

STATE OF RHODE ISLAND
ENERGY FACILITY SITING BOARD

IN RE: REVOLUTION WIND, LLC :
 APPLICATION TO CONSTRUCT : DOCKET No. SB-2021-01
 A MAJOR ENERGY FACILITY :

**DEPARTMENT OF ENVIRONMENTAL MANAGEMENT’S ADVISORY
OPINION TO THE ENERGY FACILITY SITING BOARD PURSUANT TO
THE PRELIMINARY DECISION AND ORDER ISSUED**

On December 30, 2020, Revolution Wind, LLC (“Revolution Wind” or “Applicant”) filed with the Energy Facility Siting Board (“EFSB” or “Board”) an application to construct and operate the facilities associated with the Revolution Wind Project (“Facilities” or “Project”), an offshore wind farm which is projected to deliver approximately 704 megawatts (MW) of renewable energy to Rhode Island and Connecticut. The proposed Facilities will bring the power generated by the offshore wind farm to shore, connecting to the onshore electric transmission system in Rhode Island. Although the wind farm will consist of wind turbines and an offshore substation located on the outer continental shelf in federal waters, which are outside of the jurisdiction of the Board, the Facilities necessary to connect the wind farm to the onshore electric transmission system are within the jurisdiction of the Board. The proposed Facilities constitute transmission lines greater than 69 kV and thus qualify as a major energy facility, defined by R.I. Gen. Laws § 42-98-4.

Revolution Wind applied for a license to construct and operate the following Facilities: 1) two 23-mile submarine export cables, 2) two new underground 1-mile 275 kV onshore transmission cables, 3) and onshore substation, and 4) two new underground 519-foot long, 115 kV high voltage transmission lines. In addition to these newly constructed Facilities, Revolution Wind proposed to: 1) expand the 115kV side of the Davisville Substation owned and operated by

the Narragansett Electric Company d/b/a National Grid (Narragansett Electric or National Grid), and 2) reconfigure 1,340 feet of overhead, 115 kV high voltage transmission lines.

The total land area covered by the aforesaid Facilities is approximately 751.4 acres, which includes both onshore and offshore land area. The 23 miles of export cables in state waters will make landfall at Quonset Point in North Kingstown, Rhode Island where they will be joined with onshore transmission cables before traversing approximately one-mile underground to the onshore substation. The onshore substation will connect to an interconnection facility with two 115 kV underground transmission cables, which will then connect two National Grid’s adjacent Davisville Substation with two 115 kV overhead transmission circuits. The Applicant anticipates commencing construction in the fall of 2022 and having the Project in service during winter 2023. On April 26, 2021, the EFSB issued an Order which, among other things, requested an Advisory Opinion from the Rhode Island Department of Environmental Management (“DEM”) on two questions:

- (i) The impact on vegetative community, fish and wildlife that will be caused by disruption of the habitat; and (ii) whether the Facilities will present an unacceptable harm to the environment.¹

Pursuant to the Order and Notice of Designation the DEM offers this advisory opinion.

I. The Energy Facility Siting Act.

The Energy Facility Siting Act (the “Siting Act”)² consolidates in the EFSB, with two exceptions, all state and local governmental regulatory authority for the siting, construction, operation and alteration of energy facilities “designed or capable of operating at a gross capacity of 40 megawatts or more” of electricity.³ Consequently, the EFSP is, with a few exceptions,

¹ EFSB Order No. (Issued April 26, 2021).

² R.I. GEN. LAWS § 42-98-1 *et seq.*

³ R.I. GEN. LAWS § 42-98-3(d).

the licensing and permitting authority for all licenses, permits, assents or variance under any statute of the state or ordinance of any political subdivision of the state, would be required for the siting, construction or alteration of a major energy facility in the State of Rhode Island.⁴

As a result, the EFSB's decision in favor of an application to locate a major energy facility in Rhode Island constitutes the granting of all permits, licenses, variances or assents, under the EFSB's authority, which would be required for a proposed facility.⁵

