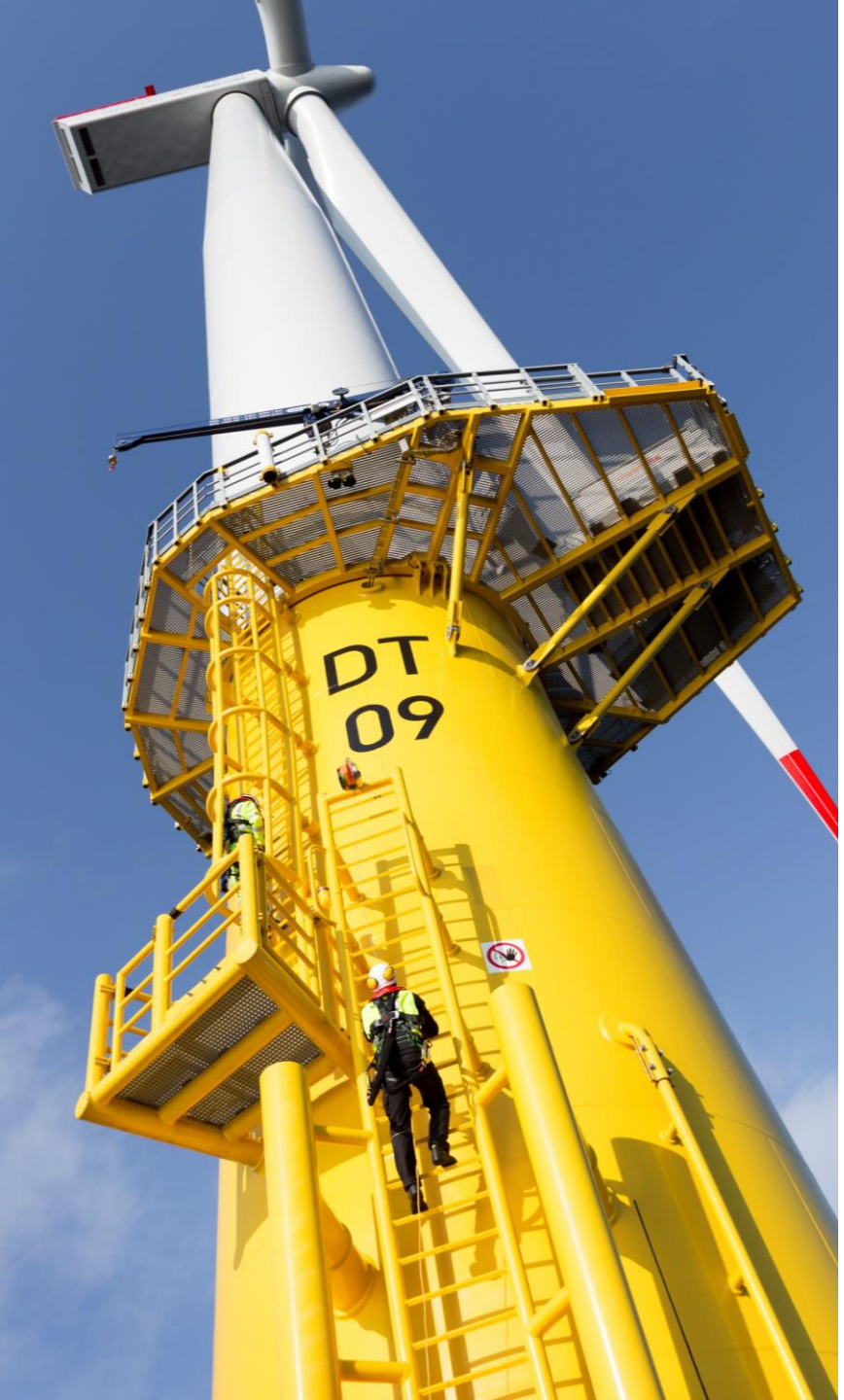

Learning from the Experts Webinar Series

Worker Safety in Offshore Wind

Jonathan Fraser
Renewable Energy Specialist
Bureau of Safety and
Environmental Enforcement

