New Jersey Department of Environmental Protection ("Department")
Division of Land Resource Protection ("Division")

CAFRA, WATERFRONT DEVELOPMENT, COASTAL WETLANDS & FRESHWATER WETLANDS ENVIRONMENTAL REPORT

N.J.S.A. 13:19-1 et seq., N.J.S.A. 12:5-3 et seq., N.J.S.A. 13:9A-1 et seq. & N.J.S.A. 13:9B-1 et seq.

File No. 0000-21-0022.2 LUP240001 CAFRA IP
0000-21-0022.2 LUP240001 WATERFRONT DEVELOPMENT INDIVIDUAL IN-WATER PERMIT
0000-21-0022.2 LUP240001 FRESHWATER WETLANDS SPECIAL ACTIVITY TRANSITION AREA WAIVER- LINEAR DEVELOPMENT
0000-21-0022.2 LUP240001 COASTAL WETLANDS PERMIT

Applicant: Atlantic Shores Offshore Wind Project 1, LLC c/o Jennifer Daniels ("Applicant")
Project: Atlantic Shores Offshore Wind Project 1
Project Location: State Waters & Onshore
Atlantic Ocean within New Jersey jurisdictional waters off the coast of Atlantic City
Block: 1 Lots: 53, 54, 55, 56, 57, 58, 59 & 60
Block: 32 Lots: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 & 11
Block: 370 Lots: 1, 1.01, 2 & 2.01
Block: 473 Lot: 3
Block: 794 Lot: 1
Block: 795 Lots: 39, 40, 45 & 47
Block: 797 Lot: 11
Block: 830 Lots: 1, 5, 6, 7
Block: 832 Lots: 1 & 2
Block: 833 Lots: 1, 2, 3, 4 & 7
N/A, N/A – Rights-of-Way (ROWs)
Atlantic City, Atlantic County
Block: 2117 Lots: 1 & 20
Block: 2118 Lot: 10
Block: 2203 Lots: 4, 5, 6, 7, 8, 9, 10, 24, 25, 26 & 27
Block: 2302 Lots: 10 & 10.01
Block: 4301 Lot: 17
N/A, N/A – Rights-of-Way (ROWs)
Egg Harbor Township, Atlantic County
N/A, N/A – Rights-of-Way (ROWs)
Pleasantville City, Atlantic County
Project Engineer: Andre Thompson
Project Manager: Lindsey J. Davis

APPLICATION REVIEW TIMELINE

Mandatory Pre-Application Meeting Held: October 4, 2023
Application Received: February 1, 2024
Administrative Deficiency Issued: February 20, 2024
DEP Bulletin Notice of Application Receipt: March 6, 2024
Final Response Submitted to Address Administrative Deficiencies: March 7, 2024
Application Administratively Complete: March 7, 2024
Technical Review 20th Working Day: April 4, 2024
Newspaper Notice Publications:

- Press of Atlantic City on February 17, 20 & 22 of 2024

Waterfront Development Individual In-Water Permit 90 Day Decision Deadline: June 4, 2024
Waterfront Development Individual In-Water Permit Request for 30 Day Extension Received: May 17, 2024
Waterfront Development Individual In-Water Permit Extended Decision Deadline: July 4, 2024
CAFRA Complete for Public Hearing: April 4, 2024
Complete for CAFRA Public Hearing Letter Sent: April 17, 2024
Additional Information Request Letter Sent: May 2, 2024
Public Hearing Notice Documentation Submitted: May 8th, 9th and 10th, 2024
CAFRA Public Hearings Held:

- May 14, 2024 Virtual Hearing from 6pm to 9 pm
- May 28, 2024 In-Person Hearing from 5 pm to 8 pm at Central Regional High School in Bayville, New Jersey
- May 29, 2024 Virtual Hearing from 1 pm to 4 pm

Request made for a Coastal Wetlands Permit: April 26, 2024
Coastal Wetlands Permit Application Fee Received: May 6, 2024
Coastal Wetlands Permit Application Administratively Complete: May 6, 2024
Coastal Wetlands Permit Application Technical Review 20th Working Day: June 3, 2024
Coastal Wetlands Permit Application 90th Day Decision Deadline: August 3, 2024
Coastal Wetlands Permit Request for 30 Day Extension Received: July 11, 2024
Coastal Wetlands Permit Application 120th Day Decision Deadline: September 2, 2024

CAFRA Individual Permit Application Declared Complete for Final Review: June 13, 2024
CAFRA Individual Permit Application 90th Day Decision Deadline: July 27, 2024
CAFRA Individual Permit Request for 30 Day Extension Received: July 11, 2024
CAFRA Individual Permit 120th Day Decision Deadline: August 26, 2024

Request submitted for Withdrawal of the Waterfront Development Permit Application: June 19, 2024
Waterfront Development Permit Application Withdrawn: June 20, 2024

Waterfront Development Permit Application Resubmitted: June 26, 2024
Resubmitted Waterfront Development Permit Application Administratively Complete: June 26, 2024
20th Working Day for the Resubmitted Waterfront Development Permit Application: July 24, 2024
Resubmitted Waterfront Development Permit Application Technically Complete: As of June 26, 2024
90 Day Deadline for Resubmitted Waterfront Development Permit Application: September 23, 2024

Stormwater Information Submission: June 19, 2024 & July 16, 2024
Partial Information Submission: July 11, 2024
Partial Information Submission: July 24, 2024
Partial Information Submission: July 25, 2024
Partial Information Submission: July 31, 2024
Partial Information Submissions: August 5, 6 & 7, 2024
Additional Information Submission: August 16, 2024
Additional Information Submission: August 22, 2024

PROJECT DESCRIPTION & HISTORY – The project is the construction of the Atlantic Shores Offshore Wind Project 1 offshore wind farm (herein referred to as "Project 1") within Atlantic Shores Offshore Wind LLC's or Atlantic Shores's Bureau of Ocean Energy Management ("BOEM") Lease Area OCS-A 0499 off the coast of New Jersey. Project 1 consists of work within Federal waters, State waters, and onshore in New Jersey. However, only the work in New Jersey State waters and onshore is the subject of this State permit application.

The portion of Project 1 within Federal waters (referred to as "the Federal project" within this report) is located in a 54,175 acre (21,924 hectares) southwestern portion of the Lease Area with a 16,102 acre overlap area that could be utilized for a portion of the Federal project. The Federal project consists of a minimum of 105 and a maximum of 136 wind turbine generators ("WTGs"), up to five (5) offshore substations ("OSSs"), inter-array and/or inter-link cables, 1 permanent meteorological ("met") tower, and three (3) temporary meteorological and oceanographic ("metocean") buoys. The Federal project also includes the installation of electric transmission export cables extending east from the 3 nautical mile ("nm") New Jersey State jurisdictional limit to the Lease Area. The Federal project was determined to be consistent with the State's enforceable policies as outlined in the Division's April 1, 2024 Federal Consistency Certification (Division File# 0000-21-0022.1 CDT210001) and accompanying decision documents.

The work proposed under this State permit application for the portion of Project 1 within State waters and onshore within the CAFRA area includes the following activities (herein referred to as "the State project").

See Figures 1 & 2 below for a visual depiction of the State project.

Atlantic Ocean (within State waters)

- Utilizing jetting installation technology, such as controlled flow jetting or jet trenching, the installation of up to four (4) HVAC, 275 kV electric transmission export cables within a 3,300 foot to 4,200 foot cable corridor (referenced as the Atlantic Export Cable Corridor or Atlantic ECC), widening to 5,900 feet near the proposed Horizontal Directional Drill ("HDD") location for the proposed cables installation within the Atlantic Ocean extending east to the 3 nautical mile ("nm") State water jurisdictional limit. In general, the electric transmission export cables will be spaced approximately 328 feet apart, although the separation distance may range from approximately 164 feet to 820 feet with the 164 feet further decreasing as required in specific locations, including at the HDD exit pit. The electric transmission export cables are intended to be buried to a target depth of between 5 feet and 6.6 feet (1.5 to 2 meters) below the seabed. Auxiliary cable protection measures will be utilized if the target burial depths are not achieved in specific locations.

Cable Route Including Transition to Onshore

The route contains four (4) HVAC, 275 kv electric transmission export cables that begin at the State's 3nm jurisdictional boundary limit in the Atlantic Ocean, as described above, and extends onshore beneath the beach and dune system to a paved parking lot located between South Belmont Avenue and South California Avenue in Atlantic City, Atlantic County. The cable continues on land to the proposed Point of Interconnection ("POI") for the Cardiff Substation located in Egg Harbor Township, Atlantic County. The route is proposed as follows:

- The HDD of the four (4) HVAC, 275 kv electric transmission export cables beginning at the HDD point off the coast of Atlantic City, Atlantic County transversing beneath the beach and dunes to a point within the paved parking lot located between South Belmont Avenue and South California Avenue in Atlantic City, Atlantic County. The landfall location will include four (4) underground transition vaults, one for each electric transmission export cable. The distance between the HDD point is approximately 2,950 feet or 899.2 meters.
- The open cutting/trenching of the electric transmission export cables along two (2) independent routes through Atlantic City to a common point at the southeast corner of Pete Pallitto Field. The first route exits the landfall location and makes a left onto Pacific Avenue. The route takes a right turn on Iowa Avenue continuing on Iowa Avenue until a left turn at Fairmount Avenue is made.

From Fairmount Avenue, the first route will terminate at the common point in Pete Pallitto Field referenced above. The second route exits the landfall location and makes a left onto Pacific Avenue. The route takes a right turn on Iowa Avenue continuing on Iowa Avenue until a left turn at Atlantic Avenue is made. The route travels along Atlantic Avenue until a right turn on Sovereign Avenue is made. The route travels on Sovereign to the common point in Pete Pallitto Field referenced above.

