

Learning from the Experts Webinar Series

Siting and Leasing Offshore Wind Energy Areas



Luke Feinberg
Energy Program Specialist,
Office of Renewable Energy Programs
Bureau of Ocean Energy Management
(BOEM)

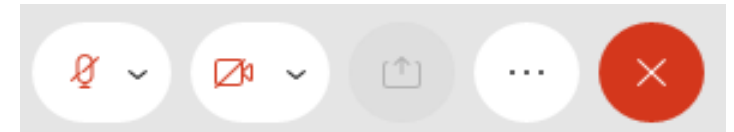
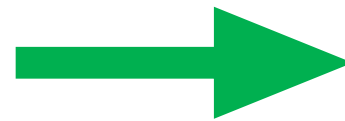
March 24, 2021


Meeting Procedures

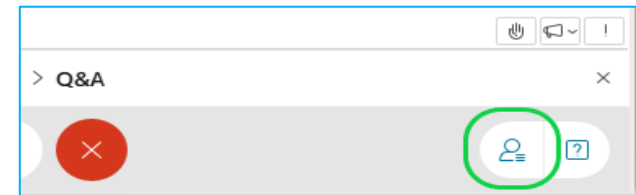
Webinar recordings and presentations will be available at:
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Participation for Members of the Public:

- > Members of the public will be muted upon entry.
- > Questions and comments may be submitted in writing through the Q&A feature at any time during the event.
- > If technical problems arise, please contact Sal.Graven@nyserda.ny.gov



You'll see  when your microphone is muted



Learning from the Experts

This webinar series is hosted by NYSERDA's offshore wind team and features experts in offshore wind technologies, development practices, and related research.

DISCLAIMER:

The views and opinions expressed in this presentation are those of the presenter and do not represent the views or opinions of NYSERDA or New York State.





Renewable Energy Planning And Leasing Overview

Luke Feinberg
Office of Renewable Energy Programs

March 24, 2021



Outer Continental Shelf (OCS) Energy

OCS Lands Act: "... vital national resource ... expeditious and orderly development ... environmental safeguards"

Energy Policy Act of 2005: "... energy from sources other than oil and gas ..."

Alaska OCS



Pacific OCS



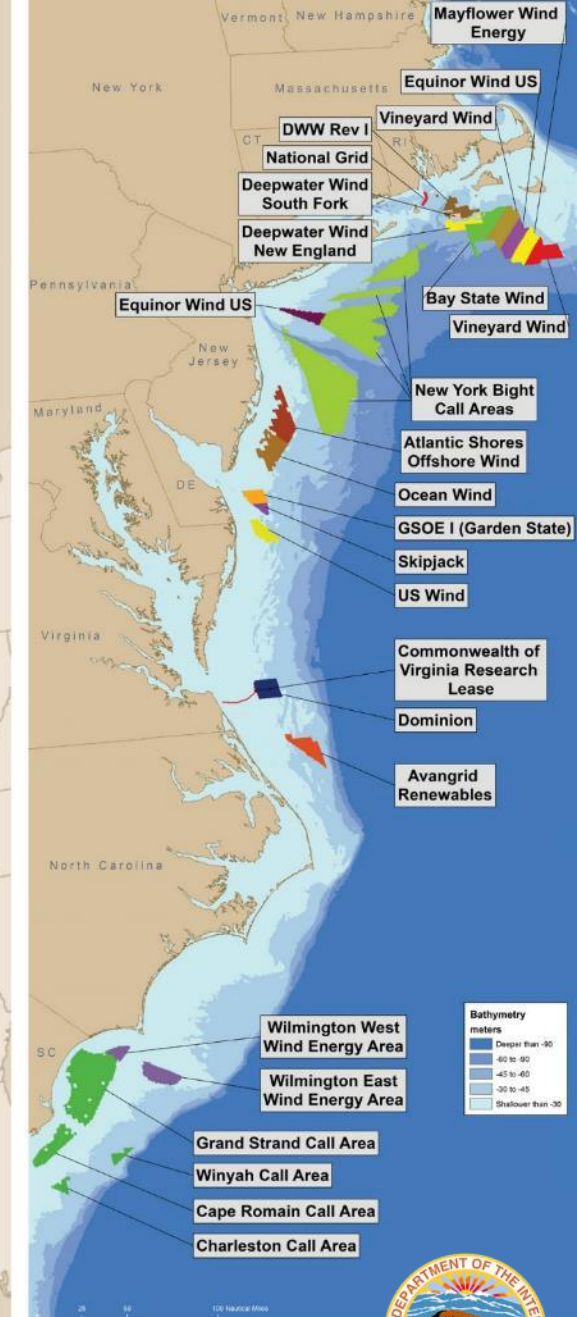
Gulf of Mexico OCS



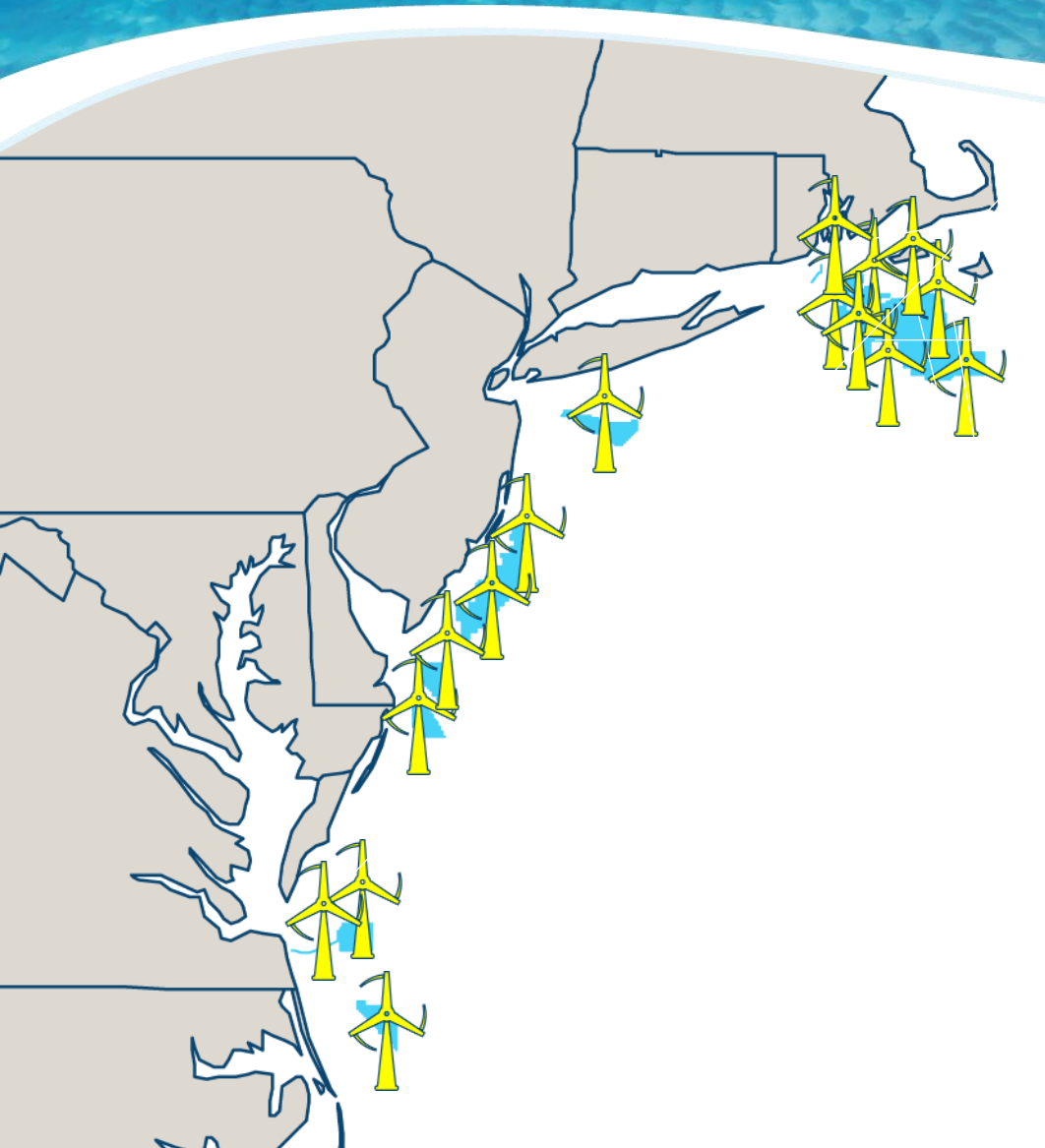
Atlantic OCS



Renewable Energy Program by the Numbers



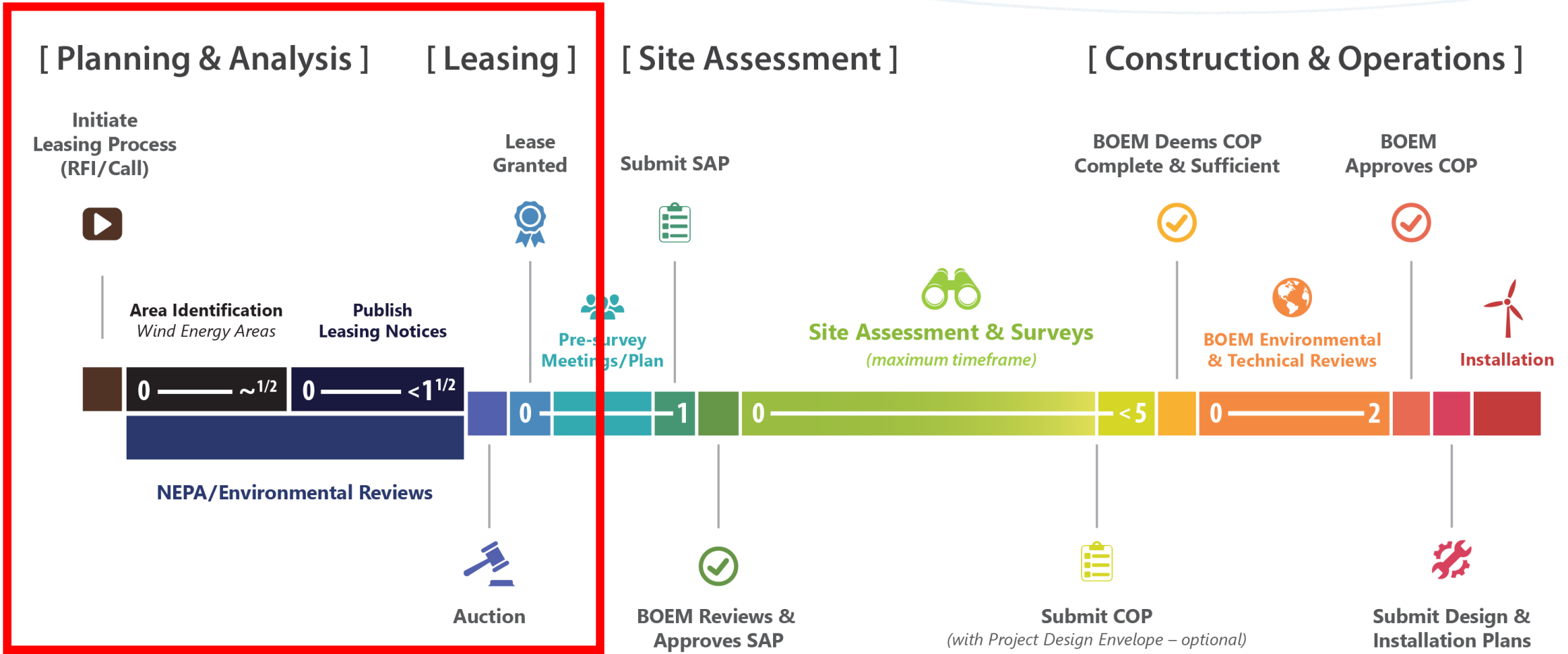
Atlantic OCS Renewable Energy: “Projects in the Pipeline”



