# BUREAU OF OCEAN ENERGY MANAGEMENT

# eNGO Meeting Gulf of Mexico Wind - 2: Proposed Sale Notice

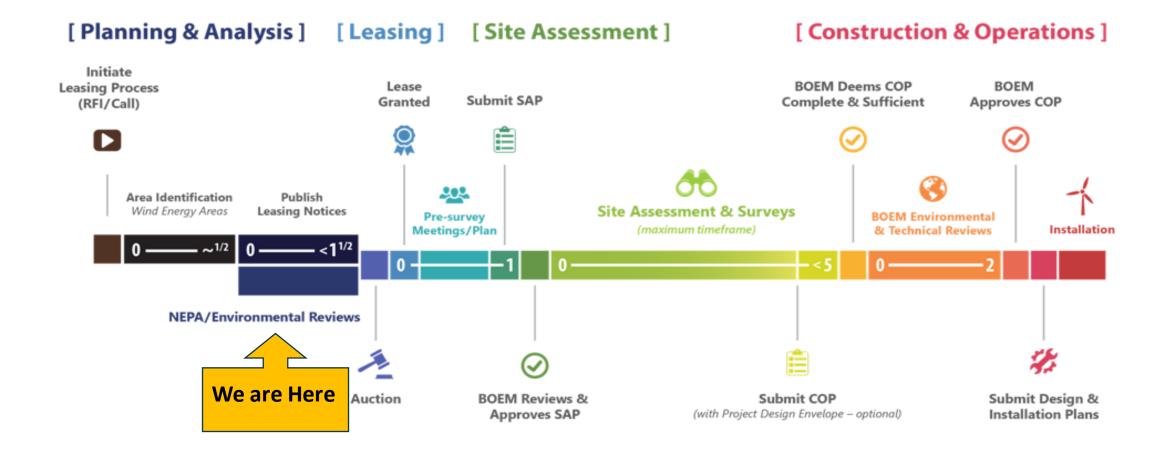
**BOEM GOM Regional Office** 

# **Presentation Outline**

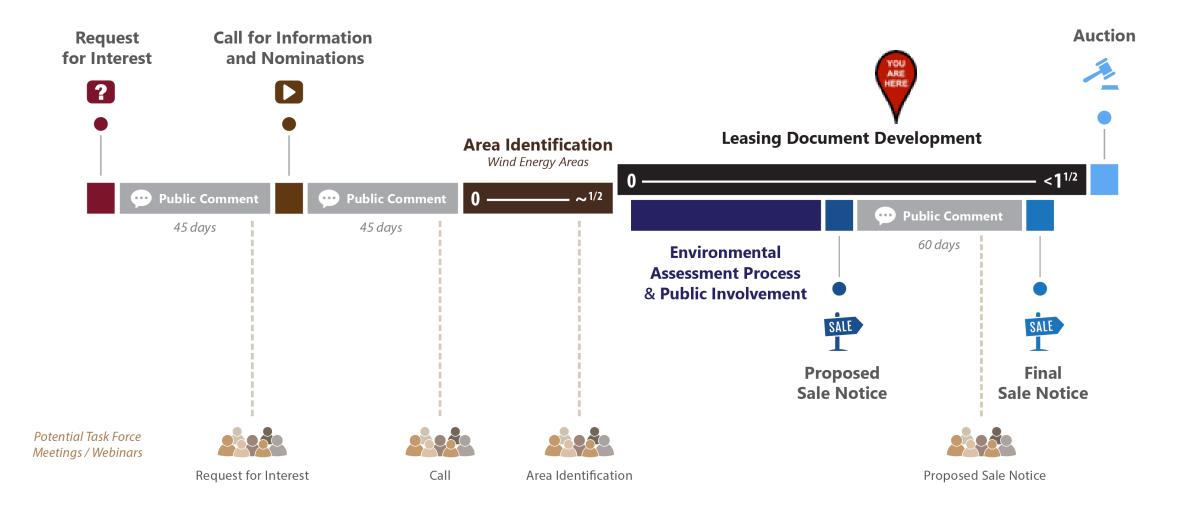
- Background
- Proposed Lease Areas
- Lease Package and Stipulations
- Environmental Slides (Consultations/Research, NEPA, CZMA)
- Fiscal Terms Overview
- Auction Format & Contract
- Next Steps



