

**Morgan Lewis**

**integral** INSIGHT FOR AN  
EVOLVING WORLD

# LAYING THE (OFFSHORE) GROUNDWORK

Overcoming Regulatory and Environmental  
Challenges for Offshore Energy Development

**Thursday, February 24**  
1:00–2:00 pm ET

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# Presenters



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Morgan Lewis



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# Agenda

- Understanding the Risks to Offshore Generation Development from Interconnection, Power Purchase Agreement, State Awards, and Other Timing Deadlines
- Planning a Successful Science, Permitting, and Environmental Compliance Strategy
- Legal Strategies for Accommodating Unexpected Permitting Delays
- Questions

A photograph of several offshore wind turbines in a row, extending into the sea. The sky is a mix of purple, orange, and blue, suggesting a sunset or sunrise. The turbines are white with three blades each.

# Understanding the Risks to Offshore Generation Development from Interconnection, Power Purchase Agreement, State Awards, and Other Timing Deadlines

# Interconnection and Queue Position

- Interconnection could be state-jurisdictional or FERC-jurisdictional depending on the specific facility that is interconnected.
  - Most likely FERC-jurisdictional due to expected voltage level of interconnection.
- Projects must go through normal generator interconnection process subject to the interconnection procedures of the relevant transmission provider, including RTOs/ISOs.
  - E.g., application/interconnection request, scoping, interconnection studies, and entering into an interconnection agreement.
- Projects must meet deadlines in the interconnection process to maintain position in the queue.
  - Otherwise, it could result in withdrawal of Project from queue, loss of queue deposit.
  - Without interconnection, cannot sell power/services; may breach other agreements.

## RECs and ORECs

- Cost-recovery mechanisms vary by state.
  - Maryland, New Jersey, New York – Projects may sell ORECs.
- RECs represent the clean energy attributes of one megawatt-hour of electric generation from a renewable source.
  - ORECs represent specifically offshore wind generation.
- RECs and ORECs can be sold for compliance with renewable portfolio standard provisions, including offshore wind-specific renewable portfolio standards.
- ORECs can be critical to Project development as a significant revenue source.
  - Can also be used to enable non-recourse financing of Projects.
- OREC awards usually tied to meeting deadlines, including operational dates.

# Power Purchase Agreements

- A PPA is an agreement to purchase a Project's power for a predetermined period and at a predetermined price.
  - Pros: Predictable, long term, leverage tax credits.
- Connecticut, Massachusetts, Rhode Island – states mandate that utilities enter into PPAs for offshore wind projects for set capacities.
- State public utility commission approval of power purchase agreement.
- PPAs generally require seller to achieve commercial operation by a specified commercial operation date.
  - Failure to meet COD can be a breach of the PPA; loss of revenue stream.

