



**BOEM’s Offshore Wind and Maritime Industry Knowledge Exchange**

*March 5 & 6, 2018*

*Hilton BWI Baltimore Airport  
Linthicum Heights, MD 21090  
Meeting Room Concourse A*

Workshop Objectives

- Share knowledge and best practices for offshore wind and marine transportation co-existence
- Explore the range of roles and responsibilities across Bureau of Ocean Energy Management (BOEM), U.S. Coast Guard (USCG), U.S. Bureau of Safety and Environmental Enforcement (BSEE), offshore wind lessees, and maritime stakeholders
- Learn about and discuss potential offshore wind farm layouts and development timeframes
- Identify potential challenges for continued discussion

Day 1 Agenda: March 5, 2018

<b>Time</b>	<b>Session</b>
<b>9:30 – 10:30 am</b>	<i>Registration and selection of table posters</i>
<b>10:30 – 11:00 am</b>	<p><u>Opening Remarks</u></p> <p><i>Speakers: James Bennett, BOEM; George Detweiler, USCG; Jason Gershowitz, Facilitator, Kearns &amp; West</i></p> <ul style="list-style-type: none"> <li>• <i>Welcome and discussion of workshop objectives</i></li> <li>• <i>A brief overview of workshop agenda and logistics</i></li> </ul>
<b>11:00 – 11:30 am</b>	<p><u>BOEM Atlantic Coast Renewable Energy Leases</u></p> <p><i>Speaker: Darryl François, BOEM</i></p> <ul style="list-style-type: none"> <li>• <i>Overview of BOEM’s mission and the status of offshore wind leases and timing of development</i></li> </ul>
<b>11:30 am – 12:15 pm</b>	<p><u>What Does an Offshore Energy Wind Facility Look Like?</u></p> <p><i>Speaker: Walt Musial, National Renewable Energy Laboratory</i></p> <ul style="list-style-type: none"> <li>• <i>Overview of the factors that influence the different foundations, layouts, and sizes of offshore wind farms</i></li> </ul>
<b>12:15 – 12:35 pm</b>	<p><u>Importance of Maritime Commerce</u></p> <p><i>Speaker: Sean Kline, Chamber of Shipping of America</i></p> <ul style="list-style-type: none"> <li>• <i>Overview of the importance of an efficient marine transportation system to U.S. economy</i></li> <li>• <i>Forecast of maritime commerce trends (e.g., volume, vessel types and sizes)</i></li> </ul>

Time	Session
12:35 – 12:45 pm	<u>Tugboat Coastal Navigation Challenges</u> <i>Speaker: Brian Vahey, The American Waterways Operators</i> <ul style="list-style-type: none"> <li>• Describe the navigation needs and maneuverability challenges of tugs</li> </ul>
12:45 – 2:00 pm	Lunch (On your own, restaurant list available at registration)
2:00 – 2:45 pm	<u>Navigational Risk Assessments and U. S. Coast Guard Responsibilities</u> <i>Speakers: George Detweiler, USCG; Ed LeBlanc, USCG</i> <ul style="list-style-type: none"> <li>• USCG role and responsibilities related to offshore wind</li> <li>• Update to guidelines for conducting navigational risk assessments</li> <li>• Potential regulatory tools (e.g., new fairway, recommended routes)</li> </ul>
2:45 – 3:30 pm	<u>Environmental Review and Compliance of Offshore Wind Energy Projects</u> <i>Speakers: Michelle Morin, BOEM; Glenn Degnitz, BSEE</i> <ul style="list-style-type: none"> <li>• Overview of BOEM’s NEPA process including: <ul style="list-style-type: none"> <li>○ Regulatory process</li> <li>○ Stakeholder opportunities for input</li> </ul> </li> <li>• Compliance and enforcement</li> </ul>
3:30 – 3:40 pm	Break
3:40 – 4:10 pm	<u>Lessons Learned from Europe</u> <i>Speakers: Dennis O’Mara, DNV GL; John Beattie, Anatec</i> <ul style="list-style-type: none"> <li>• Facilitated panel discussion highlighting recommendations and best practices from the European Offshore Wind Industry</li> </ul>
4:10 – 4:30 pm	<u>Table Topic Discussion</u> <ul style="list-style-type: none"> <li>• Review potential challenges identified during registration and prioritize key questions to be addressed during the Day 2 breakout sessions and in subsequent conversations</li> </ul>
4:30 – 4:55 pm	<u>Summary of Priorities Identified in Table Discussion</u>
4:55 – 5:00 pm	<u>Wrap-up</u> <i>Speaker: Jason Gershowitz, Kearns &amp; West</i> <ul style="list-style-type: none"> <li>• Preview of Day 2 table topics</li> </ul>
5:00 pm	Adjourn