# **Leasing and Development Process**

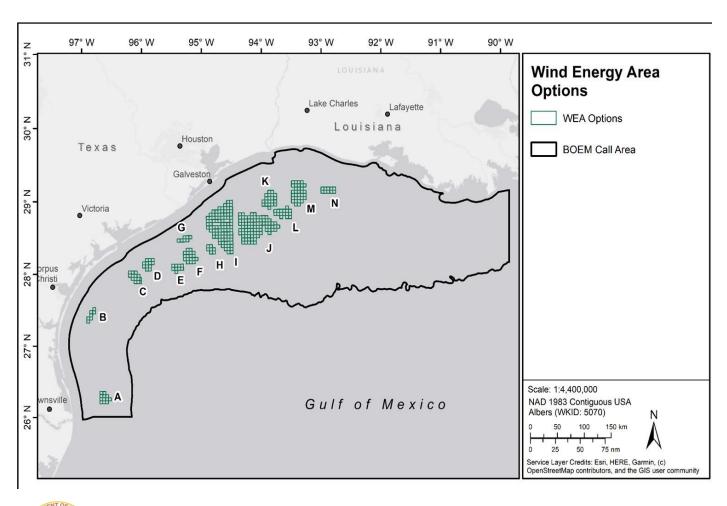


# Renewable Energy Leasing Process: From RFI/Call to Lease Sale





# **Background - Identified Wind Energy Area Options**



- 14 WEA Options were identified
- Option B was removed due to DOD conflicts
- The Programmatic Environmental
   Assessment covers the entire call area up to
   18 leases.