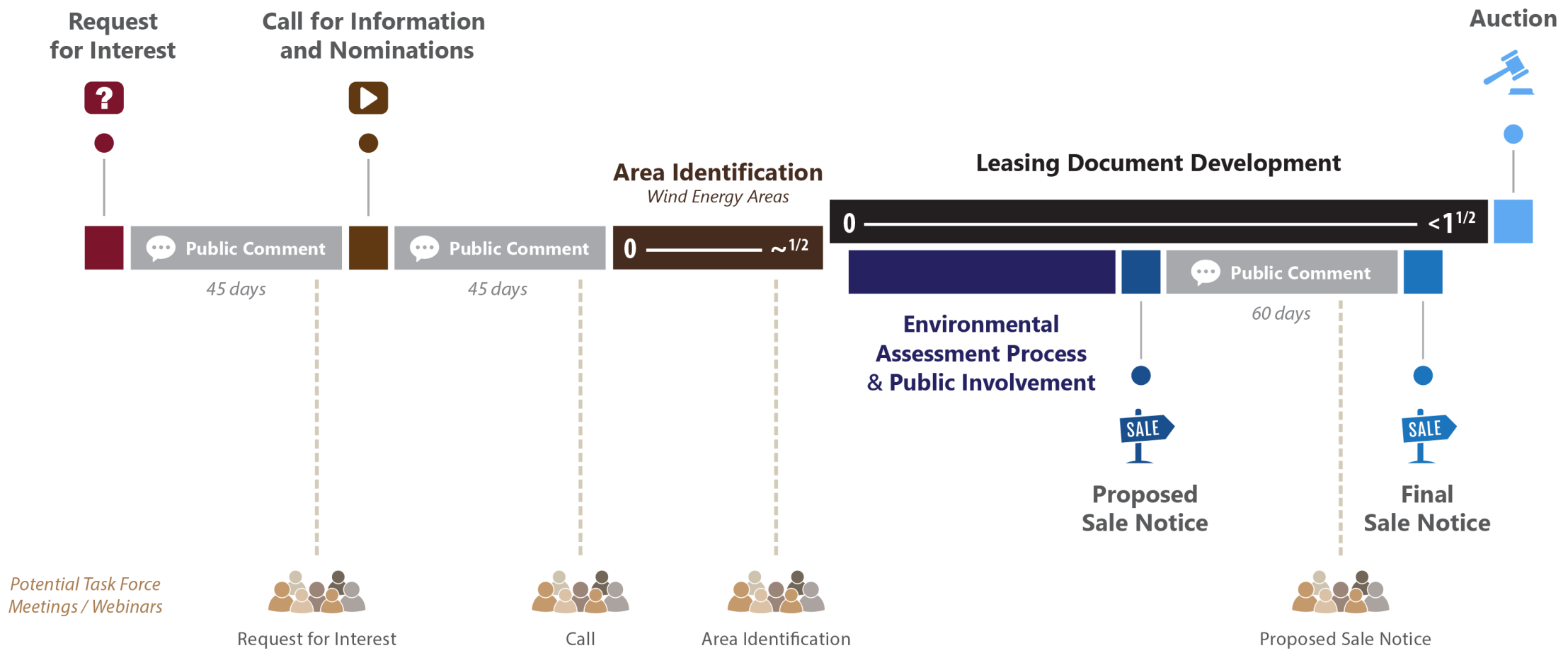
	Project	Company
2020	Coastal Virginia Offshore Wind Pilot	
▼	South Fork	
▼	Vineyard Wind I	
▼	Revolution Wind	
▼	Skipjack Windfarm	
▼	Empire Wind	
▼	Bay State Wind	
▼	U.S. Wind	
▼	Sunrise Wind	
▼	Ocean Wind	
▼	Coastal Virginia Offshore Wind Commercial	
▼	Park City Wind	
▼	Mayflower Wind	
▼	Atlantic Shores	
▼	Kitty Hawk	
2030	OCS-A 0522	



Renewable Energy Process: From RFI/Call to Operation



Request for Interest to Lease Sale



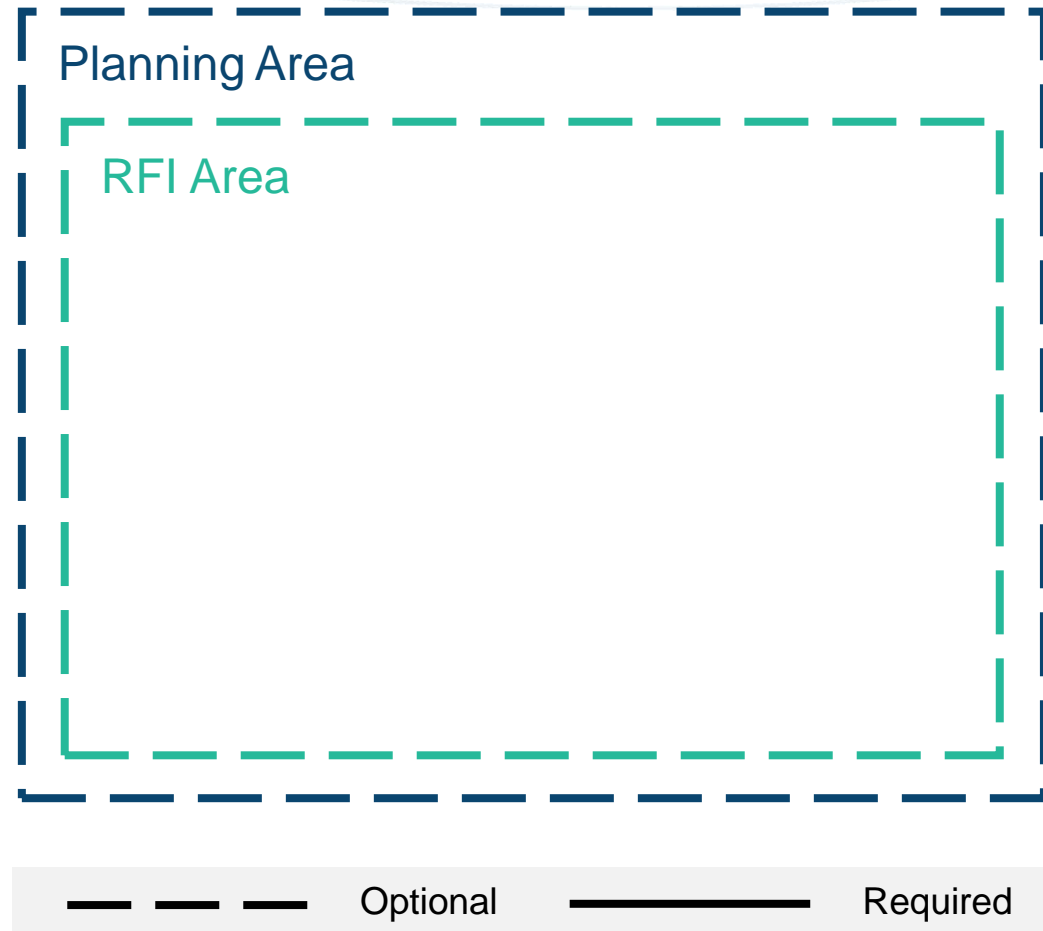
Planning Area

- High-level screening
- Initial identification of areas that may be suitable for potential offshore wind development



Request for Interest (RFI) Area

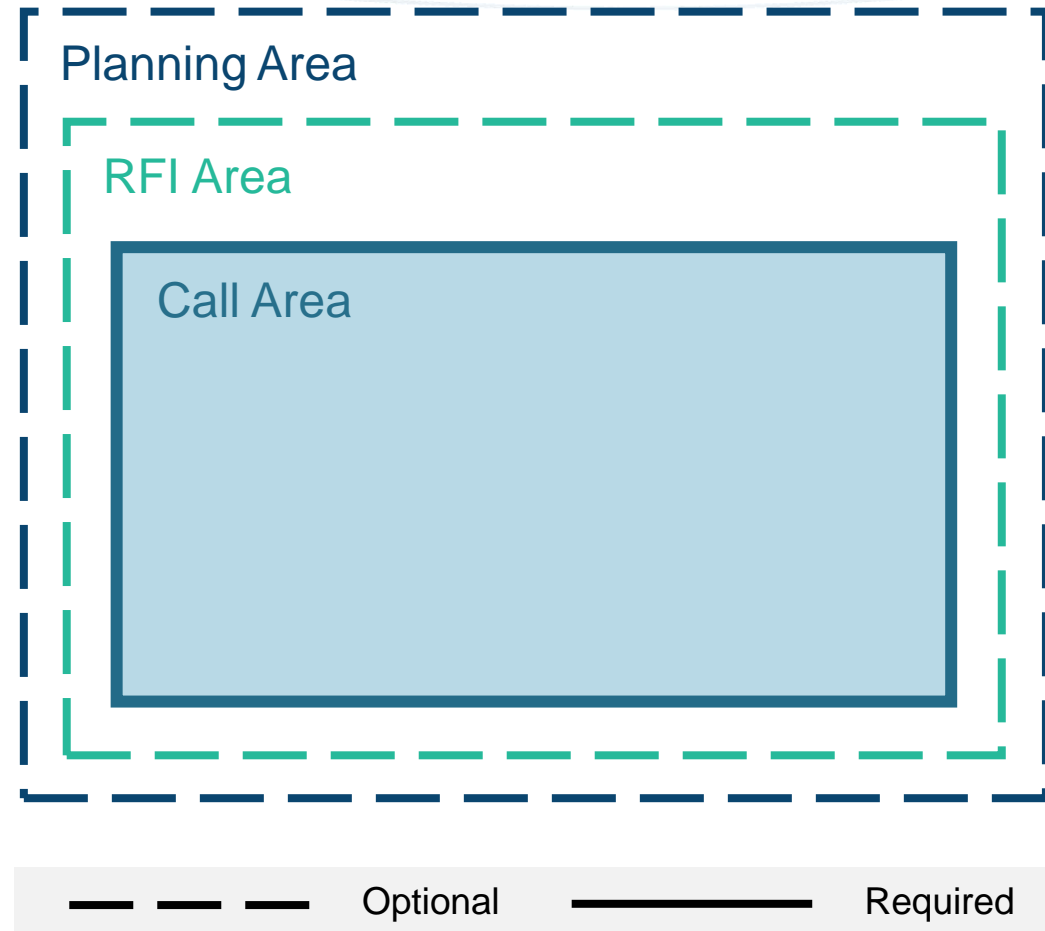
- Collect information to determine the level of interest in offshore wind leasing
- Shed more light on suitability of area for wind development



