



BOEM Bureau of
Ocean Energy Management

Gulf of Maine Research Array Application

May 11, 2023

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Presentation Topics

- How did we get here?
- Purpose of the Research Lease
- Application Review Process
- Next Steps & Timeline
- Task Force Feedback



Maine Research Lease Application

Planning Process in the Gulf of Maine



Commercial Track

Request For Interest (RFI)

Non-Competitive Leasing Process: Commercial Lease



YES

Competitive Commercial Leasing Process

Call for Information

Area Identification (Wind Energy Areas)

Proposed Lease Areas

SALE

Final Lease Areas

Comment Period

Determination of Competitive Interest

NO

Environmental Assessment

Non-Competitive Research Lease Issuance

Request For Competitive Interest (RFCI)

Non-Competitive Leasing Process: Research Lease

Research Track

May 2023



What is a Research Lease?

- BOEM is allowed to issue a lease “to a Federal agency or a State for renewable energy research activities that *support* the future production, transportation, or transmission of renewable energy.” 585.239
- BOEM will *NOT* charge any fees
 - No acquisition fee
 - No rent
 - No operations fee
- **EXAMPLE: Coastal Virginia Offshore Wind Pilot Project**
 - 2013 - application received
 - 2015 - lease issued
 - 2020 – installation complete