# **GOMW-2 Final Wind Energy Areas (WEAs)**

### Published October 27, 2023

1. Option J: 495,567 acres

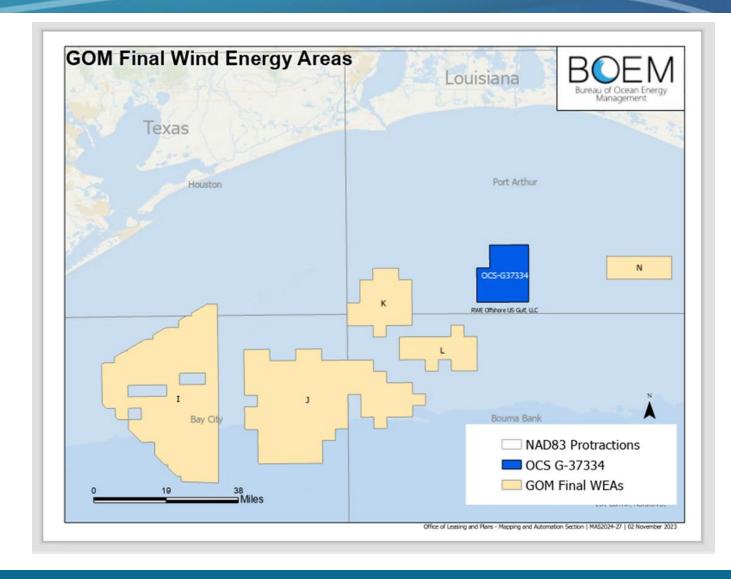
2. Option K: 119,635 acres

3. **Option L: 91,157 acres** 

4. **Option N : 56,978** acres

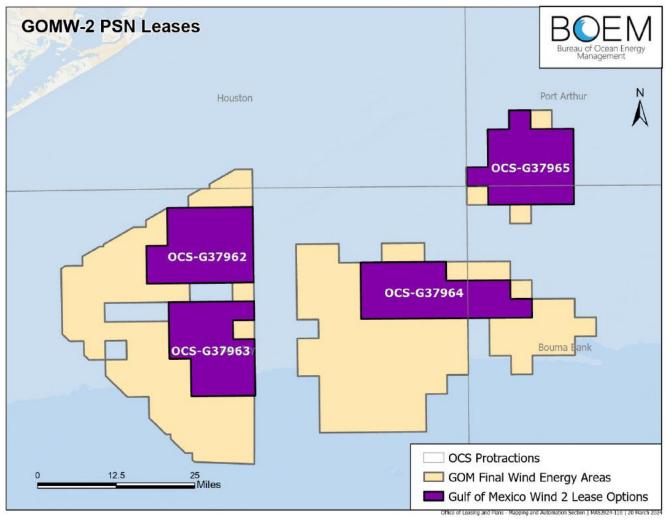
5. **Option I:** 508,265 acres

Option I designated a Final WEA on October 31, 2022





# **Leases Proposed in GOMW-2 PSN**

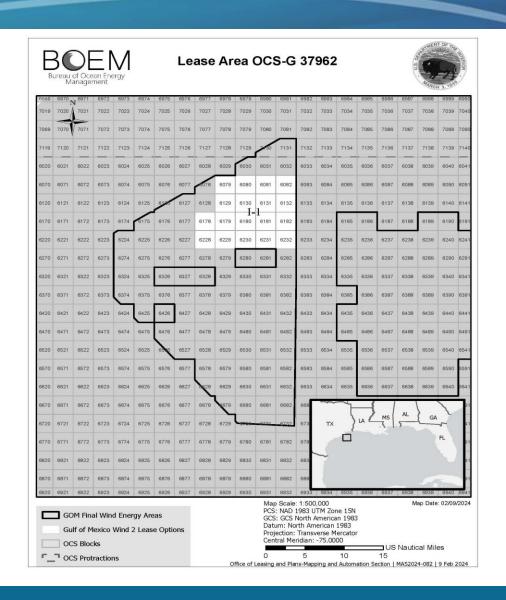




# Proposed Lease G37962 (I-1)

	Lease G37962
Acres	102,480
Installation Capacity (MW) <sup>[1]</sup>	1,244
Homes powered <sup>[2]</sup>	435,400
Power Production (MWh/yr) <sup>[3]</sup>	3,269,232
Max Depth (meters[m])	36
Min Depth (m)	16
Closest distance to TX (km)	28

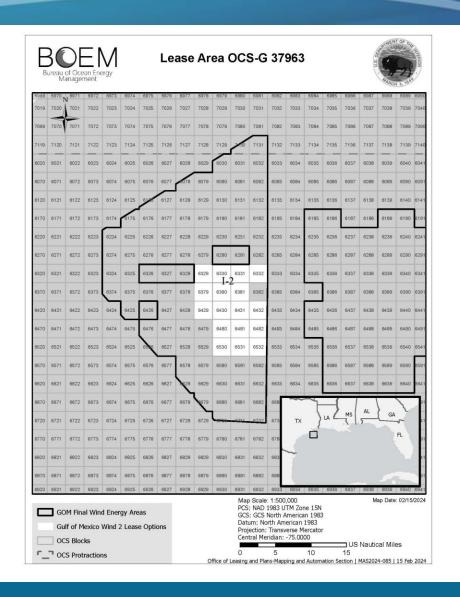
- [1] Megawatts (MW) based upon 3MW/sqkm
- [2] Based upon 350 homes per MW
- [3] Formula = Capacity (MW) \* 8760 (hrs/yr) \* 0.3 (capacity factor)



# Proposed Lease G37963 (I-2)

	Lease G37963
Acres	96,786
Installation Capacity (MW) <sup>[1]</sup>	1,175
Homes powered <sup>[2]</sup>	411,250
Power Production (MWh/yr)[3]	3,087,900
Max Depth (meters[m])	36
Min Depth (m)	16
Closest distance to TX (km)	39