- The electric transmission export cables will continue via HDD method of installation beneath Inside Thorofare. The cables will exit the HDD installation within Bader Field on the opposite side of Inside Thorofare. The length of the HDD is approximately 1,260 feet or 384 meters.
- The electric transmission export cables, being installed via open-cut and/or trenching, will then continue from Bader Field onto the Black Horse Pike (U.S. Route 40 & 322) for approximately 0.5 miles where it will turn north onto Bader Field.
- From Bader Field, the electric transmission export cables will be installed via HDD underneath Great Thorofare for a length of approximately 2,040 feet or 590 meters exiting on a property known as Block 830, Lot 6 in Atlantic City.
- From Block 830, Lot 6, the electric transmission export cables will be installed via HDD underneath Great Thorofare for a length of approximately 3,480 feet or 1,061 meters to a marina property located on Block 795, Lot 45 in Atlantic City.
- The electric transmission export cables will cross the Black Horse Pike and terminate at a property known as Block 833, Lot 3 in Atlantic City for the fourth HDD installation.
- From Block 833, Lot 3, the electric transmission export cables will be installed via HDD underneath Great Thorofare and the adjacent coastal wetlands for a length of approximately 3,360 feet or 1,024.1 meters exiting on a property known as Block 4301, Lot 23 in Egg Harbor Township.
- The electric transmission export cables will continue on the Black Horse Pike for approximately three (3) miles and veer left onto Delancy Avenue in Egg Harbor Township.
- The electric transmission export cables will continue on Delancy Avenue, transversing a private property known as Block 2118, Lot 10, and will continue on Delancy veering right onto Old Egg Harbor Road and then left onto Hingston Avenue.
- The electric transmission export cables will continue along Hingston Avenue to the location of the proposed Fire Road substation in Egg Harbor Township. At the substation, the electric transmission export cables' transmission voltage will be stepped down from 275 to 230 kV for interconnection at the Cardiff Substation.
- The electric transmission export cables will exit the Fire Road substation onto Fire Road and then veer left onto the Black Horse Pike. The electric transmission export cables will continue along the Black Horse Pike and underneath the Garden State Parkway. This is where CAFRA jurisdiction and the limits of the State project end.
- Within New Jersey Pinelands Commission jurisdiction, the electric transmission export cables will continue on the Black Horse Pike transversing a private property known as Block 2302, Lot 10 in Egg Harbor Township and continue onto West Jersey Avenue for approximately 2 miles. The electric transmission export cables will then veer right and then left onto Reega Avenue for approximately 1.5 miles. The cables then make a right turn onto Roberta Avenue and terminate at the Cardiff Substation POI.

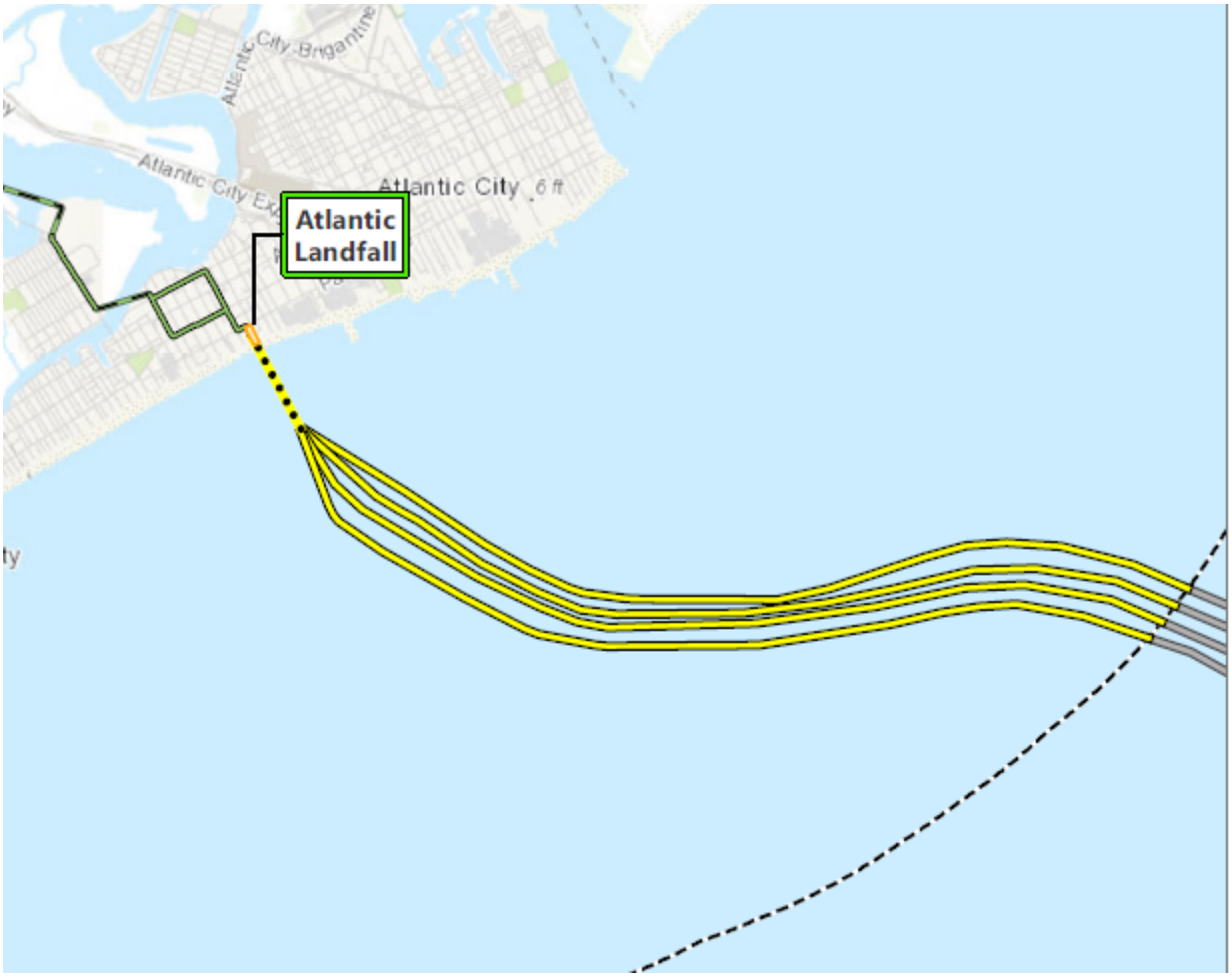
Onshore Substation

The construction of an onshore unmanned substation is proposed on an approximately 20 acre parcel located along Fire Road in Egg Harbor Township, Atlantic County. The substation construction includes the construction of all necessary equipment and infrastructure for the substation operation, stormwater management measures, driveways, and internal access roads.

Additional Activities

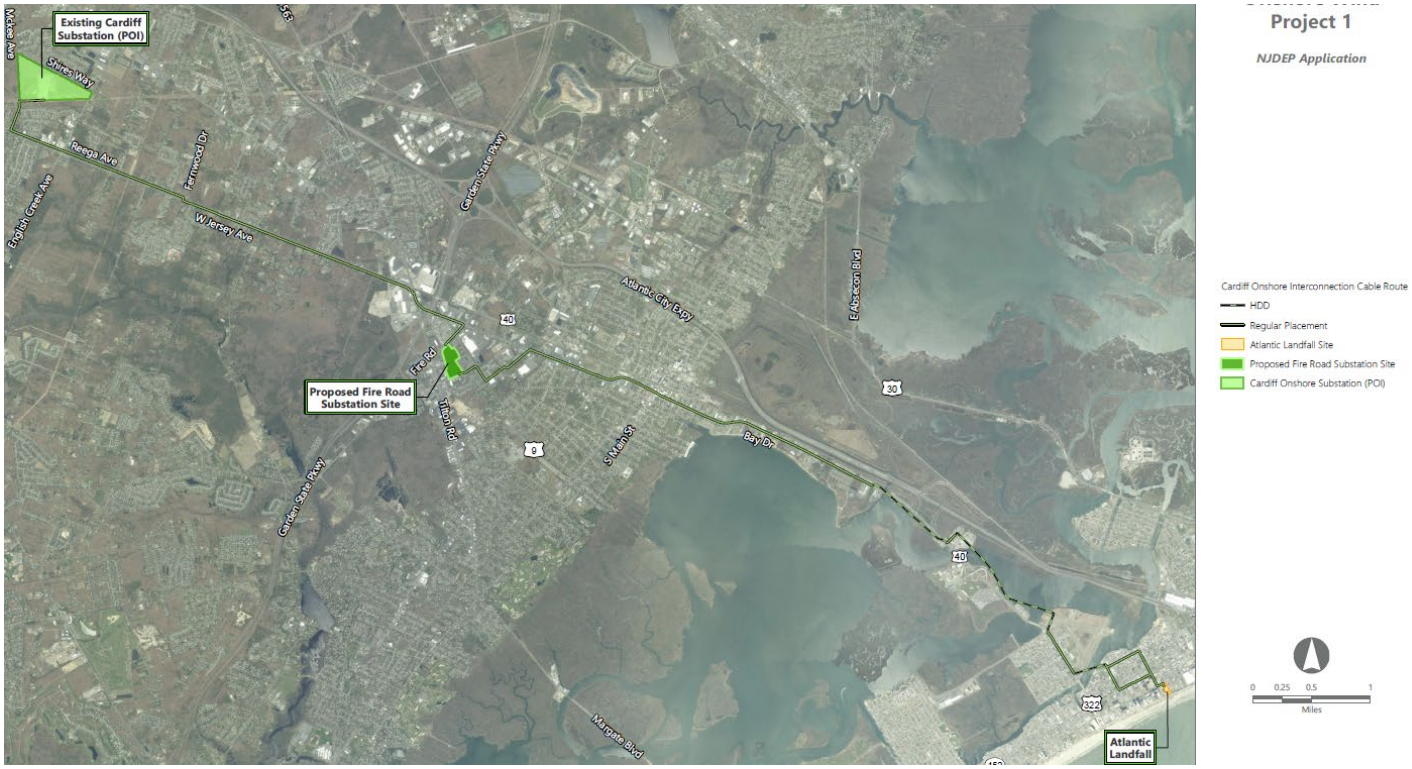
- Associated infrastructure along the cable routes including manholes, duct banks, and transition vaults.
- Cable protection measures, where necessary, within New Jersey State waters of the Atlantic Ocean.
- Electric transmission export cable installations outside the CAFRA jurisdictional boundary and within jurisdiction of the New Jersey Pinelands Commission are under review by the Commission. These installations, as described above, extend west from the New Jersey Garden State Parkway to the POI for the Cardiff Substation located in Egg Harbor Township, Atlantic County.