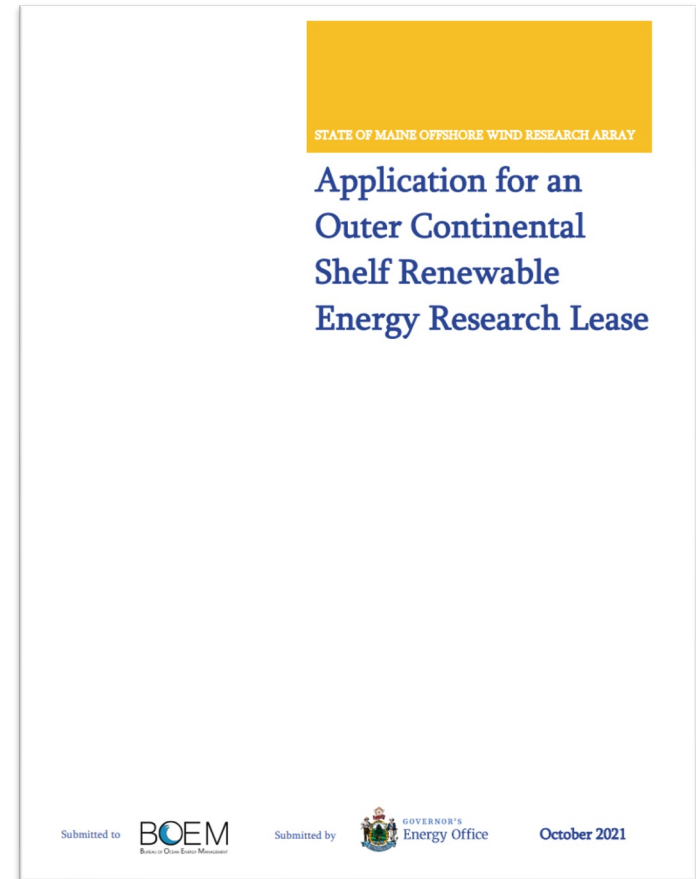


Coastal Virginia Offshore Wind Pilot Project under construction



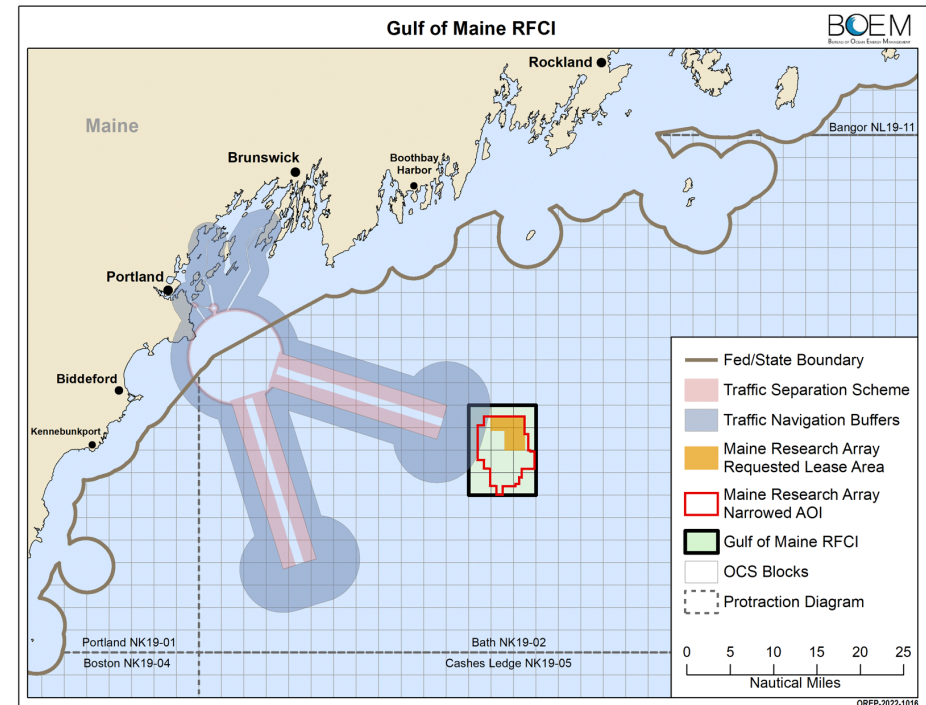
Why are we Here?

- State of Maine submitted a research lease application (Oct. 1, 2021) for a floating research array in Federal Waters
 - ~25 nmi from the mainland; 15 Square Miles (~10,000 acres)
 - ≤ 12 Floating Turbines | Up to 144 MW capacity
- Research Framework
 - Human Dimensions (e.g., optimize co-existence w/ ocean users)
 - Ecosystem & Environment (e.g., minimize entanglement/improve monitoring)
 - Technology Development (e.g., optimal mooring/anchor systems)



What has BOEM done since?

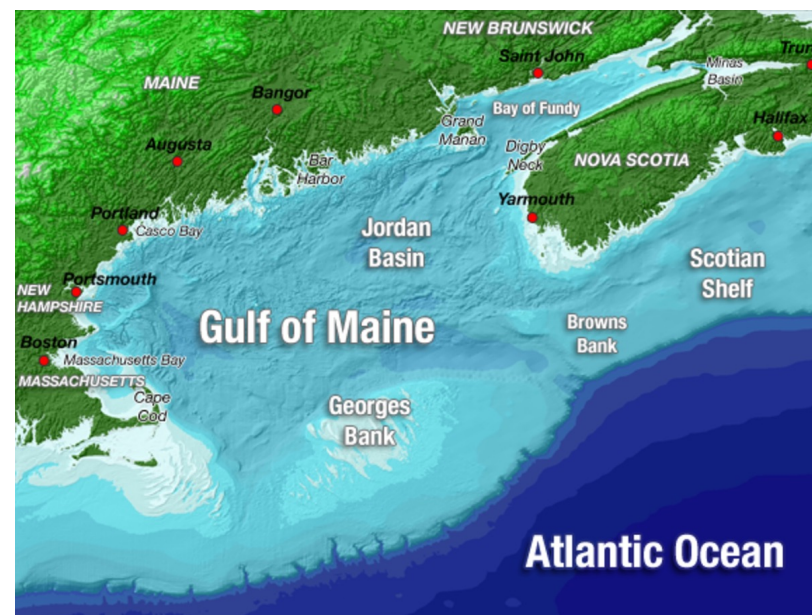
- Aug. 19, 2022 – Request for Competitive Interest (RFCI)
 - Required to determine the presence of competitive commercial interest
- March 20, 2023 – Determination of No Competitive Interest (DNCI)
 - After review, BOEM determined that no competitive interest existed
 - Allows BOEM to move forward to process the State's research application