EFSB's permitting authority is limited in nature. Specifically, DEM remains the permitting authority where it exercises a permitting or licensing function under the delegated authority of federal law.⁶ In addition, permits required pursuant to the State's Freshwater Wetlands Act (the "Wetlands Act") remain under the jurisdiction of DEM. However, in limited circumstances the Coastal Resources Management Council ("CRMC") has jurisdiction over wetlands in the vicinity of the coast.⁷ For this Project the impacted wetlands are within CRMC's jurisdiction and as a result CRMC will be the lead state agency with respect to permitting decisions regarding wetlands and RIPDES. Consequently, the EFSB's decision cannot act as a grant of any permit or license which is issued by DEM or CRMC pursuant to its delegated authority of the Wetland Act and the Clean Water Act. With respect to the Facility, the following is a non-exhaustive list of permits and licenses that are specifically exempt from the EFSB's jurisdiction:

- Freshwater wetlands permit(s) issued pursuant to the Freshwater Wetlands Act, R.I. Gen. Laws § 2-1-21, which fall under CRMC's jurisdiction for this Project;
- Water Quality Certification pursuant to the authority delegated to DEM by EPA pursuant to the Clean Water Act, 33 U.S.C. sec. §§ 1251-1387, R.I. Gen. Laws § 46-12-1 *et seq.*; and
- Rhode Island Pollution Discharge Elimination System permit for point source discharge, issued pursuant to authority delegated to DEM by EPA pursuant to the Clean Water Act,

⁴ *Id* at § 7(a)(1).

⁵ *Id* at § 1(a).

⁶ *Id* at § 7(a)(3).

⁷ R.I. GEN. LAWS § 2-1-21(A); R.I. GEN. LAWS § 46-23-6(2)(III)(E).

33 U.S.C. sec. §§ 1251-1387.⁸ (In accordance with the General Permit, Rhode Island Pollution Discharge Elimination System Stormwater Discharge Associated with Construction Activity, Section 1.D.3.c, the CRMC Assent will provide the authorization for any point source discharges from this project.)

- Dredge Permit issued pursuant to the Marine Infrastructure Maintenance Act of 1996, the Marine Waterways and Boating Facilities Act of 2001, R.I. Gen. Laws Chapter 46-6.1 and the *Rules and Regulations for Dredging and the Management of Dredged Materials (250-RICR-150-05-2)*.

Additionally, any permit or license whereby DEM is acting as the permitting or licensing authority pursuant to its delegated authority under federal law is specifically exempted from the EFSB's jurisdiction. To the extent that the proposed Facility may require additional permits, licenses, approvals, etc. from DEM pursuant to its delegated authority under federal law which are not listed above, DEM expressly reserved its jurisdiction.

⁸ EFSB Order No. (Issued April 26, 2021).

II. Advisory Opinions

- i. *Impact on the vegetative community, fish and wildlife that will be caused by disruption of the habitat.*⁹

Background

The opinions provided below pertain only to activities within Rhode Island, including state waters. Activities occurring in federal waters are under the jurisdiction of the Bureau of Ocean Energy Management (BOEM). The DEM provides comments to BOEM on offshore activities including installation, operation, and decommissioning of wind turbine generators and inter-array cables through the National Environmental Policy Act (“NEPA”). DEM also serves as a cooperating agency to BOEM on the Revolution Wind review under NEPA.

According to the Construction and Operations Plan (COP) submitted by Revolution Wind to BOEM on April 29, 2021, Revolution Wind is proposing to install up to two high voltage alternating current (AC) submarine export cables (275 kV each), buried to a target depth of 4 to 6 feet below the seabed. The 23 miles of submarine cables in state waters will be installed via hydraulic plow (i.e., jet-plow), mechanical plow, mechanical dredging (e.g., mechanical cutter), or similar technology for displacing sediments to allow for cable burial. The cables will be 11.8 in. in diameter, with an installed disturbance width (corridor width per cable) of 131 ft. Therefore, the total area of disturbed benthic sediments in Rhode Island state waters is approximately 365.2 acres. Landfall installation will occur via horizontal directional drilling (HDD) into Quonset.

Onshore activities may include a landfall work area up to 3.1 acres at Quonset Point. Six underground transmission circuits will be installed within a single corridor up to 1 mile in length. The cables are anticipated to be 5.1 in. in diameter with a burial depth between 3 and 6 feet below ground level. The temporary ground disturbance of installing the two cables on land, including

⁹ For a list of literature cited see Appendix A.

larger areas of disturbance at Splice Vaults, is approximately 3.1 acres.