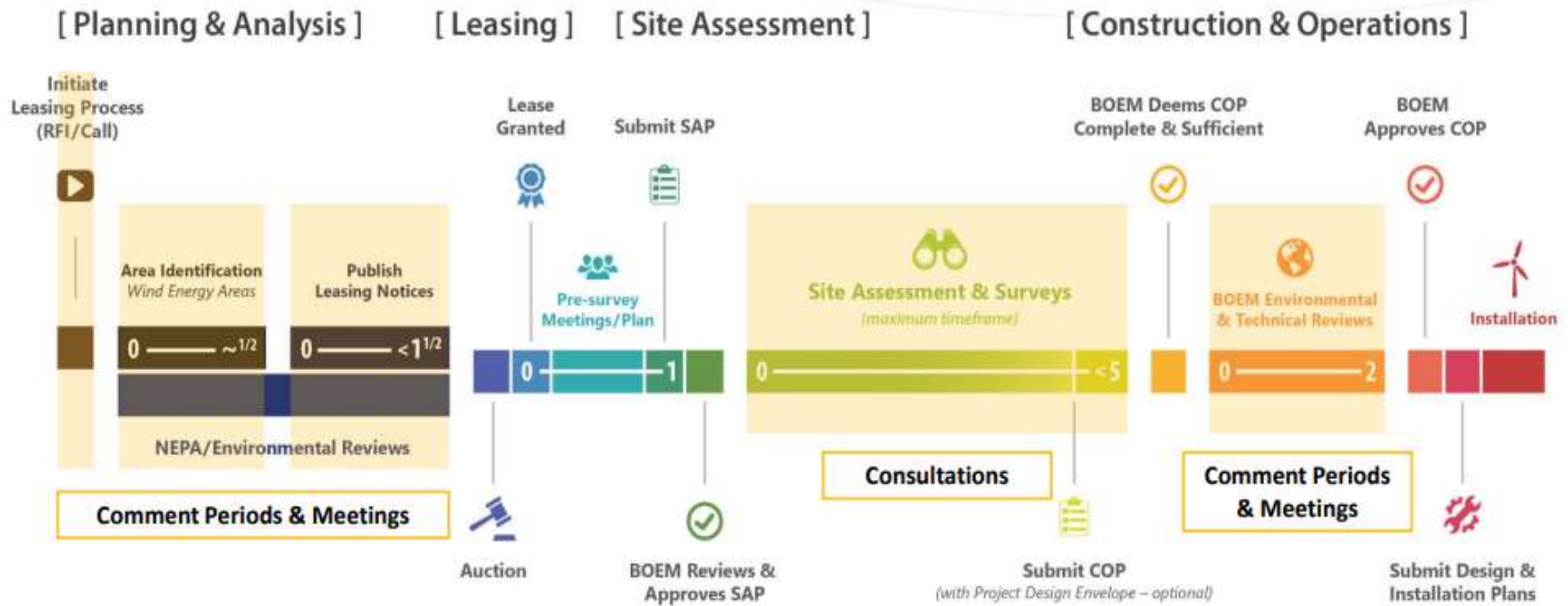


# Potential Delays in Permitting Process

- Permitting process has multiple opportunities for stakeholder engagement.
  - E.g., BOEM’s leasing process includes Call for Information and Nominations, Area Identification Process, Proposed Sale Notice, Final Sale Notice.
- Permitting process requires cooperation with federal and state agencies, local communities, and Indian tribes.
- Challenges from the public and special interest groups could lead to extended agency reviews.
- Failure to receive necessary authorizations can prevent continuing permit process.
- Environmental reviews can be complex and bring up unforeseen delays.
  - As DC Circuit recently affirmed, BOEM need not perform a NEPA review to issue a lease; issues may not be recognized until well into permitting process.



# Time Estimates for BOEM Phases



## Additional Approvals That May Be Required

- BOEM oversees Project development in four phases with specific deadlines.
  - E.g., Lessee develops a SAP or GAP for review and approval no later than 12 months from date of lease issuance.
  - E.g., Lessee submits COP no later than six months from completion of site assessment.
- May need approvals from one or more of:
  - US Army Corps of Engineers – CWA Section 404 permit for discharge of dredged or fill material for construction, including transmission lines.
  - National Marine Fisheries Service and Fish and Wildlife Service – Authorizations under Marine Mammal Protection Act, Endangered Species Act, Migratory Bird Treaty Act, Magnuson-Stevens Fishery Conservation and Management Act, etc.
  - State Historic Preservation Office – National Historic Preservation Act Section 106.
  - Relevant state agency – Federal Coastal Zone Management Act consistency determination.
  - US Coast Guard – Marking and lighting of offshore structures.