Jeff Stewart
Renewable Energy Specialist
Bureau of Safety and
Environmental Enforcement

June 29, 2023

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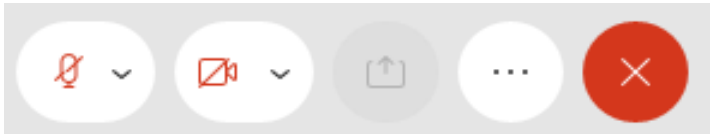
www.nyserda.ny.gov/osw-webinar-series

Participation for Members of the Public:

> Members of the public will be muted upon entry.



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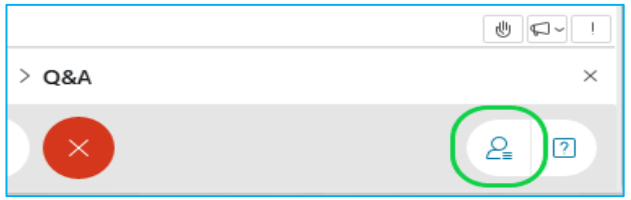

> If technical problems arise, please contact Sal.Graven@nyserda.ny.gov

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.

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BUREAU OF SAFETY & ENVIRONMENTAL ENFORCEMENT (BSEE)

WORKER SAFETY IN OFFSHORE WIND

Jonathan Fraser and Jeff Stewart

June 29th, 2023

1:00pm-2:00pm ET

AGENDA

- BSEE Overview
- Risk Profile
- Pre-emption of OSHA
- Performance-based Regulations
- Standards
- Safter Management Systems (SMS)
- Enforcement

BUREAU OF SAFETY AND ENVIRONMENTAL ENFORCEMENT

What we do

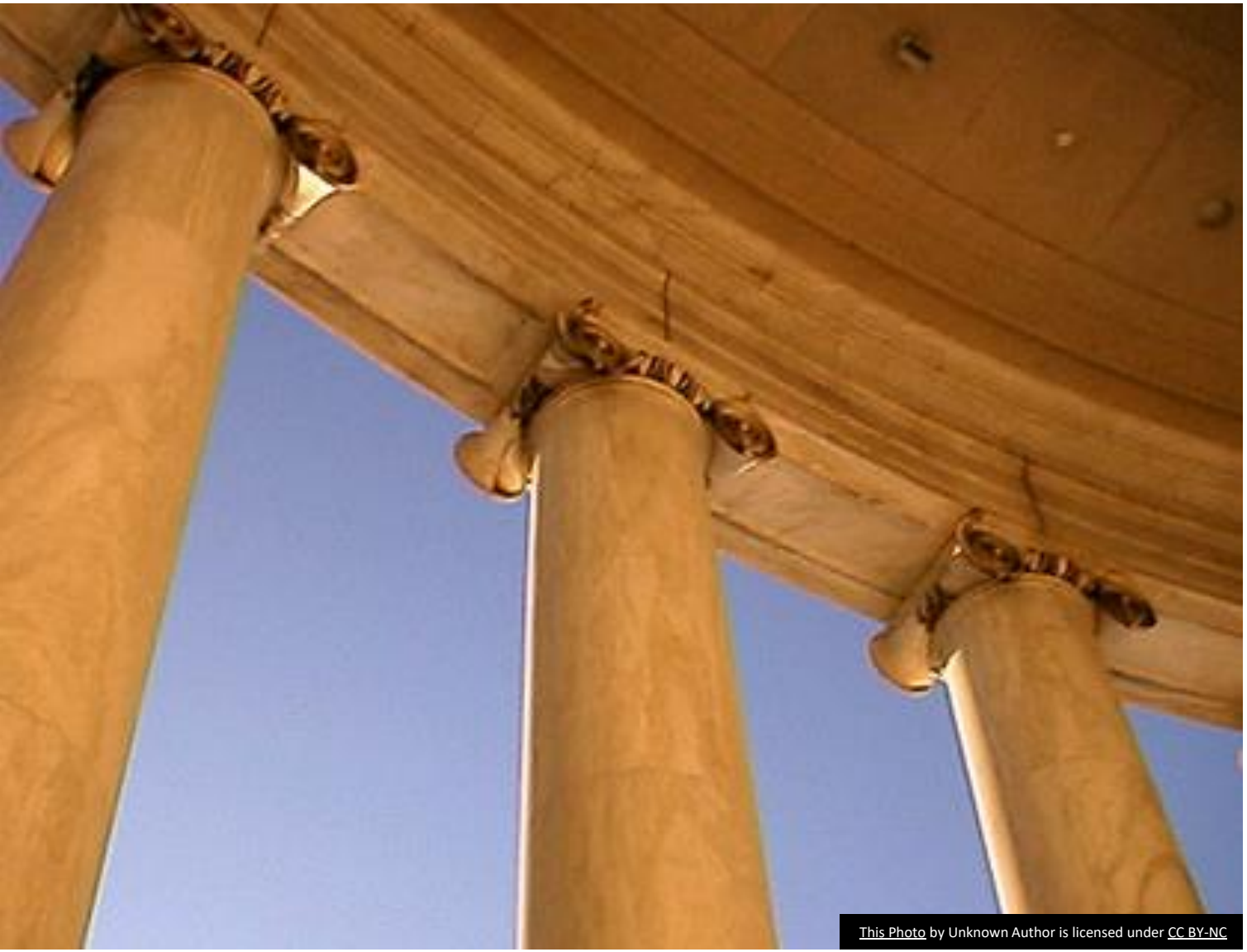
- Ensure safe and environmentally responsible offshore energy exploration and production.
  - Outer Continental Shelf Lands Act 1953.