Vegetative Community

As previously indicated, CRMC will be the lead agency for reviewing any impacts that may occur within wetlands. Consequently, to the extent that impacts to the vegetative community occur in wetlands those impacts will be addressed through CRMC's permitting process. Notwithstanding that CRMC is the lead agency regarding wetlands, the project narrative indicates that "The documented sickle-leaved golden aster population on the OnSS parcel will be protected during construction." However, it is unclear from Figure 4.3.1-7 Rare and Protected Species, which depicts a substation limit of work that extends up to and perhaps into one delimited patch of the species, that this is the case. No details are provided to support this assertion. Further, the persistence of this species post-construction is equally of concern but not addressed by the Applicant. It is unclear from the level of detail of the current proposal whether there will be permanent changes to site conditions in the vicinity of the sickle-leaved golden aster (*Pityopsis falcata*) that could impact its persistence on site (e.g., draining patterns, introduction of shade from buildings, etc.).

Further, where the planned substation expansion will bring the cable onshore, the Substation and ICF Limits of Work will need to provide a buffer area for the wetlands therein as required by regulation. The complex of freshwater wetlands in the area contains spotted salamanders, wood frogs, and fairy shrimp. As these wetlands fall within CRMC jurisdiction, CRMC will be the permitting agency and will address impacts to wetlands and set any permitting conditions.

Fish and Wildlife

Marine Species

As stated previously, 23 miles of submarine cables will be installed in state waters using a jet plow or similar technology. The installation process will directly disturb benthic habitats and suspend benthic sediments, while cable protection mattresses following installation may smother habitats. Construction and decommissioning of offshore wind farms may lead to loss of sediment and consequently, loss of habitats. During any construction, local water turbidity may increase, as suspended solids and contaminants within the sediments may be mobilized and transported by prevailing water movements. These mobilized sediments may also smother neighboring habitats of sessile species, as well as the living organisms themselves (Gill, 2005). Suspended sediment poses a threat to fish within the construction area, as it may physically clog their gills and limit oxygen intake (Lake & Hinch, 1999). Larval states are more vulnerable than adult life history stages due to more limited mobility, as well as larger gills and higher oxygen consumption in proportion to body size (Auld & Schubel, 1978; Partridge & Michael, 2010). Sediment dispersal may also smother eggs and benthic suspension feeders by clogging the feeding or respiratory apparatus. Some benthic epifauna and deep-burrowing infauna may also be unable to escape burial by displaced sediment. While sedimentation events are generally brief, seabed communities may be greatly altered and take years to recover (Maurer et al., 1986). Avoidance of sensitive benthic habitats is therefore essential, as these habitats provide fish with spawning, feeding, nursery, and migration grounds, as well as refuge from predators. Habitat avoidance and potential impacts will be evaluated through the dredge permitting and water quality certification process.

Time of year restrictions for construction in State Waters will be required to minimize impacts to winter flounder (*Pseudopleuronectes americanus*), whelk (*Busycon carica* and

Busycotypus canaliculatus), and quahog (*Mercenaria mercenaria*) spawning, as well as anadromous species such as Alewife (*Alosa pseudoharengus*), Blueback Herring (*Alosa aestivalis*) and American Shad (*Alosa sapidissima*) spawning and emigration. The National Oceanic and Atmospheric Administration's (NOAA) Essential Fish Habitat (EFH) description for winter flounder eggs and previous DEM Division of Marine Fisheries (DMF) ichthyoplankton survey work suggests that winter flounder spawning is likely greatest north of the COLREG line, where much of the construction will occur. Consistent with other dredging projects in state waters, prior to cable laying shellfish resources within the cable corridor will need to be surveyed, and if deemed necessary by the DMF, relocated from the area prior to cable laying.

HDD will be used to install the cable at landfall, which will result in less benthic disturbance than an open cut method. Utilization of the HDD method should reduce the likelihood of not achieving target burial depth at the landfall site, which would in turn reduce the likelihood of extended construction timelines to meet cable burial requirements. HDD will also situate the cable deeper beneath the seabed than will jet plowing, which will also serve to reduce the electromagnetic field (EMF) strength that fish and wildlife are exposed to near the landfall site.