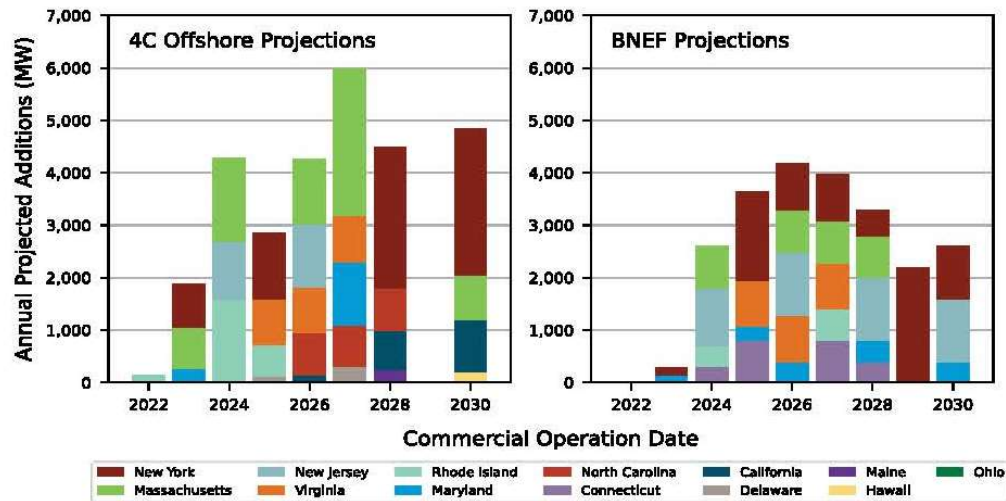
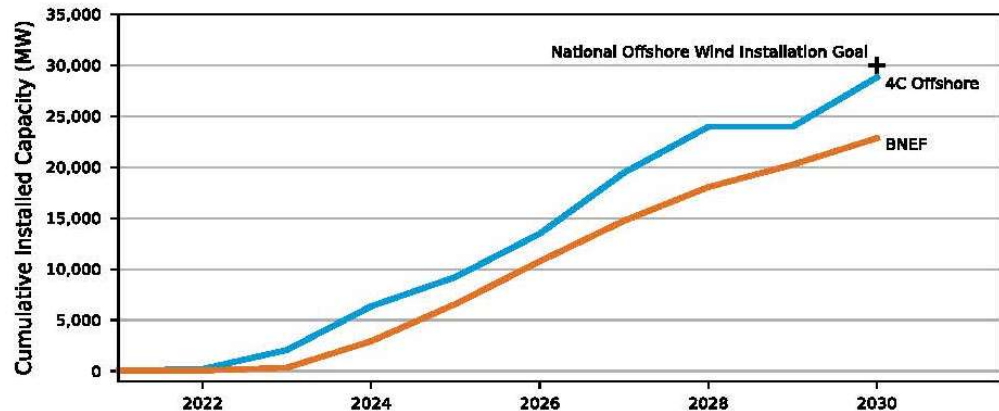
# Planning a Successful Science, Permitting, and Environmental Compliance Strategy

## Bottom Line Up Front

- Lessons-learned from offshore oil & gas may be informative
- Address the big issues/conflicts directly
- Create ***certainty & opportunity*** when possible

# Growth Goals

- Ambitious goals for 30 GW capacity by 2030
- Nascent industry in the US with many challenges and opportunities



# Lessons From Offshore O&G

- **Technical Risks** – Risks associated with the design, construction, operation, even economics of offshore energy systems. Generally understood, engineered, and manageable risks.
- **Non-Technical Risks** – Risks that arise from interactions of offshore energy projects with a broad range of external regulatory and stakeholder interests.
  - Up to 70% of failure to meet project schedule and budget targets is due to non-technical risks (Brewer and McKeeman, 2012)
  - Further, environmental assessments for offshore energy projects have been found deficient, with less than 60% achieving satisfactory grades in developing alternative actions and mitigation (Barker et al., 2013)



