

STATE OF RHODE ISLAND
PROVIDENCE, SC.

COASTAL RESOURCES
MANAGEMENT COUNCIL,
O.H. Stedman Government Center
Tower Hill Road, Wakefield, RI 02879

Subcommittee Recommendation

Petition Of: DEEPWATER WIND, BLOCK ISLAND, LLC AND
DEEPWATER WIND BLOCK ISLAND TRANSMISSION, LLC

Docket No: 2012-09-065

Applicant, Deepwater Wind, Block Island, LLC and Deepwater Wind Block Transmission, LLC (“Deepwater” or “DWW”), filed an application to construct and maintain the Block Island Wind Farm (“BIWF”) and the Block Island Transmission System (“BITS”) which will be referred to collectively as “the Project” except where the two component projects are identified for individual discussion and evaluation purposes. The specific details of the project are set forth below and incorporated herein by reference.

The Ocean Special Area Management Plan subcommittee (“OSAMP”) held three public hearings relating to the project on February 4, 2014 in Narragansett, February 24, 2014 on Block Island and February 27, 2014 in Narragansett. The OSAMP subcommittee then held a workshop on April 3, 2014 in Narragansett where it formed the recommendation set forth herein. All hearings were held pursuant to the Administrative Procedures Act (“APA”), RI General Laws §42-35-15 *et seq.* The record includes, among other things, Deepwater Wind’s September 2012 applications and subsequent modifications, Deepwater Wind’s Environmental Report/Construction and Operations Plan, communications between Deepwater Wind and CRMC staff, the CRMC staff report, hearing transcripts, written public comment, and correspondence involving Federal, State and local governmental agencies. All evidence submitted to the OSAMP Subcommittee pursuant to Deepwater Wind’s application has been and is available at the CRMC’s office, Oliver H. Stedman Government Center, 4808 Tower Hill Road, Wakefield, RI. Further, all evidence submitted to the subcommittee pursuant to this application whether it be by interested parties, opponents, or the Coastal Resources Management Council staff or other agencies has been and is available to all interested parties at the CRMC offices.

After deliberation upon all the evidence, legal memoranda, and all arguments submitted by interested parties and the applicant, the subcommittee recommends to the entire Council to find as a matter of fact.

FINDINGS OF FACT:

Project Description:

1. **Block Island Wind Farm (BIWF):** Deepwater Wind proposes the Block Island Wind Farm (BIWF), a 30-megawatt (MW) offshore wind farm located approximately 3 miles southeast of Block Island, Rhode Island. The BIWF will consist of five, 6-MW wind turbine generators located entirely within State waters, a submarine cable interconnecting the turbines (referred to as the Inter-Array Cable), and a 34.5-kilovolt (AC) transmission cable from the northernmost turbine to an interconnection point on Block Island (referred to as the “export cable”).
2. **Block Island Transmission System (BITS):** The Block Island Transmission System (BITS), is a 34.5-kV alternating current (AC) bi-directional submarine transmission cable that will run approximately 21.8 miles (35.1 km) from Block Island to the Rhode Island mainland. The BITS will be capable of delivering power both to and from the Rhode Island mainland. Deepwater Wind will develop and construct the BITS and will likely transfer ownership of the BITS to National Grid. The BITS cable is located within Rhode Island state territorial waters and in federal waters between Block Island and the mainland. The mainland landing site is at Scarborough State Beach with the cable continuing along state roads to a new substation located at the Dillon Rotary/Corner. The Project will also include construction of one new substation (Block Island Substation) in the Town of New Shoreham on Block Island at the site of an existing power generation facility on property owned by the Block Island Power Company (BIPCO). The Block Island Substation will provide a point of interconnection for the power from the BIWF and will also be the point of interconnection for BITS on Block Island. The onshore portions of the BIWF and BITS cables on Block Island will be collocated along the same route to the Block Island Substation. The Block Island Substation will consist of two adjoining switchyards, one dedicated to the BIWF (BIWF Generation Switchyard) and the other dedicated to the BITS (BITS Island Switchyard). The Project will also include upgrades to the existing substation on the BIPCO property.
3. **Block Island Wind Farm (BIWF):** The wind farm portion of the project consists of five 6-MW direct drive wind turbine generators that are spaced approximately one half mile apart with an inter-array cable that connects the turbines to the Block Island switchyard. The turbines are located in the Renewable Energy Zone as designated by the OSAMP which is located approximately 3 miles-southeast of Block Island. The wind turbine generators will be installed on jacketed structures (similar to oil rigs in the Gulf of Mexico) in approximately 80 feet of water. It is the opinion of CRMC staff that the wind turbine generators proposed within the Renewable Energy Zone utilizing construction methods which include appropriate time of year restrictions to mitigate potential impacts to North Atlantic Right Whales and other species of concern meets the

requirements of the RI Coastal Resources Management Program (RICRMP) and the Ocean Special Area Management Plan (OSAMP).

4. **Block Island Transmission System (BITS):** The BITS cables will be installed using a jet plow which is typical for this type of cable installation. The jet plow liquefies the sediment and allows the cable to be buried without any excavation and backfill. This method has benthic impacts but they are limited to the immediate cable area and are short in duration. It is the opinion of CRMC staff that the proposed BITS cable locations and installation methods meet the program requirements of the RICRMP and OSAMP for all areas with the exception of the beach landing at Scarborough Beach. The proposal for the beach landing submitted has two options with limited geotechnical and geophysical information. It is the opinion of CRMC staff that the applicant will not satisfactorily achieve the 10 foot burial depth utilizing the Short Distance Horizontal Directional Drilling (HDD) alternative. Accordingly, CRMC staff recommended that the Council require that the Long Distance HDD alternative be utilized for transmission cable installation should an assent be granted for the project. The subcommittee agrees.