While the construction phase presents the greatest potential for habitat disruption, the operational phase will introduce an anthropogenic electromagnetic field from the submarine cables. Most previous studies on electromagnetic fields have focused on direct current (DC) cables, while the cables proposed in the U.S. have all been alternating current (AC). DC and AC cables should not be considered comparable, as fish may perceive static and alternating magnetic fields differently (Rommel & McCleave, 1973b). The installed AC cables will transmit electricity from the Revolution Wind Farm to the mainland; the flow of electrons through the cable will generate both an electric and a magnetic field. Shielding on the cables will minimize the electric field from

being detected by marine species, but cannot retain the magnetic field, which induces a secondary electrical field.

Species of elasmobranchs like smooth dogfish (*Mustelus canis*) and blue sharks (*Prionace glauca*), as well as other fish including sea lamprey (*Petromyzon marinus*), American eel (*Anguilla rostrata*), and Atlantic salmon (*Salmo salar*) are all thought to be able to sense electric fields at low levels (Heyer et al., 1981; Kalmijn, 1982; Rommel & McCleave, 1973a). In addition, recent research has shown that other commercially valuable species including American lobster (*Homarus americanus*), little skates (*Leucoraja erinacea*), and Brown crab (*Cancer pagurus*) show behavioral and physiological responses to electromagnetic fields (Hutchison et al., 2020b; Scott et al., 2018).

It is presently unknown whether behavioral changes will result from detected AC electromagnetic fields, though behavioral responses of American lobster (magneto-sensitive) and little skates (electro-sensitive) were documented in response to DC electromagnetic fields emitted by two high-voltage DC cables. Researchers noted a striking increase in foraging/exploratory behavior in skates, and a more subtle exploratory response in lobsters in response to the cables (Hutchison et al., 2020b; Hutchison et al., 2018). Brown crab have also been found to be more attracted to EMF-exposed shelter as compared to controls and were documented to have a physiological response (Scott et al., 2018). In contrast, Taormina et al. (2020) found that European lobsters' (*Homarus gammarus*) ability to find shelter and exploratory behavior were not influenced by anthropogenic magnetic fields. Hutchison et al., (2018) also found that HVDC cables did not present a barrier to movement for American lobster or little skate, though exploratory behaviors did change. At this time, studies on benthic invertebrates and EMF have provided variable, and

sometimes contradictory, results, suggesting that additional research and better alignment of methods (e.g., exposure levels) is needed (Hutchison et al., 2020b).

The impacts of induced electric fields are expected to be greater for cartilaginous fish because they use bioelectric signals to detect their prey (Bailey et al., 2014; Bergström et al., 2014; Gill, 2005; Gill & Kimber, 2005). Other fish may also be affected by magnetic field interference with their capacity to orient in relation to the geomagnetic field; potentially disturbing fish migration patterns (Metcalf et al., 2015).

Furthermore, protected species including sea turtles and marine mammals may be able to detect buried electrical cables; however, directed studies on protected species are limited. Sea turtles use magnetic sensitivity for orientation and navigation. Potential behavioral changes to sea turtle navigation due to the AC electromagnetic fields associated with buried electrical cables are poorly understood at this time (e.g., Putman et al., 2015). Some of these protected species are also vulnerable to risk of entanglement or collision with construction equipment (Inger et al., 2009) and disruption of navigation or possible stranding caused by cable-introduced electromagnetic fields (Kirschvink et al., 1986). This is especially important for endangered species, including the critically endangered North Atlantic Right Whale (*Eubalaena glacialis*), as cetaceans (whales, dolphins, and porpoises) may be susceptible to EMF-related navigational disruptions and behavioral changes (Gill, 2005; Kuznetsov, 1999). Translating disjointed knowledge about individual-level EMF effects into population level-impacts remains a challenge (Boehlert and Gill, 2010) and Hutchison et al. (2020a) argue that our current understanding of sensory abilities and responses for a variety of species (at varying levels of exposure) is limited. As such, further context-relevant studies are needed to address research gaps.