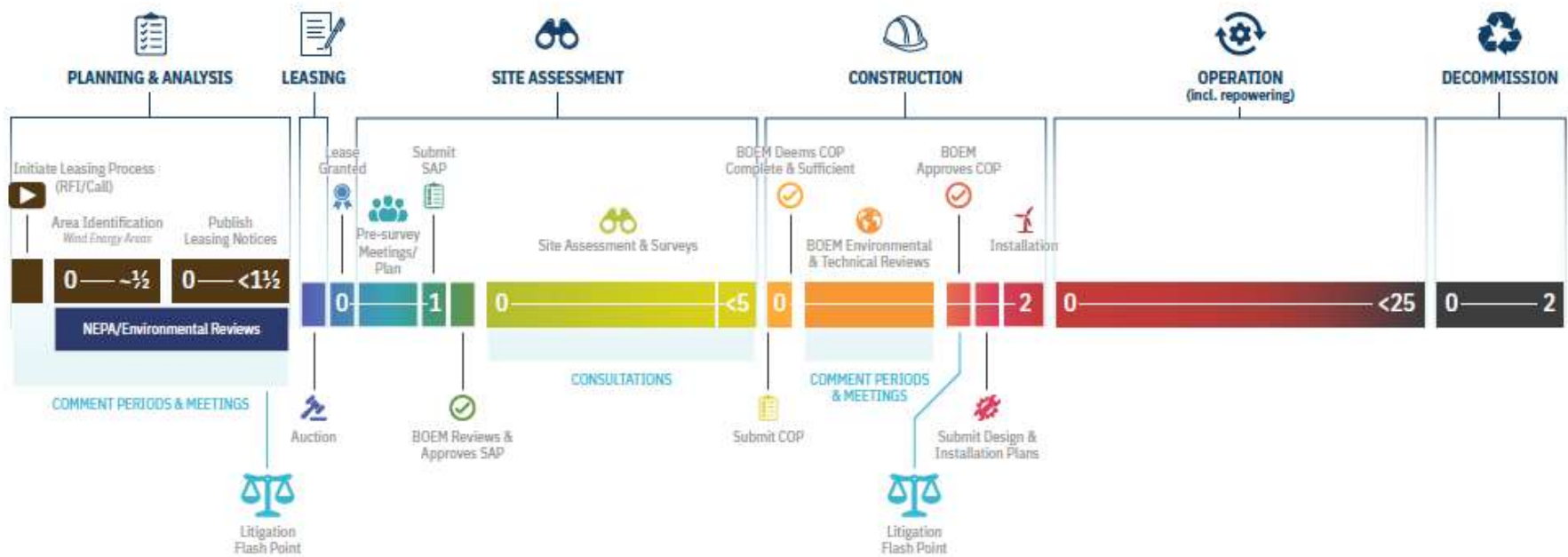
Source: Adekoya and Ekpenyong 2016

# The Big Issues/Conflicts

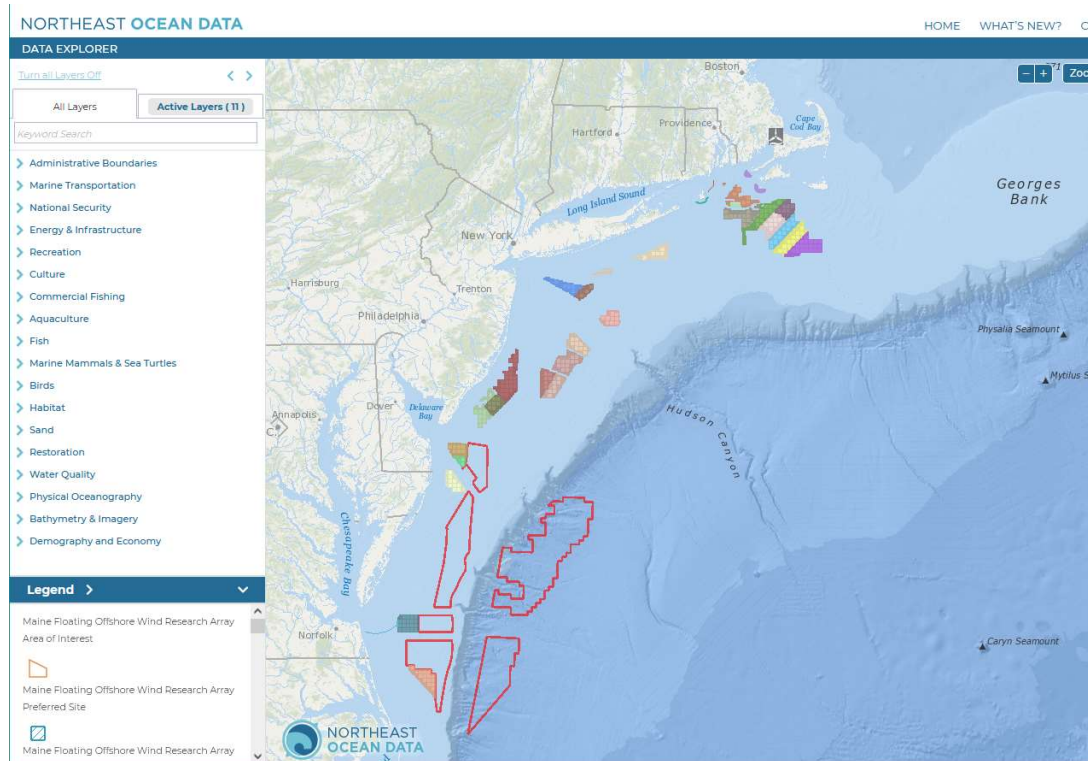
- Commercial and Recreational Fisheries
- Ecological Concerns – e.g., North Atlantic Right Whale
- New Regulatory Procedures
  - Public involvement, range of alternatives, cumulative effects