Figure 1



Depiction of the Project 1 work in State waters of the Atlantic Ocean. The yellow dotted line represents the nearshore HDD of the electric transmission export cables, the solid yellow lines represent the four (4) electric transmission export cables in State waters, and the gray lines represent the four (4) electric transmission export cables in Federal waters. The 3 nautical miles ("nm") jurisdictional boundary separating State and Federal waters is represented in this figure by the dashed black line.

Figure 2



Depiction of the Project 1 onshore work which includes electric transmission export cable installations and construction of a new substation on a parcel located along Fire Road in Egg Harbor Township, Atlantic County. Please be advised, the State project ends at the limits of CAFRA jurisdiction at the New Jersey Garden State Parkway. The remainder of the electric transmission export cable route is subject to review by the New Jersey Pinelands Commission.

This report addresses compliance with all applicable Coastal Zone Management Rules at N.J.A.C. 7:7-1.1 et seq., Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A-1.1 et seq. and Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-1.1 et seq., for the State project only.

Other local, State and Federal approvals are required for the State project, including but not limited to approvals from the United States Army Corps of Engineers ("USACE"). Approvals from the New Jersey Pinelands Commission are needed for the portion of the electric transmission export cables outside of CAFRA jurisdiction and within jurisdiction of the Commission. In accordance with N.J.A.C. 7:7-27.2(c)3, the permittee must obtain all Federal, State, and local approvals prior to commencement of regulated activities authorized under a coastal permit. This will be a condition of the issued permit.

A condition will be included in the State permit indicating that the permittee is responsible for compliance with N.J.A.C. 7:7-27.2 Conditions that apply to all coastal permits for the work regulated under CAFRA, the Waterfront Development Law, and the Wetlands Act of 1970.

Under Section 401 of the Clean Water Act, a federal agency may not issue a permit or license to conduct any activity that may result in any discharge into waters of the United States. As the work under the State permit application involves a discharge in wetlands and navigable waters, a Water Quality Certificate is being issued concurrent with the State permit.

The installation of the electric transmission export cables within State waters requires a Tidelands utility license. The application for the necessary Tidelands utility license is pending under file# 0000-21-0022.2 TDI240001. A condition will be added to the State permit requiring the Applicant to obtain the required Tidelands license prior to construction activities in State waters.

PROJECT 1 PUBLIC INTEREST DISCUSSION

It is well-settled in the scientific community that climate change is primarily driven by increased atmospheric levels of greenhouse gas concentrations. According to the 2020 New Jersey Scientific Report on Climate Change (NJDEP, 2020), human activities are now the primary cause of climate change, particularly greenhouse gas emissions from the burning of fossil fuels which, combined with land use changes like deforestation, have increased atmospheric carbon dioxide concentrations by more than one third over the past century. As discussed in the Report, sea level rise is occurring throughout the world, and is an indicator of Earth's increasing temperature (NJDEP, 2020).

New Jersey has already been disproportionally affected by climate change, sea level rise in particular, at a rate that is more than two times the global average (Kopp et al. 2019). According to a 2019 report of the New Jersey Climate Change Alliance Science and Technical Advisory Panel (STAP), by 2050, there is a 50 percent chance that sea-level rise will meet or exceed 1.4 feet and a 17 percent chance it will exceed 2.1 feet (Kopp et al. 2019). Under a moderate emission scenario, those levels increase to 3.3 and 5.1 feet by the end of the century (Kopp et al. 2019). These impacts pose a threat to New Jersey's communities, infrastructure, economy, natural resources and way of life.

In addition to impacts to communities and infrastructure, climate change is known to increase temperatures, alter ocean acidity, raise sea levels, and is expected to increase the frequency and intensity of storms. Increased temperatures can alter habitat, modify species' use of existing habitats, change precipitation patterns, and increase storm intensity (USEPA 2022; NASA 2023; Love et al. 2013). As reported by BOEM's Final Environmental Impact Statement ("FEIS") for the Atlantic Shores South Projects, which includes Project 1, an increase of the ocean's acidity has numerous effects on ecosystems including reducing available carbon that organisms use to build shells and causing a shift in food webs offshore (USEPA 2022; NASA 2023; Love et al. 2013). The increased magnitude or frequency of storms, shoreline changes, ocean acidification, and water temperature changes can impact commercial fisheries, which contribute more than $1 billion dollars to the State's economy (NJ Sea Grant Consortium) and for-hire recreational fishing. The New Jersey commercial and recreational economies reliant on marine species that are vulnerable to the effects of climate change could be adversely affected. Furthermore, New Jersey coastal communities with fishing businesses that have infrastructure near the shore could be adversely affected by sea level rise.

The New Jersey Global Warming Response Act, N.J.S.A. 26:2C-38 et seq. (GWRA), first passed in 2007 and since amended to enhance the State's response to climate change, established a fixed goal of reducing statewide greenhouse gas emissions to eighty percent below 2006 levels by the year 2050, and directed the NJDEP to routinely report on the State's progress in reducing emissions and identify pathways for meeting the 2050 goal.

Multiple state and federal assessments have made it clear that, without permanent reductions in greenhouse gas emissions within the next several years, New Jersey's people and their property will experience significant adverse effects of climate change, including rising sea-levels, increases in temperature and precipitation causing periods of both intense storms and drought, and chronic inundation from flooding (NJDEP 2020a; NJDEP 2022; USGCRP 2023). These reports make it clear that, while future emissions reductions cannot avoid these nearer-term impacts hastened by our past emissions,

deeper and continuous emissions reductions will protect and improve the state's longer-term outlook by helping to avoid more drastic adverse impacts.

Without steep reductions moving forward, for example, New Jersey's sea-levels could rise by as much as 5.1 feet by the year 2100 and 8.3 feet by the year 2150 under even a moderate emissions scenario (Kopp, 2019), with the potential to erode large land areas of the state.

The energy generating sector is the second largest contributor to the State's greenhouse gas emissions inventory. The majority of in-state energy sector emissions are from natural gas fired electric generating units (84% in 2021), with lesser amounts arising from coal and solid waste incineration (NJDEP, 2024). Coal-fired generation ceased in the state in 2023.

To both meet statutory emissions reductions requirements and avoid more drastic adverse climate impacts to the State's communities and economy, emissions from electric generation must be fully decarbonized by 2050. (NJDEP 2020a, NJDEP 2020b). Planning assessments have determined that renewable power supply must increase from a present-day level of 4.8 GW (Gigawatts) to almost 16 GW by 2030, through the addition of 10.9 GW of renewable energy (NJ BPU 2024; NJ BPU 2019, NJDEP 2020b). It is anticipated this will include development of 3.5 GW of offshore wind, with the balance supplied by 7.4 GW of in-state solar and renewable energy resources from the PJM region (NJBPU 2019, NJDEP 2020b).

By 2050 total State renewable energy capacity must reach approximately 60.5 GW, comprised of 32 GW of solar, nearly 11 GW of offshore wind, and almost 18 GW of firm capacity (e.g., low-carbon or carbon neutral fuels) to meet reliability requirements (NJBPU 2019, NJDEP 2020b).

Offshore wind energy production as an alternative to the burning of fossil fuels reduces global, national, and regional greenhouse gas emissions, advances renewable energy, improves resiliency for communities in New Jersey and the extended region, and improves energy efficiency throughout the region, as well as supporting national energy policies. Offshore wind energy production will aid in combating the adverse effects of climate change discussed above by reducing the demand for energy sources which produce substantial greenhouse gas emissions. The alleviation of these adverse impacts of climate change, such as increased temperatures, alteration of ocean acidity, rising sea levels, and increases in intensity and frequency of storms, further reduces adverse impacts on coastal and environmental resources.

Furthermore, a cumulative approach to combatting climate change through a reduction in greenhouse gas emissions by development of clean energy sources, such as offshore wind energy production, will reduce adverse environmental impacts on a national level and supports achievement of the goals outlined in the national policy discussed in detail above.

Mitigating the adverse impacts of climate change is in the national, regional, and State of New Jersey's public interest and Project 1 will contribute to ameliorating these effects.

Pursuant to the New Jersey Offshore Wind Economic Development Act ("OWEDA"), on June 30, 2021, the New Jersey Board of Public Utilities ("NJBPU") awarded Project 1 an Offshore Renewable Energy Credit ("OREC") allowance to deliver 1,510 MW of offshore renewable energy into the State of New Jersey (NJBPU Docket No. QO21050824, In the Matter of the Board of Public Utilities Offshore Wind Solicitation 2 for 1,200 to 2,400 MW – Atlantic Shores Offshore Wind Project 1, LLC). Project 1 would contribute to New Jersey's goal of 11 gigawatts (GW) of offshore wind energy generation by 2040 as outlined in New Jersey's Governor's Executive Order No. 307, issued on September 22, 2022. Project 1 is intended to contribute substantially to the region's electrical reliability and help New Jersey achieve its renewable energy goals.