Purpose of the Proposed Research Lease

“...support the future production, transportation, or transmission of renewable energy.” – 585.239

- In this case, proposed research activities would address critical needs for floating offshore wind development, including the following:
 - **Opportunities and challenges** caused by the **deployment** of floating offshore wind projects to the **existing uses** of the Gulf of Maine;
 - Methods to **avoid and minimize** the **impact** of floating offshore wind projects on **ecosystems and existing uses** of the Gulf of Maine; and
 - Ways to realize **cost efficiencies** in the commercialization of floating offshore wind projects.



Evaluating the Research Lease Request

Environmental Assessment



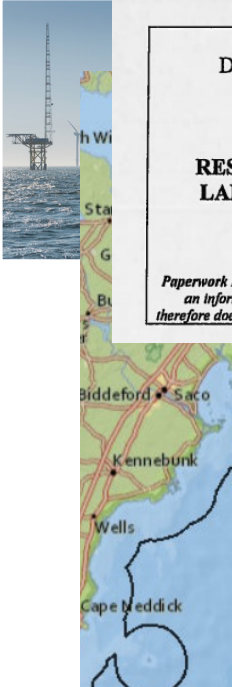
Spatial Analysis

Leasing

Aerial photographs & LIDAR

navigation (DGPS)

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF OCEAN ENERGY MANAGEMENT RESEARCH LEASE OF SUBMERGED LANDS FOR RENEWABLE ENERGY ACTIVITIES ON THE OUTER CONTINENTAL SHELF <small><i>Paperwork Reduction Act of 1995 statement: This form does not constitute an information collection as defined by 44 U.S.C. § 3501 et seq. and therefore does not require approval by the Office of Management and Budget.</i></small>	Office Herndon, VA	Renewable Energy Lease Number OCS-A 0497
	Cash Bonus and/or Acquisition Fee N/A	Resource Type Wind
	Effective Date April 1, 2015	Block Number(s) See Addendum A



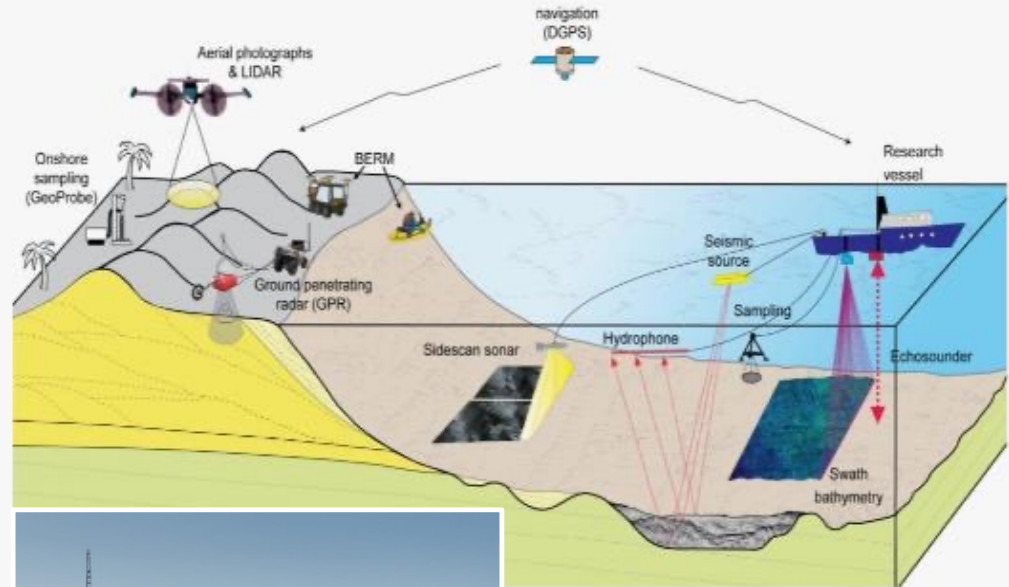
Evaluating the Research Lease Request: Environmental Assessment

