

GOM Renewable Energy Update

Michael Celata

Regional Director, Gulf of Mexico Regional Office



Outer Continental Shelf Renewable Energy

Agenda

- Renewable Leasing Process
- Comments from the Call Area
- Environmental Assessment Process
- Next Steps



BOEM Renewable Energy Authorization Process





Planning & Analysis

~ 2 YEARS

- Intergovernmental Task Force
- Request for Information or Call for Information and Nominations
- Area Identification
- Environmental Reviews

Leasing

~ 1-2 YEARS

- Publish Leasing Notices
- Conduct Auction or Negotiate Lease Terms
- Issue Lease(s)





Site Assessment

UP TO 5 YEARS

- Site Characterization
- Site Assessment Plan

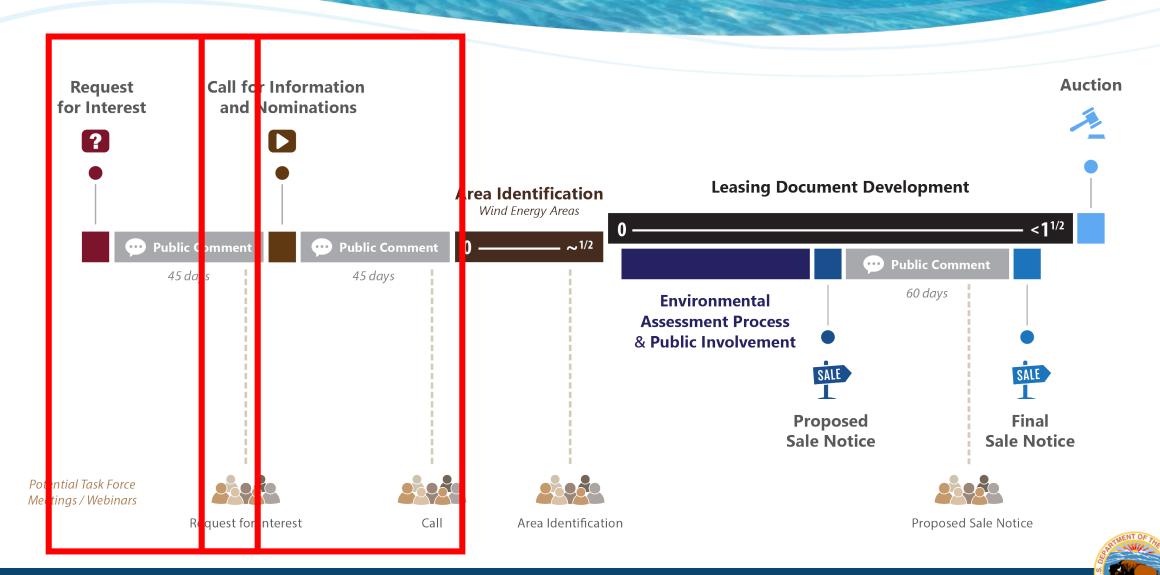
Construction & Operations

~ 2 YEARS (+25)

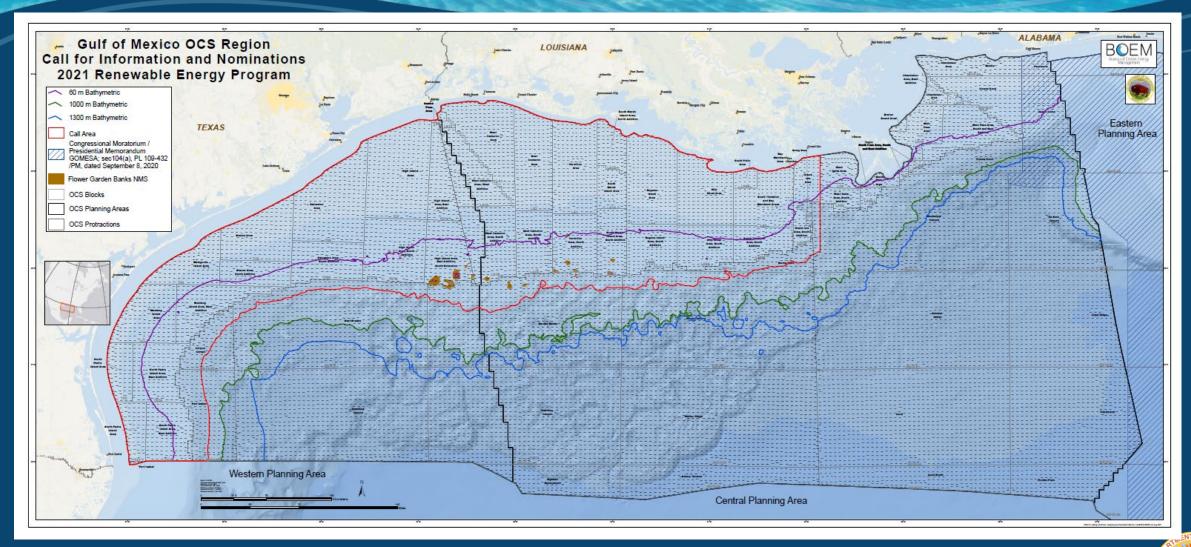
- Construction & Operations Plan
- Facility Design Report and Fabrication & Installation Report
- Decommissioning
- Environmental and Technical Reviews