5. **Final Plan Set:** The final plan set is a combination of three different plan sets that were provided during the review process. The set is entitled "BIWF and BITS Preliminary Engineering Drawings – Submitted by: Deepwater Wind Block Island, LLC and Deepwater Wind Block Island Transmission System, LLC –Block Island Wind Farm(submitted September 2012 ER/COP; Block Island Transmission System September 2012 ER/COP Route updated in September 2013 ER/COP Modification; Block Island Transmission System Terrestrial Scarborough Beach Route". These plans were attached to the staff report and are incorporated herein by reference.

If the Council should approve the Project, these plans would be considered the "Approved Project Plans"

6. **Block Island Substation:** CRMC staff did not conduct a review of the Block Island Substation which involves activities in the vicinity of Freshwater Wetlands. Regulatory jurisdiction over this portion of the project has been deferred to the RI Department of Environmental Management ("RIDEM") and will include both a Freshwater Wetlands assessment and assessment of work to be performed in the areas of existing environmental contamination. The official transfer of jurisdiction to RIDEM occurred pursuant to a letter dated November 19, 2012 and signed by Grover J. Fugate, Executive Director, Coastal Resources Management Council.

7. Public Comments: The project had two separate public notices that were advertised in the Providence Journal, sent to abutters and posted on CRMC's website. The first public notice was on November 15, 2012 and was for 60 days. The notice was extended until February 4, 2013 due to requests for additional time to review the significant amount of material submitted by Deepwater. This notice garnered 78 written comments and a petition signed by 214 people. There was some overlap of the written comments and signers of the petition. The comments had 5 main themes which were: the Application fee; the permitting process; the costs of the project; environmental impacts; and general comments such as aesthetics and decommissioning. Many of the comments listed several of these items. Of the 78 comments received, 19 were in favor of the project, the remaining are opposed to the project or portions of the project. The 214 people who signed the petition were opposed to the project.

Deepwater Wind modified the project to move the transmission cable landing from Narragansett Town Beach to Scarborough State beach. This modification required an additional public notice. The second public notice was sent on November 22, 2013 and was to notify the public including those in the vicinity of the proposed Scarborough beach landing that the project had been modified. This notice was issued in a similar manner but only for 30 days. There were a total of 7 comments with only one in favor, one neutral and the remaining opposed.

8. The OSAMP subcommittee's review of the Project included whether the Project will conflict with any resource management plan or program enacted by the CRMC; will make any area unsuitable for any uses or activities to which it is allocated by a resources management plan or program adopted by the CRMC; or would significantly damage the environment of the coastal region.
9. The applicable provisions of the Coastal Resources Management Plan and OSAMP are set forth on the record, including in the CRMC staff report, and are incorporated herein by reference.

10. The BIWF Wind Turbine Generators (“WTG’s”), Inter-Array Cable, and a portion of the Export Cable are located within the Rhode Island Renewable Energy Zone that the CRMC established in the OSAMP as a preferred area for a wind farm. In establishing the location of the Renewable Energy Zone, CRMC found that in assessing natural resources (benthic ecology, birds, marine mammals, sea turtles, fisheries resources and habitat) and existing human uses (commercial and recreational fishing, cultural and historic sites, recreation and tourism, marine transportation, navigation and infrastructure) present in the state waters of the OSAMP, the Renewable Energy Zone is the most suitable area for offshore renewable energy development.
11. The BIWF will be located in an area of the Renewable Energy Zone approximately 3 mi (4.8 km) southeast of Block Island, and over 16 mi (25.7 km) south of the Rhode Island mainland.
12. The major Project components consist of the construction, operation, and decommissioning of the following:
 - A WTG Array that consists of five 6-MW WTGs spaced approximately 0.5 mi (0.8 km) apart;
 - A 34.5-kV, 2-mi (3.2 km) submarine cable system connecting the WTGs (Inter-Array Cable);
 - A 34.5-kV, 6.2-mi (10-km) Export Cable that connects the WTG Array to the BIWF Generation Switchyard located within a new substation on Block Island (Block Island Substation); and
 - A 34.5-kV BITS Cable to provide power to the Rhode Island mainland by interconnecting with National Grid’s (“NG”) 34.5-kV distribution system in Narragansett, and two switchyards at either end of the BITS: one on the BIPCO property on Block Island (BITS Island Switchyard within the new Block Island Substation) and one in Narragansett at Dillon’s Corner. The BITS will not be decommissioned because it will be abandoned in place.

Motions to Intervene:

13. By order dated March 12, 2013, CRMC set a deadline of March 22, 2013 for the filing of any motions to intervene in the applications of Deepwater Wind. Nine motions to intervene were filed before the March 22 deadline. After considering the briefs and legal arguments on the motions to intervene and holding a public hearing on April 5, 2013 on the motions at which public comments were also received, the OSAMP subcommittee recommended to the Council that the motions to intervene be denied. On May 28, 2013, the Council considered the subcommittee’s recommendation and denied the motions to intervene. The Council issued

a final, written decision denying the motions to intervene on June 21, 2013, which was appealed to the Superior Court by some of the proposed intervenors. By a final judgment dated October 4, 2013, the Superior Court denied the proposed intervenors their requested relief. No writ of certiorari or appeal was filed to the Rhode Island Supreme Court. As such, the only “party” in this proceeding is the applicant, Deepwater Wind.