Therefore, based on the foregoing, Project 1, which includes the State project subject of this permit application and described above, is in the public interest.

JURISDICTION

The overall project consisting of an offshore wind farm and associated offshore and onshore infrastructure is an industrial development per N.J.A.C. 7:7-1.5, which defines industrial development as a development that involves a manufacturing or industrial process, and includes, among other things, electric power production. A portion of the State project proposes the construction of a new substation as well as the installation of electric transmission cables upland of the mean high water line ("MHWL") beneath beaches and dunes in the CAFRA area, so it requires a CAFRA permit in accordance with N.J.A.C. 7:7-2.2(a)1, 2 and/or 5iii. The Applicant has applied for a CAFRA Individual Permit for the proposed activities.

The State project also proposes work below the MHWL of several tidal waterways. Therefore, in accordance with N.J.A.C. 7:7-2.4(a)3i, a Waterfront Development permit is required for the State project. The Applicant has applied for a Waterfront Development Individual In-Water Permit for the proposed activities within Waterfront Development jurisdiction.

The State project will also result in the installation of electric transmission electric cables beneath areas of mapped coastal wetlands. Due to the crossing of mapped coastal wetlands, the Applicant has applied for a Coastal Wetlands Permit for the proposed activities.

Furthermore, State project proposes work within freshwater wetlands and/or unmapped coastal wetlands transition areas. Therefore, in accordance with N.J.A.C. 7:7A-2.3, a Freshwater Wetlands permit is required for the State project. The Applicant has applied for a Freshwater Wetlands Special Activity Transition Area Waiver for Linear Development for the proposed activities.

Applicable standards of the Flood Hazard Area Control Act Rules (N.J.A.C. 7:13 –1.1 et seq.) are being addressed for compliance within the review of the CAFRA Individual Permit, Waterfront Development Individual In-Water Permit and/or Coastal Wetlands Permit applications.

As mentioned above, the onshore work associated with Project 1 also includes work within the jurisdiction of the New Jersey Pinelands Commission. These activities will occur outside of the CAFRA jurisdictional area. The activities within the jurisdiction of the New Jersey Pinelands Commission are being reviewed by the Pinelands Commission under their pending permit application.

PROJECT PLANS

The State project is shown on four (4) sets of plans. The first set of plans is entitled "Atlantic Shores Offshore Wind Project 1 – NJ State Waters", dated July 29, 2024, digitally signed on July 31, 2024, prepared by Tyler R. McArthur, P.E. from Burns & McDonnell Engineering Co, Inc., and further identified as:

Drawing UG023 – "Alignment Chart Page 1 of 3"
Drawing UG023 – "Alignment Chart Page 2 of 3"
Drawing UG023 – "Alignment Chart Page 3 of 3"
Drawing UG024 – "P1 Plan & Notes Page 2 of 3"
Drawing UG024 – "P1 Plan & Notes Page 3 of 3"
Drawing UG026 – "P1 N-Up Plan Page 1 of 3"
Drawing UG026 – "P1 N-Up Plan Page 2 of 3"
Drawing UG026– "P1 N-Up Plan Page 3 of 3"

The second set of plans is entitled "Atlantic Shores Project 1 Substation 3038 Fire Road Egg Harbor Township Atlantic County New Jersey", dated March 1, 2024, last revised on August 21, 2024, prepared by Leonard D. Savino, P.E. from Langan Engineering and Environmental Services, LLC, and further identified as:

Drawing CS002, Sheet 2 of 32 – "General Notes"
Drawing CS100, Sheet 6 of 32 – "Overall Site Plan"
Drawing CS101, Sheet 7 of 32 – "Enlarged Site Plan (1 of 2)"
Drawing CS102, Sheet 8 of 32 – "Enlarged Site Plan (2 of 2)"
Drawing CG100, Sheet 11 of 32 – "Overall Grading & Drainage Plan"
Drawing CG101, Sheet 12 of 32 – "Enlarged Grading & Drainage Plan (1 of 2)"
Drawing CG102, Sheet 13 of 32 – "Enlarged Grading & Drainage Plan (2 of 2)"
Drawing CG201, Sheet 14 of 32 – "Storm Profiles", unrevised
Drawing CU100, Sheet 15 of 32 – "Overall Utility Plan"
Drawing CU101, Sheet 16 of 32 – "Enlarged Utility Plan (1 of 2)"
Drawing CU102, Sheet 17 of 32 – "Enlarged Utility Plan (2 of 2)"
Drawing CE100, Sheet 18 of 32 – "Soil Erosion & Sediment Control Plan"
Drawing CE101, Sheet 19 of 32 – "Enlarged Soil Erosion and Sediment Control Plan (1 of 2)"
Drawing CE102, Sheet 20 of 32 – "Enlarged Soil Erosion and Sediment Control Plan (2 of 2)"
Drawing CE501, Sheet 21 of 32 – "Soil Erosion & Sediment Control Notes & Details"
Drawing CS502, Sheet 28 of 32 – "Construction Details II", unrevised
Drawing CS503, Sheet 29 of 32 – "Construction Details III", unrevised
Drawing CS504, Sheet 30 of 32 – "Construction Details IV"
Drawing CS506, Sheet 32 of 32 – "Construction Details VI"

The third set of plans is entitled "Atlantic Shores Offshore Wind Project 1 – Cardiff Atlantic City, New Jersey", dated January 26, 2024, last revised on July 25, 2024 unless otherwise noted below, signed on August 22, 2024, prepared by Daniel Cole Byington, P.E. from BOND Civil & Unity, and further identified as:

Drawing T001 – "AC Landfalls HDD #0-1 Plan and Profile", unrevised
Drawing T002 – "AC Landfalls HDD #0-2 Plan and Profile", unrevised
Drawing T003 – "AC Landfalls HDD #0-3 Plan and Profile", unrevised
Drawing T004 – "AC Landfalls HDD #0-4 Plan and Profile", unrevised
Drawing T005 – "AC Landfalls Proposed Gravity Cell Detail"
Drawing T006 – "Pete Pallitto Field HDD #1-1 Plan and Profile", unrevised
Drawing T007 – "Pete Pallitto Field HDD #1-2 Plan and Profile", unrevised
Drawing T008 – "Bader Field To Lot 1075 HDD #2-1 Plan and Profile"
Drawing T009 – "Bader Field To Lot 1075 HDD #2-2 Plan and Profile"
Drawing T010 – "Lot 1075 to Marina HDD #3-1 Plan and Profile", unrevised
Drawing T011 – "Lot 1075 to Marina HDD #3-2 Plan and Profile", unrevised
Drawing T012 – "Route 40 Crossing HDD #4-1 Plan and Profile"
Drawing T013 – Route 40 Crossing HDD #4-2 Plan and Profile"

The fourth set of plans is entitled "NJDEP Permit Application Permitting Drawings Atlantic Shores Offshore Wind Transmission Line – Atlantic City to Cardiff Substation City of Atlantic City City of Pleasantville Egg Harbor Township", dated January 15, 2024, last revised on August 21, 2024, prepared by Leonard D. Savino, P.E. from Langan Engineering and Environmental Services, LLC, and further identified as:

Drawing CS001 – "Cover Sheet"

Drawing CS002 – “General Notes”
Drawing CU119 – “NJDEP Permitting Plan – Tiles 32-33”
Drawing CU120 – “NJDEP Permitting Plan – Tile 34”
Drawing CU121 – “NJDEP Permitting Plan – Tile 35”
Drawing CU122 – “NJDEP Permitting Plan – Tile 36”
Drawing CU123 – “NJDEP Permitting Plan – Tile 37”
Drawing CU124 – “NJDEP Permitting Plan – Tile 38”
Drawing CU125 – “NJDEP Permitting Plan – Tile 39”
Drawing CU126 – “NJDEP Permitting Plan – Tile 40”
Drawing CU127 – “NJDEP Permitting Plan – Tiles 41-42”
Drawing CU128 – “NJDEP Permitting Plan – Tile 43”
Drawing CU129 – “NJDEP Permitting Plan – Tile 44”
Drawing CU130 – “NJDEP Permitting Plan – Tiles 45-46”
Drawing CU131 – “NJDEP Permitting Plan – Tiles 47-48”
Drawing CU132 – “NJDEP Permitting Plan – Tiles 49-50”
Drawing CU133 – “NJDEP Permitting Plan – Tiles 51-52”
Drawing CU134 – “NJDEP Permitting Plan – Tiles 53-54”
Drawing CU135 – “NJDEP Permitting Plan – Tiles 55-56”
Drawing CU136 – “NJDEP Permitting Plan – Tiles 57-58”
Drawing CU137 – “NJDEP Permitting Plan – Tiles 59-60”
Drawing CU138 – “NJDEP Permitting Plan – Tiles 61-62”
Drawing CU139 – “NJDEP Permitting Plan – Tiles 63-64”
Drawing CU140 – “NJDEP Permitting Plan – Tiles 65-66”
Drawing CU141 – “NJDEP Permitting Plan – Tile 67”
Drawing CU142 – “NJDEP Permitting Plan – Tile 68”
Drawing CU143 – “NJDEP Permitting Plan – Tile 69”
Drawing CU144 – “NJDEP Permitting Plan – Tile 70”
Drawing CU145 – “NJDEP Permitting Plan – Tile 71”
Drawing CU146 – “NJDEP Permitting Plan – Tile 72”
Drawing CU147 – “NJDEP Permitting Plan – Tiles 73-74”
Drawing CU148 – “NJDEP Permitting Plan – Tile 75”
Drawing CU149A – “NJDEP Permitting Plan – Tile 76A”
Drawing CU150A – “NJDEP Permitting Plan – Tile 77A”
Drawing CU151A – “NJDEP Permitting Plan – Tile 78A”
Drawing CU152A – “NJDEP Permitting Plan – Tile 79A”
Drawing CU149B – “NJDEP Permitting Plan – Tile 76B”
Drawing CU150B – “NJDEP Permitting Plan – Tile 77B”
Drawing CU151B – “NJDEP Permitting Plan – Tile 78B”
Drawing CU152B – “NJDEP Permitting Plan – Tile 79B”
Drawing CU153 – “NJDEP Permitting Plan – Tile 80”
Drawing CU154 – “NJDEP Permitting Plan – Tile 81”
Drawing CU155 – “NJDEP Permitting Plan – HDD #2 Exit”
Drawing CU156 – “NJDEP Permitting Plan – HDD #3 Entry”
Drawing CU157 – “NJDEP Permitting Plan – HDD #4 Exit”
Drawing CU501 – “Construction Details I”
Drawing CU502 – “Construction Details II”
Drawing CU503 – “Construction Details III”
Drawing CU504 – “Construction Details IV”
Drawing CE501 – “Soil Erosion and Sediment Control Notes and Details”