Call for Information and Nominations - Area

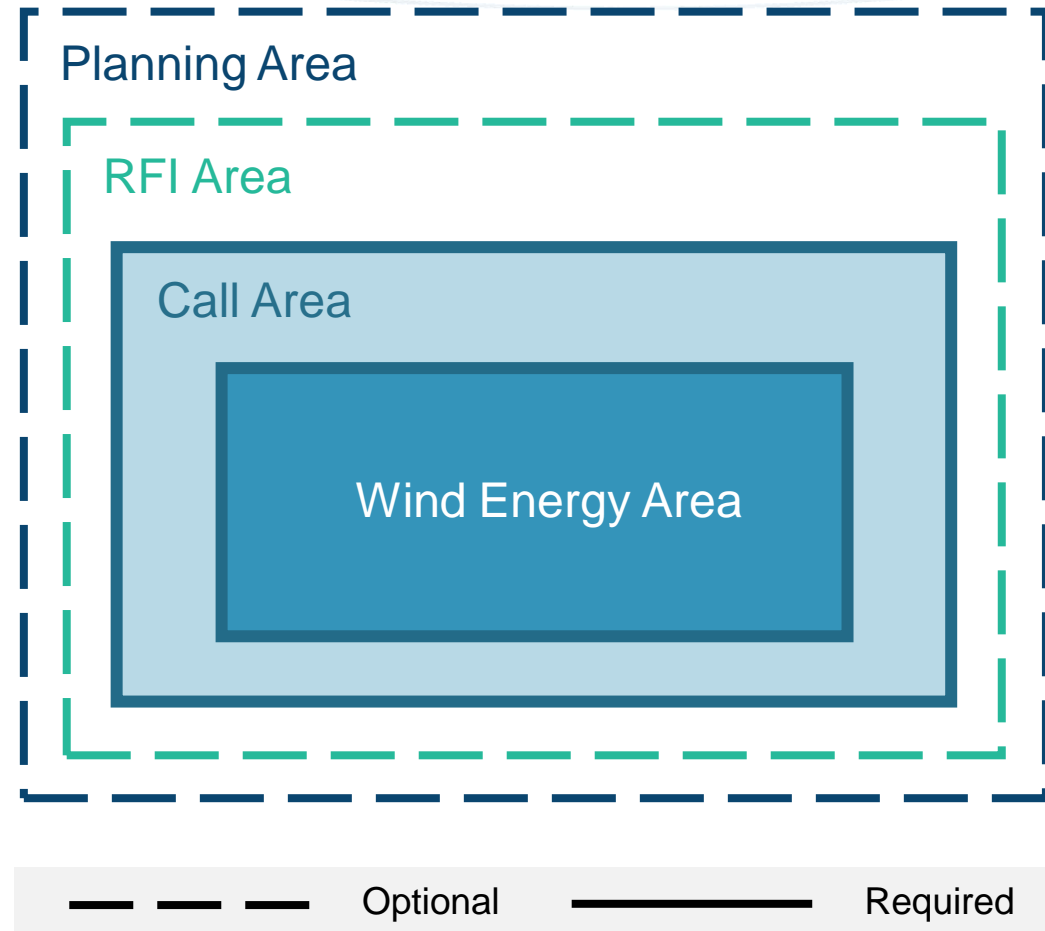
Request comments on:

- Areas for special consideration and analysis
- Conditions in the Call Area
- Areas to be considered for leasing



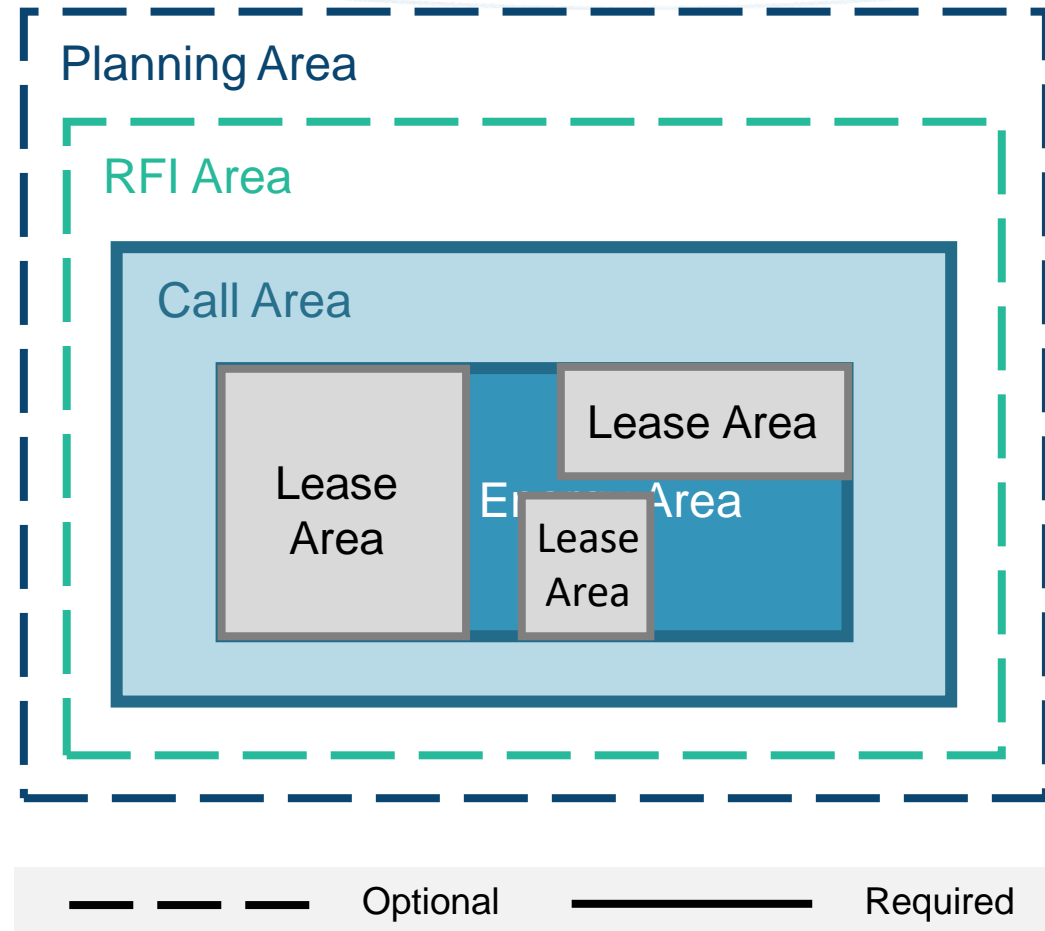
Wind Energy Area

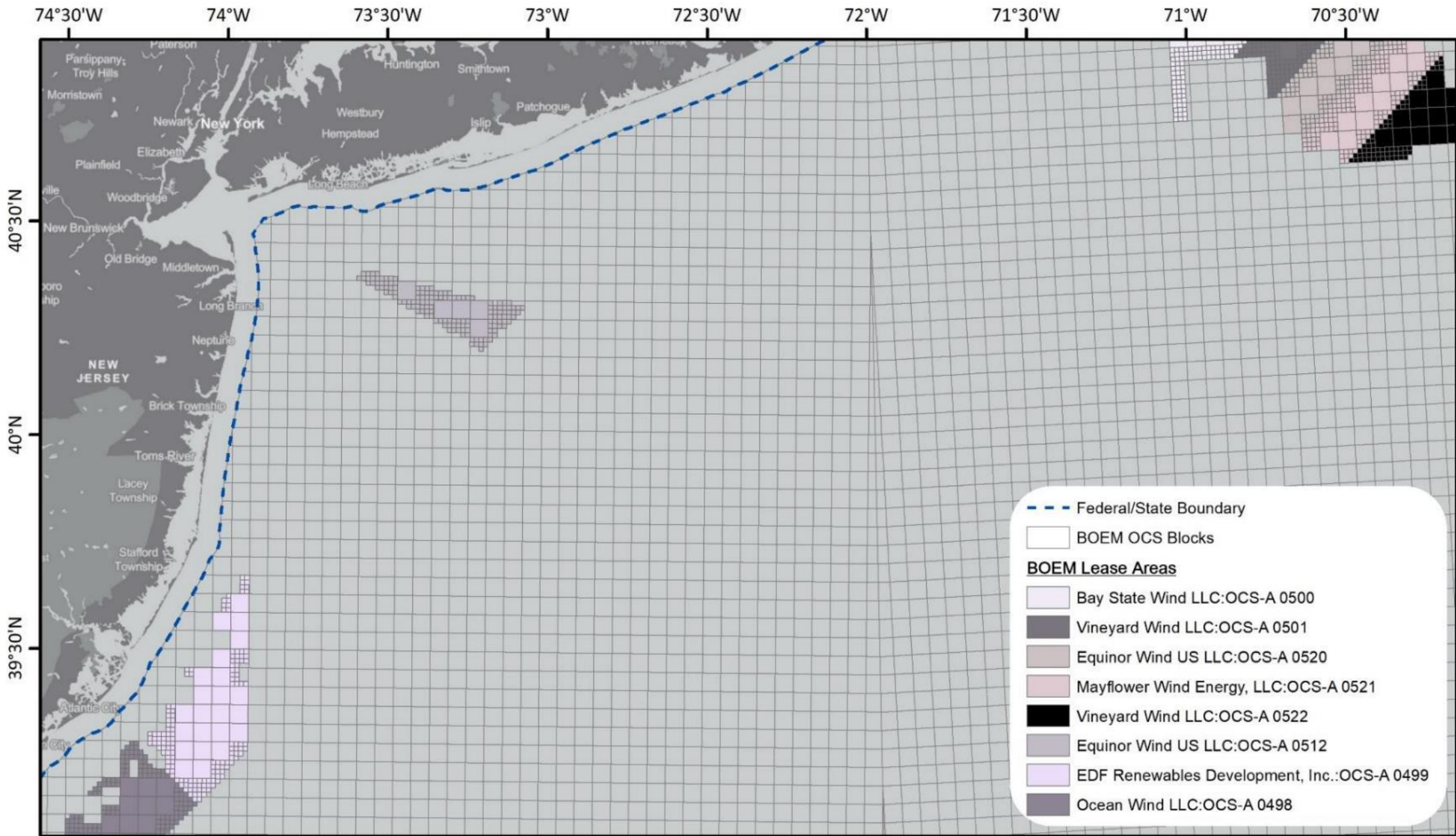
- A portion of the Outer Continental Shelf (OCS) identified by BOEM for NEPA analysis (Environmental Assessment)
- The basis for a Lease Area