Waterbirds

The area adjacent to and including the Revolution Wind project contains important habitat for common loons (*Gavia immer*) (Flanders et al. 2015 and Winiarski et al. 2014 & 2014) and sea ducks (Flanders et al, 2015, Loring et al. 2014 and Meattey et al. 2019). Additionally, the 23 miles of cable will pass through a portion of the Narragansett Bay, an area that supports many wintering waterfowl. Between 2006 and 2010, observers recorded an average of $20,062 \pm 3393$ individuals in the bay during winter waterfowl surveys (McKinney et al. 2015). Increased boat traffic, particularly in waters less than 20 meters, can impact foraging success for sea ducks (Loring et al. 2014). Common loons are not restricted to shallow near shore waters for foraging and are piscivorous, feeding primarily on fish (Schwemmer et al. 2011). Increased boat traffic may impact loon food availability through the displacement of fish (Becker et al. 2013). Loons have also been recorded in significantly lower numbers in areas of high boat traffic (Schwemmer et al. 2011). Energy expended while escaping boat traffic can result in less time spent feeding. To compensate for this, birds must increase feeding times and/or rates above normal (Schwemmer et al. 2011). This is particularly difficult for species like loons and sea ducks that are limited by diving time (Guillemette et al. 1992). Repeated disturbance that impacts time spent feeding may result in decreased fitness, and indirectly, survival.

From April to August, Islands within the Narragansett Bay support colonial nesting waterbirds, such as glossy ibis, great egret, snowy egret, black-crowned night heron, little blue heron, great blue heron, double-crested cormorant, great black-backed gull, herring gull, common tern and American oystercatcher (Enser 1992). An increase in disturbance from boat traffic can decrease reproductive success, cause nest abandonment, premature fledging and a decrease in foraging success. Recommended set-back distances of any human disturbance are at least 100m

for herons and gulls; and at least 180m for common tern colonies and nesting American oystercatchers (Bratton 1990; Rodgers & Smith 1995; Rodgers & Smith 1997; Chatwin et al. 2013). Additionally, horseshoe crab eggs are a food source for migratory shorebirds each spring along the Atlantic coast (Niles et al. 2009). Although, migratory shorebirds are less reliant on horseshoe crab eggs as a food source in New England compared to the Delaware Bay (Beekey et al. 2013). It is still recommended to minimize any potential impacts to horseshoe crab populations, as the New England population is at an elevated risk for further declines (Smith et al. 2016).

The Construction and Operations Plan (COP) indicates in several places that Revolution Wind will comply with FAA and USCG requirements for lighting while using lighting technology (e.g., low-intensity strobe lights) that minimize impacts on avian and bat species. Yet, additional lighting measures beyond minimizing to the amount necessary are not proposed for bats or any other species besides birds in the offshore environment. Specific to the onshore component, the COP indicates only that in general, the lighting will be off at night unless there is work in progress or lights are left on for safety and security purposes. As during construction of the Onshore Facilities, lighting at night has the potential to temporarily displace bats and/or disrupt normal behavior. The use of lighting at night is expected to be infrequent. The impacts lighting may have on temporary bat displacement and/or behavior are considered indirect and long-term.

Avoiding artificial light at night is the best course of action, as the Applicant has documented in its COP some of the impacts that lighting can have on invertebrate communities and insectivore foraging. Particularly given that security-related night lighting needs are not yet determined, however, and that the evidence suggests detrimental impacts of artificial light at night across many taxa (Sanders et al. 2021), it is prudent to ensure that all lighting proposed at the OnSS and ICF is dark-sky compliant. That is, in addition to only having lights on when and where they

are needed, lighting ought to be no brighter than necessary, be fully shielded, and minimize blue light (known to affect the Circadian rhythm of mammals).

Summary and Conclusion

Impacts to the vegetative community for this project are primarily confined to wetlands which are under CRMC's jurisdiction. Although DEM has highlighted areas where further information is needed, ultimately it will be CRMC's permitting process which determine the extent and acceptability of any proposed impacts to the vegetative community.

Impact to marine species are difficult to quantify. There will be impacts to the benthic environment resulting from the cable laying. However, those impacts will be addressed through a Dredging permit and the Water Quality Certification.

In addition to impacts during the construction phase, which will generally be limited in duration, there will be impacts during the operational phase of the Project. The operational phase impacts consist of electric and magnetic fields generated by the AC current in the buried cable. While electric fields will be reduced to some extent by shielding, the shielding will not reduce the magnetic fields generated. Impacts from AC current on various marine species are not well understood. What can be stated for certain is there will be impacts to marine species from the magnetic field generated by the cable. What those impacts are and the extent of those impacts are unknown and any approval should contain a requirement to conduct scientific studies to ascertain those impacts.