COASTAL ZONE MANAGEMENT RULES (7:7), FRESHWATER WETLANDS PROTECTION ACT RULES (7:7A) & FLOOD HAZARD AREA CONTROL ACT RULES (7:13)

Below is an analysis of the State project's compliance with the applicable regulations based upon all information available to the Division during the review of the State permit application. Please note that any Coastal Zone Management Rules not discussed in this document are not applicable to the components of the State project. Compliance with the applicable Freshwater Wetlands Protection Act Rules and Flood Hazard Area Control Act Rules are discussed under the corresponding Coastal Zone Management Rules.

Shellfish Habitat 7:7-9.2

Shellfish habitat is defined at N.J.A.C. 7:7-9.2(a) as "estuarine bay or river bottom which currently supports or has a history of production for hard clams (Mercenaria mercenaria), soft clams (Mya arenaria), eastern oysters (Crassostrea virginica), bay scallops (Argopecten irradians), or blue mussels (Mytilus edulis)". A review of the applicable shellfish habitat mapping referenced at N.J.A.C. 7:7-9.2(a)2 indicates that the following State project work locations are mapped for shellfish habitat:

- A portion of the electric transmission export cables will traverse Inside Thorofare in a location where the waterway is mapped for shellfish habitat and the waters are classified as prohibited for the harvesting of shellfish. Specifically, the work area is mapped for hard clam high value commercial on the U.S. Department of Interior's 1963 "Distribution of Shellfish Resources in Relation to the New Jersey Intracoastal Waterway" map for Little Egg Harbor to Longport.
- A portion of the electric transmission export cables will traverse the area of intersection of Beach Thorofare and Great Thorofare in a location where the waterway is mapped for shellfish habitat and the waters are classified as restricted for the harvesting of shellfish. Specifically, the work area is mapped for hard clam high value commercial on the U.S. Department of Interior's 1963 "Distribution of Shellfish Resources in Relation to the New Jersey Intracoastal Waterway" map for Little Egg Harbor to Longport.
- A portion of the electric transmission export cables will traverse Great Thorofare in a location where the waterway is mapped for shellfish habitat and the waters are classified as restricted for the harvesting of shellfish. Specifically, the work area is mapped for hard clam high value commercial on the U.S. Department of Interior's 1963 "Distribution of Shellfish Resources in Relation to the New Jersey Intracoastal Waterway" map for Little Egg Harbor to Longport.

As the State project crosses waterways with areas of regulatorily defined shellfish habitat per N.J.A.C. 7:7-9.2(a) in the locations referenced above, compliance with the requirements of this rule applies to the portions of the State project within the above listed waterways.

The current rule does not provide standards related to offshore wind development and associated electric transmission cable installations. However, per N.J.A.C. 7:7-9.2(c), development which would result in the destruction, condemnation, or contamination of shellfish habitat is prohibited.

The installation of the electric transmission export cables beneath the above referenced waterways will occur utilizing HDD ranging between 30 feet and 55 feet beneath the stream beds to prevent any surficial construction activities in the waterways. The trenchless technology being utilized at these locations for the installation of the electric transmission cable beneath the stream beds will prevent any impacts or destruction of existing shellfish habitat.

The final comments received via email from the Department's Marine Resources Administration ("MRA") on April 25, 2024 note that the installation of the electric transmission export cables beneath the above waterways is not anticipated to adversely impact shellfish habitat. The release of drilling fluids has the potential to temporarily impact harvesting of shellfish in the area of the release. However, it is anticipated that no permanent impacts to shellfish habitat would result from a release, only a temporary impact to water quality and temporary restriction on harvesting. To prepare for a potential release, the Applicant has prepared and included as part of their application a HDD Inadvertent Release Contingency Plan, prepared on November 29, 2023 and located in Appendix L of the permit application, which establishes plans for preventing, monitoring, and responding to an inadvertent release of drilling fluids that may occur during the installation of the electric transmission export cables via HDD. This Plan was updated on July 25, 2024 and provided to the Division. Implementation of this Plan will be required as a permit condition.

The State project meets the requirements of this rule.

Surf Clam Areas 7:7-9.3

As per N.J.A.C. 7:7-9.3(a), surf clam areas are coastal waters which can be demonstrated to support significantly commercially harvestable quantities of surf clams (Spisula solidissima), or areas important for recruitment of surf clam stocks.

As confirmed by the NJDEP's MRA in their final review comments provided to the Division via email on April 25, 2024, the State project within State waters in the Atlantic Ocean does not currently support significantly harvestable quantities of surf clams. MRA's comments note that data from the New Jersey Surf Clam Survey and anecdotal data from the surf clam industry suggests that, at this time, there are no fishable quantities of market sized surf clam in New Jersey State waters within the State project area.

Furthermore, the results of the most recent *Inventory of New Jersey's Surf Clam (Spisula solidissima) Resource, 2015 -2021*, confirm the continued rapid downward trend of the estimated standing stocks of surf clams in New Jersey territorial waters. The stock has continued to shift to deeper, cooler waters outside of the State's 3 nm jurisdictional limit because of the effect of rising water temperatures on surf clam populations.

Based on the above information, the Division concludes that the State project within State waters in the Atlantic Ocean will not result in the destruction, condemnation, or contamination of any surf clam areas as defined in this rule.

Based on the above, the State project meets the requirements of this rule.

Prime Fishing Areas 7:7-9.4

As per N.J.A.C. 7:7-9.4(a), prime fishing areas include tidal water areas and water's edge areas which have a demonstrable history of supporting a significant local intensity of recreational or commercial fishing activity. These can include, but is not limited to, coastal jetties, groins, public fishing piers, artificial reefs, rock outcroppings, and sand ridges or lumps. Prime fishing areas are also identified on New Jersey's applicable mapping as defined in this section.

A review of applicable GIS mapping indicates that a portion of the electric transmission export cables within the Atlantic Ocean in State waters runs through the Absecon Inlet prime fishing area. Final comments received from the MRA and provided to the Division via email on April 25, 2024 confirms that this portion of the State project will impact the 1 nm buffer area associated with identified prime fishing areas. As the State project proposes work within a prime fishing area, the requirements of this rule apply to the State project.

The work proposed in the Absecon Inlet prime fishing area, which is limited to the installation of electric transmission export cables, is not a prohibited activity per the rule at N.J.A.C. 7:7-9.4(b)2. Impacts within prime fishing areas would be limited to the narrow corridor necessary for the electric transmission cables installation. The installation of the electric transmission export cables will not permanently impact any of the permissible uses of prime fishing areas which include recreational and commercial finfishing and shellfishing, scuba diving, and other water related activities per N.J.A.C. 7:7-9.4(b)1. Additionally, as indicated in the submitted application, the installation of the electric transmission export cables will not result in any permanent changes in bathymetry at a level to reduce the productivity of these prime fishing areas.

Furthermore, the comments received from the MRA indicate that while access for fishing to the prime fishing areas may be temporarily restricted during the construction and decommissioning phases of the State project, the proximity of other prime fishing areas should allow adequate access to fishing grounds during the construction and decommissioning of the State project.

Based on the information presented in the application and the comments received on the State project from the MRA, it can be concluded that the proposed activities are not anticipated to significantly alter bathymetry during construction of the State project and will not result in adverse impacts to the Absecon Inlet prime fishing area.

Therefore, the State project meets the requirements of this rule.

Finfish Migratory Pathways 7:7-9.5

Finfish migratory pathways are defined at N.J.A.C. 7:7-9.5(a) as waterways (rivers, streams, creeks, bays and inlets) which can be determined to serve as passageways for diadromous fish to or from seasonal spawning areas, including juvenile anadromous fish.

Final comments, dated April 25, 2024 and received by the Division via email from the Department's MRA indicated that the proposed electric transmission export cable installations within New Jersey State waters will occur within waterways which serve as passageways for critical migrations of anadromous fish species. Therefore, this rule applies to the project.

According to N.J.A.C. 7:7-9.5(b), development which creates a physical barrier to the movement of fish along finfish migratory pathways is prohibited. The construction of the State project will not result in any permanent development or structures which would create a physical barrier to the movement of fish in or through their migratory pathways as the proposed electric transmission export cables will be buried below the seabed.