How we do it

- Safety Management & Enforcement.
  - Safety and Incident Investigations.
- Standards.
- Environmental Compliance and Stewardship.
- Oil Spill Preparedness.
- 850+ employees in 10 locations.

It takes more than regulations

- MOUs, such as with USCG.
- Performance-based oversight.
- Risk analysis committee.
- Safety Alerts.
- BSEE!SAFE text messaging.
- Engagement.
- Research.



BSEE OBLIGATIONS

- Safety.
- Environment.
- Obstruction to Other Users.
  - As per the Outer Continental Shelf Land Act

RISK PROFILE - SIMILARITIES

- Unmanned: 4 of 5 oil & gas facilities.
- Transfer of personnel & equipment.
- Heavy Construction using vessels.
- Marine resources & debris.
- Require similar notifications for annual self-inspections, incidents, and loss of control.

RISK PROFILE - DIFFERENCES

- Wind Automation & Sensors:
  - Scheduled Maintenance.
  - Highly predictive maintenance.
- Significantly smaller capacity of oils:
  - Enclosed systems.
  - Adequate Secondary Capacity.
- Significantly less fire hazard.
- Interior, climate-controlled environment.
- Significantly smaller gas leak potential.

PRE-EMPTION OF OSHA

- "DOI will act as the principal Federal agency for the regulation and enforcement of safety and health requirements for OCS renewable energy facilities. DOI considers its regulatory program … to occupy the field of workplace safety and health for personnel and others on OCS renewable energy facilities, and to preempt the applicability of Occupational Safety and Health Administration (OSHA) regulations."

PRE-EMPTION OF OSHA (CONT)

- "In carrying out its responsibilities on the OCS, DOI will collaborate and consult with OSHA on the applicability and appropriateness of workplace safety and health standards for the offshore wind industry and other offshore renewable energy industries."
- OSHA is considered a baseline, but the pre-emption allows the use of alternate ways to meet the same intent.