Setbacks and Special Exceptions:

14. Based on the record and recommendations of CRMC staff, setback variances are not required from the CRMP because the BIWF and BITS transmission cables are considered “water dependent” pursuant to RICRMP Section 140.B.4 and, thus, are exempt from CRMC regulation. The RICRMP glossary defines “Water-dependent activity use” as: “Activities or uses which can only be conducted on, in, over, or adjacent to tidal waters or coastal ponds because the use requires access to the water for transportation, recreation, energy production, or source of water . . .” This Project is for energy production, and based on recommendations of CRMC staff, the subcommittee finds it is exempt from setback variance requirements.
15. The following are the special exceptions required for this Project:
 - Installation of the BIWF export cable in the Type 1 waters surrounding the Block Island shoreline and out to 500 feet from shore (ref. RICRMP Section 300.3.D.1 and Table 1 – Water Type Matrices.)
 - Installation of the BIWF export cable through (under) the beach bordering the shoreline of Block Island adjacent to Corn Neck Road (ref. RICRMP Section 300.3.D.1 and Table 1 – Water Type Matrices). This beach is locally known as Crescent Beach.
 - Installation of the BIWF export cable within dunes and the fore dune as defined by RICRMP Section 210.7 (ref. RICRMP Sections 300.3.D.1, 210.7.D.2). Installation on beaches and dunes bordering Type 1 waters (ref. RICRMP Water Type Matrices).
 - Installation of the BITS cable in Type 1 Waters bordering the Block Island Shoreline and Scarborough Beach Shoreline and out to 500’ from shore (ref. RICRMP Section 300.3.D.1 and Table 1 – Water Type Matrices).
 - Installation of the BITS cable through (under) the beach bordering the Type 1 waters of the Block Island and Scarborough Beach shorelines (ref. RICRMP Section 300.3.D.1 and Table 1 – Water Type Matrices).

16. To obtain a special exception, the three elements of RICRMP Section 130 must be met. First, the Project must serve a compelling public purpose and be one of several listed activities. Based on the record, the subcommittee finds the Project fits the criteria for public infrastructure projects such as “utilities” and/or “energy” thereby meeting element 1. Two, all reasonable steps shall be taken to minimize environmental impacts and user conflicts. Based on a comprehensive review of the record and review of the Project’s consistency with the RI Coastal Resources Management Program and the OSAMP, the subcommittee finds that the Project has minimized potential environmental impacts and user conflicts. Finally, there must be no reasonable alternative means of, or location for, serving the compelling public purpose cited. When applying this element to the Project, the foremost consideration is given to the proposed location of the BIWF within the preferred area established by the OSAMP – the Renewable Energy Zone. In addition, the transmission cables for the Project appear to be reasonably located. For reasons stated in this paragraph, the subcommittee concludes the Project meets the required special exception criteria.
17. The CRMC staff’s stipulation on transmission cable installation in the vicinity of freshwater wetlands, which is set forth in paragraph 3 of the Appendix (staff stipulations), must be followed by the BIWF and the BITS.

Public Access:

18. The subcommittee finds based on the recommendation of the CRMC Executive Director, that the Project is not subject to Section 335’s public access requirements because the BIWF and its associated transmission cable (excluding cable landings) are located in tidal waters owned by the State of Rhode Island or are subject to federal jurisdiction for transmission cable sections located beyond the 3 mile limit from mainland Rhode Island and Block Island. Further, cable landing locations on Block Island and Narragansett are located on public beaches, which provide public access that will not be impacted by the Project.

Wetlands:

19. On Block Island, the transmission cable affects a single isolated freshwater wetland located on the north side of Beach Avenue (wetland 6). Cable (duct bank) installation will occur within the existing cleared shoulder associated with Beach Avenue. Pursuant to Rule 6.10 of CRMC’s “Freshwater Wetland Rules,” utilities installed within the cleared shoulders of existing roadways are considered “exempt.”

20. In Narragansett, the “Scarborough Beach” landfall identifies 12 freshwater wetlands under CRMC jurisdiction, which occur along the transmission cable route between the Scarborough Beach landing and the connection to the Wakefield substation. Wetlands subject to CRMC jurisdiction occur primarily on the west side of Route 108 where they are located within the watershed of the Point Judith Pond and subject to the Salt Pond Special Area Management Plan. Of these 12 freshwater wetlands, 6 are contiguous to salt marshes bordering Point Judith Pond while the remaining 7 are “isolated” freshwater wetlands (e.g. not contiguous to salt marshes). Other freshwater wetlands are regulated by RIDEM. All isolated freshwater wetlands both in RIDEM and CRMC jurisdiction are subject to a “companion” set of Freshwater Wetland rules which are implemented in a similar manner by both RIDEM and CRMC. These companion rules exempt new utility line installations in existing roadways and their cleared shoulders pursuant to CRMC Rule 6.10.

Transmission Cables:

21. Transmission cables will be installed by burial below coastal beaches both at Scarborough Beach in Narragansett and Crescent Beach on Block Island. Deepwater’s preferred transmission cable installation would involve short distance Horizontal Directional Drilling (HDD). The details of this process are set forth in the CRMC staff reports and incorporated herein by reference.
22. Short distance HDD would then be used to drill from the respective beach parking lots to the beach trench where the cable will be attached and pulled back to manholes installed in the parking lot at each beach. Cable installation from mean-high-water (“MHW”) seaward would be accomplished by a vessel towing a jet plow from the beach to a depth of approximately 20 feet. As more fully set forth in the staff reports and incorporated herein by reference, it is the opinion of the CRMC staff based on research with the Army Corp of Engineers, that jet plows cannot effectively bury cables deeper than 6 feet into the sediment. The subcommittee concurs with that conclusion.
23. The second (applicant’s non-preferred) alternative involves utilizing long distance HDD from the respective beach parking lot to temporary steel sheet-pile cofferdams installed “between 300 and 1,800 feet off-shore”. The offshore cofferdam will consist of a temporary steel sheet-pile enclosure that will be removed upon cable installation to the mainland.