According to N.J.A.C. 7:7-9.5(c), development which lowers water quality to such an extent as to interfere with the movement of fish along finfish migratory pathways or to violate State and Delaware River Basin Commission water quality standards is prohibited. Furthermore, according to 9.5(c)1, mitigation measures are required for any development which would result in: lowering dissolved oxygen levels, releasing toxic chemicals, raising ambient water temperature, impinging or suffocating fish, entrainment of fish eggs, larvae or juveniles, causing siltation, or raising turbidity levels during migration periods. It is anticipated that during the installation of the electric transmission export cables, an increase in sediment disturbance and turbidity is likely to occur. However, it is also anticipated that these impacts will be short-term and spatially limited as the cable laying process is a relatively quick process anticipated to only occur for a few weeks. To reduce the potential for undue disturbance to critical migrations of anadromous fish species, the Department will impose a timing restriction on installation of the electric transmission export cables in State waters between March 1st and June 30th of each calendar year. The

timing restriction will be added as a condition of the permit. With implementation of this timing restriction measure, compliance with 9.5(c)1 is met.

9.5(d) of this rule applies to the installation of migration access structures, such as fish ladders. As the State project does not propose the installation of any migration access structures, 9.5(d) is not applicable to the project.

As discussed in detail above, with the timing restriction imposed, the State project meets the requirements of this rule.

Submerged Vegetation Habitat 7:7-9.6

As per N.J.A.C. 7:7-9.6(a), submerged vegetation habitat consists of water areas supporting or documented as previously supporting rooted, submerged vascular plants such as widgeon grass (Ruppia maritima), sago pondweed (Potamogeton pectinatus), horned pondweed (Zannichellia palustris), and eelgrass (Zostera marina). Other submerged vegetation species in lesser quantities include, but are not limited to, the following: water weed (Elodea nuttalli), Eriocaulon parkeri, Liaeopsis chinesis, Naja flexilis, Nuphar variegatum, Potamogeton crispus, Potamogeton epihydrus, Potamogeton perfoliatus, Potamogeton pusillus, Scirpus subterminalis, and Vallisneria americana.

A review of the applicable submerged aquatic vegetation (SAV) habitat mapping referenced at N.J.A.C. 7:7-9.6(a) indicates that portions of the electric transmission export cables crossing the intersection of Great Thorofare and Beach Thorofare as well as Great Thorofare will occur within areas mapped for Ulva lactuca, commonly referred to as sea lettuce. Ulva lactuca, which is a macro alga and not a rooted, submerged, vascular plant, is not a regulated species of submerged vegetation per this rule. Therefore, it can be concluded that the mapped area of these waterways do not provide suitable habitat for submerged vegetation.

Additionally, the portions of the electric transmission export cables proposed to be installed in Great Thorofare and Beach Thorofare will be done utilizing trenchless cable installation methodologies, specifically HDD. The use of HDD for the installation of the electric transmission export cables will eliminate any impacts to the seabed and benthic habitat, including submerged vegetation habitat.

This Rule is not applicable to the State project.

Navigation Channels 7:7-9.7

As per N.J.A.C. 7:7-9.7(a), navigation channels are tidal water areas including the Atlantic Ocean, inlets, bays, rivers, and tidal guts with sufficient depth to provide safe navigation. Navigation channels are often marked or shown on NOAA/National Ocean Service Charts.

The installation of the proposed electric transmission export cables will be installed via HDD and cross beneath the Federal Intracoastal Waterway (ICW). Therefore, the requirements of this rule apply to the State project.

As required per N.J.A.C. 7:7-9.7(b)1, 2 & 3, the proposed electric transmission export cables will not extend into any navigation channels as the cables will be installed below the bottom of the channels. The installation of the electric transmission export cables below the navigation channels will not cause a loss of navigability, terrestrial soil and shoreline erosion, or siltation of any navigation channels.

Based upon a review of applicable GIS mapping, the Atlantic ECC, where the electric transmission export cables will be installed, does not cross any established State navigation channels within New Jersey State waters. Additionally, the State project will not cross any mapped State navigation channels within Inside

Thorofare, Beach Thorofare, or Great Thorofare. However, the electric transmission export cables will cross the Federal navigation channel or ICW within Inside Thorofare. As required per N.J.A.C. 7:7-9.7(b)1, 2 and 3, the proposed electric transmission export cables will be installed either via jetting technologies or via HDD below the seabed to prevent any loss of navigability, terrestrial soil and shoreline erosion, or siltation of any navigation channels. The electric transmission export cables in New Jersey State waters will not be placed within 50 feet of any authorized navigation channel. Furthermore, the State project does not propose any maintenance or new dredging.

The application does note that the short-term construction activities associated with the installation of the electric transmission export cables may require temporary restrictions on vessel navigation within the immediate vicinity of the construction activities for the purpose of protecting the health and safety of the construction workers and vessels. However, this will not result in any permanent impacts to navigation. The Applicant has also committed to implementing measures, such as the establishment of a safety zone around the electric transmission export cables installation vessel, installation activities outside of the summer tourist season, and use of a Marine Affairs Coordinator to be the primary point of contact with the United State Coast Guard ("USCG"), port authorities, state and local law enforcement, marine patrol, port operators, and commercial operators, to prevent impacts to navigation during the installation activities.

Based upon the above, it can be concluded that the State project will not result in any adverse impacts to New Jersey state navigation channels.

The State project meets the requirements of this rule.

Inlets 7:7-9.9

As per N.J.A.C. 7:7-9.9(a), inlets are natural channels through barrier islands allowing movement of fresh and salt water between the ocean and back bay system.

This Rule at N.J.A.C. 7:7-9.9(b) discourages the construction of submerged infrastructure within inlets. The proposed electric transmission export cable routes will not be constructed within any inlets as defined under this Rule.

Therefore, the requirements of this Rule are not applicable to the State project.

Submerged Infrastructure Routes 7:7-9.12

As per N.J.A.C. 7:7-9.12(a), a submerged infrastructure route is the corridor in which a pipe or cable runs on or below a submerged land surface.

The project includes the installation of electric transmission export cables below the submerged land surface of the Atlantic Ocean, Inside Thorofare, Beach Thorofare, and Great Thorofare. These export cable corridors will become a submerged infrastructure route. As discussed above, the electric transmission export cables are intended to be installed to a minimum target depth of 5 feet to 6.6 feet in the Atlantic Ocean to avoid and minimize possible future impacts to this installed infrastructure. The electric transmission export cables within Inside Thorofare, Beach Thorofare, and Great Thorofare will be installed deeper than the cables in the Atlantic Ocean due to the installation of the cables in these areas via HDD. No additional work is proposed within these corridors which would increase the likelihood of damage or breakage to the proposed export cables in accordance with N.J.A.C. 7:7-9.12(b).

The State project meets the requirements of this rule.

Shipwreck and Artificial Reef Habitats 7:7-9.13

As per N.J.A.C. 7:7-9.13(a), this special area includes all permanently submerged or abandoned remains of vessels and other structures, including but not limited to, artificial reefs, anchors, quarry rocks or lost cargo, which serve as a special marine habitat or are fragile historic and cultural resources.

Based on a review of applicable Department GIS mapping, the portions of the State project within State waters will not impact any existing artificial reef habitats. There is no indication in the MRA's final review comments dated April 25, 2024 that the State project would impact any existing artificial reefs.

As indicated in the submitted application, archaeologists have evaluated survey data along the Atlantic ECC to identify known and potential shipwrecks. A review of existing shipwreck databases identified approximately 20 within New Jersey State waters within 1 mile of the Preliminary Area of Potential Effects ("PAPE"). The PAPE is limited to areas of potential seabed impact associated with the State project. The State project is being sited and oriented to avoid impacting shipwrecks.

Based on the above, the installation of the electric transmission export cables within State waters will not impact any artificial reef habitats or known shipwrecks.

The State project meets the requirements of this rule.

Intertidal and Subtidal Shallows 7:7-9.15

Intertidal and subtidal shallows ("ISS") are defined at N.J.A.C. 7:7-9.15(a) as all permanently or temporarily submerged areas from the spring high water line to a depth of four feet below mean low water.

The proposed electric transmission cable export installations will occur below areas that meet the definition of ISS. Therefore, this rule is applicable to the State project.

The State project will not result in any maintenance dredging, new dredging, filling of ISS for beach nourishment, establishment of a living shoreline, or construction or replacement of a bulkhead within ISS. Therefore, the requirements specified at 9.15(c), (d), (f), (g) & (h) are not applicable to the State project.

In accordance with this rule at 9.15(e), the installation of submerged infrastructure is an acceptable activity provided directional drilling is utilized unless it is not feasible, alternative routes to avoid intertidal and subtidal shallows are not feasible, the infrastructure is located deeply enough to avoid exposure or hazard, and all trenches are backfilled to the preconstruction depth with naturally occurring sediment. As discussed above, HDD will be utilized for electric transmission export cable installations in the Atlantic Ocean and in the back bay areas where ISS could exist, thereby eliminating any impacts to existing ISS. The electric transmission export cables will be located deep enough below the seabed to avoid any exposure or hazard. Therefore, the State project will not result in any permanent or temporary impacts to ISS.

The State project meets the requirements of this rule.

Dunes 7:7-9.16

A dune is defined at N.J.A.C. 7:7-9.16 as a wind or wave deposited or man-made formation of sand (mound or ridge), that lies generally parallel to, and landward of, the beach and the foot of the most inland dune slope. This includes the foredune, secondary or tertiary dune ridges and mounds, and all landward dune ridges and mounds, as well as man-made dunes, where they exist.

The proposed electric transmission export cables are proposed to be installed beneath the existing oceanfront dunes in Atlantic City. As portions of the electric transmission export cables will be installed beneath dunes, the requirements of this rule apply to those portions of the State project.

Acceptable activities on dunes referenced at N.J.A.C. 7:7-9.16(b) include linear development which meets the Rule on Location of Linear Development at N.J.A.C. 7:7-14.1. The portion of the State project proposed beneath the dunes in Atlantic City includes the installation of the electric transmission export cables and meets the definition of a "linear development" as defined at N.J.A.C. 7:7-1.5. Therefore, this work is an acceptable activity on a dune. Compliance with the Rule on Location of Linear Development at N.J.A.C. 7:7-14.1 is discussed later in this report.