REGULATIONS

- Renewable Energy regulations are performance based.
  - Specify the outcome required but leaves the measures to achieve that outcome up to the discretion of the regulated entity.
  - In contrast to a compliance regulation that specifies exactly how to achieve compliance.
- BSEE must use consensus standards when available, except where inconsistent with law or otherwise impractical.

WHAT ARE PERFORMANCE BASED REGULATIONS?

- A performance-based regulation specifies the outcome required and provides the regulated entity, and BSEE as the regulator, flexibility in how to achieve that outcome. In contrast, a prescriptive regulation specifies exactly how to achieve compliance.
- While there is flexibility in this type of regulation, the regulated entity must still demonstrate, to BSEE's satisfaction, that it has identified relevant risks and implemented appropriate controls.

WHAT ROLE DO INDUSTRY STANDARDS PLAY IN PERFORMANCE BASED REGULATIONS?

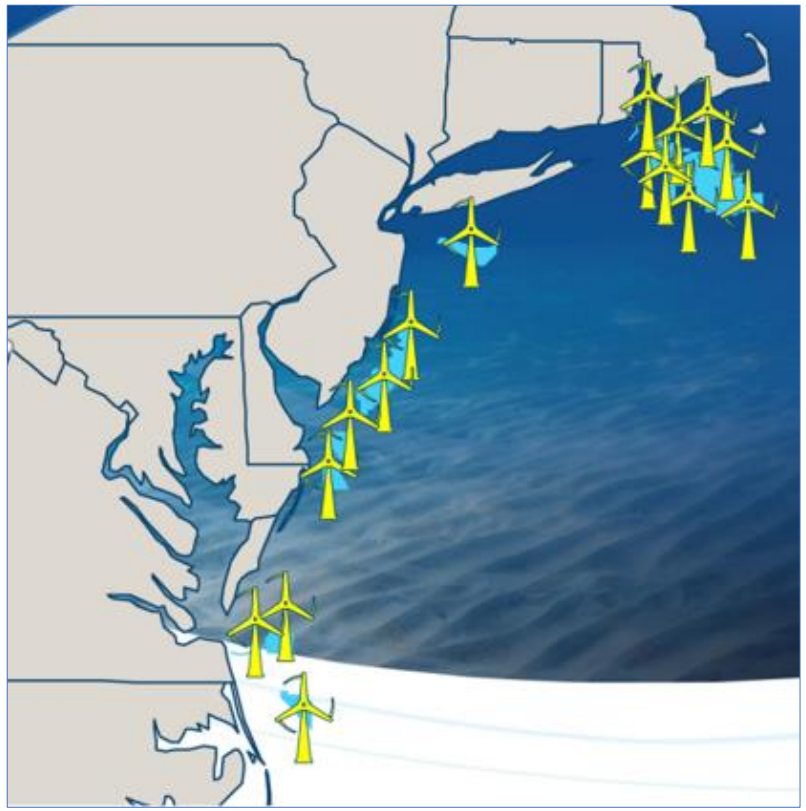
- BSEE encourages the adoption of effective, consensus-based standards and recommended practices and industry guidelines for design and procedures to enhance safety and environmental performance of offshore activities.
- Reliance on consensus-based industry standards will promote frequent and reliable improvements in the safety of all operations as advances in technology and management science are reflected in updated standards. Updated standards should be evaluated for changes before being adopted.
- Currently, only 1 standard has been incorporated by reference.

STANDARDS: INTERNATIONAL & US

- Developed by Industry for Industry: Developed by very experienced experts with particular skill sets and focus.
- International: Vast experience and generally very suitable.
- National: Some published, many under development.
- BSEE does not vote on standards but has an opportunity to review and comment on industry standards.

STANDARDS DEVELOPMENT

- BSEE encourages engagement with Standards Setting Bodies:
  - Lease Holders.
  - Contractors.
  - Unions.
  - Equipment Manufacturers.
  - Other Interested Parties.
- Industry needs to drive the development of standards and recommended practices.



