BSEE's Offshore Renewable Energy Program

Cheri Hunter

BSEE Renewable Energy Program Coordinator

"Offshore Wind Jurisdictional Authorities: Who is Who and What do They Do?"

Gulf of Mexico Intergovernmental Renewable Task Force Meeting

June 15, 2021

"To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement."



BSEE's Renewable Energy Role

BOEM has looked to BSEE as an authority on safety and operational issues for the renewable energy program. BSEE retains the expertise in these areas. BOEM is communicating to the current offshore wind lessees that BSEE is acting on behalf of BOEM in connection with the following functional areas:

Environmental, workplace and process safety management, including development and oversight of Safety Management Systems	Incident reporting
Inspections	Investigations
Decommissioning and site clearance, including plan review	Verification activities, including Certified Verification Agent responsibilities
Facility and equipment maintenance	Structural assessments
Oil spill preparedness	Environmental compliance
All matters involving the safety of personnel	



Key Developments

- In July 2020, Letter of Agreement (LOA) signed outlining the cooperation between BOEM and BSEE for processing renewable energy incident reports and BSEE's lead in managing incidents, incident data, and conducting investigations. BOEM informed all 16 current renewable energy lease holders, clarifying BOEM and BSEE's roles for oversight of, and enforcement activities concerning offshore wind development.
- In December 2020, BSEE and BOEM signed a Renewable Energy Memorandum of Agreement (MOA) to outline the process through which BSEE will assist BOEM with matters for which BSEE has relevant experience and expertise. The MOA clarifies BSEE's role in developing the safety and environmental compliance functions of the renewable energy program that are critical to BOEM's management of the program's planning and development.
- BOEM and BSEE agree that the offshore renewable energy industries, particularly the offshore wind industry, have now grown sufficiently to justify such a transfer of functions. There is expectation of a forthcoming transfer of safety and compliance responsibilities to BSEE.
- Compliance assurance strategy for offshore renewable energy industry
 - Developing a program that promotes a culture of safety and environmental stewardship with a focus on continuous improvement and ensuring workers are empowered to identify, report, and remedy unsafe conditions and environmental concerns.
 - Inspection philosophy
 - Health, Safety and Environmental guidance document
 - Promote industry data sharing
 - Use the best, proven methods available



DOI Policy Statement

In October 2019, the Department published a policy statement in the Federal Register clarifying that DOI will act as the principal Federal agency for the regulation and enforcement of safety requirements for OCS renewable energy facilities. Coast Guard has determined its occupational safety regulations do not apply to renewable energy facilities.

 DOI will consider the standards used in OSHA regulations as a baseline but can allow alternate standards to achieve the same level of safety.

DEPARTMENT OF THE INTERIOR

Bureau of Safety and Environmental Enforcement

30 CFR Part 250

Bureau of Ocean Energy Management

30 CFR Part 585

[201E1700D2 ET1SF0000.EAQ000 EEEE500000]

Department of the Interior Policy Statement on Regulating Workplace Safety and Health Conditions on Renewable Energy Facilities on the Outer Continental Shelf

AGENCY: Bureau of Ocean Energy Management, Interior; Bureau of Safety and Environmental Enforcement, Interior.

ACTION: Notification of policy statement.

Role of DOI

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, described in part above, 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. See 29 U.S.C. 653(b)(1).

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.

In addition, DOI will continue to collaborate with the USCG to share relevant safety and training information and promote safety on the OCS.

In implementing this policy statement, DOI may amend its regulations or issue guidance related to the workplace health or safety of employees on renewable energy facilities on the OCS.