Waterbirds also have the potential to be impacted by the project. Increased boat traffic impacts the foraging ability of various birds. Consequently, boat traffic should be limited to the extent feasible during the construction phase.

Further, the construction of the landside infrastructure will introduce additional light at night which will potentially impact various invertebrate communities and insectivore foraging. Current plans do not state with specificity the nighttime lighting measures to be implemented. DEM would request that the Applicant be required to utilize measures that reduced the impacts of artificial lights at night to the extent feasible, such as the use of measures that lower the illumination intensity, control the direction of emitted illumination, and minimize the spectrum of light.

Respondents:

**Julia Livermore
Deputy Chief
Division of Marine Fisheries**

**Jennifer Kilburn
Principal Wildlife Biologist
Division of Fish & Wildlife**

Testimony Topic:

Marine Species

Waterbirds

ii. *whether the Facilities will present an unacceptable harm to the environment*

DEM is charged with determining whether projects and activities present and acceptable harm to the environment through the various permits, licenses, and reviews authorized under the Rhode Island General Laws and associated rules and regulations promulgated thereunder. Projects and activities determined to be compliant with the thresholds and standards set for acceptability in those various rules and regulations, in the context of harm to the environment, are approved, often through the issuance of permits. Conversely, projects and activities that haven an unacceptable level of harm to the environment either result in denial of permits and approvals for the proposed project or activity, or enforcement actions to stop and mitigate the harm for conditions not considered under an application before DEM.

The Facility is subject to the following permitting actions separate and apart from the EFSB process:

- Freshwater wetlands permit(s) issued pursuant to the Freshwater Wetlands Act, R.I. Gen. Laws § 2-1-21, which fall under CRMC’s jurisdiction for this Project;
- Water Quality Certification pursuant to the authority delegated to DEM by EPA pursuant to the Clean Water Act, 33 U.S.C. sec. §§ 1251-1387, R.I. Gen. Laws § 46-12-1 *et seq.*; and
- Rhode Island Pollution Discharge Elimination System permit for point source discharge, issued pursuant to authority delegated to DEM by EPA pursuant to the Clean Water Act, 33 U.S.C. sec. §§ 1251-1387.¹⁰ (*In accordance with the General Permit, Rhode Island Pollution Discharge Elimination System Stormwater Discharge Associated with Construction Activity, Section 1.D.3.c, the CRMC Assent will provide the authorization for any point source discharges from this project.*)
- Dredge Permit issued pursuant to the Marine Infrastructure Maintenance Act of 1996, the Marine Waterways and Boating Facilities Act of 2001, R.I. Gen. Laws Chapter 46-6.1 and the *Rules and Regulations for Dredging and the Management of Dredged Materials (250-RICR-150-05-2)*.

¹⁰ EFSB Order No. (Issued April 26, 2021).

The judgment as to whether the Facility, as a whole, will present an unacceptable harm to the environment will depend on the analysis and decision on each and every permit application required under these laws and regulations. Failure to receive ANY of these required permits would represent a determination by DEM that the proposed Facility presents an unacceptable harm to the environment.

Dredge Permit

The Applicant is required to obtain a Dredge permit pursuant to the Rules and Regulations for Dredging and the Management of Dredged Materials (250-RICR-150-05-2.1) for work with burying the cable. Specifically, based on the Application the proposed HDD exit pits are the only work that qualifies as “dredging” and therefore requires a permit.

A dredging permit constitutes a Water Quality Certificate under Section 401 of the Federal Clean Water Act and is issued under Rhode Island’s federally delegated authority under the Clean Water Act. As such, the Dredge permit falls outside of the EFSB’s jurisdiction.

The Applicant’s application for a dredge permit was received on July 30, 2021 and is currently under review. There are no substantive comments on the dredge application, however the review is in its infancy. RIDEM will review the application jointly with CRMC prior to issuing a decision on the permit.