SPLIT RULE

- Split Rule published Jan. 31, 2023.
- 30 CFR 285 are the BSEE regulations for Offshore Renewable Energy.
- An NTL and presentation were created to further clarify division of regulations between BOEM and BSEE.

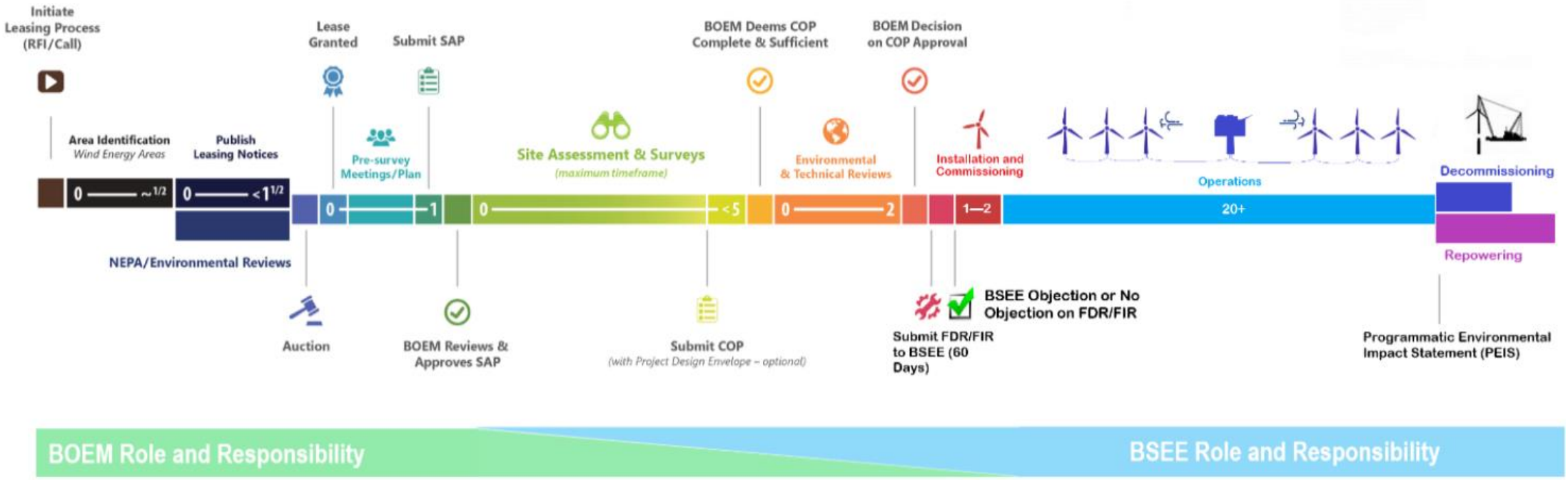
BOEM/BSEE KEY AUTHORITIES

BOEM	BSEE
Issuing and managing leases NEPA analyses.	Operational safety and environmental protection.
Site Assessment Plan. Construction and Operations Plan. General Activities Plan.	Facility Design Report. Fabrication and Installation Report. Safety Management System. Oil Spill Response Plan. Emergency Response Procedures.
Financial Assurances.	Decommissioning.
Enforcing BOEM regulations.	Enforcing BSEE regulations.