Day 2 Agenda: March 6, 2018

Time	Topic / Activities
8:00 – 8:30 am	<i>Registration and Networking</i>
8:30 – 8:40 am	<p><u>Welcome</u></p> <p><i>Speaker: Jason Gershowitz, Kearns &amp; West</i></p> <ul style="list-style-type: none"> <li>• <i>Day 1 recap and Day 2 preview</i></li> <li>• <i>Presentation of Table Topics</i></li> </ul>
8:40 – 9:25 am	<p><u>Strategies for Mitigating Offshore Wind Impacts to Navigation</u></p> <p><i>Speakers: John O'Keeffe, Deepwater Wind; Hywel Roberts, Ørsted; Martin Goff, Statoil</i></p> <ul style="list-style-type: none"> <li>• <i>Developers explain how they mitigate navigation and safety challenges during construction and operation</i></li> </ul>
9:25 – 10:55 am	<p><u>Breakout Groups: Table Topic Sessions</u></p> <ul style="list-style-type: none"> <li>• <i>Tables and topics to be identified according to areas of concern highlighted in Day 1 discussion</i></li> </ul>
10:55 – 11:05 am	<i>Break</i>
11:05 am – 12:00 pm	<p><u>Facilitated Discussion</u></p> <p><i>Speaker: Jason Gershowitz, Kearns &amp; West</i></p> <ul style="list-style-type: none"> <li>• <i>Report-out from Table Topics</i></li> <li>• <i>Identifying potential challenges, key questions, and opportunities for future discussion</i></li> </ul>
12:00 – 12:15 pm	<p><u>Closing Remarks &amp; Next Steps</u></p> <p><i>Speakers: Darryl Francois, BOEM and George Detweiler, USCG</i></p>
12:15 pm	<i>Adjourn</i>

### Presenter Biographies

#### **John Beattie**, *Director & Principal Risk Analyst, Anatec Ltd*

John Beattie has over 20 years of experience in shipping and navigational risk assessments for the offshore renewables, oil & gas and marine industries. In offshore renewables, John has worked on numerous UK offshore wind farm Navigational Risk Assessments (NRAs) including Robin Rigg, Humber Gateway, London Array, Burbo, Walney, Firth of Forth and Hornsea. He has also participated in projects in Europe, the USA and the Far East. Projects typically comprise baseline data collection (including traffic surveys), traffic analysis, impact / risk assessment and stakeholder / regulator engagement. John also recently managed the NRA for Statoil's Hywind Scotland project, the world's first floating wind farm array, and has been heavily involved in offshore wave and tidal projects, most notably in the Pentland Firth and Orkney Waters. As well as the consenting phase, John and Anatec assist Developers in designing risk controls and discharging consent conditions such as applying for safety zones, preparing lighting and marking plans, Emergency Response Cooperation Plans and Vessel Management Plans. Anatec are also specialists in cable risk assessment, assessing the risks to export and inter-array cables from anchors and fishing gear.

#### **James Bennett**, *Program Manager, Office of Renewable Energy Programs, Bureau of Ocean Energy Management*

Jim Bennett has over 35 years of experience in the environmental and energy arenas serving in a variety of capacities in the Department and other Federal agencies. Prior to becoming the program manager for renewables, Jim led the Division of Environmental Assessment, overseeing BOEM's compliance with the NEPA and other environmental laws focusing on Federal OCS programs, including oil and gas, sand and gravel, and renewable energy. He is a graduate of the Department's Manager Development Program and has earned two Master's degrees -- one in Environmental Planning and the other in Computer Systems Management. His experience encompasses events such as the Exxon Valdez and the Deepwater Horizon oil spills, the Cape Wind energy project, and offshore renewable energy activities particularly in the Atlantic.

#### **George Detweiler**, *Marine Transportation Specialist, U.S. Coast Guard Headquarters*

George Detweiler retired from the U. S. Coast Guard with over 20 years of service. He returned to the Coast Guard as a civilian marine transportation specialist in the Marine Transportation Systems Directorate at USCG Headquarters. He is a member of the U.S. delegation to the International Maritime Organization's Subcommittee on Navigation, Communication and Search and Rescue. His major projects have included conducting the Right Whale and Atlantic Coast Port Access Route Studies, creating ships' routing measures including the first Russian Federation – United States joint proposal on routing measures in the Bering Sea and Strait, conducting tribal consultations, and reviewing offshore renewable energy installations (OREIs) proposals. Mr. Detweiler works closely with the Coast Guard's Navigation Safety Advisory Council (NAVSAC) on safety of navigation issues, including COLREGS and the Inland Navigation Rules and the development of Best Practices for Unmanned Maritime Systems (UMS).