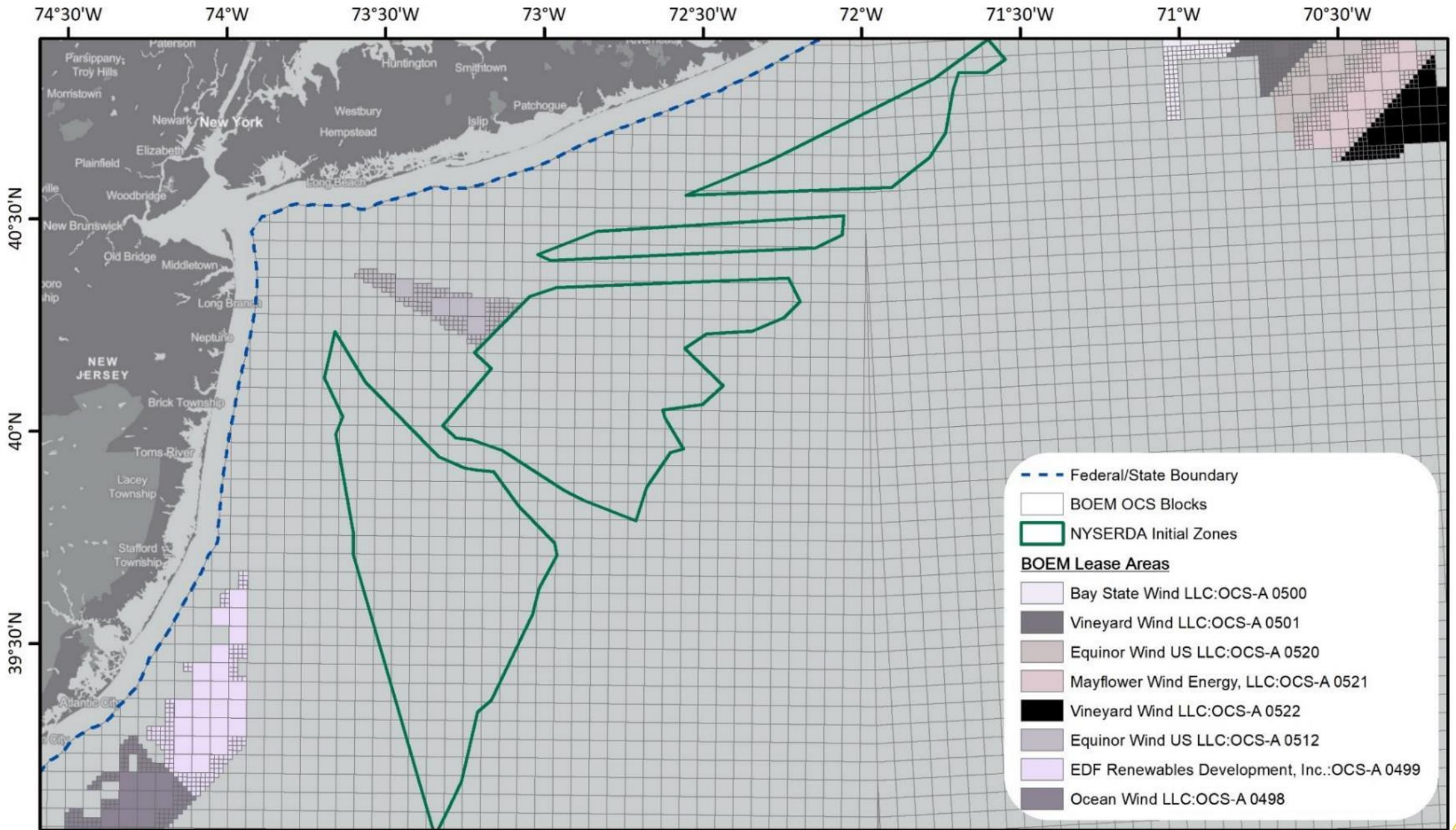


Lease Areas

- Wind Energy Areas have the potential for further division into Lease Areas

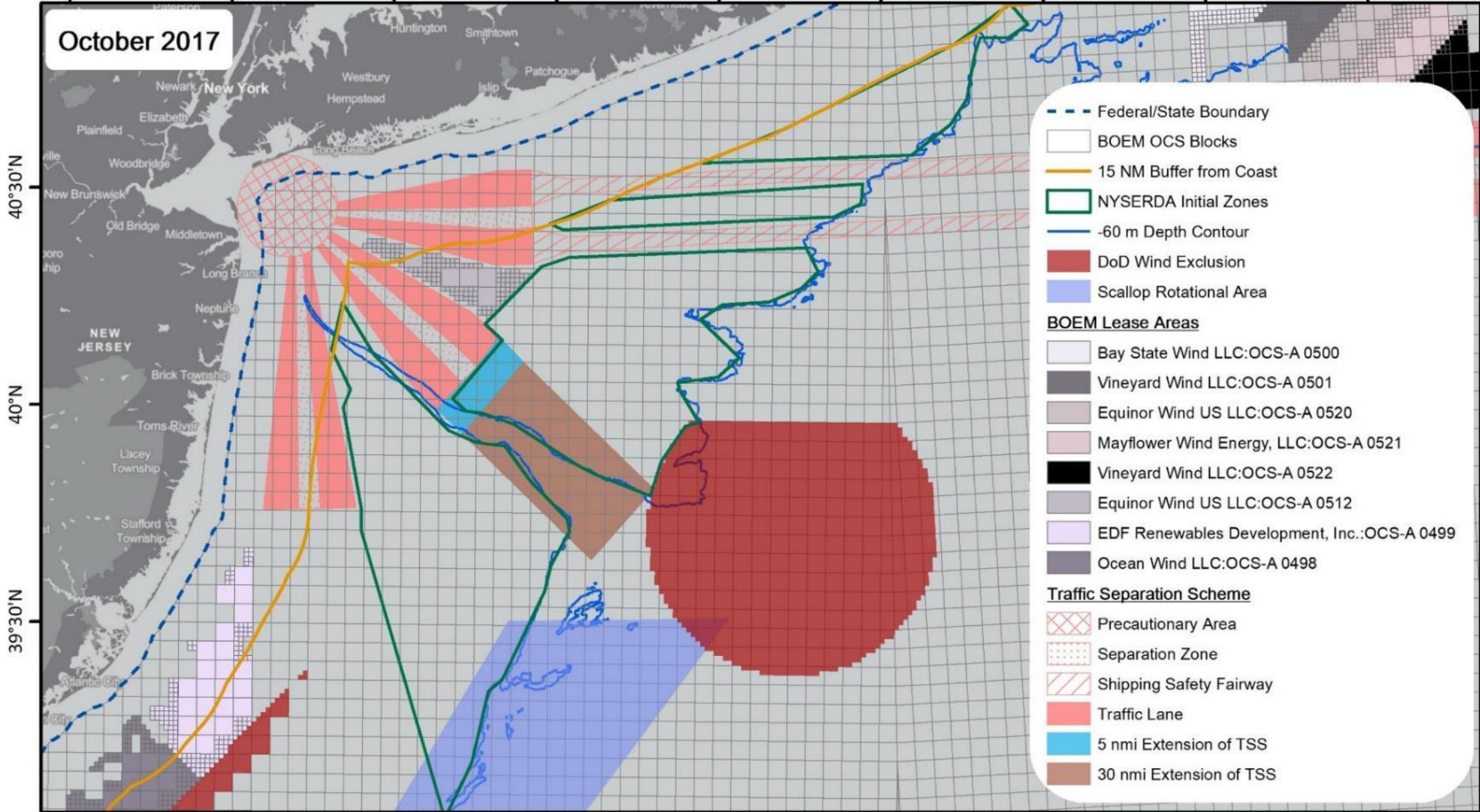






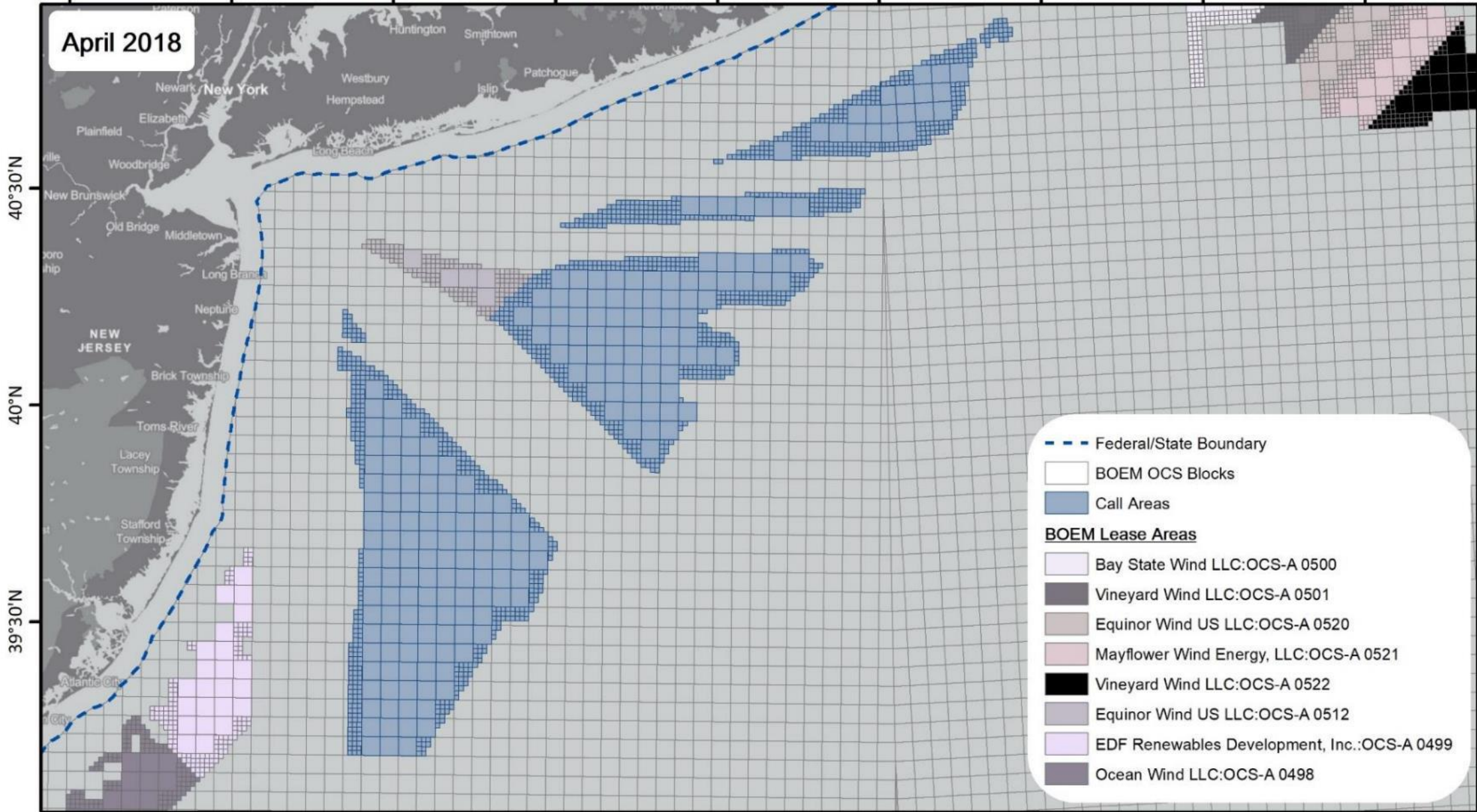
74°30'W 74°W 73°30'W 73°W 72°30'W 72°W 71°30'W 71°W 70°30'W