OVERVIEW OF BOEM'S AND BSEE'S ROLES FOR OFFSHORE RENEWABLE ENERGY

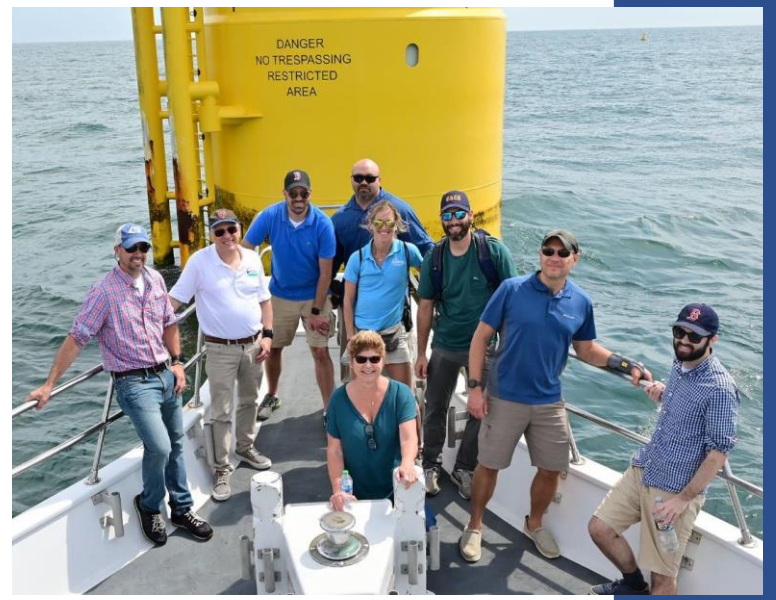
BOEM
Bureau of Ocean Energy Management

BSEE



SAFETY MANAGEMENT SYSTEMS

- Foundation for safety programs.
- BSEE encourages operators to select an SMS standard framework and to seek certification to that standard.
- Ideally, SMS should identify consensus standards that are being adopted.
- Due to the nature of work, operator oversight of contractor's work and communication will be key to success.



SAFETY MANAGEMENT SYSTEM (SMS)

- Clearly state the safety goals and document a process for reaching those goals.
- Well-conceived SMS enhances consistent and effective communications for all workers (including management, contractors, and subcontractors) with work requirements, expectations and promotion of continual improvement.
- How will BSEE know the SMS is working?
  - The answer should be a combination of evidence: incident reports, audits that identify failure to correct gaps in system effectiveness, and trending analysis of performance metrics.

SMS OVERSIGHT

- Site Assessment: Reviews and determines adequacy of the SMS for facilities determined to be significant and/or complex.
- COP: Receive and review a description of a Lessee's SMS.
- Construction: Review and determine the functionality of the SMS for installation activities.
- Operations: Oversee the maintenance and implementation of the SMS.
- Decommissioning: Review SMS plans for decommissioning.

SMS EXPECTATIONS DOCUMENT

- Goal is to address the offshore wind industry's request for clarification regarding BSEE's expectations regarding SMS submission requirements for offshore renewable energy activities.
- As industry and BSEE gain experience, BSEE will update this document as needed.

30 CFR 285.810 SAFETY MANAGEMENT SYSTEM

(a) How you will ensure the safety of personnel or anyone on or near your facilities.

(b) Remote monitoring, control, and shut down capabilities.

(c) Emergency response procedures.

(d) Fire suppression equipment, if needed.

(e) How and when you will test your Safety Management System.

(f) How you will ensure personnel who operate your facilities are properly trained.

ENFORCEMENT OPTIONS

- Issue Notices of Non-Compliance (Violation).
  - Various Enforcement Levels.
- Civil penalties (fines on a per day basis).
- Issue a cessation order: Cease all activities on the lease.
- Order lease suspension: Generally, would be used to comply with judicial decrees.
- Recommend lease cancellation to Secretary of the Department of Interior: Revocation of the lease.

QUESTIONS & CONTACT INFO

- For any questions, please contact:
  - Jonathan Fraser(Jonathan.Fraser@bsee.gov)
  - Jeff Stewart (Jeffrey.Stewart@bsee.gov)
- Additional information can be found on BSEE and BOEM's websites:
  - https://www.bsee.gov/
  - https://www.boem.gov/

THANK YOU

Coming Soon

July 19, 1:00 p.m. ET

Environmental Data Management and Offshore Wind

MARACOOS and MARCO

August 23, 1:00 p.m. ET

Research and Regulations for Marine Mammal interactions with Offshore Wind

Doug Nowacek (Duke's Nicholas School for the Environment) and Nick Sisson (NOAA Fisheries)

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- Weather Impacts Offshore Wind
- Offshore Wind COP Review Process
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