Request for Interest to Lease Sale



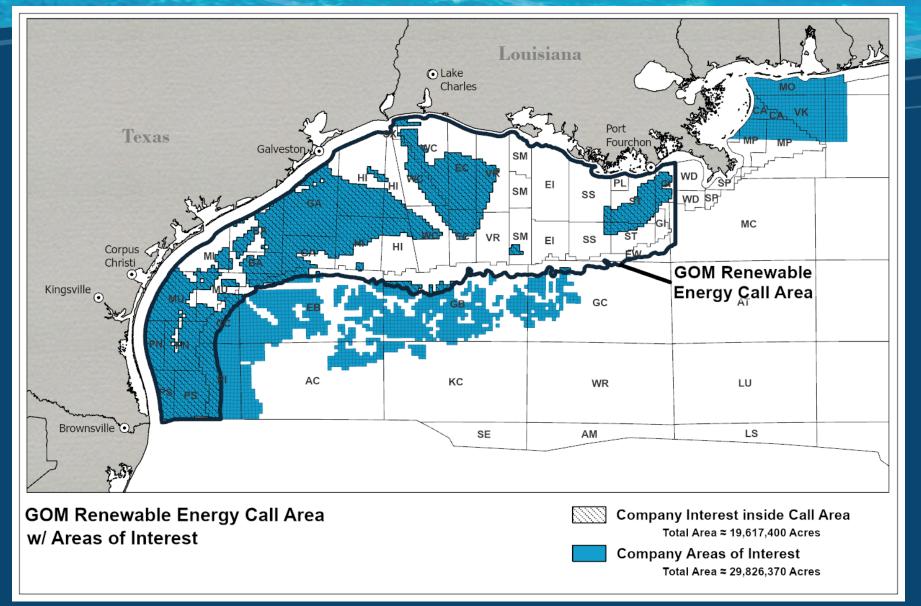
Call for Information Area



Call Comment Summary

Stakeholder Comments	Number of comments
Private Citizens	10
State Agencies	1
Federal Agencies	5
Universities	0
Non-governmental Organizations (NGOs)	16
Industry	7
Total Comments	39