Analyzes environmental effects associated with leasing:

- Site characterization activities
 - biological, geological, geotechnical, and archaeological surveys
- Site assessment activities
 - meteorological and oceanographic buoy deployment

Notice of Intent to conduct an EA

- Published on **May 4, 2023**, comment period until June 5, 2023
- BOEM-2023-0031



Evaluating the Research Lease Request: Environmental Assessment

Consultations for Research Lease Issuance:

- Biological Assessments (ESA)
 - Fish and Wildlife Service
 - National Marine Fisheries Service
- Essential Fish Habitat Assessment (MSFCMA)
- Section 106 (NHPA)
- Consistency Determination (CZMA)

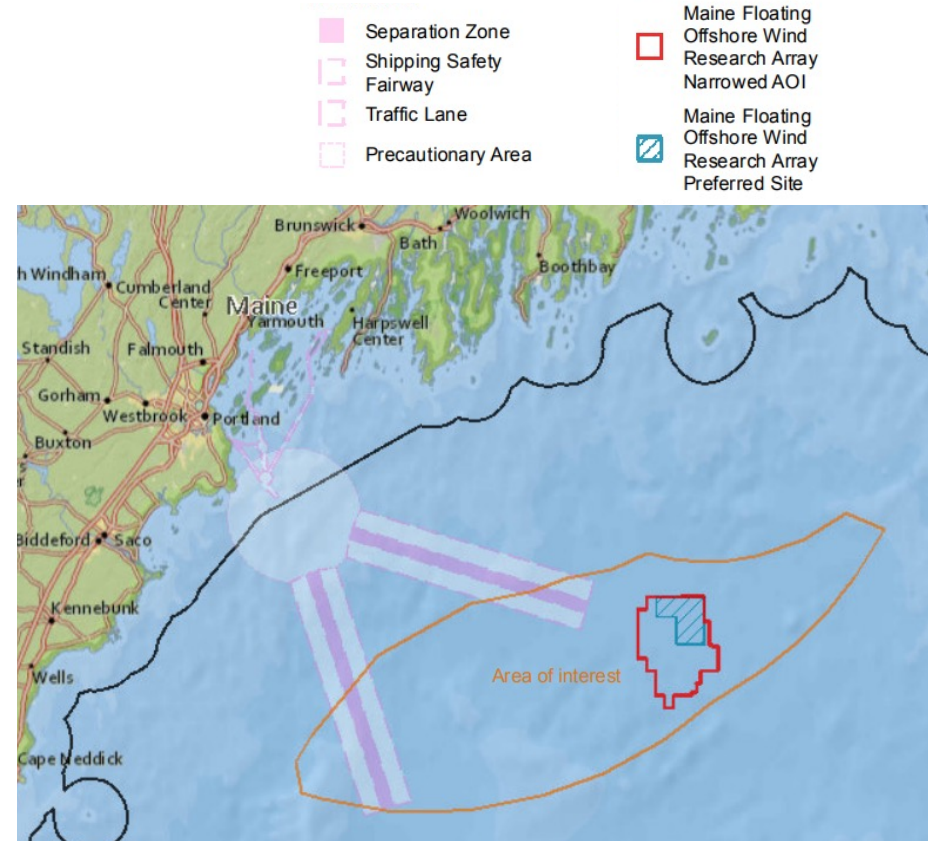


UMaine 1:8 scale floating VoltturnUS foundation



Evaluating the Research Lease Request: Spatial Analysis

- The State of Maine conducted a spatial analysis to identify the requested area.
 - (ORANGE) Area of Interest [AOI]
 - (RED) Narrowed AOI
 - (BLUE) Preferred Site
- It is BOEM's responsibility to build upon the information provided in Maine's application to identify the area of least conflict for the research lease