October 2017



74°30'W 74°W 73°30'W 73°W 72°30'W 72°W 71°30'W 71°W 70°30'W

April 2018

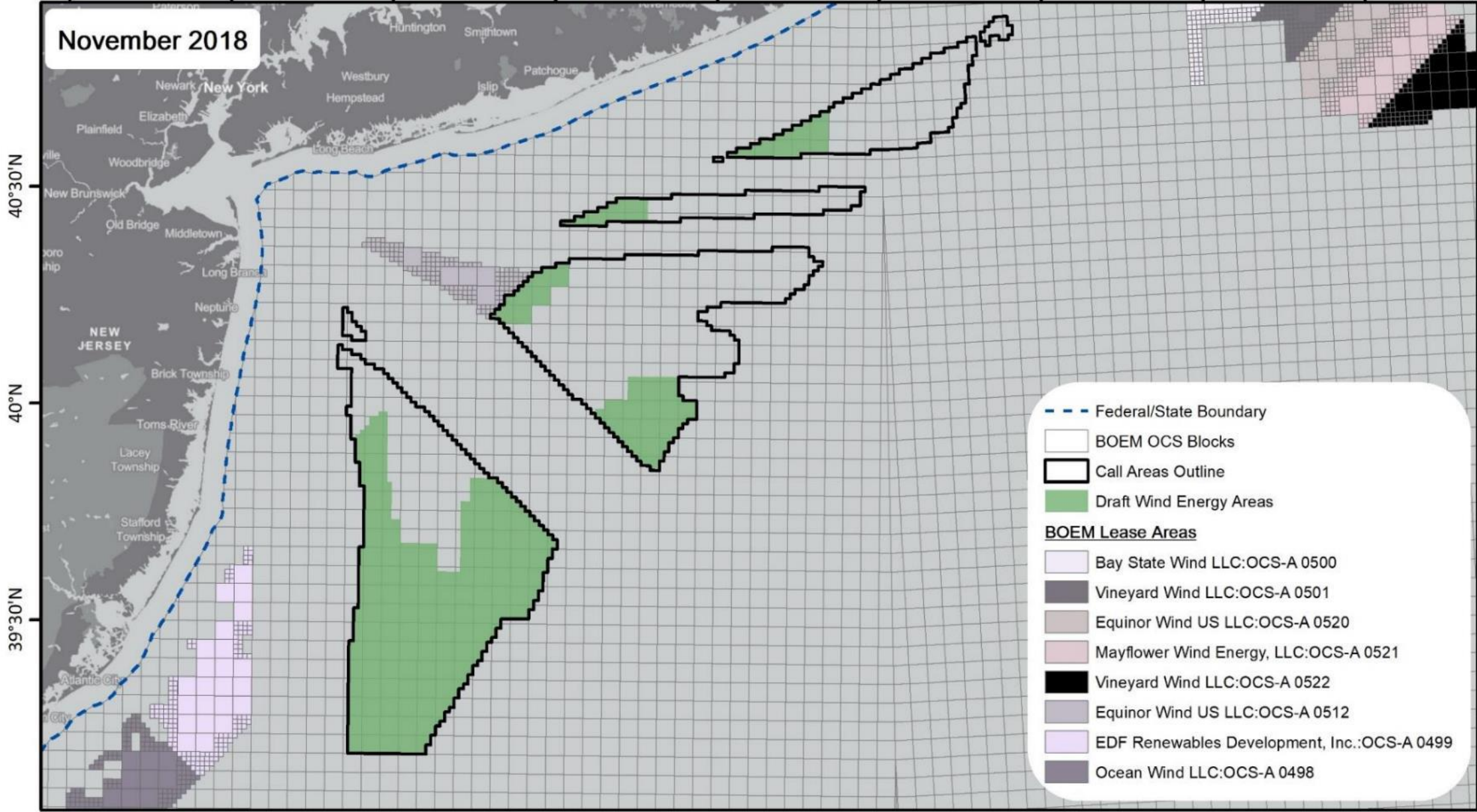


- - - Federal/State Boundary
 BOEM OCS Blocks
 Call Areas
BOEM Lease Areas
 Bay State Wind LLC:OCS-A 0500
 Vineyard Wind LLC:OCS-A 0501
 Equinor Wind US LLC:OCS-A 0520
 Mayflower Wind Energy, LLC:OCS-A 0521
 Vineyard Wind LLC:OCS-A 0522
 Equinor Wind US LLC:OCS-A 0512
 EDF Renewables Development, Inc.:OCS-A 0499
 Ocean Wind LLC:OCS-A 0498



74°30'W 74°W 73°30'W 73°W 72°30'W 72°W 71°30'W 71°W 70°30'W

November 2018

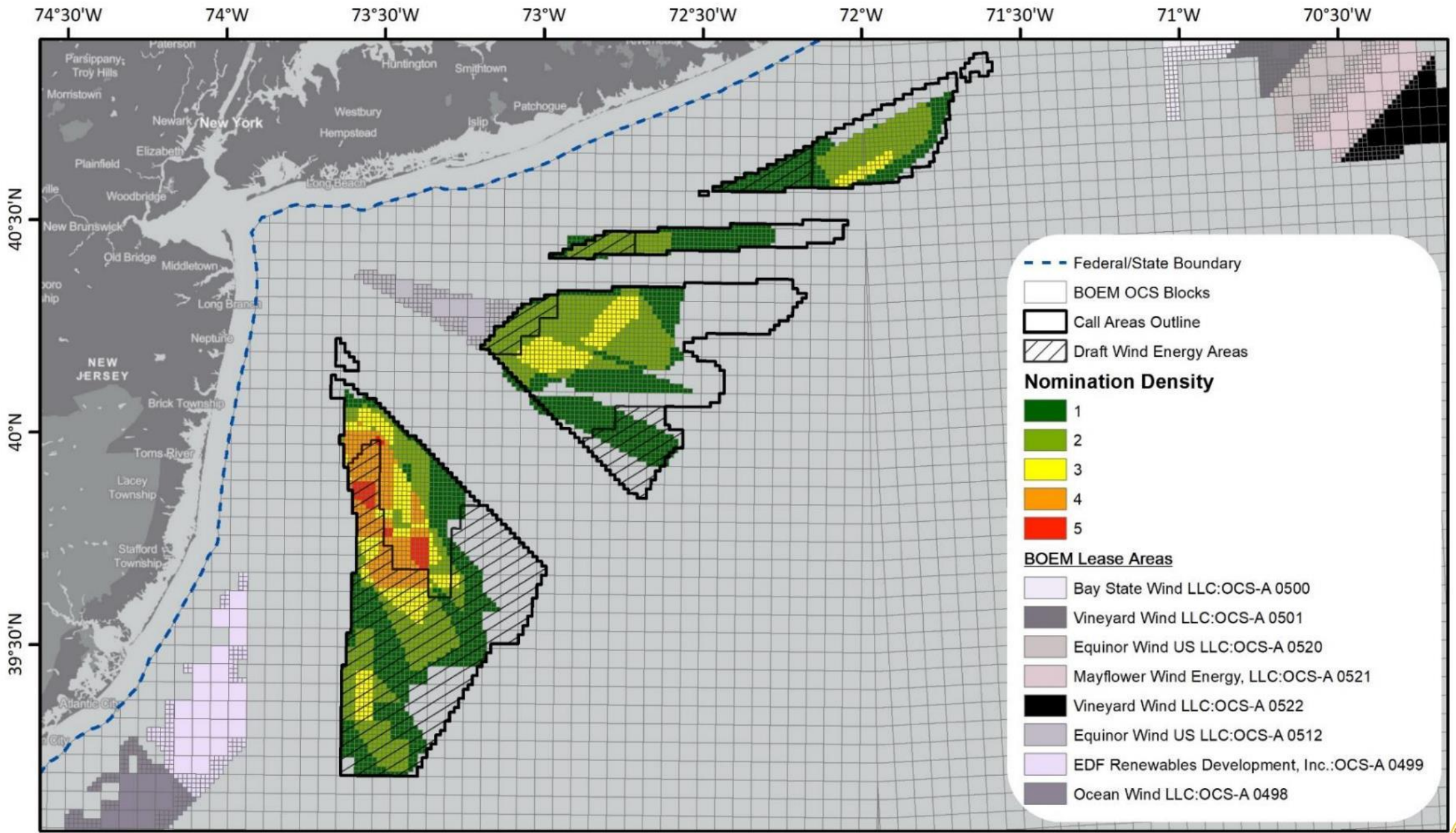


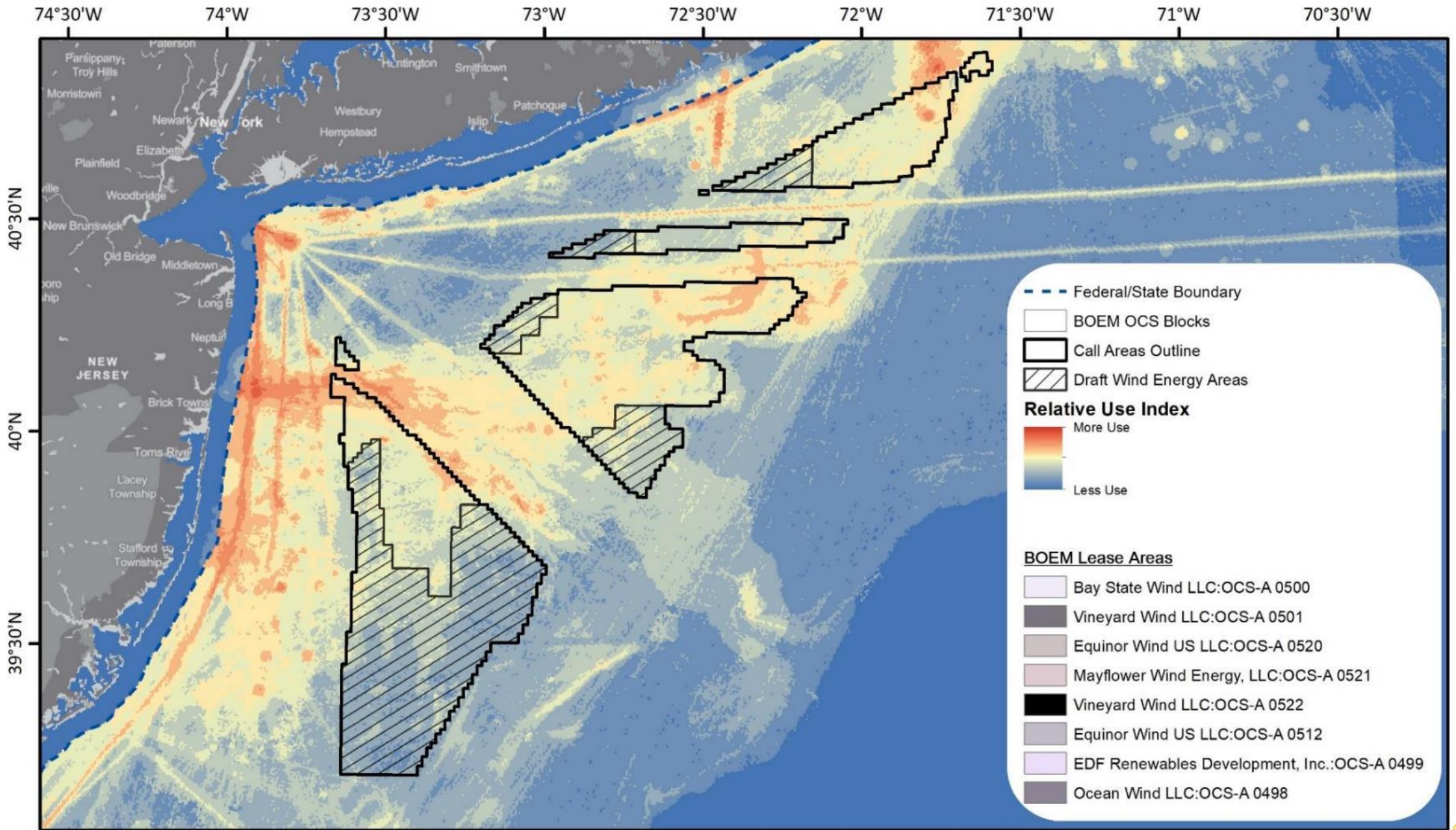
- - - Federal/State Boundary
- BOEM OCS Blocks
- Call Areas Outline
- Draft Wind Energy Areas