Companies' Areas of Interest





Comment Discussion



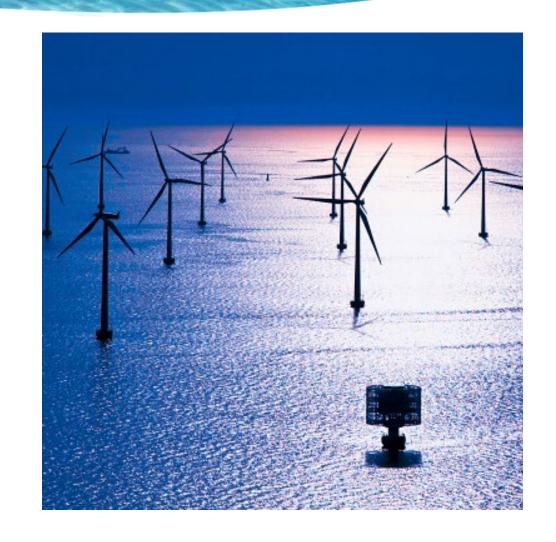


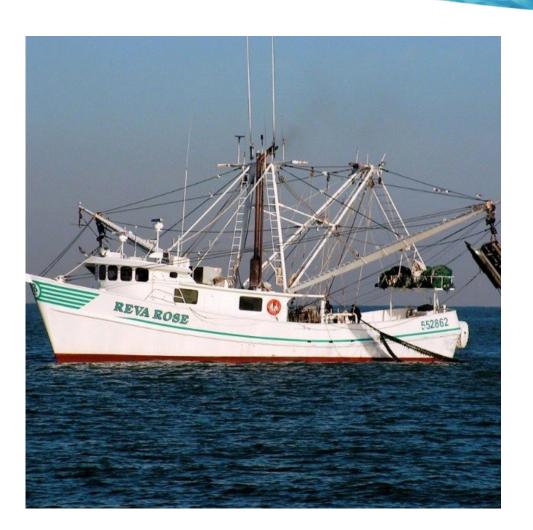
Are there siting and design concerns that address navigation and safety?

- Facilities will comply with U.S. Coast Guard requirements
- Navigational and Safety Risk Assessment
- BOEM can impose restrictions on development or require mitigation measures
- BOEM will evaluate and consider facility design alternatives

What is the average height above sea surface and distance between turbines?

- Turbine height and spacing varies by project
- 65-100 ft above the surface based on current technology
- 200 ft above the surface as taller turbines are installed
- Wind projects offshore RI/MA have adopted a standard 1x1 nautical mile spacing





Will vessel traffic and fishing activity be excluded around and within offshore wind farms?

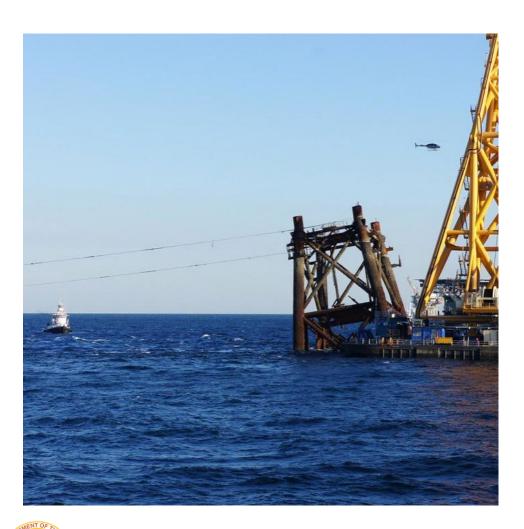
 BOEM does not have the authority to restrict vessel traffic or fishing activities

 U.S. Coast Guard implements safety zones and buffers on a case-by-case basis

Will electrical cables be buried beneath the seafloor?

- Standard commercial practice is to bury cables 3-10 ft in waters shallower than 6,562 ft
- Although, burial depths may vary by project depending upon multiple factors
- Alternatives to burial include adding protective coverings, such as concrete mattresses