24. Deepwater submitted a letter dated October 17, 2013, which withdrew the long distance HDD alternative from consideration on Block Island (but remained an alternative for the beach landing at Scarborough). Long distance HDD results in a deeper cable installation depth in the near-shore and beach environment which is stated to be 15-20 feet below the sediment surface. The staff recommended this method of installation to the Council.
25. Due to the shallower transmission cable depth in the near-shore environment achieved with the short distance HDD technique, CRMC staff opined that Long Distance HDD is the better alternative considering the highly dynamic nature of beaches particularly during significant coastal storms.
26. Additionally, after careful review of the information submitted, the CRMC staff remained unconvinced that a 10-12 foot burial depth could be achieved by the jet plow in the near-shore environment. On this basis, staff has offered a stipulation that a minimum burial depth of 10 feet below grade be achieved between MHW and -10 foot mean-low-water ("MLW"). Staff also proposed a stipulation requiring long distance HDD at Scarborough Beach due to the limited amount of geotechnical information provided. In addition, since both cable landing areas will occur beneath public bathing beaches, the deeper cable installation depth achieved with long distance HDD would provide a greater margin of safety.
27. As a result of the staff recommendations and follow-up meetings, during the course of the hearing process, Deepwater Wind modified its application to reflect the recommendations and concerns expressed by the CRMC staff, which are embodied in the modified application and staff stipulations. The Subcommittee concurs with the staff concerns and subsequent modifications.
28. The OSAMP has various policies and regulatory standards outlined in sections within each of the chapters. The majority of the standards required for the Block Island Wind Project are found in Chapters 8 and 11, as set forth in the staff report and incorporated herein by reference. Due to the large number of policies and standards required for this large project, the CRMC staff provided a table that details the OSAMP section, the standards to be met (or paraphrased in some cases) and either how this application has met the requirement or the location of the response by the applicant whichever is most appropriate. The subcommittee adopts the findings made by the CRMC staff.

29. Deepwater Wind presented testimony at the OSAMP subcommittee hearings that the Project is a demonstration or “pilot” scaled project. The Project meets the definition of Large-scaled project under the OSAMP because it has five turbines.
30. The Vice President of Permitting and Environmental Affairs for Deepwater Wind, testified about the selection of the site for the BIWF in the Renewable Energy Zone. Ms. Kenney testified that where the five WTGs will be located allows Deepwater Wind to avoid more sensitive habitat and also is an area where Deepwater Wind did not identify any significant cultural concerns from the tribal perspective. Ms. Kenney further testified that areas of particular concern (“APCs”) have been avoided for the entire Project. The record also shows that the Project is not within or adjacent to areas identified as Critical Habitat under the Endangered Species Act.
31. The offshore BITS cable is located within Rhode Island state territorial waters and in federal waters on the outer continental shelf.

Need for Project:

32. R.I. Gen. Law §39-26-1-7 sets forth the General Assembly’s finding that it is “in the public interest for the State to facilitate the construction of a small-scale offshore wind demonstration project off the coast of Block Island, including an undersea transmission cable that interconnects Block Island to the mainland in order to: position the State to take advantage of the economic development benefits of the emerging offshore wind industry; promote the development of renewable energy sources that increase the nation’s energy independence from foreign sources of fossil fuel; reduce the adverse environmental and health impacts of traditional fossil fuel energy sources; and provide the Town of New Shoreham with an electrical connection to the mainland.” R.I. Gen. Law §39-26.1-7 also states that the wind energy project would have an aggregate nameplate capacity of no more than 30 megawatts.
33. Deepwater Wind’s 30 MW Project is expected to generate approximately 125,500 megawatt-hours (MWh) each year once it is fully operational. The BIWF will be capable of supplying the majority of Block Island’s electricity needs and will provide an alternative energy source to the diesel-fired generators that are currently used to power the Island.

34. The BITS will export excess power from the BIWF to the Rhode Island mainland and will be capable of supplying power from the existing NG distribution system to Block Island. Block Island is not currently connected to the mainland electric grid.
35. The CRMC staff report and evaluation included an analysis of potential environmental impacts associated with the BIWF and the BITS. The evaluation included potential construction and operational impacts to marine fish, marine mammals and marine reptiles (turtles), birds, (both marine and terrestrial species), and bats. The subcommittee finds the staff report well-reasoned and credible. It adopts those findings as if is set forth herein.

Fish and Fisheries:

36. As set forth in the staff report, fish and fisheries will be affected by the BIWF and the BITS. The effects will be different for construction activities, operations and decommissioning. The pilot scale project proposed is an opportunity to determine many of the effects and their duration. The information obtained from this project will help determine strategies to minimize impacts in future large scale offshore energy projects.
37. The OSAMP has many regulatory standards concerning fisheries, and each standard was addressed in the matrix attached to the CRMC staff report.
38. The proposed fisheries mitigation plan was submitted on November 8, 2013. The plan needs Council approval. The staff expressed concerns that some of the mitigation measures are not mitigation measures, but are requirements of the OSAMP. Three of the proposed measures are mitigation: funding an executive director for the Commercial Fisheries Center of Rhode Island; the conceptual agreement with the RI Charter Boat Association; and the proposed package to off-set the commercial impacts of the BIWF Area of Potential Effect (“APE”) Work Area closure. These mitigation measures were acceptable to the CRMC staff. The subcommittee concurs with the staff recommendation.
39. Deepwater Wind conducted a detailed assessment of finfish and crustaceans in the Project Area. Deepwater Wind has minimized impacts on fisheries by: siting the BIWF within the Renewable Energy Zone; siting the Project to avoid direct impacts on important benthic habitats such as eelgrass and hard bottom substrates known to be used by finfish species and crustaceans through various life stages; and selecting construction techniques

and equipment to minimize disturbance and alteration of substrate to the maximum extent possible during construction activities.