# The Big Issues/Conflicts



# Create Certainty & Opportunity When Possible

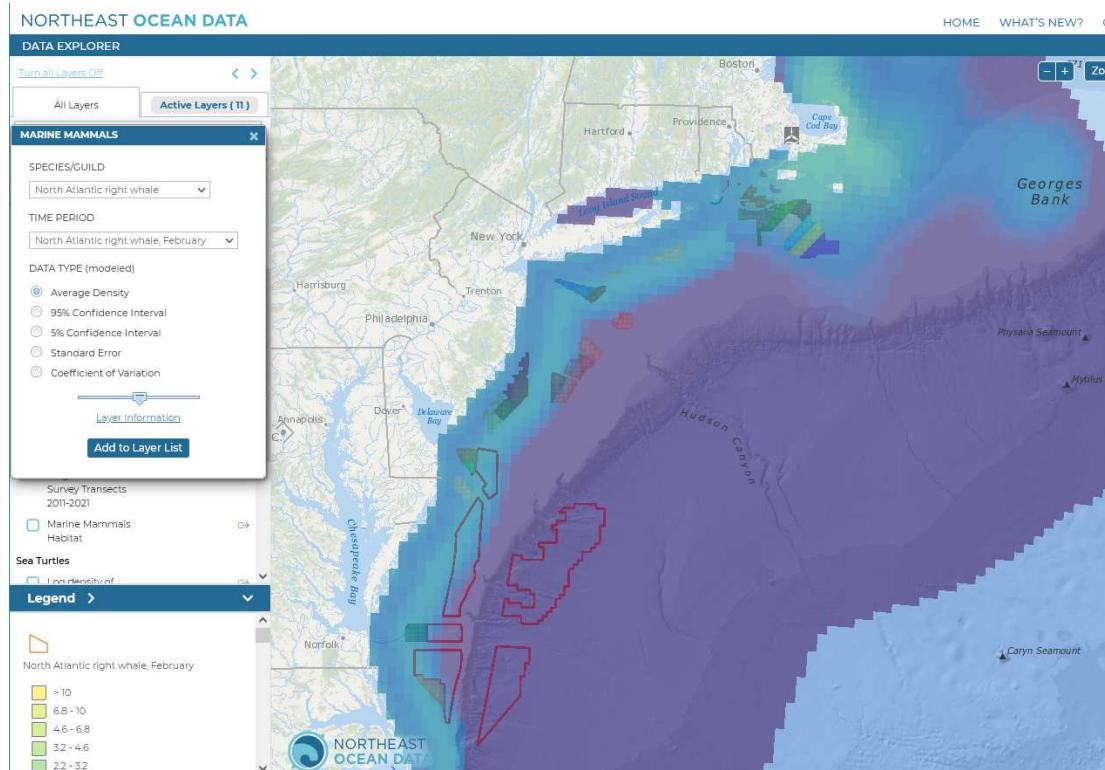


## OSW Leases and WEAs in the Atlantic Outer Continental Shelf

From Northeast  
Ocean Data Portal  
(Feb. 16, 2022)

Retrieved  
from <https://www.northeastoceandata.org/data-explorer/?energy-infrastructure|planning-areas>

# Create Certainty & Opportunity When Possible



## Predicted Distribution and Density of North Atlantic right whales in the Atlantic Outer Continental Shelf

From Northeast Ocean Data Portal (Feb. 16, 2022)  
Retrieved from <https://www.northeastoceandata.org/data-explorer/?energy-infrastructure|planning-areas>

# Create Certainty & Opportunity When Possible

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## Special Series

### Convergence of emerging technologies: Development of a risk-based paradigm for marine mammal monitoring for offshore wind energy operations

A. Michael Macrander,<sup>1</sup> Louis Brzuzy,<sup>2</sup> Kaustubha Raghukumar,<sup>3</sup> Damian Preziosi,<sup>4</sup> and Craig Jones<sup>3</sup>

