BOEM
Bureau of Ocean Energy Management

Potential impacts to commercial and recreational fisheries from OSW development in the Gulf of Mexico

Fact Sheet

How does BOEM assess impacts to fisheries from offshore wind development?

BOEM analyzes proposed activities on the Outer Continental Shelf (OCS), including offshore wind, for potential impacts to marine species and habitats, multiple use conflicts, and access to OCS resources. Assessments include National Environmental Policy Act (NEPA) reviews at various stages of development and consultation with federal agencies and tribal governments. In some cases, these processes include public comment and coordination with stakeholders, industry, and regional fishery management councils. Not all activities warrant the same level of review or engagement.

BOEM scientists use the best-available science to inform their analyses. This information is typically gathered from publicly available peer-reviewed publications and state and federal government reports. BOEM also funds research to investigate the effects of offshore wind and other OCS exploration and development activities. For example, BOEM has funded studies investigating potential effects to marine species from electro-magnetic fields and underwater sound and impacts to commercial and recreational fisheries because of offshore wind development. Based on the information accumulated through research, BOEM scientists identify the types of activities that could affect various species and physical resources or impede other activities, evaluate the potential for impacts, and consider the range of mitigations that could be used to reduce or avoid potential impacts. This information is used to advise leadership and inform decision-making.

For a list of completed environmental studies related to offshore wind impacts to fisheries (including links to final reports), please see https://www.boem.gov/renewable-energy-research-completed- studies.

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If fishermen are displaced or economically impacted, will compensation be available from the Federal government? If so, how?

There currently is no mechanism for BOEM to directly compensate fisherman for economic impacts related to displacement or otherwise reducing access to a particular species or habitat. The Energy Policy Act of 2005, which granted BOEM lead management authority for marine renewable energy projects on Federal offshore lands, did not establish a compensation fund for commercial fishing gear damaged or lost as a result of obstructions arising from renewable energy projects. The Fishermen's Contingency Fund (authorized under the Outer Continental Shelf Lands Act, the fund is managed by NOAA) compensates U.S. commercial fishermen and other eligible citizens and entities for property and economic loss caused by obstructions specifically related to oil and gas development activities on the OCS and does not extend to offshore wind development.

However, in accordance with NEPA, BOEM must identify and analyze environmental, economic, and social impacts related to the approval and construction of offshore wind facilities. Mitigation measures to reduce potential impacts are evaluated in this process and may be required as a condition of approval of a wind lessee's Construction and Operations Plan (COP). Non-governmental compensation might become available. For example, some U.S. Atlantic offshore wind developers have established fisher compensation funds to address losses.

What are the effects of electromagnetic fields (EMFs) and heat from the energized cables?

EMFs are physical fields produced by electrically charged objects. Operation of turbines does not generate EMF; however, once the cable becomes energized it will produce a magnetic field. Cables will be buried beneath the seafloor and are wrapped in a sheath that eliminates direct electric fields and reduces magnetic and induced electric fields. The EMF decays quickly with distance from the cable and burial helps minimize potential exposure.

BOEM has completed several studies related to understanding the effects of EMFs on fish and invertebrates in other regions of the U.S. Current research suggests that, while some species (e.g., such as skates, sharks, and lobster) are sensitive to EMF, detrimental effects to populations are not expected. Some marine species are observed to respond to EMF, but the fields do not act as a barrier to movement.

Buried cable would generate sufficient heat to raise the temperature of the surrounding sediments by as much as 10 to 20°C above ambient temperatures within 1.3 to 2 ft of the cable. However, typical cable burial depths would limit potential exposure to substrate heating effects. These factors will be more fully considered in the NEPA analyses conducted for proposed activities when more detailed information is available.