40. The record evidence demonstrates operation of the BIWF, the BITS and associated cables will not have a significant effect on finfish species or crustaceans.
41. As more fully set forth in the record and incorporated herein by reference as if fully set forth herein, the combined effects of the BIWF and the BITS on essential fisheries habitat and species that use that habitat will not be significant. Construction activities will result in a small combined total area permanent impact across the entire Project Area and disturbance from construction will be of short duration and would largely be associated with the disturbance of soft bottom habitats. Decommissioning activities for the BIWF, similar to construction activities will result in temporary disturbances only. When considered together, the combined impacts associated with the construction, operation and decommissioning of the Project on essential fish habitat and essential habitat species are not significant.
42. The CRMC staff's stipulations on a fisheries liaison and report on unexpected effects on fisheries, which are set forth in the Appendix, must be followed by the BIWF and the BITS.

Commercial and Recreational Fishing and Boating:

43. Deepwater Wind has minimized impacts on marine uses, including commercial and recreational fishing and boating, including the charter boat industry, by siting the BIWF in the Renewable Energy Zone. In addition, the spacing between the WTGs of approximately 0.5 miles will allow for vessel access both around and through the BIWF.
44. As set forth above, construction of the BIWF will result in temporary impacts on commercial and recreational fishing as a result of the temporary displacement of fishing activities in the BIWF Project Area. Construction will be of a short duration.
45. Operation of the BIWF will not have a significant adverse effect on commercial or recreational fishing or boating. Decommissioning will have a temporary impact to boating activities as with construction. Upon completion of decommissioning, the Project area will return to pre-construction conditions. Operation of the BITS will not have a significant adverse effect on commercial or recreational fishing or boating.

46. The Project also has been sited to avoid the CRMC's designated sailing areas of concern and, to the extent known, recreational boating and long distance sailing routes. As such, the Project will not have a significant impact on recreational boating activities and sailing events in Rhode Island during the Project's construction, operation or decommissioning.
47. The CRMC staff stipulation on a recreational boating survey, which is set forth in Appendix, must be followed by the BIWF.

Marine Mammals and Reptiles:

48. As set forth in the staff report, the application identifies two major impact issues that may affect marine mammals and sea turtles: collision and noise.
49. The proposed mitigation measures which Deepwater must follow include exclusion zones, protected species observers, modified construction procedures, vessel speed restrictions and time restrictions as set forth in the record and incorporated herein by reference.
50. Seasonal restrictions for construction were agreed to by Deepwater Wind. The seasonal restriction is designed to protect migrating whales and will be included in the staff stipulations, and is specifically adopted herein by the subcommittee.
51. The CRMC staff stipulation on an environmental compliance monitor that will cover a range of issues, which stipulation is set forth in the Appendix, must be followed by the BIWF and the BITS.

Avian and Bat Species:

52. As more fully set forth in the record and incorporated herein as if fully set forth, Deepwater Wind conducted an extensive, three year avian and bat assessment program in consultation with the United States Fish and Wildlife Service, RIDEM and OSAMP biologists to characterize the bird and bat communities within and adjacent to the Project area and has used that information to assess the potential impact on these resources. In addition, Deepwater Wind must conduct avian and bat monitoring during construction and post-construction if the Project is approved.

53. The CRMC staff evaluation of the potential impacts on avian resources follows avian guild and species specific discussions provided by the avian studies undertaken to support the OSAMP. OSAMP information was then compared to the avian studies and the risk analysis provided in the Deepwater Wind application. The CRMC staff analysis was well-reasoned and the subcommittee finds it credible and adopts those findings.
54. Additionally, Aaron Svedlow, a wildlife biologist and project manager with TetraTech, which is an environmental consulting firm that Deepwater Wind hired to assist with many of the studies for the Project, was admitted at the subcommittee hearings as an expert witness in bird and bat surveys. On behalf of Deepwater Wind, Mr. Svedlow oversaw the assessment of bird and bat activity around the Project area using industry accepted, technical wildlife assessment techniques, such as visual surveys, videography, avian radar and acoustic monitoring.
55. Mr. Svedlow testified that there were no federally-listed species that occur within the Renewable Energy Zone where the turbines are to be sited. Mr. Svedlow further testified about the lengthy process of consultation with the U.S. Fish and Wildlife Service under Section 7 of the Endangered Species Act to address whether any endangered species were found in the Project area. None was found.
56. The CRMC's staff report, which as stated above is incorporated in the record and also by reference herein, presents a detailed discussion on the avian studies Deepwater Wind performed. In addition, the CRMC staff report addresses a number of bird species and finds that the construction, operation and decommissioning of the BIWF will have insignificant impacts to the following species: loons; grebes; shearwaters; storm petrels; Northern Gannets; double-crested cormorants; sea ducks and other waterfowl; gulls; terns; alcids; wading birds; shore birds; and raptors. Mr. Svedlow testified that he agrees with the conclusions in the CRMC staff report that the BIWF will have insignificant impacts to these bird species. The subcommittee finds this evidence credible that the operation of the BIWF will have insignificant impacts to these bird species.
57. As to a particular bird species – passerines or “song birds” – the CRMC staff report indicates that considering the significant passage of nighttime targets within the Renewable Energy Zone during the fall as documented by Deepwater Wind's Merlin VSR

radar study, there appears to be some potential for impact to this species. The staff report notes that the potential impacts on songbirds, in total, is likely to be less than significant with the exception of the potential for periodic impacts to nocturnal migrants passing over the south end of Block Island at low flight heights during unfavorable weather conditions.

