of CMANC's core principles is supporting the relationship between California's large ports for cargo, and smaller harbors which provide recreational boating and commercial fishing infrastructure. The CEC report would have benefitted from consultation with CMANC leaders, many of whom are representatives from the state's largest ports.

OSW Service Vessel Usage of Small Craft Harbors

The strategic plan, to comply with AB 525, must:

"Strive for compatibility with other harbor tenants and ocean users to ensure that the local benefits related to offshore wind energy construction complement other local industries when considering port repurposing."

A troubling feature of the report is its failure to discuss the existing demands on California's small craft harbors in any detail. There is also no discussion about the cultural/socioeconomic present condition, and how that would be impacted, and change, with the arrival of OSW-related tenants. How will the residents of Avila, Morro Bay, and Eureka, feel about the industrialization of their communities? This is likely to be a socioeconomic cost brought on by OSW development. At minimum, the impacts to small communities deserve discussion in a final Benefits report.

The CEC will find that each of California's harbors are full, most with waiting lists for space. Pressure for space from existing stakeholder groups has meant that in most cases, harbors are fully built-out.

RE the potential for displacement of commercial fishing infrastructure by OSW port development, we saw no reference to California's Coastal Act¹, which says, in part:

"Section 30234 Commercial fishing and recreational boating facilities

Facilities serving the commercial fishing and recreational boating industries shall be protected and, where feasible, upgraded. Existing commercial fishing and recreational boating harbor space shall not be reduced unless the demand for those facilities no longer exists or adequate substitute space has been provided. Proposed recreational boating facilities shall, where feasible, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

Section 30234.5 Economic, commercial, and recreational importance of fishing

The economic, commercial, and recreational importance of fishing activities shall be recognized and protected."

Section 30703

¹ Public Resources Code Secs 30000 - 30900

The California commercial fishing industry is important to the State of California; therefore, ports shall not eliminate or reduce existing commercial fishing harbor space, unless the demand for commercial fishing facilities no longer exists or adequate alternative space has been provided. Proposed recreational boating facilities within port areas shall, to the extent it is feasible to do so, be designed and located in such a fashion as not to interfere with the needs of the commercial fishing industry.

The Benefits report would be improved if it discussed how commercial fishing harbor space and facilities will be protected or upgraded, in the face of OSW shoreside development.

The ACSF acknowledges that there are some limited opportunities for the smaller OSW maintenance and service vessels to berth inside Morro Bay, the Port San Luis mooring area, and within the existing small marina at Diablo Canyon nuclear plant. Between these three harbors, we believe 6-7 OSW maintenance vessels in the 100-foot or less range can be accommodated.

ACSF members note that the report is careful to state it's findings are in regards to projects that *could*, but not necessarily *should*, happen. We believe that even "could" is a stretch. The idea of building port structures such as contemplated in the REACH and CEC reports for Port San Luis and Diablo Canyon are, frankly, delusional.

Environmental, Cultural, and Socioeconomic Costs and Concerns

Among the legislative findings for AB 525:

"Offshore wind should be developed in a manner that protects coastal and marine ecosystems."

We see that the major new structures suggested in the CEC and REACH reports will be contrary to this finding. There are no natural features to support the success of such new port structures. Developments at Port San Luis and/or Diablo Canyon will require massive yearly dredging projects and will have serious negative consequences on the littoral migration of sand and sediments along the coast, upsetting the equilibrium that now exists. This will increase shoaling in some areas and rob sand from beaches in others, leading to rapid and increased coastal erosion. The CEC Benefits report only mentions in passing that environmental review will be necessary.

Another complexity will be the proposed Chumash Heritage National Marine Sanctuary, which, if designated, will include or be immediately adjacent to these port construction projects, with all of their environmental impacts.