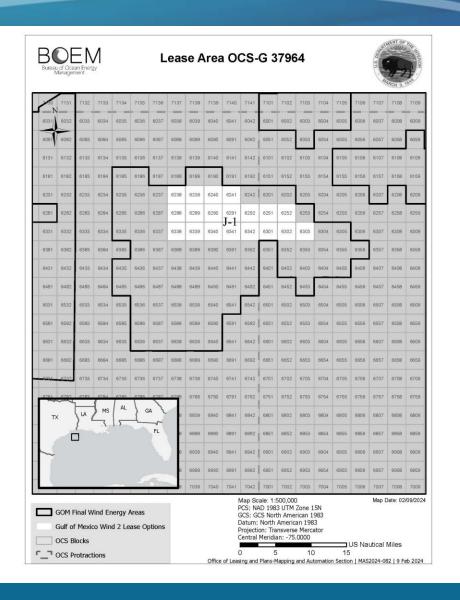
- [1] Megawatts (MW) based upon 3MW/sqkm
- [2] Based upon 350 homes per MW
- [3] Formula = Capacity (MW) \* 8760 (hrs/yr) \* 0.3 (capacity factor)



# Proposed Lease G37964 (J-1)

	Lease G37964
Acres	108,230
Installation Capacity (MW) <sup>[1]</sup>	1,314
Homes powered <sup>[2]</sup>	459,900
Power Production (MWh/yr) <sup>[3]</sup>	3,453,192
Max Depth (meters[m])	34
Min Depth (m)	21
Closest distance to TX (km)	75

- [1] Megawatts (MW) based upon 3MW/sqkm
- [2] Based upon 350 homes per MW
- [3] Formula = Capacity (MW) \* 8760 (hrs/yr) \* 0.3 (capacity factor)

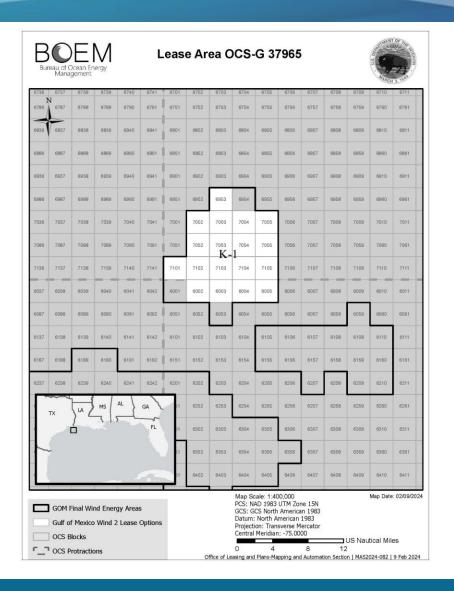




# Proposed Lease G37965 (K-1)

	Lease G37965
Acres	102,544
Installation Capacity (MW) <sup>[1]</sup>	1,245
Homes powered <sup>[2]</sup>	435,750
Power Production (MWh/yr) <sup>[3]</sup>	3,271,860
Max Depth (meters[m])	23
Min Depth (m)	18
Closest distance to TX (km)	58
Closest distance to LA (km)	59

- [1] Megawatts (MW) based upon 3MW/sqkm
- [2] Based upon 350 homes per MW
- [3] Formula = Capacity (MW) \* 8760 (hrs/yr) \* 0.3 (capacity factor)



# **Proposed Lease Area Statistics**

### **Lease Area Descriptive Statistics**

	Acres	Installation Capacity <sup>1</sup>	Homes Powered <sup>2</sup>	Power Production (MWh/yr.) <sup>3</sup>	Max Depth (meters)	Min Depth (meters)	Closest Distance to TX (km)	Closest Distance to LA (km)
G37962 (I-1)	102,480	1,244	435,400	3,269,232	36	16	28	
G37963 (I-2)	96,786	1,175	411,200	3,087,900	36	16	39	
G37964 (J-1)	108,230	1,314	459,900	3,453,192	31	24	75	100
G37965 (K-1)	102,544	1,245	435,750	3,271,860	23	18	58	59
TOTAL	410,040	4,978	1,742,250	13,082,184				