58. As for the songbirds, Mr. Svedlow testified that in the area of the BIWF his studies showed fairly low passage rates and fairly low activity for songbirds. For migration in the fall, when the highest passage rate is expected, the passage rate for passerines in the BIWF area was below average. Nevertheless, to reduce the attractiveness of the BIWF to birds – including the songbirds – Mr. Svedlow testified that Deepwater Wind will install blinking red lights for the BIWF, which studies have shown reduce the possibility that birds would be attracted to the BIWF during low visibility events.
59. In addition, Deepwater Wind has minimized potential barrier effects to migrating and transiting birds in the BIWF area by orientating the turbines in parallel with the average avian flight direction through the WTG area, which is predominantly northeast—southwest. The proposed turbine orientation minimizes the potential for increased flight distances for the majority of migrating and transiting birds in the BIWF area. Deepwater Wind also has reduced the number of WTGs from eight to five and sited the WTGs within the Renewable Energy Zone and as far as possible offshore. Further, the relative size of the turbine site in relation to Rhode Island Sound is small and, therefore, will likely not pose a barrier to migration. As a result, operation of the BIWF is not expected to cause a significant barrier to migration. Effects to avian species during decommissioning are expected to be similar to those evaluated for the construction phase of the BIWF.
60. Installation of the transmission cable systems (BITS, inter-array, export) and their operation is also unlikely to have significant impacts on avian resources.
61. Construction and operation of the BIWF and BITS will not have any significant combined impacts on bird populations. Impacts during construction will be short in duration and limited in scale and will not cause birds to incur risks that could affect individual or population fitness.
62. The CRMC staff stipulation on post construction avian monitoring, which is set forth in the Appendix, must be followed by the BIWF.

Cultural Resources:

63. Deepwater Wind sited the Project outside of known submerged cultural resources and conducted a site specific investigation that did not identify any evidence of archeological sensitive paleosols or pre- and post-contact period cultural materials within the footprint of the Project's components. Specifically, the BIWF will not result in any direct effects to NRHP-listed marine archaeological sites. Again, siting the Project in the Renewable Energy Zone minimizes impacts such as to cultural resources.
64. Deepwater Wind engaged with the Narragansett Indian Tribe and the Wampanoag Tribe of Gay Head (Aquinnah) in marine survey protocol design, execution of the surveys, and interpretation of the results. Based on this work with the tribes and as stated above, no archaeologically sensitive or potentially eligible sites were identified by the site-specific surveys within the footprint of the Project. The deputy tribal historic preservation officer with the Narragansett Indian Tribe stated during the public hearings the tribe supported the Project.
65. The CRMC staff stipulation on the historic and archaeological preservation memorandum, which is set forth in the Appendix, must be followed by the BIWF and the BITS to address/mitigate any impacts on historic properties and archaeological resources.

Visual Impact Assessment:

66. As set forth in the staff report, despite the use of a standardized Visual Impact Assessment Procedure (VRAP), the subcommittee finds that visual impacts and considerations are typically considered to be subjective.
67. Deepwater Wind presented the testimony of John Hecklau on the issue of visual impacts. Mr. Hecklau was not qualified as an expert on visual impacts. He opined that with the various viewpoints to the Project selected on Block Island, none exceeded the threshold for the landscape similarity zone that they were within. This is not to say there is no visual impact. There is impact but the scores indicate that the impact would not be unreasonable or unduly adverse. In addition, Deepwater Wind is using mitigation factors for any visual impacts, included siting the BIWF in the Renewable Energy Zone and as far away from Block Island as possible. The BIWF will be approximately three miles away from Block Island, which Mr. Hecklau testified is mid-ground or background, instead of foreground which would be zero

to half mile. Mr. Hecklau further testified that the Project is a small project of five turbines and the turbines themselves are clean, "whitish" in color, and in a simple arrangement in a single line, which minimizes their contrast in the overall visual impact.

68. Based on the record before it, the subcommittee finds that the Project will not have a significant adverse impact on the natural resources or existing human uses of the coastal zone.

Permits, Approvals, Consultations and Public Comment:

69. Deepwater Wind has conducted all of the required consultations and outreach required under the OSAMP, including with the Habitat Advisory Board, the Fishermen's Advisory Board, and the Rhode Island Historic Preservation and Heritage Commission.
70. Deepwater Wind has engaged in significant agency consultation, including with the United States Army Corps of Engineers, the Environmental Protection Agency, United States Fish and Wildlife Service, the United States Coast Guard, the Bureau of Ocean Energy Management, the National Oceanic and Atmospheric Administration Agency, the Rhode Island Historic Preservation and Heritage Commission, and the Rhode Island Department of Environmental Management.
71. Deepwater Wind has provided CRMC with a copy of its special use permit approval from the Town of New Shoreham for the Project's facilities on the BIPCO property. In addition, Deepwater Wind has provided CRMC with its various state approvals, including easements for: the use of Scarborough Beach; burying lines within state roads; and the use of the RIDOT facility at Dillon's Corner.
72. Deepwater Wind anticipates receiving a Water Quality Certification from RIDEM and a Freshwater Wetlands permit from RIDEM. The subcommittee recommends that the CRMC Assent issuance is contingent on the receipt of these RIDEM approvals. In addition, the CRMC staff stipulation on prerequisite state and federal approval requirements, must be followed.
73. In addition to the written public comment that is part of the record, the subcommittee also heard comments from 70 members of the public. Of the 70 who gave comment during the hearings, 43 were in favor of the Project, and 27 were against. The OSAMP subcommittee evaluated and considered all of the public comment, both written and oral, within its jurisdiction.