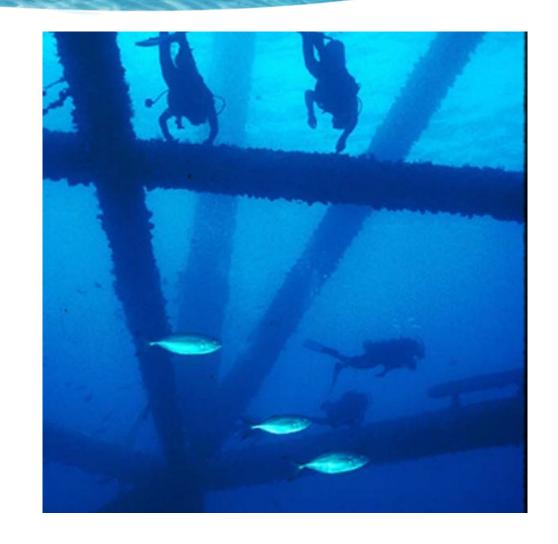


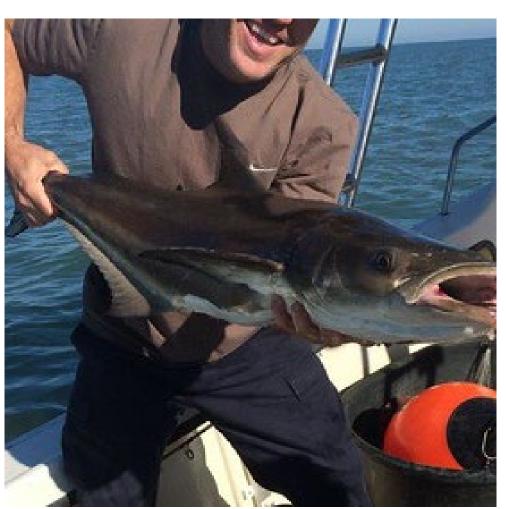
Will the wind farm facilities be removed after the expiration of a lease?

- A typical offshore wind lease is valid for ~ 30 years
- Financial assurance must be provided to cover decommissioning
- All infrastructure must be removed within 2 years of lease cancellation, expiration, or other termination
- An exception may be rights-of-way facilities

How does BOEM assess impacts to fisheries?

- Impacts are assessed through the NEPA review process, which also includes
 - Public comments
 - Coordination with stakeholders, industry, and regional fisheries management entities
- BOEM uses the best available science
- BOEM funds research to fill information gaps related to offshore wind impacts





Will there be a Fisheries Contingency Fund?

- Currently there is no Federal compensation fund available for renewable energy projects.
- Mitigation measures are evaluated during the NEPA review process and may be required as a condition of approval of a wind lessee's COP.
- Some U.S. Atlantic offshore wind developers have established fisher compensation funds.



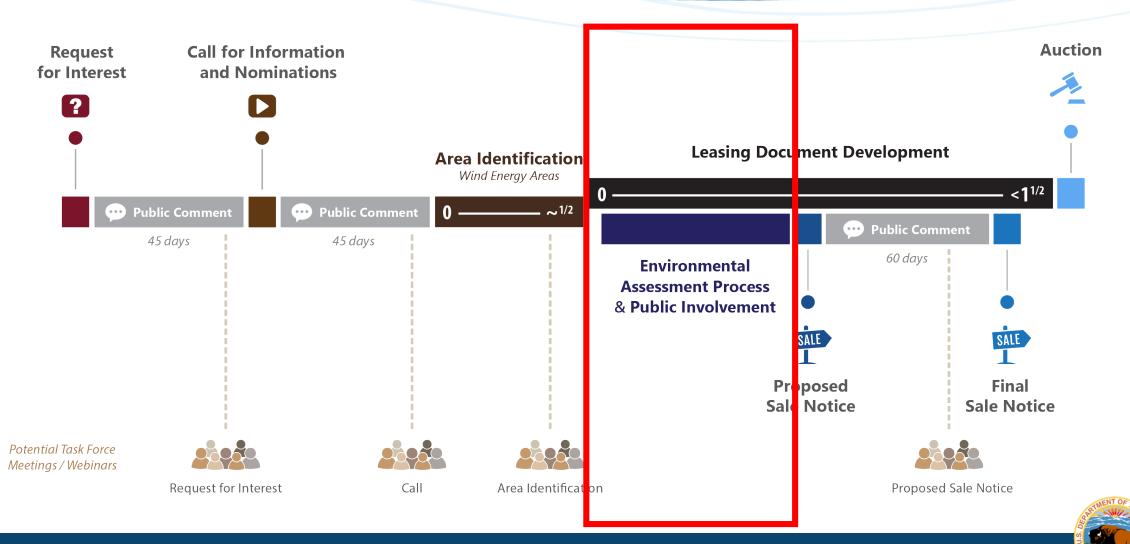
What are the effects of electromagnetic fields (EMF)?

- EMF decays quickly with distance from the cable
- Many studies have been performed on the impacts of EMF on marine species.
 - EMFs not observed to act as barriers to movement
 - Impacts to populations are not expected
 - Some species respond to EMF (e.g., sharks, skates, and lobsters)





NEPA



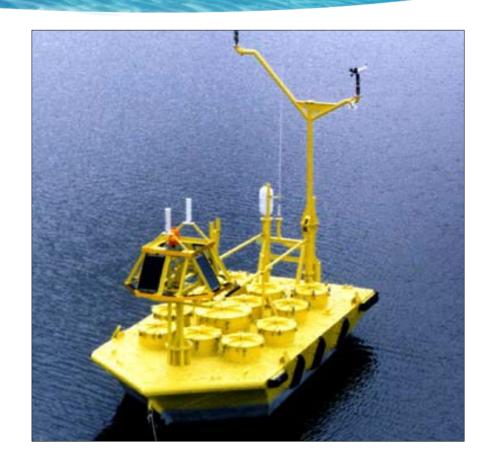
What is NEPA?