However, in order to avoid impacts to the existing dunes, the electric transmission export cables installed beneath the dunes will be installed utilizing HDD trenchless cable installation methods. Installing the cables beneath the dunes will eliminate any surface disturbance to this resource. The landing for the electric transmission export cables will be located within a paved parking lot upland of the dunes limit to avoid impacts to the existing dunes. In addition, the installation and maintenance of the electric transmission export cables will not require any excavation, grading, vegetation removal, or other alterations of the dunes. Therefore, it can be concluded that the installation of the electric transmission export cables beneath the existing dunes will not cause significant adverse long-term impacts on the natural functioning of the beach and dune system.

It should be noted that due to the installation of the electric transmission cables beneath the USACE's Federal beach and dune project on the Atlantic City beach and dune system, a Section 408 approval is required from the USACE. The Section 408 approval will ensure that the installation of the electric transmission export cables will not be injurious to the public interest and will not impair the usefulness of the Federal beach and dune project in Atlantic City. The condition requiring the Applicant to obtain all necessary Federal, State and local approvals will be further clarified to indicating that Section 408 approval is required from the USACE.

Comments on the State project were requested and received from the Watershed & Land Management Program's ("Program") Office of Coastal Engineering ("OCE") as discussed in detail in the Coastal Engineering 7:7- 15.11 section of this report. Conditions will be added to the permit to ensure that the work taking place in the area of the existing dunes located in Atlantic City will not impact the dunes.

With implementation of the appropriate permit conditions, the State project meets the requirements of this rule.

Coastal High Hazard Areas 7:7-9.18

As per N.J.A.C. 7:7-9.18, coastal high hazard areas are flood prone areas subject to high velocity waters (V zones) as delineated on FEMA flood mapping, and areas within 25 feet of oceanfront shore protection structures, which are subject to wave run-up and overtopping. The coastal high hazard area extends from offshore to the inland limit of a primary frontal dune along an open coast subject to high velocity wave action from storms or seismic sources. The inland limit of the V zone is defined as the V zone boundary line as designated on FEMA flood mapping or the inland limit of the primary frontal dune, whichever is most landward.

A review of the applicable FEMA flood mapping indicates that the installation of the electric transmission export cables in the vicinity of the Atlantic Ocean as well as the crossing of Beach Thorofare will occur within a V zone. Therefore, the requirements of this rule are applicable to the work in these locations within the V zone.

Project 1, which includes both the Federal project and the State project, meets the definition of an industrial development. Since the overall project is not a residential or commercial development, the requirements at N.JA.C. 7:7-9.18(b), (c), (d), and (f) do not apply to the project.

N.J.A.C. 7:7-9.18(e) indicates that water dependent development is conditionally acceptable within coastal high hazard areas provided the development complies with the Federal flood reduction standards at 44 CFR Part 60 and the Uniform Construction Code ("UCC"). "Water dependent development" is defined at N.J.A.C. 7:7-1.5 as "development that cannot physically function without direct access to the body of water [within] which it is proposed". As discussed in this report, the State project is associated with the construction of an offshore wind farm within the Applicant's Lease Area off the coast of New Jersey. An offshore wind farm meets the definition of a water dependent use as defined above. Without the onshore components of the State project to bring wind energy from the wind farm sited within Federal waters onshore in New Jersey, the offshore wind farm would not serve its intended function. There are no alternatives that would avoid siting of the electric transmission export cables within coastal high hazard areas. It's also important to note that the installation of the below grade structures within coastal high hazard areas would not preclude future potential uses of these areas for additional water dependent uses.

Regarding compliance with the Federal flood reduction standards at 44 CFR Part 60 and the UCC, as reviewed by the Program's reviewing engineer and discussed in the August 22, 2024 approved engineering report, the electric transmission export cables are encased below grade and are, therefore, in compliance with any Federal flood reduction standard at 44 CFR Part 60 and Uniform Construction Code standard at N.J.A.C. 5:23. In addition, the State project is in compliance with the applicable requirements of the Flood Hazard Area Control Act Rules with implementation of the conditions referenced in the approved engineering report. These conditions will be added to the State permit.

As discussed above and with implementation of the applicable permit conditions, the State project meets the requirements of this rule.

Barrier Island Corridor 7:7-9.20

Barrier island corridors as defined at N.J.A.C. 7:7-9.20 are the interior portions of the oceanfront barrier islands, spits and peninsulas. Portions of the proposed State project will be located on New Jersey's barrier islands. Specifically, the electric transmission export cables landfall on the public beach in Atlantic City. Therefore, the requirements of this rule apply to this portion of the State project.

New or expanded development within the oceanfront barrier island corridor is conditionally acceptable provided the development complies with the requirements for impervious cover and vegetative cover. As discussed in detail below, the requirements of Subchapter 13 at N.J.A.C. 7:7-13 do not apply to the State project. Additionally, the electric transmission export cables on the barrier island portions of the State project site will be installed within unvegetated, disturbed areas to the maximum extent practicable utilizing feasible trenchless installation methods at selected locations to avoid surface disturbances.

The State project meets the requirements of this Rule.

Bay Islands 7:7-9.21

Bay islands as defined at N.J.A.C. 7:7-9.21(a) are islands or filled areas surrounded by tidal waters, wetlands, beaches, or dunes, lying between the mainland and barrier island. Such islands may be connected to the mainland or barrier island by elevated or fill supported roads. As per N.J.A.C. 7:7-9.21(a)2, Bader Field and Chelsea Heights in Atlantic City are not considered bay islands. Therefore, the components of the State project proposed on Bader Field and Chelsea Heights are not subject to the requirements of this rule.

Components of the State project consisting of the installation of electric transmission export cables will occur on Great Island in Atlantic City. Specifically, the electric transmission export cables traversing Beach and Great Thorofares will result in the need for an HDD pit and staging area on Great Island. These components must meet the requirements of this rule.

N.J.A.C. 7:7-9.21(c) allows for water dependent development on bay islands which abut a paved public road and abut the conveyance components of an offsite treatment, conveyance, and disposal system with adequate capacity to convey, treat, and dispose of the sewage generated from the proposed development. As discussed throughout this report, Project 1, which includes both the Federal and State projects, is a water dependent development. As mentioned above, the only work on the bay island consists of installation of electric transmission export cables and staging activities for the installations. The installation and staging activities for the installation of electric transmission export cables will not result in an increase in impervious cover at the site. Additionally, the work associated with the installation of the electric transmission export cables on the bay island will be located within existing disturbed areas and will not result in the permanent disturbance of any existing vegetation.

The State project meets the requirements of this rule.

Beaches 7:7-9.22

Beaches are defined at N.J.A.C. 7:7-9.22(a) as "gently sloping areas of sand or other unconsolidated material, found on all tidal shorelines, including ocean, bay, and river shorelines, that extend landward from the mean high water line to either a man-made feature generally parallel to the water or the waterward limit of dunes.

A portion of the State project involves the installation of electric transmission export cables utilizing HDD installation methods beneath the beach in Atlantic City. Therefore, the requirements of this rule apply to this portion of the State project.

Development on beaches is prohibited with the exception of development that has no prudent feasible alternative and that will not result in significant long-term impacts to the natural functioning of the beach and dune system. Limited acceptable activities on beaches are outlined at N.J.A.C. 7:7-9.22(b). Acceptable activities as described in this section include linear development which meets the Rule on Location of Linear Development at N.J.A.C. 7:7-14.1. The installation of electric transmission export cables meets the definition of a "linear development", and therefore, is an acceptable activity in accordance with N.J.A.C. 7:7-9.22(b). The State project's compliance with the Rule on Location of Linear Development at N.J.A.C. 7:7-14.1 is discussed later in this report.

While linear development is an acceptable activity on beaches per the rule at N.J.A.C. 7:7-9.22(b), measures are being implemented to avoid any surface impacts to the existing beach as well as any future impacts to any beach nourishment projects in Atlantic City. As mentioned previously, the portion of the electric transmission export cables traversing the beaches in Atlantic City will be installed via HDD beneath the existing beach at a sufficient depth to avoid impacting the beaches and their current natural function. Installing the cables beneath the beaches will eliminate any surface disturbance to this resource. The landing for the electric transmission export cables will be located within a paved parking lot upland of the beach and dunes limit to avoid impacts to the existing beach and dunes. In addition, the installation and maintenance of the electric transmission export cables will not require any excavation, grading, vegetation removal, or other alterations of the beach and dunes. Therefore, it can be concluded that the installation of the electric transmission export cables beneath the existing beach and dunes will not cause significant adverse long-term impacts on the natural functioning of the beach and dune system.

Comments on the State project were requested and received from the Program's OCE as discussed in detail in the Coastal Engineering 7:7-15.11 section of this report. Conditions will be added to the permit to ensure that the work taking place in the area of the existing beach located in Atlantic City will not impact the beach, which is subject to Federal beach nourishment.

As discussed in detail above, the Applicant will be required to obtain Section 408 approval from the USACE prior to any work beneath the Federal beach and dune project in Atlantic City.

With implementation of the appropriate permit conditions, the State project meets the requirements of this rule for the work proposed beneath the existing beach in Atlantic City.

Filled Water's Edge 7:7-9.23

Per N.J.A.C. 7:7-9.23(a), filled water's edge areas are existing filled water, wetland, or upland areas lying between wetlands or water areas, and either the upland limit of fill or the first paved public road or railroad landward of the adjacent water area, whichever is close to the water.

Portions of the electric transmission export cables transitioning from offshore to onshore will likely impact areas that meet the definition of a filled water's edge. Therefore, compliance with the requirements of this rule is applicable for the work within filled water's edge areas.