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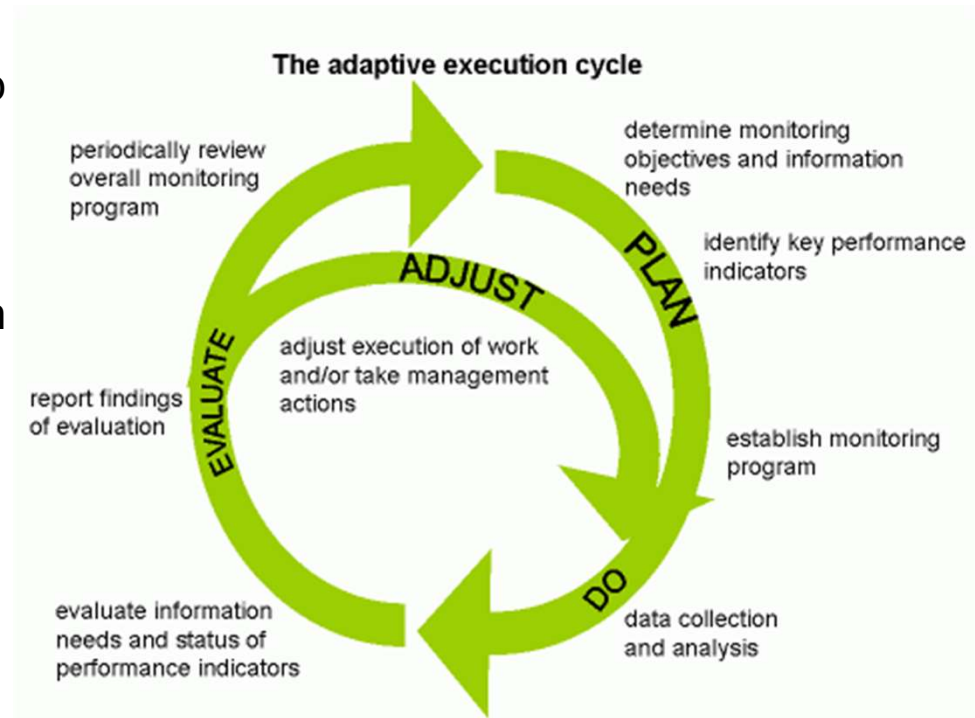
<sup>4</sup>Integral Consulting Inc., Berlin, Maryland, USA

## ***A mission-critical opportunity***

- ✓ Unnecessary project shut-downs minimized, schedule (somewhat) de-risked
- ✓ Significant cost savings during construction
- ✓ Transferable to multiple lease areas
- ✓ Cumulative impacts addressed
- ✓ Strikes at core of ESA, MMPA challenges

# Adaptive Management

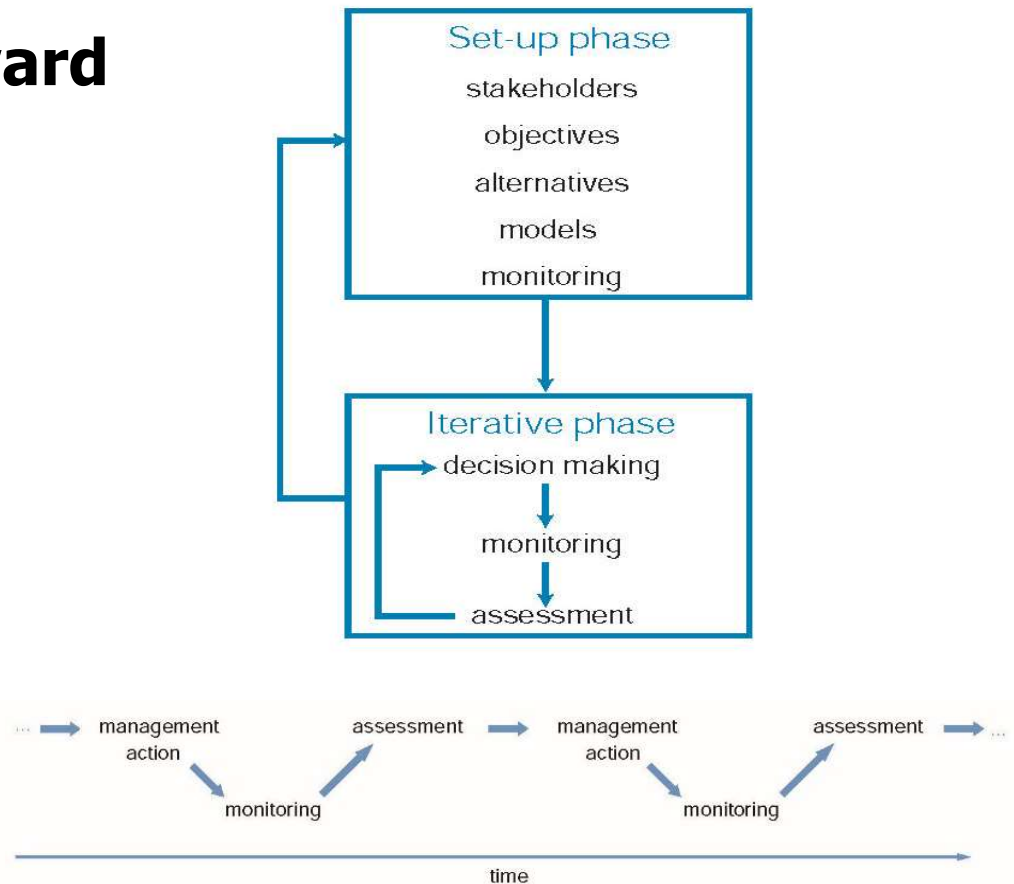
- To date, developers have been required to synthesize multiple monitoring efforts into detailed reports for regulators and stakeholders to evaluate.
- A traditional periodic reporting mechanism can result in delays, uncertainties, and miscommunication
- To overcome these challenges, adaptive management is implemented in project planning and permitting to effectively manage environmental risk (Shapiro et al., 2009).