<sup>[1]</sup> Megawatts (MW) based upon 3MW/sqkm

<sup>[3]</sup> Formula = Capacity (MW) \* 8760 (hrs/yr) \* 0.3 (capacity factor)



<sup>[2]</sup> Based upon 350 homes per MW

# **Input Requested from Stakeholders**

- Delineation, number, size, orientation and location of Lease Areas Offered
- Benefits to underserved communities
- Bidding credits
  - Workforce training & supply chain development
  - Fishing compensatory mitigation fund
- Tribal Nations, ocean users, underserved communities, agencies, and other stakeholders engagement and reporting
- Prescribed layouts uniform and aligned
- Limits on Number of Lease Areas per Bidder



# Lease-Specific Terms, Conditions and Stipulations

# The following Lease-Specific Terms, Conditions and Stipulations are proposed to be included in Addendum C of the Lease Instrument:

- Site Characterization
- Reporting
- National Security and Military Operations
- Standard Operating Conditions
- Encourage Project Labor Agreements
- Supply Chain Statement of Goals
- Workforce Training and/or Domestic Supply Chain Development Bidding Credit (17%)
- Fisheries Compensatory Mitigation Fund Bidding Credit (8%)
- Siting Conditions



# Lease-Specific Terms, Conditions, and Stipulations

### Reporting and Enhanced Engagement

- Progress Report submitted by Lessee every 6 months
  - Must include Communication Plans for fisheries, Tribes, and agencies
  - Must include coordinated engagement between Regional Lessees

### Project Labor Agreements (PLAs)

• The Lessee must make every reasonable effort to enter into a PLA that covers the construction stage of any project proposed for the Lease Area.

### Supply Chain Statement of Goals

 The Lessee must submit a statement describing plans, including engagement with domestic suppliers, for contributing to the creation of a robust and resilient US-based offshore wind supply chain.

# Hydrogen

Minor edits were made to the lease instrument in the PSN to allow lessees to propose hydrogen production as an energy product of offshore wind generation under 585.200(b).



# **Next Steps**

o PSN Comment Period Ends: May 19, 2024 11:59 PM EST

To make a formal comment, go to <a href="https://www.regulations.gov/">https://www.regulations.gov/</a> and search for <a href="https://www.regulations.gov/">Docket # BOEM-2024-0017</a>



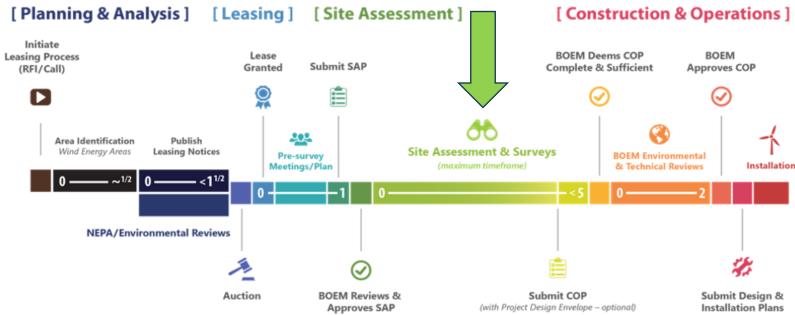
# **Consultations and Research**

Mark Belter

Environmental Resources Section, Gulf of Mexico Region

### Site Assessment and Site Characterization

- Specific activities in the lease area during Site Assessment and Characterization may include:
  - Buoy Installation and Decommissioning
  - Biological & Archaeological Surveys
  - Geological Surveys (e.g. high-resolution geophysical surveys)
     and geotechnical testing and sampling (e.g. coring)