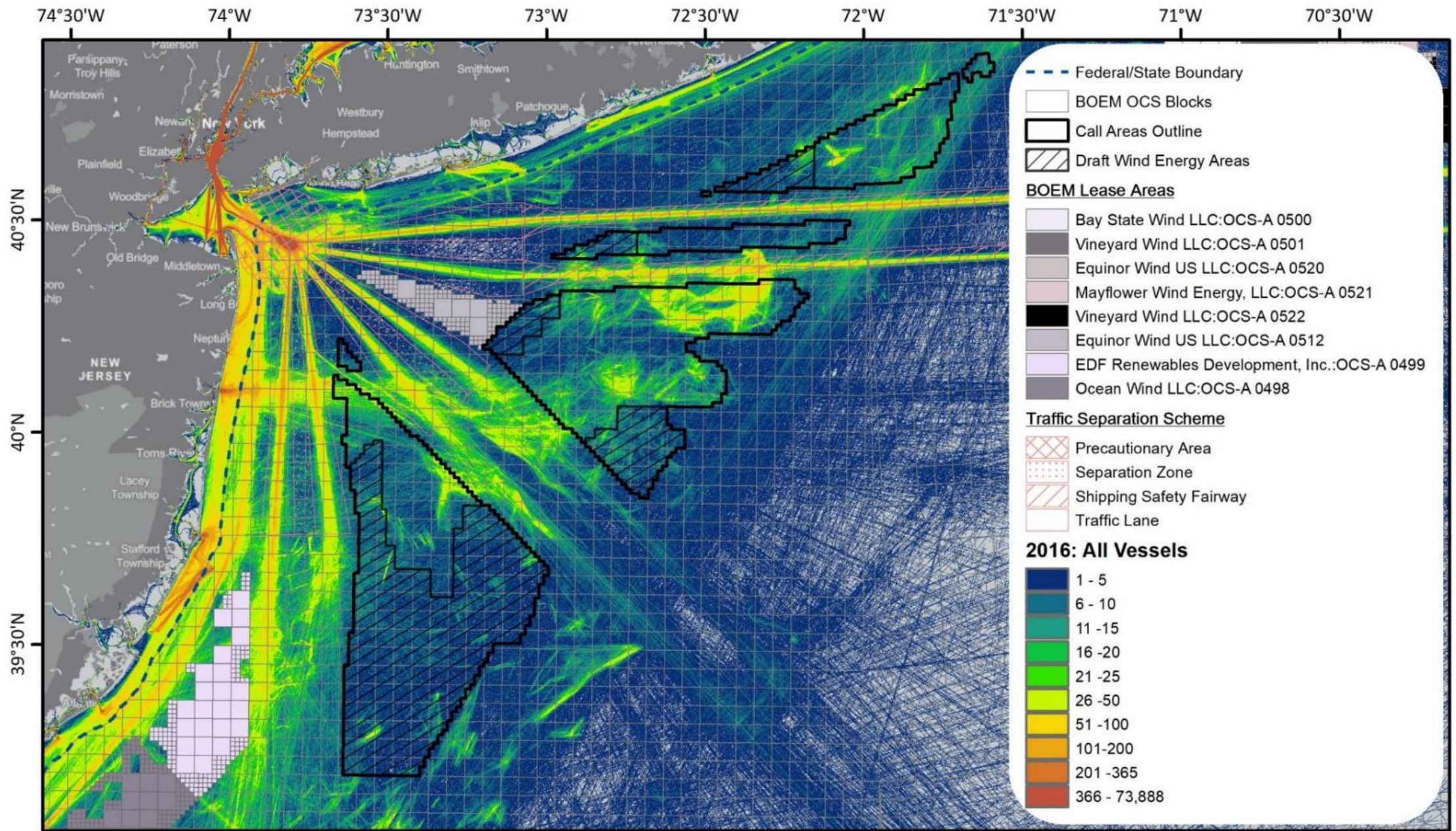
BOEM Lease Areas

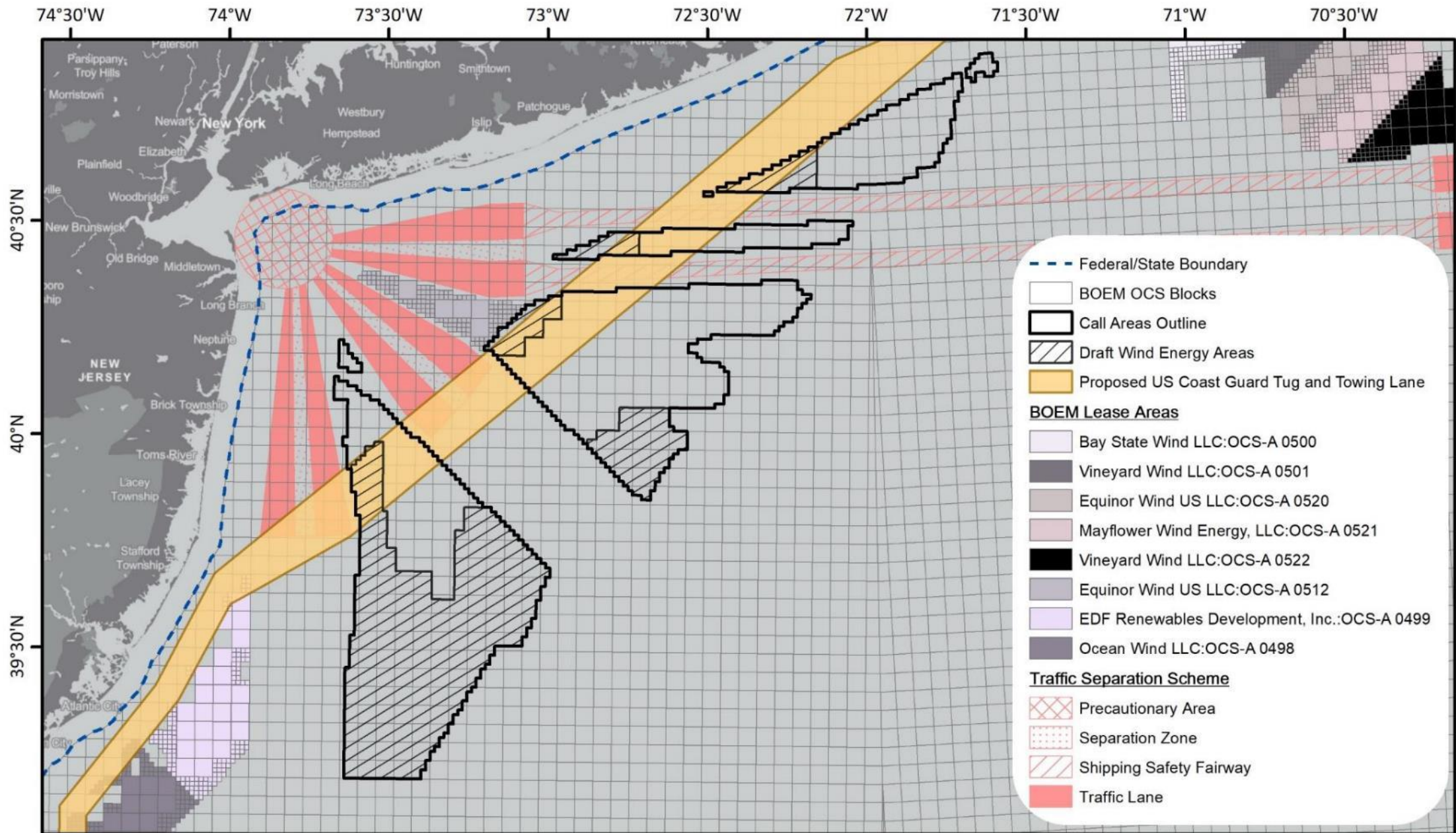
- Bay State Wind LLC:OCS-A 0500
- Vineyard Wind LLC:OCS-A 0501
- Equinor Wind US LLC:OCS-A 0520
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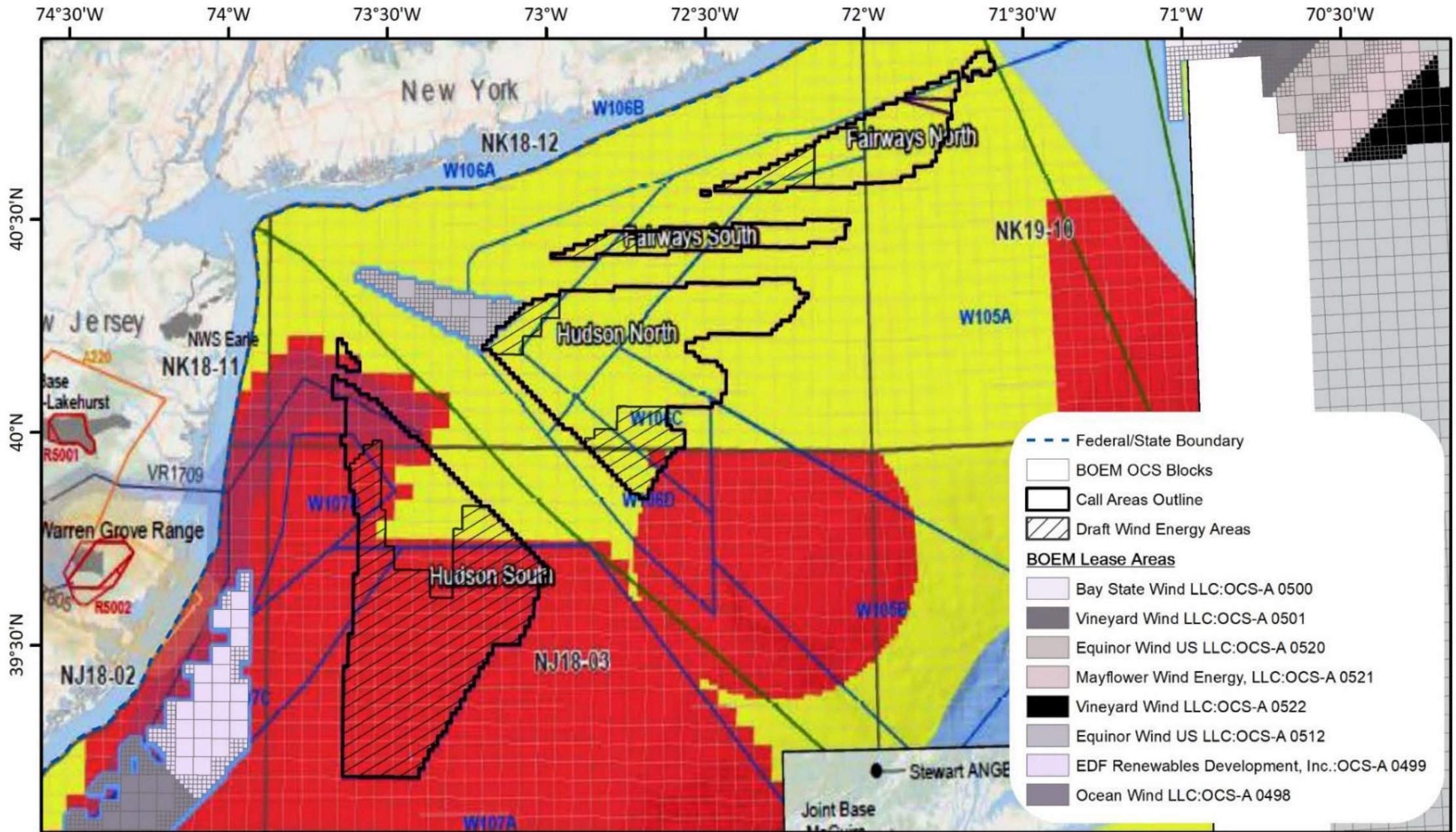