Also missing from the CEC report is an assessment of the carbon footprint of all the new port construction activities associated with this report's (as well as the REACH report) purported benefits. The ACSF is not qualified to provide this calculation; however, consider the magnitude of these activities:

- new deep-water breakwater and road construction, including materials mining

- provide many other new structures such as piers and docks of a massive size to be useful for OSW hardware
- dredging new channels (with the guaranteed need for regular, annual-at-least, dredging)
- transportation of materials and hardware from rail hubs or via vessel to relatively remote locations
- relocation of skilled workers from metropolitan areas to San Luis Obispo and Humboldt counties

Also consider the negative “boom-and-bust” economic cycle that will occur as workers are displaced from metropolitan areas to the port construction areas for the 4-5 years it will take to do the work, followed by no work. The effects on housing must be considered as well. There will be an early housing shortage, raising rents, quite possibly pricing out the area’s lower-paid workers (food and hospitality workers, among others). This will be followed by the exodus of port-related construction workers when the project is over. There are carbon-footprint costs to this cycle as well.

Any discussion of a change from status quo in an economy must be placed into the context of the existing economic land/seascape, eg, from what to what? The report provides no such context.

For example, we understand that it is hoped that OSW will replace power from oil and gas fired plants when most of those plants shut down. Those lost jobs will take away from whatever number of jobs OSW is creating. The report would have benefitted from this calculation. Further, it is quite possible that grid reliability and redundancy requirements will mean that many of these gas-fired plants will in fact, stay open and the hoped-for climate benefits of OSW will necessarily be reduced.

There is no discussion of the socioeconomic costs that will be caused by the disruption, displacement, or outright elimination of existing ocean uses (primarily commercial fishing), coming from OSW industrial development. These costs will be borne both by direct and indirect ocean users, and their communities, and some will be immediate, others long-term, and be cumulative as more OSW projects mature. The comment letter from the Responsible Offshore Development Alliance (RODA) documents these costs, and the ACSF supports RODA’s comments. We believe that the comments from RODA will also be useful if included in the CEC’s pending report on impacts to stakeholders.

We perceive the state as taking the position that the climate benefits of OSW development outweigh impacts to other ocean users and to the environment. However, we assert that the full scope of environmental and socioeconomic impacts is not nearly known, so such a cost/benefits calculation is premature.

Also from the Benefits report:

“Floating and fixed-bottom technologies have been deployed internationally, and there are 50,500 MW of installed capacity of fixed-bottom projects globally, including a pipeline of additional projects under development on the U.S. East Coast, as well as 123 MW of installed capacity of floating projects globally.”

This statement, implying that all goes well with European OSW, is yet another example of information missing from the CEC report that would, if included, provide a more complete picture of OSW benefits, and costs. There are numerous media articles, scientific studies and other reports out of Europe detailing problems with OSW development, including extraordinary, high maintenance costs (not surprising to us) for marine structures, high-capacity electrical cables becoming unburied, and fires in turbines. Further, the European Parliament’s “REPORT on the impact on the fishing sector of offshore wind farms and other renewable energy systems” could have provided information to the CEC about what is occurring in Europe. The reality is Europe actually has very little experience in deep water OSW; 123 MW is not a big number.

Also noteworthy is the cautionary message found in the European scientific, peer-reviewed study that documents the downwind effect of wind farms: a decrease in upwelling in a broad area. (Daewel, U., Akhtar, N., Christiansen, N. et al. Offshore wind farms are projected to impact primary production and bottom water deoxygenation in the North Sea. *Community Earth Environ* 3, 292 (2022). <https://doi.org/10.1038/s43247-022-00625-0>).

Upwelling is the main driver of ocean productivity on the west coast.

The ACSF is on record as previously advocating for the first five OSW leases in California to be used as a demonstration project, and to allow for time to assess the environmental and socioeconomic impacts from these projects. To charge ahead with new OSW leases, absent valid data, will be reckless, in our opinion

Purported OSW/Port Economic Benefits

Quoting the CEC study,

“Studies show a correlation between megawatt offshore wind targets and resulting job growth and other economic benefits. Although California’s 2030 planning goal is 2–5 GW, a recent study estimated that total annual jobs associated with the offshore wind industry may be as great as 5,000 jobs by 2030 for 3 GW. By 2040 and beyond this could increase up to 13,000 jobs for 10 GW. Given California’s higher offshore wind planning goals, the state can expect significantly more jobs created.”