Source: ecoshape.org 2022

# Effectively Moving Forward

- Adaptive management frameworks have helped address uncertainty and have shown increasing success across ocean energy projects
- Integrating 'the right' information for assessment and decision making is a key lesson to sustainable progress
- **Converts uncertainty into opportunities for conservation and sustainability efforts**

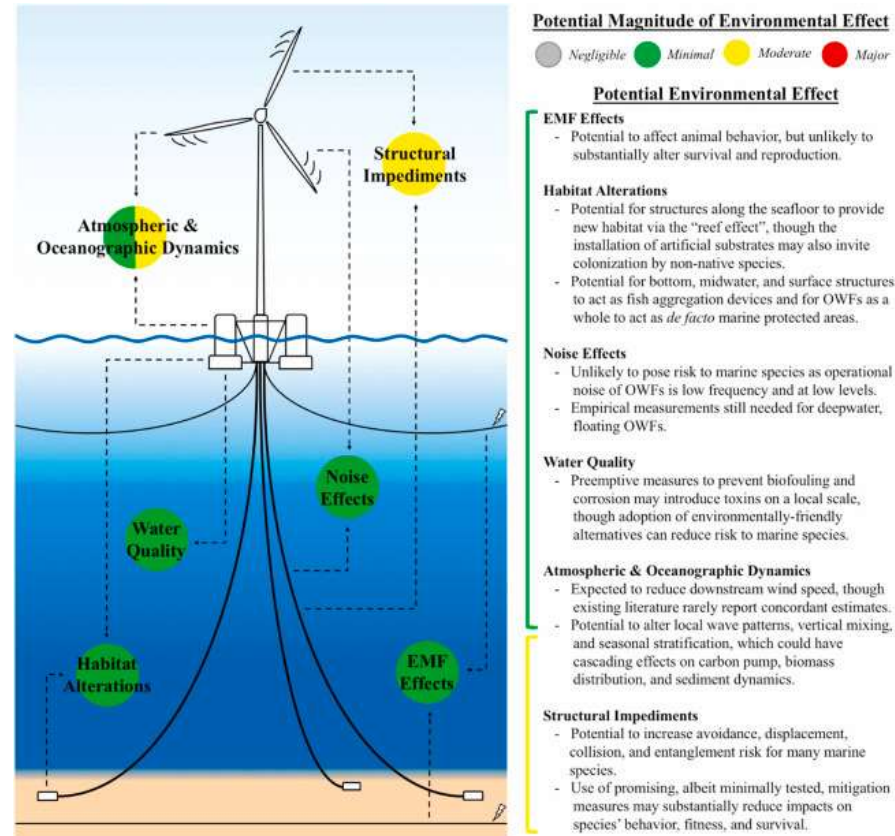


Source: Shapiro et al. (2009)



# Potential Environmental Stressors in Floating Offshore Wind

- There is a potential for Noise, Oceanographic, EMF, Water Quality, and Habitat stressors in offshore wind deployments
- For large potential risks and higher uncertainty, adaptive management can continually evaluate the actual risks after deployment
- **Build confidence in findings through a holistic approach for environmental assessment and provide opportunities for future improvement**





## Summary

- Lessons-learned from offshore oil & gas may be informative
- Address the big issues/conflicts directly
- Create ***certainty & opportunity*** when possible

A row of wind turbines on a beach at sunset. The sky is a mix of purple, orange, and blue, with the sun low on the horizon. The turbines are white and stand in a line from the foreground into the distance.