### **Consultations**

- EFH Consultation with NMFS was completed for the call area on 12/14/2022.
  - This consultation considered the site assessment and site characterization activities from up to 18 leases.
- ESA Consultation for site assessment and site characterization
  - Consultation with FWS completed on 11/18/2022; considered up to 18 leases in the call area.
  - Consultation with NMFS completed on 12/14/22; considered up to 18 leases in the call area in water depths no greater than 100 m.
- NHPA Section 106
  - Invitations to consult were sent 1/31/24, with responses due 2/29/24.
- Government-to-Government Consultation
  - Letters inviting consultation were sent to tribes with a known interest in GOM.
  - Several responses received requesting to be informed throughout the process.



# **Ongoing and Planned Research**

### Ongoing Studies:

- Avian Habitat Use and Collision-Risk
- Abundance, distribution, and habitatuse of protected species
- Gulf Coast Community and Cultural Impact Baselines Survey

### Potential future study topics:

- Hydrodynamic impacts
- Environmental Justice Factbook
- Assessing cumulative effects



BOEM, Mike Miner

# **NEPA Analysis**

Helen Rucker

Environmental Assessment Section, Gulf of Mexico Region

# **Determination of NEPA Adequacy (DNA)**

### Environmental Assessment (EA)

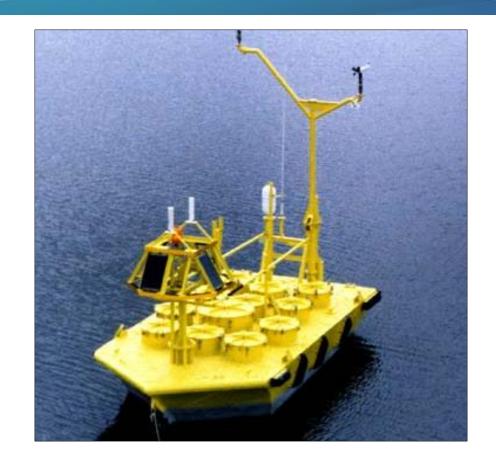
BOEM conducted a programmatic EA for the Gulf of Mexico Call Area prior to the OSW-1 Lease
 Sale

### Determination of NEPA Adequacy (DNA)

- BOEM revisited the analysis conducted in the EA and verified that the conclusions were still valid for the OSW-2 Lease Sale in a DNA
- The DNA will be filed in the administrative record for the OSW-2 Lease Sale

### **Environmental Assessment**

- Analysis ONLY covers the impacts of issuing leases and the associated site assessment and site characterization activities
  - Meteorological (met) buoys
  - Vessel trips
  - Geological and biological surveys
- Analysis does NOT include
  - Specific project layouts
  - Cable routes for specific projects
  - Visual impacts of a project
  - Wind Energy Area (WEA) identification
- 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



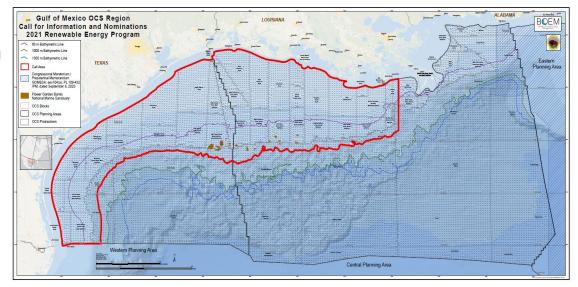
# Approach for the EA

### Approach differs from Atlantic wind energy lease issuance EAs

- Analyzed the Call Area rather than the WEAs
  - Allows greater flexibility for future identification of WEAs
  - Provides NEPA coverage for non-competitive and research leases proposed in the Call Area

### Approach more in line with stakeholders in the GOM Region

- Familiar with regional NEPA analysis
- Similar approach to conventional energy NEPA in the GOM Region
  - Analysis for more than one lease issuance
  - Flexibility for ID of several WEAs and lease areas over time
  - Allows for up to 18 leases to be covered in this analysis





