“To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement.”
Discussion Objective

• Present options BSEE is considering for carrying out its future regulatory role in facility design, fabrication, installation, and operations phases of offshore wind projects
  • Current regulations 30 CFR 585; developing regulations under 30 CFR 285

• Engage industry to gather technical input and suggestions for scoping and implementing Federal regulatory oversight and inspection program
Regulatory Philosophy

• Operator’s responsibility to ensure safety on their facilities

• Regulations and compliance verification procedures will reflect a performance based approach

• Require safe working conditions, properly operating equipment, hazards management, careful recordkeeping, minimized pollution, and an overall culture of preparedness
What Does Good Look Like?

• Incorporate relevant global industry standards
• Incorporate industry best practices
• Expect that a strong management system and safety culture will be in place

BSEE’s “good” sets minimum expectations
  • Equal or better
Discussion Points

Current safety requirements (per 30 CFR):  
- Safety Management System (SMS)  
- Inspections  
- Annual self certification program  
- Incident reporting
Safety Management System (SMS)
What are typical Offshore Wind Industry Hazards?

- Electrical injury
- Personnel transfers to facility
- Vessels striking offshore wind facility
- Confined space entry and tight working area
- Slips, trips, and falls into water or from heights
- Diving hazards during installation and inspections
- Manual handling of equipment and materials
- Long-term personnel physical wear and tear
- Mechanical hazards (e.g., pinch points)
- Exposure to heat and cold

According to the Transportation Research Board (SR310), potential risks that offshore wind personnel must manage.
What is an SMS?

Performance-based approach that an organization uses to perform healthy, safe, and environmentally conscious operations by:

- Setting HSE goals or objectives;
- Identifying hazards;
- Implementing processes to mitigate risk; and
- Establishing a continual improvement process.
Offshore Wind Inspection Program

Annual inspection cycle
- Safety and environmental compliance certifications by the operator
- Verification audits or inspections of company certification
- Safety Management System
- Combine elements of a compliance and a performance-based approach

In general BSEE feels this approach, with some modifications, is workable
Offshore Wind Inspection Program

Two-phase

• Self certification (may involve 3\textsuperscript{rd} party)
  • Operator prepares a plan covering all facilities
  • Assess integrity of critical components to company standards and industry standards

• Spot checks
  • Verify condition of the offshore facility
  • Assess effectiveness of Operator’s SMS
Current discussion of BSEE’s future inspection and enforcement program

**Guidelines: BSEE’s expectations**

To assist in identifying available industry standards & selecting appropriate standards for operating model

• Address each type of offshore facility (wind turbines, electrical service platform)
  • Address all critical components (foundations, top side structures, electrical systems, etc.)

• Design
• Fabrication and construction
• Operations
• Decommissioning
Annual self certification
• Conducted as one event?
• Multiple inspections (different components) over a one-year period combined as the annual inspection?
  • OEM may have different inspection cycle

Discuss use of third parties
• Are there certain components for which a BSEE approved verification organization will be required?

• Third party inspections
  • Operator identify the standards used to assess their inspectors

• Third party auditing process

Sample inspection tool
• Check list

Give us your ideas!
Environmental Compliance

- Regulatory Consultations
- NEPA adequacy for ALL BSEE issued permits.
- Office Compliance - Evaluate mitigation measures to determine their effectiveness. Provide feedback to BSEE and BOEM. (Adaptive Management)
- Field Compliance - Inspections, Investigations, Audits, & Follow-on Enforcement Action (Enforcement on behalf of BOEM)
BSEE Technology Assessment Program

30 renewable energy projects, including:


- TAP-709-Example safety management system and audit criteria/procedures template and checklist for Offshore Wind (Nov. 2012)


www.bsee.gov/site-page/renewable-energy-research
Recent BSEE rulemaking

Well Control Rule and Part 250 Subpart S (Safety and Environmental Management Systems)

Indicative of the type of regulatory regime BSEE is likely to consider for offshore wind

- Utilizes BSEE approved independent third party
- Real-time monitoring
- Requires the use of accepted engineering practices when operating on the OCS to reduce risks

www.bsee.gov/guidance-and-regulations
Fact sheets and FAQ’s
Questions?

To learn more about BSEE, please check out our Annual Report
www.bsee.gov/newsroom/library/annual-report
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