#### **Glenn Degnitz**, *Lead Environmental Protection Specialist, Environmental Compliance Division, Bureau of Safety and Environmental Enforcement*

Glenn Degnitz has 20 years' experience establishing and managing environmental compliance and enforcement programs both within the United States and internationally. Mr. Degnitz currently serves as the BSEE Lead Environmental Protection Specialist and Deputy Chief for the Environmental Compliance Division, and has been in this position since the summer of 2014. In this role Mr. Degnitz ensures the Environmental Compliance Division promotes environmental stewardship through integrated prevention, compliance, and preparedness activities. Mr. Degnitz has an M.S. in Environmental Policy and Management.

**Darryl François**, *Chief, Engineering and Technical Review Branch, Office of Renewable Energy Programs, Bureau of Ocean Energy Management*

Darryl François is responsible for managing the regulatory framework that governs the development of renewable energy projects on public lands of the U.S. outer continental shelf. His responsibilities include policy development and management oversight of the review of technical and engineering design aspects of project plans and offshore survey activities and compliance with terms and conditions related to safe project deployment and operations. In addition to the Bureau of Ocean Energy Management, Mr. François' 37 year career with the U.S. Department of the Interior includes service with the U.S. Geological Survey, Minerals Management Service and Indian Affairs in the analysis of energy, environmental, technology, and economic development issues across the Department's spectrum of public land management. He received his B.S. in Physics from Bradley University and his M.S. in Geophysics from the Pennsylvania State University.

**Martin Goff**, *Environment & Permitting Manager, Statoil Empire Wind*

Martin Goff has worked in permitting, project development and environmental & social impacts on offshore wind projects for Statoil since 2012. As a Chartered Marine Scientist, Martin has an MSc in Applied Physical Oceanography from the University of Wales, Bangor, with over 10-years experience in the field of marine science and working offshore prior to joining Statoil. In his position with Statoil, Martin was responsible for impact assessments, maritime issues and permitting on the Dogger Bank Teesside offshore wind farms in the UK, securing permits for up to 2.4GW of projects. Martin has also worked on the Statoil operated 402MW Dudgeon Offshore Wind Farm project during construction, Statoil's site development work for floating wind in California, and advises on new prospects in the US and rest of the world. Martin's current role on Statoil's Empire Wind offshore wind project, New York, includes environmental, maritime and permitting responsibilities.

**Cheri Hunter**, *Renewable Energy Program Coordinator, Bureau of Safety and Environmental Enforcement*

Cheri Hunter serves as BSEE's principle liaison with Federal and state agencies and other stakeholders involved in the development of wind projects on the Federal OCS. She is responsible for ensuring that programmatic and policy decisions related to safety and environmental oversight and enforcement functions for renewable energy activities are incorporated into guidance documents, standard operating procedures, and program communications. Ms. Hunter has over 30 years of experience with BSEE and its predecessor agency.

**Sean Kline**, *Director of Maritime Affairs, Chamber of Shipping*

Sean Kline has sailed as a deck officer on various types of ships worldwide and after coming ashore, held positions as Director of Marine Safety and Standards at Maersk Line, Limited; Manager of Security and Audits at the Liberian Registry; and Regulatory Development Manager for the U.S. Coast Guard. Sean is a graduate of the U.S. Merchant Marine Academy at Kings Point and holds active Merchant Mariner licenses and various Lead Auditor certifications. He was appointed to the USCG Navigation Safety Advisory Committee (NAVSAC) and serves on the National Fire Protection Agency's Committee on Gas Hazards. He also sits on the international industry Roundtable cyber security working group that developed the "The Guidelines on Cyber Security Onboard Ships" and previously served on the Maritime Security Advisory Committee at U.S. State Department and as Chairman of the National Safety Council's Waterborne Transport Group.

**Ed LeBlanc**, *Chief, Waterways Management Division, U.S. Coast Guard Sector Southeastern New England*

Ed LeBlanc is the Coast Guard's primary project officer for several offshore renewable energy proposals in southeastern New England, including the Cape Wind (Nantucket Sound) project, the Block Island Wind Farm project, and several potential wind farms south of Martha's Vineyard. Mr. LeBlanc served for 28 years on active duty with the Coast Guard, serving on Coast Guard cutters and a Navy warship, and in various shore-side

assignments in Washington, D.C., and Boston, Massachusetts. He retired from active duty at the rank of Commander in July of 2003.