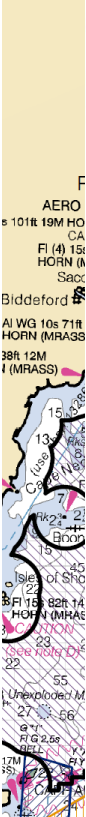
Evaluating the Research Lease Request: Spatial Analysis *(cont.)*

- On September 16, 2022, BOEM announced that it was enhancing its process to identify future Wind Energy Areas (WEAs).
 - Incorporation of the best available science and modeling, including application of NOAA NCCOS spatial modeling. To achieve this, leveraging much of the data in the NE Ocean Data Portal.



Evaluating the Research Lease Request: Spatial Analysis (cont.)

- The ocean is a complex environment with no shortage of past, present, and future uses.
 - National Security
 - Natural and Cultural Resources
 - Fisheries
 - Industry, Navigation and Transport
 - Developability
- Analysis focused within the RFCI box (RED)

	Constraints	Maine Call for Research and Nominations (Call Area)
	Traffic Separation Schemes	
	Natural & Cultural Resources Submodel	
	BOEM Bird/Whale/Turtle Persistent Hotspots D75/P75	and Southern
	MDAT Avian Abundance All Species Summary Product	and Eastern
	PRD Combined Layer	achusetts Bay
	Fisheries Submodel	
	Charter/Party VTR	f Maine Fairway 1
	Fishing Footprint Raster 2008 - 2021 (landings)	f Maine Fairway
	Fishing Footprint Raster 2008 - 2021 (revenue)	al Zone Fairway
	Large Pelagic Survey	Separation
	Lobster Decision Support Tool Pre/Post-Action Max	ea
	VMS All Fishing Types Sum 2012 - 2021	ea
	Industry, Navigation, and Transport Submodel	
	AIS Vessel Traffic All Vessels 2015 - 2021	Research Array
	NMFS Surveys	sted Lease Area
	VMS Vessel Transits Sum 2012 - 2021	ig BOEM Leases
	Wind Submodel	
	Distance to POIs (66.66%)	
Distance to Ports (33.33%)		



Evaluating the Research Lease Request: Leasing

- The lease is the agreement that binds the Lessee (State) and Lessor (BOEM) and sets forth various requirements developed through the evaluation process
 - The lease location
 - Term (length)
 - Fees (none)
 - Lease specific terms, conditions and stipulations
 - Surveys
 - Engagement
 - Research

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Next Steps & Timeline

Milestone	Action	Target Date
Environmental Assessment	Notice of Intent <i>30-Day Comment Period</i>	May 4, 2023
	Draft EA <i>30-Day Comment Period</i>	Summer 2023
	Final EA	Fall 2023
Lease Issuance	Spatial Analysis Recommendations	Q4 2023
	Leasing Negotiations Complete	Q4 2023
Research Activities Plan (RAP)	Submission	TBD
Environmental Review (EIS/EA)	Notice of Intent <i>Scoping Comment Period</i> Draft EIS/EA <i>Comment Period</i>	TBD



Photo credit: [UMaine](#)



Task Force Feedback

§ 585.239 Are there any other renewable energy research activities that will be allowed on the OCS?

(a) The Director may issue OCS leases, ROW grants, and RUE grants to a Federal agency or a State for renewable energy research activities that support the future production, transportation, or transmission of renewable energy.

1. What is necessary to advance the goals of the Research Lease?
2. What do you think would constitute a successful Research Lease?
3. How could the Research Lease be helpful to you?

OPPORTUNITIES FOR INPUT

- Open door policy – reach out!
- EA Notice of Intent, NOW OPEN!
- Draft EA comment period (Summer 2023)
- Research Activities Plan (RAP)
- Environmental Review (EIS/EA)



THANK YOU



BOEM

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