Should California be able to both manufacture and assemble OSW components, there would no doubt be an economic benefit. However, these benefits would last only as long as manufacturing and assembly last, so though lasting for 10-15 years, they are not permanent.

As previously observed, there will be a loss of jobs as gas-fired plants are decommissioned (if they in fact are). The same is true for the Diablo Canyon nuclear plant: if/when it closes, the region will lose about 3,200 jobs, so any new jobs created by OSW would be replacement jobs, not new, additional jobs.

We note that Castle Wind, as a potential lessee for the Morro Bay WEA, stated to ACSF members that it anticipated needing only about 53 full time operators to maintain and manage its 1GW wind farm should they win a lease.

We observe that the report authors quoted above uses the phrases “may be as great” and “could increase”, yet continues, postulating that “the state can expect significantly more jobs”. We wonder where the supporting data is to be found that will ground-truth the CEC Benefits Report?

The new deep water port infrastructure adjacent to the Morro Bay lease sites as contemplated in the Benefits report have costs so great as to be not justified by the 3 gigawatts likely to be produced. Also, it seems likely that these new projects could not be permitted and constructed in time for those OSW leases. We wonder, and it is not clear from the report, the degree to which developing the Diablo Canyon Call Area into OSW leases is part of the report’s economic benefits assumptions. Given the Biden administration’s assurance to the Department of Defense that DOD will be able to retain the Diablo Canyon area for mission-critical military training, it seems unrealistic to attribute any future OSW economic value to this area.

Please also know that the Diablo Canyon Call area represents a very important area for both Port San Luis and Morro Bay fishermen. Losing that area in addition to the Morro Bay Winf Energy Area would be a severe blow to these fishermen, and their communities, and would be heavily resisted.

There are other large forces at play that will determine how much OSW manufacturing will occur, and where, in the US. Consider this from the January 26, 2023, edition of *Forbes* magazine:

“They (floating OSW) are new to North America. And while the Biden Administration’s of 30 GW by 2030 seems fairly modest, projects here face several hurdles European and Asian projects do not.

In December, for example, California auctioned off seabed leases at a price of \$1,624-\$2,518 per acre—a steep drop from the \$8,831 average fetched in February for sites off New York and New Jersey. The Golden State set a record for the highest number of approved bidders—43. Yet only 7 chose to actually make an offer, the lowest turnout of any competitive U.S. offshore wind auction to date.

...Will U.S. offshore wind projects proceed despite the higher costs? That’s likely to depend in large part on how much of the additional development expenses regulators will allow into customer rates.”

Yet another shortcoming of the CEC's draft Benefits report is in it's lacking of any discussion about how the costs of the port development it (and the REACH report) contemplates, will be borne by taxpayers and ratepayers.

Conclusions:

Quoting the Report:

"This report meets the requirement for a preliminary assessment of the economic benefits of offshore wind as they relate to seaport investments and workforce development needs and standards."

The ACSF does not believe this is an accurate statement. The CEC and public need to see a report on needed port and harbor improvements that make the most-efficient use of the state's existing ports, with infrastructure and site improvements as needed, that reflect a cost-effective and least-impactful method of accomplishing the state's OSW goals. Throwing money at huge new port developments is not the answer, unless it is being done to create the false economic benefit of temporary jobs.

It is understandable that many public officials in the Central Coast region are motivated to secure all the economic benefits possible for their region. However, that goal does not outweigh the responsibility of the state to identify better alternatives for enabling OSW manufacturing and assembly.

The ACSF hopes that our comments on the Draft Benefits report will lead to an improved final report.

Thank you for considering comments from the Alliance of Communities for Sustainable Fisheries.



Alan Alward

ACSF Co-Chair

CC

Coastal Commission

State Lands Commission

REACH

ACSF Board of Directors