Worker Safety

- The Global Offshore Wind Health and Safety Organization (G+) reported a total recordable injury rate of 5.5 injuries per million hours worked in 2019 (www.gplusoffshorewind.com). In comparison, the 2019 recordable injury rate for the U.S. offshore oil and gas industry was 2.82 injuries per million hours worked
- OCS wind industry workers face unique challenges to maintain their safety and protect the environment
- A commitment to job creation through rapid program development includes a commitment to ensuring those jobs are safe

Estimated Full Time Equivalent Personnel for 30 GW Planned OCS Wind Farm Development

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Installation	8,550	17,963	25,575	32,441	31,800	31,125	30,488	29,888	29,325	20,213
O&M	375	1,875	4,388	8,100	12,413	16,575	20,738	24,750	28,763	32,663
Sum	8,925	19,838	29,963	40,541	44,213	47,700	51,225	54,638	58,088	52,875





Offshore Wind Safety Incidents

Looking to Europe for Lessons Learned in Safety Management

WORK PROCESS	REPORTED INCIDENTS	RECORDABLE INJURIES
Lifting	93	8
Access Egress	91	22
Manual Handling	76	14
Routine Maintenance	63	10
Civil Works Onshore	51	3
Hand/Power Tools	48	10
Working at Heights	41	1
Vessel Ops. (inc. jackups, barges)	40	4
Operating Plant/Machinery	37	2
Transit by vessel	37	15

Represents 5.5 recordable injuries per 1 million hours worked in 2019.



Installation/Construction

Images are not shown to scale.

Data Source: G+ Global Offshore Wind Health and Safety Organization, 2019 incident data report and dashboard. www.gplusoffshorewind.com "In comparison, the CY2019 recordable injury rate for the U.S. offshore oil and gas industry was 2.82 injuries per million hours worked.



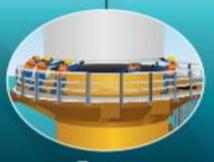




RUFE

Access

Crew Transfer



Nacelle

Tower

Health, Safety, and Environmental (HSE) Guidelines

- BSEE is developing HSE management guidelines for offshore wind construction, installation, and operations activities.
 - Offshore wind industry requested clarification
 - Lack of industry guidelines, standards and practices
- Risks and Performance-based Regulation
- SMS Requirements and Guidance
- Role and Availability of Standards
- Demonstrating a Functional SMS
- Monitoring and Reporting
- The SMS defines how "you" will ensure safety



HEALTH, SAFETY AND ENVIRONMENTAL (HSE) MANAGEMENT

GUIDANCE FOR RENEWABLE ENERGY COMPANIES

JS DEPARTMENT OF THE



Coast Guard MOU

New renewable energy Memorandum of Understanding (MOU) with USCG

- Serve as a functional guide to DOI, USCG, industry
 - o Outlines the agencies' authorities, responsibilities, and thresholds for action.
 - o Provide stakeholders with clarification on agency roles and responsibilities
 - Worker health and safety
 - Transfer points
 - Search and rescue
- Replace BOEMRE/USCG OCS-06 MOA (July 2011)
 - Content of OCS-06 detailing cooperation between agencies for offshore renewable energy development (navigational risk assessment) will be included as an enclosure in the new MOU
- BSEE has lead role for drafting the new MOU and enclosure
 - BSEE SME's are researching additional issues specific to renewable energy operations
 - Working with USCG Office of Operating and Environmental Standards and Prevention Working Group







Synergies: Offshore Wind and Oil and Gas

- DOE Wind Vision estimates 76,000 80,000 full time equivalent jobs from offshore wind by 2030.
- There are commonalities between oil and gas and offshore wind, allowing for O&G industry employees to apply their skill sets to renewable energy with minimal re-training.
- Downturns in the O&G industry may be mitigated by offshore wind (use of ports, engineering and design firms, supply chain, and even MODUs and installation vessels in the future).



photo credit: Siemens Press NREL | 3



Any Questions?

For Additional Information Please Contact: Cheri Hunter—cheri.hunter@bsee.gov

"To promote safety, protect the environment and conserve resources offshore through vigorous regulatory oversight and enforcement."



BSEE Website: www.bsee.gov



@BSEEgov



BSEEgov



Bureau of Safety and Environmental Enforcement



BSEEgov