Site Remediation

The Project proposes the construction of receiving substation on property that formerly operated as a dump. The Camp Avenue Dump, located on Plat Map 179, and Lots 1 and 30 off Camp Avenue are owned by the RI Commerce Corporation and are the site of the former Camp Avenue Dump operated by the United States Navy during the active years of the Quonset Naval

Air Station. The site was closed by the Army Corp of Engineers-New England Division under the Formerly Used Defense Site program and the DEM. In October 1996, a Memorandum of Understanding was entered into concerning site closure and a Remedial Decision letter issued in May 1997. The site was closed with an approved soil cap and an approved Environmental Land Usage Restriction (ELUR/SMP) and Soil Management Plan recorded in the municipality land evidence records against the property deed on February 9, 2018. The ELUR/SMP prohibits residential use of the property, consumption of groundwater for potable purposes and only allows construction or excavation on the site by approval of RIDEM. The current proposal to construct the receiving substation for the Revolution Wind project will not affect the previously implemented site closure.

Further, TNEC Davisville Substation, located on Plat Map 179, Lot 5, is an existing electrical substation that was constructed on the land adjacent to the former Camp Avenue Dump and was part of the former United States Naval Quonset Point Naval Air Station. DEM entered into a Memorandum of Understanding in October 1996 for the proposed sale and construction of the electrical substation and issued a Remedial Decision Letter on May 1, 1997 for the project. In June 2005, an Environmental Land Usage Restriction (ELUR) and Soil Management Plan (SMP) was recorded in the municipality land evidence records. The ELUR/SMP prohibits residential use of the property, consumption of groundwater for potable purposes and only allows construction activities on the property with the approval of DEM and TNEC. The current proposal calls for the construction of an inter-connection substation on a portion of the property which will link the receiving substation to the existing TNEC Davisville Substation. The proposed inter-connection substation will not affect the site.

Summary and Conclusion

Whether the Facility presents an unacceptable harm to the environment largely turns on whether it meets the standards for the various permits and approvals necessary for compliance with the applicable rules, regulations and statutes that the DEM is tasked with enforcing. In those laws and regulations, standards are established that govern how large of an environmental impact is acceptable.

For those regulatory permitting processes that are exempt from the EFSB review the Applicant must submit separate applications and outline in detail the environmental impacts specific to each activity. In the permit application, the Applicant must demonstrate that they will meet all the regulatory thresholds required in the applicable regulations. DEM reviews the applications in detail in accordance with well-established regulatory processes. If DEM finds that the Applicant has complied with the requirements of the applicable regulations, a permit will be issued for that proposed activity. The issuance of a permit indicates that DEM has determined that the nature and scope of the proposed activities are within standards for acceptable environmental impact established by State and federal laws and regulations.

DEM personnel with knowledge and expertise in their respective fields are in the process of conducting reviews of the permit applications submitted for the Facility. While final decisions have not been rendered, review processes have not yet been completed, and the Applicant must still satisfy its regulatory burden of responding to any comments and deficiencies that may be identified on those applications; based on the information currently available to DEM it appears that it is possible for the Applicant to meet its regulatory burden for each permit. Should the Applicant follow through and meets those burdens it would receive permits under each of these programs for the Facility. To be clear, this in no way is meant to prejudge the outcome of the

ongoing permitting processes, but rather to indicate that if, upon the completion of the regulatory processes, the requisite environmental permits are issued, it is a formal declaration that the proposed facility has met the standards and criteria for acceptable harm to the environment as established in State and federal laws and regulations.

**Respondent: Terrence Gray
Acting Director**

Respondents:

**Jason McNamee.
Deputy Director for Natural Resources**

**Ron Gagnon
Administrator**

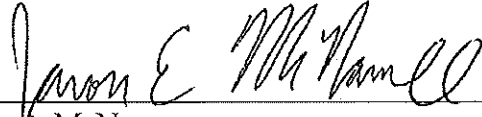
**Jeffery Crawford
Principal Environmental Scientist**

Testimony Topic:

**Overall Environmental
Impacts**

Dredge Permit

Site Remediation



Jason McNamee
Deputy Director for Natural Resources
235 Promenade St., 4th Floor
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CERTIFICATE OF SERVICE

I hereby certify that on August 26, 2021, I sent a true copy of the following to the Energy Facilities Siting Board via first class mail, postage pre-paid and electronic mail, and to the parties on the attached service list via electronic mail.



Christina A. Hoefsmit

Appendix A

Literature Cited

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