Conclusion:

74. Based on the record as a whole including the testimony and public comments, the OSAMP subcommittee finds the evidence demonstrates that Deepwater Wind's Project will not have a significant adverse impact on the natural resources or existing human uses of the Rhode Island coastal zone as long as the stipulations set forth in the Appendix, which have been referenced above in this recommendation, are included in any approval of the Project.
75. Based on the record, the subcommittee finds that credible evidence demonstrates that Deepwater Wind, by siting its Project in the Renewable Energy Zone, has minimized potential impacts on natural resources and human uses. In addition, the subcommittee finds that the BIWF and BITS will not have a significant adverse impact on the natural resources or existing human uses of the Rhode Island coastal zone.
76. The subcommittee further finds that Deepwater Wind has demonstrated that its Project meets the requirements and burdens of proof in the OSAMP and that its Project: will not conflict with any resource management plan or program enacted by the CRMC; will not make any area unsuitable for any uses or activities to which it is allocated by a resources management plan or program adopted by the CRMC; and will not significantly damage the environment of the coastal region.
77. At this time, Deepwater Wind seeks assents for the BIWF and the BITS under the Construction and Operations Plan ("COP"). Prior to construction, Deepwater Wind will then, assuming the assents are approved, submit to the Council for approval the facility design report and fabrication and installation report. In addition, the Council will approve an independent, third-party Certified Verification Agent ("CVA"), as required by the OSAMP. The CVA will be paid for by Deepwater Wind but will be approved by and will report to the Council.
78. Based on the above stated findings, the subcommittee recommends approval of the assents for the BIWF and the BITS subject to the stipulations set forth above and in the Appendix.

WHEREFORE, the OSAMP subcommittee recommends to the full Council that based upon the findings set forth above and the stipulations set forth in the Appendix that the Deepwater Wind applications be approved.

OSAMP SUBCOMMITTEE

Anne Maxwell Livingston, Chair

Paul E. Lemont, Vice Chair

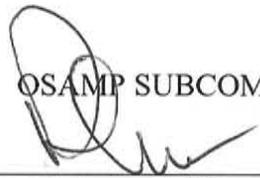
Donald T. Gomez

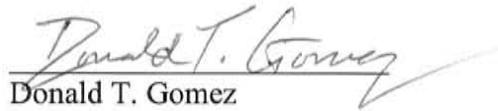
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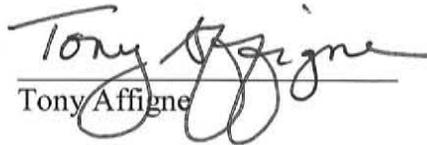
David Abedon

Dated: _____


Anne Maxwell Livingston, Chair

OSAMP SUBCOMMITTEE

Paul E. Lemont, Vice Chair


Donald T. Gomez


Tony Affigne


David Abedon

Dated: 04-22-2014

Staff Stipulations

1. North Atlantic Right Whales Impact Avoidance: In order to avoid potential impacts to North Atlantic Right Whales, impact driving of wind turbine foundations shall not occur between November 1 and April 30th of any calendar year(s). If Long Distance Horizontal Directional Drilling (Long Distance HDD) is utilized for cable installation, impact driving of steel sheeting for coffer dam construction may also be restricted during this period.

2. Nearshore Transmission Cable Burial Depth: The minimum transmission cable burial depth between Mean High Water (MHW) and Mean Low Water (MLW) shall be Elevation minus 10 feet MLW. Transmission Cable installation depth below beaches and dunes at cable landing locations shall also achieve a minimum burial depth of 10' below the beach sediment surface. Burial depth below dunes shall be based on the elevation of the beach at the base of the dunes and shall not include the dune height in the burial depth measurement. Long Distance Horizontal Directional Drilling (Long Distance HDD) is required to assure this minimal burial depth requirement is met at the mainland Scarborough Beach landing. A post installation survey, stamped by a RI registered Land Surveyor or Engineer, that provides the elevation of the top of the cable on the mean low water datum and horizontally on the RI State Plane coordinate system shall be submitted to the Council to confirm this requirement has been met. This survey shall be submitted within 15 days of transmission cable installation at the beach landing locations..

3. Transmission Cable installation in the vicinity of Freshwater Wetlands: Transmission cable installation in the vicinity of Freshwater Wetlands (including coastal wetlands having contiguous freshwater wetlands) is hereby allowed beneath existing paved roadways and their existing cleared shoulders provided the following conditions are met:

- a. Existing culverts and the flow of water under bridges in roads or highways are not blocked or disrupted by going under or attaching to such structure;
- b. The project does not cause any diversion of ground or surface water to or from any wetlands;
- c. The preconstruction contours are restored immediately upon installation;
- d. All disturbed areas are revegetated after restoring contours; and
- e. The project design incorporates best management practices for dewatering from excavated areas.

Furthermore, as a condition of this permit there shall be no direct discharges of dewatering fluids to wetlands, catch basins, or stormwater conveyance systems that discharge to wetlands without proper treatment that effectively removes sediments and other visible contaminants (oil sheens, etc.).

4. Post Construction Avian Monitoring: (BIWF Assent only) Post construction avian monitoring will be as described in the modified Avian and Bat Post Construction Monitoring Plan dated February 28, 2014.