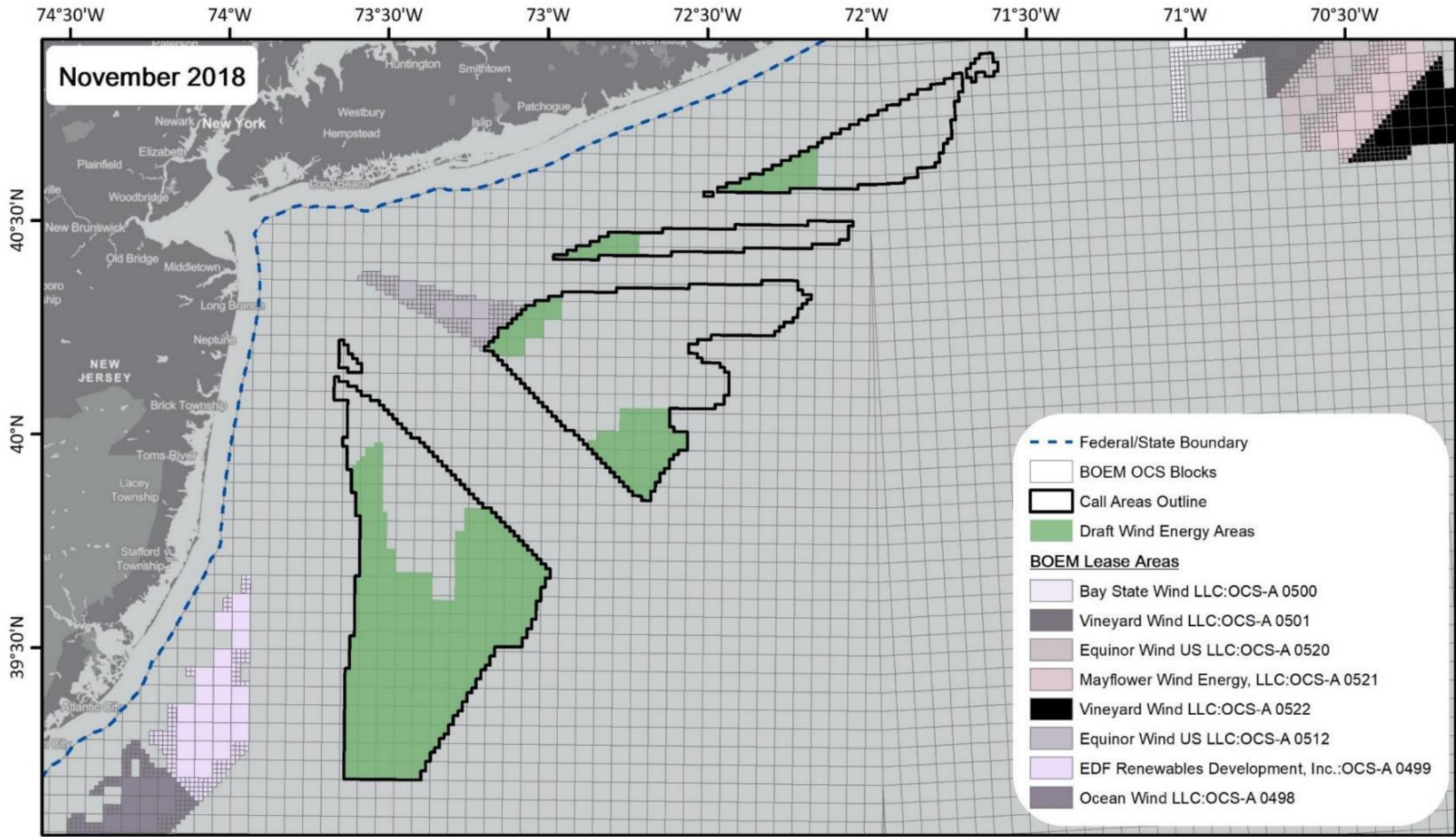


- Federal/State Boundary
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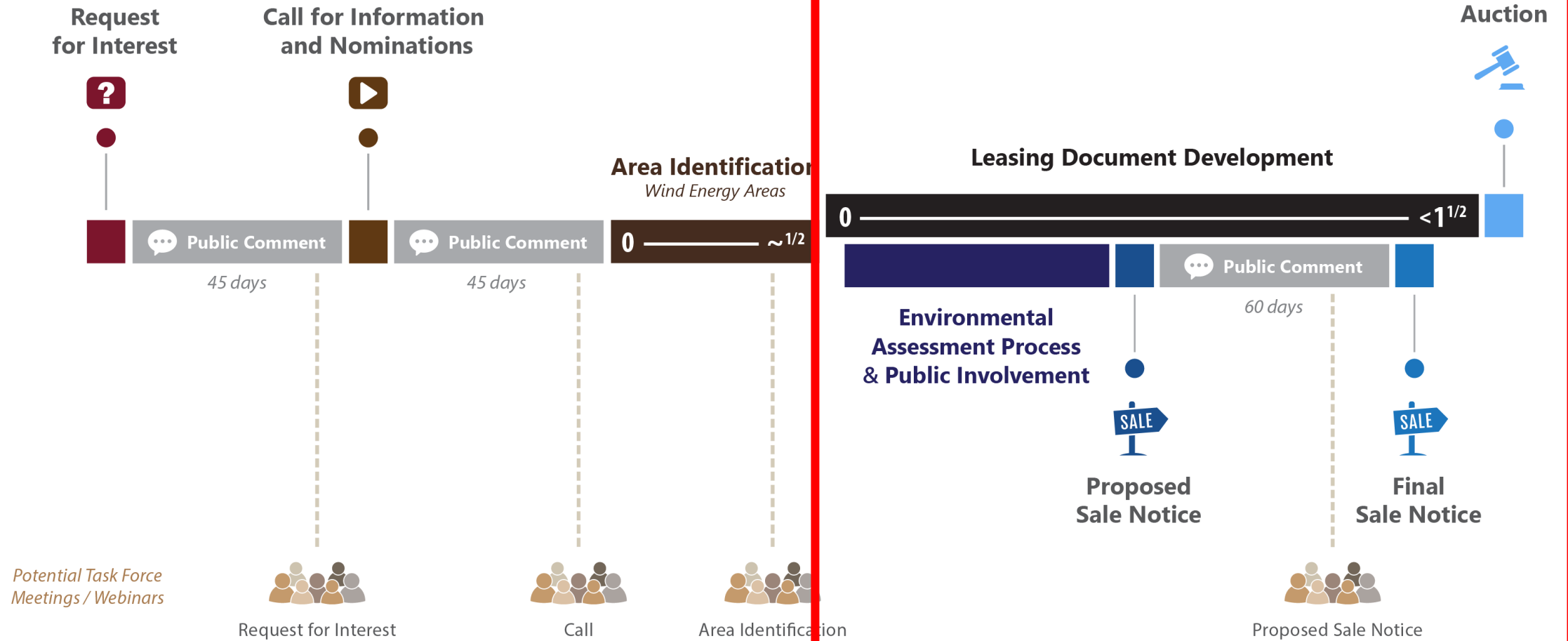
BOEM Lease Areas

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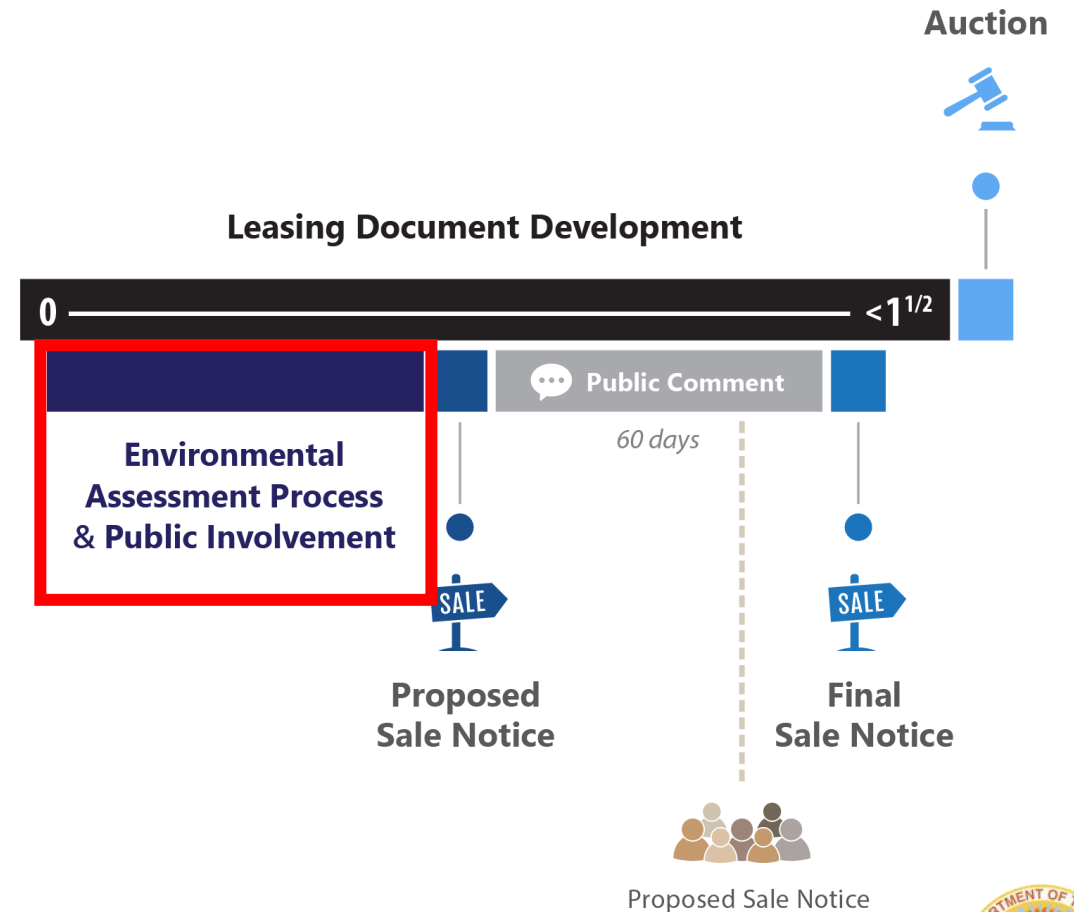
Pre-Lease Sale Process



Pre-Lease Sale Process: Environmental Assessment

Assesses Environmental Effects Associated with Leasing

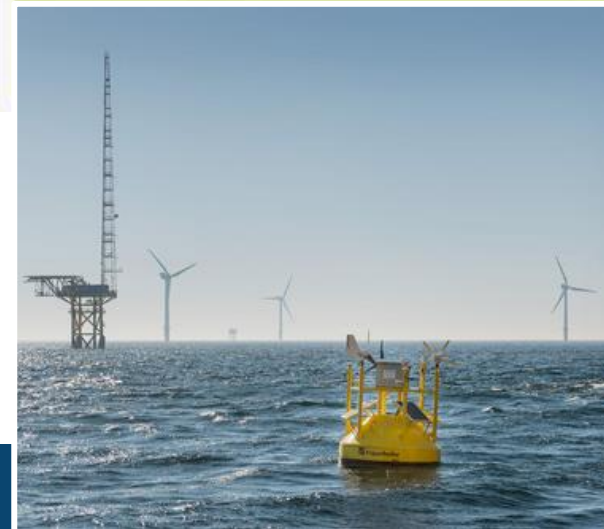
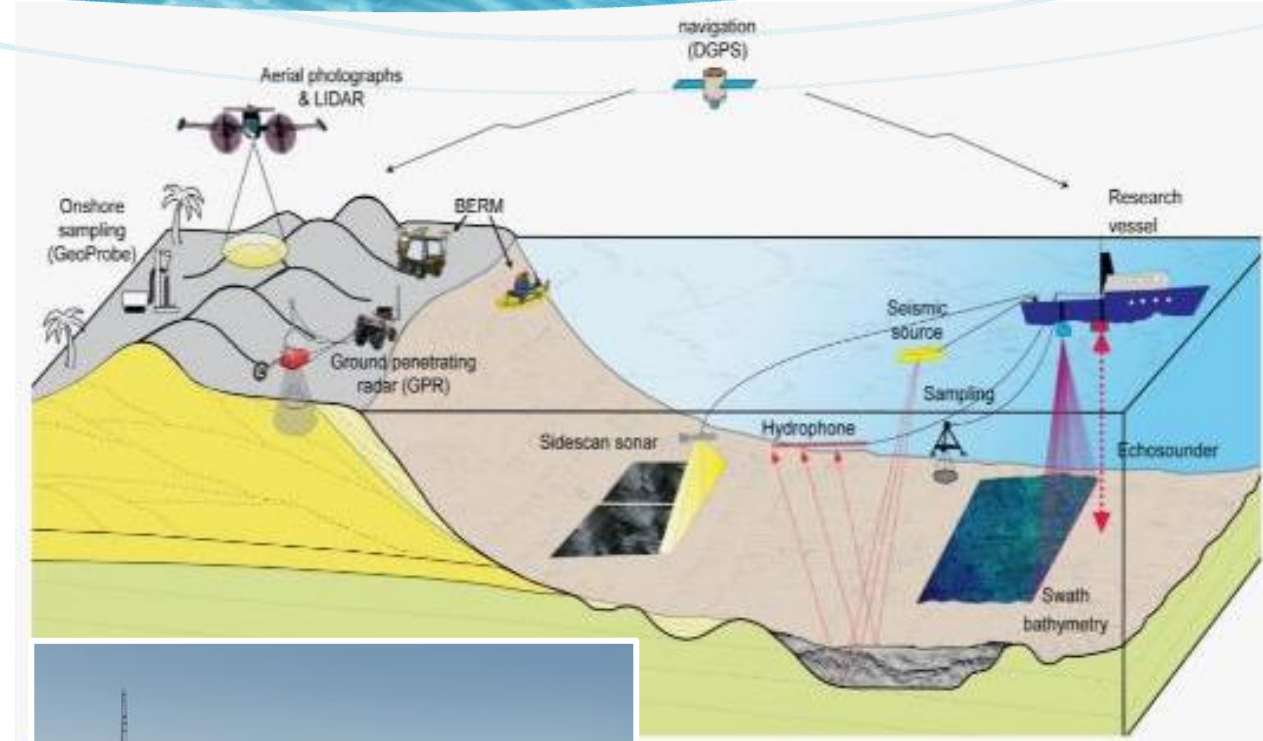
- Site Characterization Activities
 - biological, geological, geotechnical, and archaeological surveys
- Site Assessment Activities
 - meteorological and oceanographic buoy deployment