# **Scope of the Analysis**

### EA is a programmatic assessment

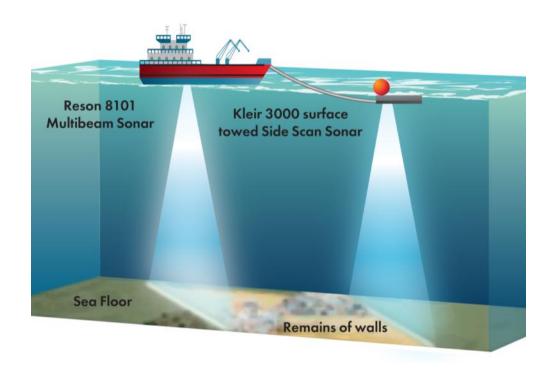
May be used for more than one lease issuance

### Up to 18 leases in the Call Area

- Number of leases based on the estimate of foreseeable future activities based on historical trends of an emerging Renewable Energy Program on the Atlantic OCS
- EA analyzes impacts of
  - A single OCS wind energy lease issuance
  - Issuance of 18 OCS wind energy leases

### No more than 6-8 leases issued per lease sale

Similar to those issued for Atlantic sales



Example of a seafloor survey



### More Information on the Environmental Assessment

- The EA concluded with a Finding of No Significant Impact (FONSI)
  - The FONSI is available on the BOEM website
    - https://www.boem.gov/sites/default/files/documents/renewable-energy/stateactivities/FONSI Signed20230524.pdf
- Environmental Assessment (EA)
  - The EA is available on the BOEM website
    - https://www.boem.gov/sites/default/files/documents/renewable-energy/stateactivities/GOM%20Wind%20Lease%20EA\_0.pdf
- Determination of NEPA Adequacy (DNA)
  - The DNA indicated that the conclusions of the EA are still valid and applicable for the OSW-2
     Lease Sale

# **Coastal Zone Management Act**

Helen Rucker

Environmental Assessment Section, Gulf of Mexico Region

# **Consistency Determination (CD)**

### Coastal Zone Management Act (CZMA)

BOEM must comply with federal consistency regulations under CZMA for GOMW-2

### Consistency Determination (CD)

- BOEM prepared a consistency determination (CD) for leases proposed in the GOMW-2 PSN
- The programmatic EA supports the evaluation contained within the CD
- The CD was sent to Louisiana (LA) and Texas (TX) coastal management programs (CMPs) in April 2024 beginning the federal consistency review process

# **Federal Consistency Review Process**

### Federal Consistency Review under 15 CFR part 930 subpart C

- 60-day review period for LA and TX CMPs is scheduled to conclude in June 2024
- LA and TX CMPs could provide concurrence or objection to BOEM's CD, or BOEM could presume concurrence if a response is not provided by the end of the review period
- LA and TX CMPs may request a 15-day extension which BOEM must grant under CZMA

# **Auction Format and Bidding Credits**

Sarah Coffman

BOEM Office of Strategic Resources
Economics Division

### **Auction Format**

- Multiple-factor auction format
  - Bidding system will be a combination of monetary and non-monetary factors.
  - The non-monetary factors will be bidding credits for commitments to financial investments in specific initiatives that further OCSLA's objectives.
- The bid in each round will represent the sum of the cash bid and the value of any non-monetary factors that the bidder qualified for in the form of bidding credits.
- BOEM will start the auction at the minimum bid price for the Lease Area and increase prices incrementally until no more than one active bidder per Lease Area remains in the auction.
  - The proposed minimum bid is \$50 per acre.
- Auction will use a 'second price' rule.
  - Lease Area will be won by the bidder that submits the highest bid, but the winning bidder will pay
    the highest bid amount where there was competition.

