## The National Offshore Wind Research and Development Consortium Project List:

|    | Awardee   | Project Title   | Technical Focus<br>Area            |
|----|---|---|------------------------------------|
| 1  | NREL  | Development of Advanced Methods for<br>Evaluating Grid Stability Impacts  | Electrical Power Systems           |
| 2  | Pacific Northwest National<br>Laboratory (PNNL) | An Offshore Wind Energy Development Strategy to Maximize Electrical System Benefits in Southern Oregon and Northern California                | Electrical Power<br>Systems        |
| 3  | GE Research                                     | DC Collection and Transmission for Offshore Wind Farms  | Electrical Power Systems           |
| 4  | Tufts University                                | Transmission Expansion Planning Models for Offshore Wind Energy   | Electrical Power Systems           |
| 5  | Offshore Wind Consultants                       | Shared Landfall and Onshore Cable<br>Infrastructure for Cable Colocation Feasibility<br>Study   | Electrical Power<br>Systems        |
| 6  | ThayerMahan                                     | Transmission and Export Cable Fault Detection and Prevention Using Synthetic Aperture Sonar   | Electrical Power<br>Systems        |
| 7  | CODAR Ocean Sensors LTD                         | Oceanographic HF Radar Data Preservation in Wind Turbine Interference Mitigation  | Environmental & Conflicting Use    |
| 8  | Advisian  | Technology Development Priorities for<br>Scientifically Robust and Operationally<br>Compatible Wildlife Monitoring and Adaptive<br>Management | Environmental &<br>Conflicting Use |
| 9  | Cornell University                              | Right Wind: Resolving Protected Species<br>Space-Use Conflicts in Wind Energy Areas   | Environmental & Conflicting Use    |
| 10 | RCAM Technologies                               | A Low-Cost Modular Concrete Support Structure and Heavy Lift Vessel Alternative   | Fixed Structure<br>Engineering     |
| 11 | ESTEYCO SL                                      | Self-Installing Concrete Gravity-Base<br>Substructure Sizing for 15MW Turbine   | Fixed Structure<br>Engineering     |
| 12 | Texas A&M                                       | Vibratory-Installed Bucket Foundation for Fixed Foundation Offshore Wind Towers   | Fixed Structure<br>Engineering     |
| 13 | Keystone Tower Systems                          | Tapered Spiral Welding for US Offshore Wind Turbine Towers  | Fixed Structure<br>Engineering     |
| 14 | DEME Offshore US LLC                            | TSPC Foundation Concept   | Fixed Structure<br>Engineering     |
| 15 | Deep Reach Technology                           | Application of Novel Offshore Oil & Gas Platforms to Large Wind Turbines  | Fixed Structure<br>Engineering     |

| 16 | Stony Brook University | Computational Control Co-design Approach for Offshore Wind Farm Optimization        | Fixed Structure<br>Engineering    |
|----|------------------------|---|-----------------------------------|
| 17 | NREL                   | Wind Farm Control and Layout Optimization for U.S. Offshore Wind Farms              | Fixed Structure<br>Engineering    |
| 18 | PCCI, Inc.             | Quarter Scale Testing of the Intelligent Mooring System for FOWT Platforms          | Floating Structure<br>Engineering |
| 19 | ESTEYCO                | Evolved Spar Concrete Subconstructure for Floating Offshore Wind US-Based Design    | Floating Structure<br>Engineering |
| 20 | NREL                   | Shared Mooring Systems for Deep-Water Floating Wind Farms                           | Floating Structure<br>Engineering |
| 21 | Principle Power, Inc.  | Innovative Deepwater Mooring Systems for Floating Wind Farms (DeepFarm)             | Floating Structure<br>Engineering |
| 22 | Principle Power Inc.   | Demonstration of Shallow-Water Mooring<br>Components for FOWTs (ShallowFloat)       | Floating Structure<br>Engineering |
| 23 | UMass Amherst          | Techno-Economic Mooring Configuration and Design for Floating Offshore Wind         | Floating Structure<br>Engineering |
| 24 | Virginia Tech          | Dual-Functional Tuned Inerter Damper for<br>Enhanced Semi-Sub Offshore Wind Turbine | Floating Structure<br>Engineering |
| 25 | Triton Systems, Inc    | Innovative Anchoring System for Floating Offshore Wind                              | Floating Structure<br>Engineering |
| 26 | University of Maine    | Design and Certification of Taut-synthetic<br>Moorings for Floating Wind Turbines   | Floating Structure<br>Engineering |
| 27 | GE Research            | Autonomous Vessel-Based Multi-Sensing System for Inspection and Monitoring          | O&M & Safety                      |
| 28 | UMass Lowell           | A Novel Structural Health Monitoring System for<br>Offshore Wind Turbine            | O&M & Safety                      |
| 29 | Dive Technologies      | Fully Autonomous Subsea Asset Inspection by a Shore-Launched AUV                    | O&M & Safety                      |
| 30 | ULC Robotics           | UAS to Transform Offshore Wind  | O&M & Safety                      |
| 31 | GE Renewable Energy    | Self-Positioning Single Blade Installation Tool                                     | O&M & Safety                      |
| 32 | Tagup Inc.             | Survival Modeling for Offshore Wind Prognostics                                     | O&M & Safety                      |
| 33 | GE Research            | Enabling Condition Based Maintenance for Offshore Wind                              | O&M & Safety                      |
| 34 | GE Research            | Radar Based Wake Optimization of Offshore Wind Farms                                | O&M & Safety                      |
|    |                        |   |                                   |

| 35 | Tufts University                                    | Physics Based Digital Twins for Optimal Asset  Management   | O&M & Safety                                  |
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| 36 | GE Renewable Energy                                 | Weld Assembly of Large Castings   | Supply & Logistics                            |
| 37 | National Renewable Energy<br>Laboratory (NREL)      | Standardized Scalable Mooring Solutions Optimized for the U.S. Supply Chain                                       | Supply & Logistics                            |
| 38 | Electric Power Research<br>Institute (EPRI)         | Verifying OSW Turbine Blade Integrity During Manufacture  | Supply & Logistics                            |
| 39 | Business Network for Offshore<br>Wind (BNOW) & NREL | 30GW by 2030: Supply Chain Roadmap for Offshore Wind in the US  | Supply & Logistics                            |
| 40 | Crowley   | Technical Validation of Existing U.S. Flagged Barges as a "Feeder" Solution for the U.S. Offshore Wind Industry   | Supply & Logistics                            |
| 41 | Exmar Offshore Company                              | Feasibility of a Jones Act Compliant WTIV Conversion  | Supply & Logistics                            |
| 42 | MARIN USA   | Comparative Operability of Floating Feeder Solutions  | Supply & Logistics                            |
| 43 | NREL  | A Validated National Offshore Wind Resource Dataset with Uncertainty Quantification                               | Wind Resource & Site Characterization         |
| 44 | GE Research   | Impact of Low Level Jets on Atlantic Coast Offshore Wind Farm Performance   | Wind Resource & Site Characterization         |
| 45 | Cornell University                                  | Reducing LCoE from Offshore Wind by<br>Multiscale Wake Modeling   | Wind Resource & Site Characterization         |
| 46 | WHOI  | Development of a Metocean Reference Site near the MA & RI Wind Energy Areas                                       | Wind Resource & Site Characterization         |
| 47 | Northeastern University                             | Ensuring Long-Term Availability and Bankability of Offshore Wind Through Hurricane Risk Assessment and Mitigation | Wind Resource and<br>Site<br>Characterization |