Pre-Lease Sale Process: Environmental Assessment

Assesses Environmental Effects Associated with Leasing

- Site Characterization Activities
 - biological, geological, geotechnical, and archaeological surveys
- Site Assessment Activities
 - meteorological and oceanographic buoy deployment



Pre-Lease Sale Process: Proposed Sale Notice

What is in a PSN?

- Area for leasing
- Fiscal terms
- Auction details and format
- Proposed lease terms
- Last opportunity to submit company qualification materials
 - Legal
 - Technical
 - Financial
- Nonmonetary factors

Auction Seminar for potential bidders



Pre-Lease Sale Process: Final Sale Notice

Final Sale Notice

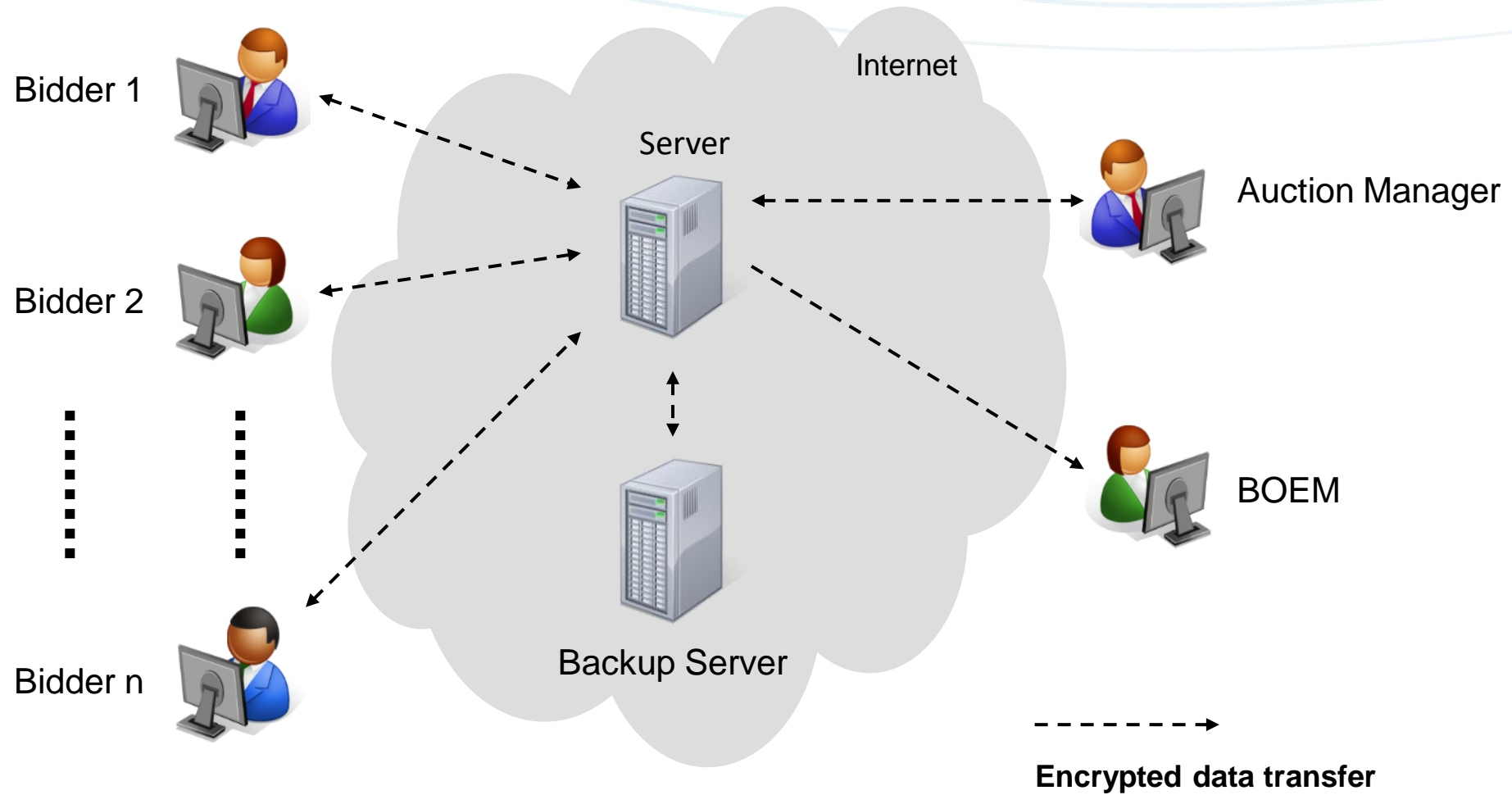
- Bid deposit required to participate in auction (\$450,000)
- List of qualified bidders

Mock Auction

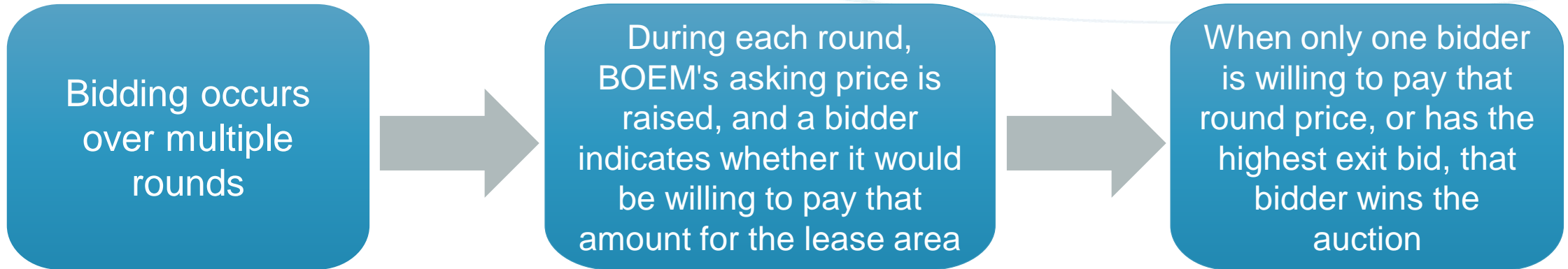
Auction



Auction Format – Online and Anonymous



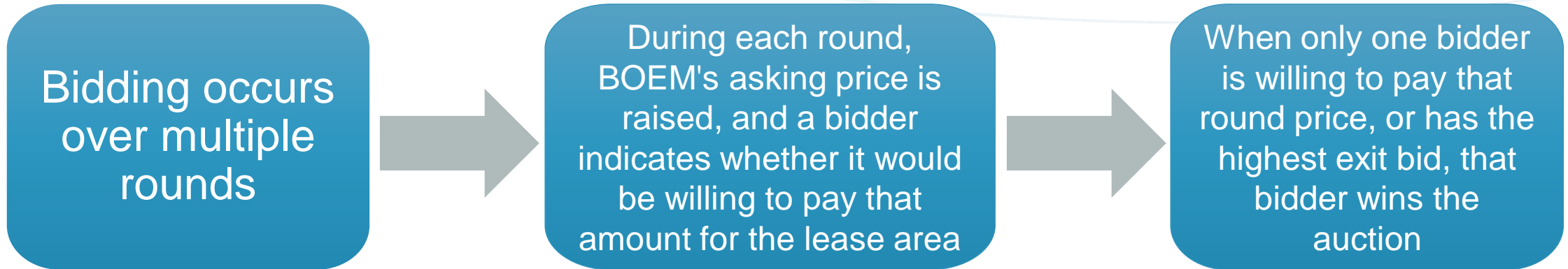
Auction Format - Bidding



Round	Asking Price	Bidder 1	Bidder 2	Bidder 3	Bidder 4
1	\$100?	✓	✓	✓	✓
2	\$150?	✓	✓	✓	×
3	\$200?	×	✓	✓	×
4	\$250?	×	✓	×	×
			WINNER		



Auction Format - Bidding



Round	Asking Price	Bidder 1	Bidder 2	Bidder 3	Bidder 4
1	\$100?	✓	✓	✓	✓
2	\$150?	✓	✓	✓	✗
3	\$200?	\$190	✓	✓	✗
4	\$250?	✗	\$240	\$225	✗
			WINNER		



Atlantic OCS Renewable Energy Lease Sales

Lease Sale Date	Adj. State	Lease Size (acres)	Bid (\$)	Developer
July 2013	RI-MA	97,498	\$3,838,288	Orsted (Deepwater Wind New England, LLC)
		67,252		
September 2013	VA	112,799	\$1,600,000	Virginia Electric and Power Company
August 2014	MD	32,737	\$3,841,538	U.S. Wind, Inc.
		46,970	\$4,859,560	
January 2015	MA	187,523	\$281,285	Orsted (Bay State Wind LLC)
		166,886	\$166,886	Vineyard Wind LLC
		248,015	-	-
		140,554	-	-
November 2015	NJ	160,480	\$880,715	Orsted (Ocean Wind LLC)
		183,353	\$1,006,240	Atlantic Shores LLC
December 2016	NY	79,350	\$42,469,725	Equinor Wind US LLC
March 2017	NC	122,405	\$9,066,650	Avangrid Renewables LLC
December 2018	MA	128,811	\$135,000,000	Equinor Wind US LLC
		127,388	\$135,000,000	Mayflower Wind Energy LLC
		132,370	\$135,100,000	Vineyard Wind, LLC

* Over \$472M auction revenue

** Over \$5M annual rental income



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Management

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Coming Next:

April 7, 1:00 p.m. ET
Offshore Wind
Technologies 101
Walt Musial, NREL

April 28, 1:00 p.m. ET
Article VII Permitting
Process for Offshore Wind
Bill Flynn, Harris Beach PLLC

Visit wind.ny.gov to register

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