# Legal Strategies for Accommodating Unexpected Permitting Delays

# Recognize the Risk in Advance

- Recognizing the risk of delay in advance is critical
  - Time to develop and implement a legal strategy
  - Time to develop and implement a lobbying strategy
  - Negotiated resolution more readily available with affected parties
  - Resolution less likely to require public action
- How to do this:
  - Track your legal obligations
  - Keep your legal team informed about emerging risks

# Preparing for Delays

- All power development creates a risk of delays; don't wait; plan for delays before the delays materialize
  - Valuable time could be lost, particularly for unexpected delays very late in the process
- Create a response plan in advance so that legal strategies and options are in place as a “menu” of options
- Options stem from:
  - Extension of COD rights under a power purchase agreement
  - Extension of COD rights under a state award for RECs or similar
  - Rights under interconnection agreements for delays in milestones
  - Rights under tariff procedures for delays in tariff deadlines
  - Extra-tariff/agreement legal options
  - Policy mechanisms

# Know Your Contractual Rights

- Every power purchase agreement, REC award, and the like will require delivery by some defined point. These are often driven by regulatory or statutory obligations to acquire generation from certain resource types by a certain date.
- These agreements often provide certain predefined flexibility for an inability to reach these deadlines, including:
  - Predetermined extensions for specified reasons
  - Extensions subject to certain procedures or showings
  - Financial penalties
  - Force majeure (the specifics matter here, as COVID shows)

# Know Your Tariff Rights

- Interconnection agreements and transmission tariffs create legal rights and obligations for the interconnecting customer, the interconnecting transmission owner, and, where applicable, the ISO/RTO that operates the transmission system.
- The tariff, including the interconnection procedures, and the interconnection agreement contain various methods for addressing project changes.
  - Two buckets:
    - Changes as a matter of right
      - COD changes earlier in the study process
    - Changes that are discretionary for the transmission owner and/or ISO/RTO
      - Other changes that are not a “material modification”
      - Timing changes that are considered “construction sequencing”
      - Suspensions
- Needing to avoid “undue preferences.”

# Know Your Legal Rights

- There is significant policy support for the development of offshore power sources at both the federal and state level. Key players may be willing to support flexibility for these projects where they might not otherwise do so.
- If the tariff rules prevent necessary flexibility, that's not the end of the legal options. Parties can seek a waiver from FERC of tariff rules or interconnection agreement requirements that would otherwise result in losing the interconnection queue position.
- Factors FERC considers in waiver requests:
  1. The applicant acted in good faith
  2. The waiver is of limited scope
  3. The waiver addresses a concrete problem
  4. The waiver does not have undesirable consequences, such as harming third parties.
- Subject to notice and comment, so never guaranteed, but can be a valuable tool.



# Questions



## Biography



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Dr. Craig Jones is a principal ocean and environmental engineer with 20 years of experience in developing and executing engineering and science projects for government agencies and the private sector to characterize offshore sites. His projects include studies on offshore energy, contaminated sediment, coastal and estuarine processes, and oceanography. Dr. Jones' expertise includes the application of state-of-the-science field measurements and modeling analysis to better understand physical processes. Dr. Jones has testified in federal court and in front of public utility commissions as an expert on environmental issues and regulatory concerns.

## Biography



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Dr. Ian Voparil is a principal project development manager of offshore energy projects with 16 years of experience managing early phase development projects in the private sector for an international energy company. His experience includes accountability for non-technical risk management of a multibillion-dollar portfolio of global exploration, development, and operational oil and gas assets. Dr. Voparil creates value and protects opportunity by applying environmental, economic, and societal sustainability across the development lifecycle. He actively creates strategic partnerships with legislators, federal and state regulatory agencies, non-governmental organizations (NGOs), and other developers to create value for all.

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J. Daniel Skees represents electric utilities before the Federal Energy Regulatory Commission (FERC) and other agencies on rate, regulatory, and transaction matters. He handles rate and tariff proceedings, electric utility and holding company transactions, utility financing, electric markets and trading issues, reliability standards development and compliance, including cybersecurity requirements, administrative litigation, and transmission development. In handling appeals of FERC decisions, Dan has successfully represented clients before both the US Court of Appeals for the District of Columbia Circuit and the US Court of Appeals for the Fifth Circuit.

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Robert Goldfin represents major energy industry participants in regulatory and transactional matters, including enforcement proceedings and investigations. He handles Federal Power Act matters before the Federal Energy Regulatory Commission (FERC) and the North American Electric Reliability Corporation (NERC). Robert advocates for clients before the Nuclear Regulatory Commission (NRC) and US Court of Federal Claims, and in settlements with the US Department of Energy (DOE) regarding spent nuclear fuel. He also represents clients on national security and international trade matters, including assisting US and foreign entities with notices to the Committee on Foreign Investment in the United States (CFIUS).

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