5. Environmental Compliance Monitor: Pursuant to Ocean SAMP Section 860.2.8, Deepwater shall employ an Environmental Compliance Monitor (ECM) to monitor environmental

compliance during all construction activities associated with the BIWF and BITS. The ECM shall be a third-party entity hired by Deepwater (assent holder) who is approved by and reports directly to the Council. The person/firm chosen to be the ECM shall require prior Council approval. The ECM shall be approved by the Council prior to the initiation of any work on the project herein approved.

6. Cable Location and Scour Protection: Within 15 days of completing the installation of the submarine transmission cable, Deepwater shall submit a post construction survey, stamped by a Rhode Island registered Professional Land Surveyor or Engineer, of the actual cable location and the proposed cable easement with State Plane and LAT/LON coordinates for the cable angle points, easement comers / angle points of all scour protection matting (concrete filled bags, concrete mats, stone, etc.) installed on the ocean floor to protect the transmission cable. If the area of the ocean bottom impacted by protective armoring exceeds the 2.1 acres of total ocean bottom coverage estimated within the Environmental Report/COP, the CRMC may require marine habitat compensation to be determined after submission of the post-installation survey.

7. Historic and Archaeological Preservation Memorandum: Prior to commencing construction, Memorandums of Agreement for the BIWF and BITS shall be finalized between Deepwater and the RI Historical Preservation and Heritage Commission as needed to address/mitigate impacts on Historic properties and Archaeological Resources.

8. Prerequisite State and Federal Agency Approval Requirements: Prior to issuance of the Assent, the applicant shall provide a copy of the RIDEM Water Quality Certificate. Prior to commencing construction, Deepwater shall provide to the CRMC and gain CRMC concurrence all necessary State and Federal Approvals for the Project. These approvals shall include but not be limited to: RIDEM Freshwater Wetlands approval, RIDEM RIPDES permit, NOAA National Marine Fisheries Service Concurrence, US Army Corps of Engineers Permit, and the BOEM Right of Way Grant Area. Copies of these approvals shall be submitted to the CRMC attention CRMC File No. 2012-09-065.

9. Fisheries Liaison: A third party fisheries liaison shall be hired by the assent holder and approved by the Executive Director before initiation of construction.

10. Scarborough Landing SAV Survey: Prior to installation of the BITS transmission cable nearshore (12 meter depth or less) at the Scarborough Landing Alternative, Deepwater shall perform a Submerged Aquatic Vegetation Survey (SAV) utilizing a towed video sled or diver video survey of the cable route. The Survey shall be performed during July or August 2014. The results of this survey shall be forwarded to the Executive Director prior to transmission cable installation. If SAV is located in the transmission cable route, avoidance and/or mitigation shall be required consistent with RICRMP Section 300.18. Avoidance and/or Mitigation measures shall require Executive Director approval.

11. CRMC Assent and Lease Bond Requirement and Permit Transfers: Prior to issuance of the Assent and/or lease, CRMC and DWW must agree to the terms and amounts of an appropriate surety bond(s), warranty, guarantee, or letter(s) of credit sufficient to secure the payment and performance of construction, operation and maintenance and decommissioning of

the Project. After issuance of the Assent, but prior to any construction of the Project, DWW must fund the bond(s) or other agreed upon instrument under the terms and amounts agreed to by the CRMC and DWW to secure the conditions of the Assent and/or lease in the forms and amounts satisfactory to the CRMC.

In the event DWW wants to transfer the CRMC Assent or lease to another party, or should the Assent or lease become an asset in a bankruptcy or state receivership proceeding, DWW shall transfer copies of the CRMC Assent, and/or lease, including all relevant information and documentation upon which the Assent and/or lease was based, to any transferee, new owners or operators of the BIWF, BITS and associated facilities including surety bond requirements or other warranty or guarantee instruments set forth herein and made a condition of this Assent and /or lease.

Prior to any transfer of the Assent or lease, DWW and the transferee must obtain approval of the transfer from the Council. Any transferee must agree to be bound by all conditions and stipulations of the CRMC Assent, and lease, including bonding requirements or any other warranty or guarantee instruments. Any modification of the Assent and/or lease shall require Council approval pursuant to applicable CRMC rules and procedures. Failure to obtain Council approval prior to any transfer will void and revoke this Assent and/or lease.

Prior to any requested transfer, DWW shall notify the CRMC in writing and shall provide a complete description of the facilities, operational properties being transferred to a new owner or operator, and their ability to meet the terms and conditions of this Assent and/or lease.

Failure to comply with the provisions set forth herein will revoke this Assent and/or lease. The provisions herein are necessary to preserve and protect the coastal resources of this state for this and succeeding generations.

12. Unexpected Effects on Fisheries : Following the third year of operations, the Assent holder shall provide to the Executive Director a report of any unexpected effects caused by the installation or operation of the BIWF. The report shall include a plan to address any unexpected negative effects which will be reviewed and approved by the Executive Director.

13. Recreational Boating (BIWF Assent only): The assent holder shall conduct a survey of recreational boating intensity preconstruction, post-construction, and during construction to capture the periods including July 4th weekend and the June Block Island Race Week. Surveys must include weekdays and weekends. Survey results will be provided to the Executive Director.

14. Research: (BIWF Assent only) Following notice, the wind turbine support structures shall be available for research projects approved by the Executive Director and which relate to the purposes of the OSAMP and that do not affect turbine operation, maintenance, emergency access or turbine warranties. Such availability shall be subject to participants agreeing to executing a release waiving all liability associated with such access and to any requirements of OSHA, ISPS, or other governmental agencies with jurisdiction and the wind turbine owner's site, insurance and HSE procedures and requirements and restrictions in place to protect persons and property.