**Michelle Morin**, *Chief, Environment Branch for Renewable Energy, Office of Renewable Energy Programs, Bureau of Ocean Energy Management*

Michelle Morin has been with BOEM for over 22 years and has coordinated dozens of environmental impact statements and assessments for BOEM's oil and gas and renewable energy programs. As the Chief of BOEM's Environment Branch for Renewable Energy, she manages an interdisciplinary team responsible for environmental assessments, consultations, and studies related to renewable energy leasing and development on the Atlantic OCS.

**Walt Musial**, *Manager of Offshore Wind, National Wind Technology Center, National Renewable Energy Laboratory, U.S. Department of Energy*

Walt Musial is a principal engineer and the manager of Offshore Wind at the National Renewable Energy Laboratory (NREL) where he has worked for 29 years. In 2003 he initiated the offshore wind energy research program at NREL which he now leads. Walt also developed and ran NREL's full scale blade and drivetrain testing facilities for 15 years. Earlier, Walt spent five years in the commercial wind energy industry in California. He studied Mechanical Engineering at the University of Massachusetts at Amherst, where he earned his Bachelor's and Master's Degrees, specializing in energy conversion with a focus on wind energy. He has over 70 publications and two patents.

**Nick Napoli**, *Ocean Planning Director, Northeast Regional Ocean Council and Northeast Regional Planning Body  
Project Manager, Mid-Atlantic Ocean Data Portal*

As Ocean Planning Director, Nick Napoli is responsible for managing the implementation of the 2016 Northeast Ocean Plan on behalf of the Northeast Regional Planning Body, including the continued development of the Northeast Ocean Data Portal. As Project Manager for the Mid-Atlantic Ocean Data Portal, Nick coordinates the team developing the Portal on behalf of the Mid-Atlantic Regional Council on the Ocean. Nick and team members from both regions will be demonstrating the Portals and draft data products that are currently in review. This includes updated vessel traffic maps using 2015-2016 data from the Automatic Identification System (AIS), which was made possible through a collaboration with the U.S. Coast Guard and the Marine Cadastre.

**John O'Keeffe**, *Manager, Operations & Maintenance and Marine Affairs, Deepwater Wind*

Prior to joining Deepwater Wind, John O'Keeffe sailed worldwide for over a decade as a professional mariner, deck officer, teacher and captain. He worked for several organizations including Sea Education Association (S.E.A.) based in Woods Hole, MA and the Bermuda Institute of Ocean Sciences (BIOS) based in St George's, Bermuda. John currently holds a 1600 ton USCG Ocean Master's license for sail & steam and earned his BS in Environmental Studies from Southern Vermont College and a graduate degree from University of Rhode Island's Marine Affairs program. John is also an 8-year veteran of the U.S. Army where he served as a sergeant in armored reconnaissance.

**Dennis O'Mara**, *Principal Consultant, DNV GL*

Dennis O' Mara is a Principal Consultant with DNV GL in Houston, Texas, working in Risk Advisory Services. He is a former US Coast Guard officer with experience in marine navigation, waterways management, aids to navigation, vessel inspections and, marine casualty investigations. His work at DNV GL includes implementation of the DNV GL navigation risk model: Marine Accident Risk Calculation System (MARCS), which has been used and

endorsed globally for several years. Dennis, and his team at DNV GL, have recently adapted the MARCS model for use in assessing navigation risk related to offshore wind farms.

**Hywel Roberts**, *Lead Environment and Consents Specialist, Ørsted*

After 10 years spent working with a range of offshore oil and gas consultants' and operators', Hywel Roberts switched tracks to the offshore wind industry, joining Ørsted's Environment and Consents team in 2012. While working with Ørsted, Hywel has managed the interface with other sea-users, including mariners, fishermen, and the UK's Maritime & Coastguard Agency. Hywel has overseen the Navigational Risk Assessments process associated with the four UK wind farms constructed, or under construction, in UK waters over the course of the last 6 years. These four wind farms comprise a total of 384 wind turbines and have a combined generating capacity of 2.7GW. Hywel is also responsible for representing UK offshore wind farm developers at the Nautical and Offshore Renewables Energy Liaison forum.

**Brian Vahey**, *Senior Manager – Atlantic Region, The American Waterways Operators*

Brian Vahey is Senior Manager for the Atlantic Region for the American Waterways Operators, the national trade association for the tugboat, towboat, and barge industry. AWO has over 250 carrier members operating on waterways across the United States. Brian has worked for AWO since 2008, and as Atlantic Region manager, he covers territory all along the Atlantic Coast, from Maine to Florida. Before joining AWO, Brian worked in DC for an association aimed at improving emergency communication between a wide-array of responders, including the Coast Guard and other maritime interests.