# **Bidding Credit Calculation**

- BOEM revised its calculation of bidding credits between GOMW-1 and GOMW-2
- For GOMW-2, Bidding Credits are calculated as a percentage of the winning bid
  - Previously, BOEM calculated bidding credits as a percentage of the cash bid.
- BOEM's proposed bidding credit percentages remain under its 25 percent winning bid bidding credit cap.

	GOMW-1	Example \$10mm bid	GOMW-2	Example \$10mm bid
Workforce Training/Supply Chain Development	20% of cash bid	\$1.54mm	17% of winning bid	\$1.7mm
Fisheries Compensatory Mitigation	10% of cash bid	\$0.77mm	8% of winning bid	\$0.8mm
Totals	23.08% of winning bid	\$2.31mm	25% of the winning bid	\$2.5mm

# **Proposed Bidding Credits**

- Bidders may receive a bidding credit in exchange for committing to a monetary contribution to offshore wind programs or initiatives.
  - Bidding credits are calculated as a percentage of the bid.
  - BOEM caps bidding credits at 25 percent of the winning bid.
- 1. 17 percent non-monetary bid credit for a contribution to workforce training, supply chain development, or a combination of both.
  - Bidding credit for a commitment to invest in programs that will advance U.S. offshore wind energy workforce training and/or supply chain development.
    - The credit is intended to incentivize investments that would not occur otherwise.
- 2. 8 percent non-monetary bid credit for a contribution to a Fisheries Compensatory Mitigation Fund.
  - Bidding credit for establishing or contributing to an existing Gulf of Mexico Fisheries Compensatory
     Mitigation Fund.

# Proposed Bidding Credits - Workforce Training and Supply Chain

### Workforce Training and Supply Chain Development

- 17 percent of the Cash Bid with the Contribution due by the lease's first FDR
- Lessee retains flexibility consistent with its Conceptual Strategy to direct funds to most worthwhile training and supply chain efforts
  - Credit is intended to incentive investments that would not otherwise happen
- Enhance, through training, the offshore wind workforce or to stand-up the domestic supply chain for offshore wind technology, manufacturing, assembly, or services
  - OCSLA nexus: operations must be conducted in a safe manner by well-trained personnel
  - OCSLA nexus: expeditious and orderly development, and protection of national security interests

# **Proposed Bidding Credits – Fisheries Compensatory Mitigation**

### Fisheries Compensatory Mitigation Fund

- 8 percent bidding credit in exchange for an equivalent cash commitment to an Atlantic Fisheries
   Compensatory Mitigation Fund
  - OCSLA Nexus: 8(p) requires BOEM to consider other uses of the sea including fisheries
- Credit Design Features
  - Fund's first priority is for gear loss or damage or income loss, but if excess funds are actuarily determined, funds can be used for engagement and select gear upgrades
  - The fund provides certainty to fisheries stakeholders and is available as a perpetual fund to mitigate impacts from other leases
  - Fund must include fiduciary governance, strong internal controls, and annual reporting

# **Bidding Credits - Conceptual Strategy**

- Bidders must submit a bidding credit conceptual strategy with the BFF.
  - The bidder's conceptual strategy will be reviewed by a BOEM Auction Panel for compliance with the bidding credit requirements.
  - Result is a Pass/Fail for each credit
- The BFF-Addendum provides instructions for completing the Conceptual Strategy.

# **Bidding Credit Example**

- A provisional winner will pay the posted price for each lease area it won less its bidding credit.
- Example: a winning bidder qualifies for both bidding credits (a 25 percent bidding credit) and the total winning bid is \$10 million.
  - The bidder would pay its \$7.5 million cash bonus to the Office of Natural Resource Revenue (ONRR).
  - The bidder receives a credit of \$1.7 million towards its winning bid in exchange for committing \$1.7 million to workforce training or development of the domestic supply.
  - The bidder receives a credit of \$0.8 million towards its winning bid in exchange for committing \$0.8 million to a Fisheries Compensatory Mitigation Fund.



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