- National Environmental Policy Act (NEPA)
 - Provides the framework for protecting the environment by disclosing decision consequences
 - Requires Federal agencies to consider environmental impacts of their activities
 - Requires decisionmakers to incorporate environmental values into Federal programs
 - Requires coordination with other agencies and governments with resource responsibilities
- BOEM is conducting an environmental assessment (EA) to disclose the potential impacts of issuing renewable energy leases on the Outer Continental Shelf
- BOEM is asking for input for this EA



Environmental Assessment

- Analysis will ONLY be for issuing leases and the site assessment and characterization activities
 - Meteorological (met) buoys or towers
 - Vessel trips
 - Geological and biological surveys
- Analysis will NOT include
 - Specific project layouts
 - Cable routes for specific projects
 - Visual impacts of a project
- Analysis of SPECIFIC projects
 - Covered later in the process
 - After a lease is obtained and project plan submitted
 - Additional opportunities for engagement and consultation



Example of a meteorological (met) buoy

Source: National Data Buoy Center, 2012



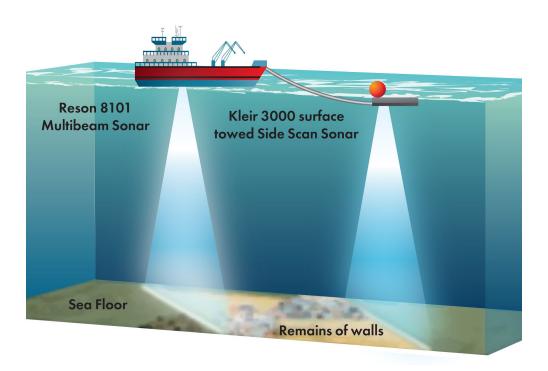
Environmental Assessment

EA will be a programmatic assessment

- May be used for more than one lease issuance
- But the analysis will be for a single lease issuance
 - Similar to BOEM's conventional energy NEPA analysis

EA will incorporate analysis from background documents

- Affected Environment in the Gulf of Mexico
 - Physical (air, water), biological (birds, marine mammals, fish), and social (human, economic, environmental justice) resources
- Impact-Producing Factors (IPFs)
 - Noise, bottom disturbance, air emissions
- Cause and Effect Analysis
 - How each IPF could affect each resource
- Analysis will cover the entire Call Area



Example of a seafloor survey

EA Schedule

Milestone	Dates
Publish Press Release for EA	1/11/2022
Scoping Period	1/11 – 2/9/22
Draft EA Published	Summer 2022
Draft EA Comment Period	30 days following publication of Draft EA
Final EA Published	Early 2023
Auction	Early 2023

Immediate Action: Next Six Months

Next Steps

- Start an Environmental Assessment
- Wind Energy Area (WEA) analysis
- Draft Area Identification (ID) memo and determine WEAs
- Identify lease areas, auction format, and publish Proposed Sale Notice (PSN)
- Proposed Lease Auction



Team Members

GOM Regional Director:

Michael Celata – <u>Michael.celata@boem.gov</u>

Chief of Emerging Programs:
Tershara Matthews - <u>Tershara.Matthews@boem.gov</u>

Renewable Energy Coordinator: Idrissa Boube - <u>idrissa.boube@boem.gov</u>

Fisheries Team Lead:
Mariana Steen- mariana.steen@boem.gov

Data Management:

Dana Inzinna - <u>Dana.Inzinna@boem.gov</u>

Communications:

John Filostrat - <u>john.filostrat@boem.gov</u> Hillary McKey - <u>Hillary.mckey@boem.gov</u>



BOEM

Bureau of Ocean Energy Management U.S. Department of the Interior

BOEM.gov





Michael Celata | michael.celata@boem.gov