Per N.J.A.C. 7:7-9.23(d), on filled water's edge sites with direct water access, the site shall be developed with a water-dependent use, an at-grade deck, or left undeveloped for future water dependent uses. As discussed above in the Coastal High Hazard Areas 7:7-9.18 section of this report, an offshore wind farm meets the definition of a water dependent use as defined at N.J.A.C. 7:7-1.5. Project 1, which includes both the Federal and State projects, is intended to aid in advancing the use of renewable energy, reducing greenhouse gas emissions, combating climate change, and improving resiliency within the State of New Jersey. Without the onshore components of Project 1 to bring wind energy from the wind farm sited within Federal waters onshore in New Jersey, the Project 1 offshore wind farm would not serve its intended function. There are no alternatives that would avoid siting of the electric transmission export cables within filled water's edge areas. It is important to note that the installation of the below grade structures within filled water's edge areas would not preclude future potential uses of these areas for additional water dependent uses.

As discussed above, the State project meets the requirements of this rule.

Flood Hazard Areas 7:7-9.25

As per N.J.A.C. 7:7-9.25, flood hazard areas area areas subject to flooding from the flood hazard area design flood, as defined by the Department under the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13. These include areas mapped as such by the Department, areas defined or delineated as an A or V zone by FEMA, and any unmapped areas subject to flooding by the flood hazard area design flood.

A review of FEMA Preliminary and Effective FEMA mapping indicates that portions of the proposed electric transmission export cables will be located within flood hazard areas. The requirements of this rule apply to the work within flood hazard areas with the exception of the areas discussed below.

The portions of the State project below the mean high water line do not include the development of habitable buildings or the construction of railroads, bridges, and/or culverts. The work below the mean high water line is limited to the installation of electric transmission export cables. Therefore, in accordance with N.J.A.C. 7:7-9.25(b), this rule does not apply to this portion of the State project.

N.J.A.C. 7:7-9.25(d) and (e) discuss development in an undeveloped portions of a flood hazard area. Portions of the State project, including the electric transmission export cable installations will be located in flood hazard areas as discussed above. N.J.A.C. 7:7-9.25(d) allows development within 100 feet of a navigable waterbody of an undeveloped flood hazard area if the use is water dependent. As discussed in detail in the Coastal High Hazard Area 7:7-9.18 section of this report, the State project is associated with a water dependent development. N.J.A.C. 7:7-9.25(e) allows development further than 100 feet from a navigable waterbody of an undeveloped flood hazard area provided the development would not prevent future water dependent uses within 100 feet of a navigable waterbody. The installation of below grade electric transmission export cables would not preclude the future use of an additional water dependent development along a navigable waterbody.

N.J.A.C. 7:7-9.25(f) requires development in flood hazard areas conform to the applicable design and construction standards of the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13, the Uniform Construction Code (UCC), and the Federal flood reduction standards. As discussed above in the Coastal High Hazard Areas 7:7-9.18 section of this report, as reviewed by the Program's reviewing engineer and discussed in the August 22, 2024 approved engineering report, the electric transmission export cables are encased below grade and are, therefore, in compliance with any Federal flood reduction standard at 44 CFR Part 60 and Uniform Construction Code standard at N.J.A.C. 5:23. In addition, the State project is in compliance with the applicable requirements of the Flood Hazard Area Control Act Rules with implementation of the conditions referenced in the approved engineering report. These conditions will be added to the State permit.

N.J.A.C. 7:7-9.25(g) & (h) requires a development to comply with the impervious cover and vegetative cover requirements of Subchapter 13 along with the Endangered or threatened wildlife or plant species habitats at N.J.A.C. 7:7-9.36. As discussed throughout this report, all applicable requirements of the Coastal Zone Management Rules, including N.J.A.C. 7:7-9.36, will be met by the State project. The requirements of Subchapter 13 do not apply to the electric transmission export cables and substation as described in detail under the Subchapter 13 – Requirements For Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas section of this report.

With implementation of the appropriate permit conditions referenced in the approved engineering report, the State project meets the requirements of this rule.

Riparian Zones 7:7-9.26

A riparian zone is defined at N.J.A.C. 7:7-9.26(a) as the land and vegetation within and adjacent to a regulated water. The following describes the location and width of the riparian zone along each regulated waterway within CAFRA jurisdiction.

- In accordance with the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-2.3(c)1i & ii, there is no riparian zone located within or along the Atlantic Ocean and New Jersey's barrier island complex.
- Inside Thorofare: 300 feet extending onto Bader Field as Inside Thorofare is an upstream tributary to a Category 1 waterway (Beach Thorofare) within the same HUC-14 watershed.
- Beach Thorofare: Category 1 waterway – 300 feet on both sides.
- Crossing of Great Thorofare: Upstream to Category 1 waterway, 300 feet on both sides.
- Lakes Bay: Category 1 waterway – 300 feet.

While the construction of the substation along Fire Road in Egg Harbor Township will not impact any riparian zone vegetation, the installation of the electric transmission export cables along the cable route will result in disturbance to riparian zone vegetation. The areas of disturbance to riparian zone vegetation are proposed to be revegetated upon completion of the work. The Department has determined that this

disturbance is temporary provided the Applicant adheres to the permit conditions requiring restoration of these areas in accordance with N.J.A.C. 7:13-11.2(z). It should be noted that the majority of the temporary disturbance to riparian zone vegetation does not include disturbance to treed areas. The majority of the electric transmission export cable installations meet the requirements of Flood Hazard Area Permits-by-Rule 36 or 37 at N.J.A.C. 7:13-7.36 and 7.37. However, one of the proposed HDDs will result in the necessary clearing of trees in the riparian zone, which will be restored within the riparian zone after project completion. Therefore, this crossing does not meet one of the permits-by-rule referenced above and the disturbance to riparian zone vegetation must be quantified in accordance with the Flood Hazard Area Control Act Rules at N.J.A.C. 7:13-11.2(k).

As represented on the State project plans, the installation of the electric transmission export cables along the entire cable route within CAFRA jurisdiction will result in temporary impacts to 2.446 acres (106,568 square feet) acres of riparian zone vegetation. In accordance with N.J.A.C. 7:13-11.2(k), for a new utility line, 30 square feet of disturbance is permissible per linear foot of utility line. Information provided by the Applicant via email on August 21, 2024 indicates that 16,000 linear feet (3.03 miles) of cables will be installed within the riparian zone. Therefore, the allowable disturbance to riparian zone vegetation would be 480,000 square feet or 11.02 acres. Additionally, within a 300 foot riparian zone, 6,000 square feet of disturbance to riparian zone vegetation is permitted for access to the project. There are four (4) crossings of waterways, all via HDD. This would allow for 24,000 square feet of riparian zone vegetation disturbance for access to the project areas. Based on the proposed temporary disturbance to 2.446 acres of riparian zone vegetation mentioned above, this disturbance is significantly less than the allowable disturbance to riparian zone vegetation. This is due to the siting of the electric transmission export cables as well as the proposed construction staging within areas that are already disturbed and devoid of vegetation.

In accordance with N.J.A.C. 7:13-13.4(b)1, mitigation for the temporary disturbance to riparian zone vegetation is not required.

The project meets all applicable requirements specified at N.J.A.C. 7:13-11.2(k). As discussed previously in this report, the proposed State project component of the overall Project 1 offshore wind farm is an essential component of Project 1, which will aid in advancing renewable energy, reducing greenhouse gas emissions, combating climate change, and improving resiliency within the State of New Jersey. The electric transmission export cables have been sited to the maximum extent practicable within paved or cleared areas to minimize impacts to riparian zone vegetation. However, the areas of riparian zone vegetation impacted temporarily by the State project do not exceed the allowable limits specified in Table 11.2 for the installation of underground utility lines. The appropriate conditions for temporary disturbance to riparian zone vegetation will be added as conditions of the permit.

Based on the above discussion and with implementation of the appropriate riparian zone conditions, the State project meets the requirements of this rule.

Wetlands 7:7-9.27

As per N.J.A.C. 7:7-9.27(a), wetlands or wetland means an areas that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

The Applicant has applied for a Letter of Interpretation (LOI) under DLRP File# 0000-21-0022.2 LLI240001 to verify the extent of unmapped coastal, and freshwater wetlands, and their associated transition areas within the proximity of the State project. The LOI will be issued concurrently with the State permit. As depicted on the approved State project plans, the State project will not result in any

disturbance to unmapped coastal wetlands or freshwater wetlands. However, the State project will result in the crossing of mapped coastal wetlands per the applicable coastal wetlands mapping pursuant to the Wetlands Act of 1970. Due to the crossing of mapped coastal wetlands, the requirements of this rule apply to the State project. The Applicant has applied for a Coastal Wetlands Permit for the crossings.

In accordance with N.J.A.C. 7:7-9.27(c), development in mapped coastal wetlands is acceptable provided the development is water dependent, has no prudent or feasible alternative to a non-wetland site, will result in the minimum feasible alteration or impairment of natural tidal circulation, and will result in a minimum feasible alteration or impairment of natural contour or the natural vegetation of the wetlands. As discussed in detail throughout this report, Project 1, which includes both the Federal and State projects, is the construction of an offshore wind farm, which is a water dependent use. Without the onshore components of the project to bring wind energy onshore in New Jersey, the offshore wind farm would not serve its intended function to aid in advancing renewable energy, reducing greenhouse gas emissions, combating climate change, and improving resiliency within the State of New Jersey. In addition, to the maximum extent practicable, the installation of the electric transmission export cables will occur within existing paved roadways or historically disturbed areas to avoid impacting existing areas of mapped coastal wetlands. It is important to note that while the electric transmission export cables will cross mapped coastal wetlands, the installation methodology will be HDD, which would prevent any surface disturbance and disturbance to existing mapped coastal wetlands. As no disturbance of mapped coastal wetlands will occur, mitigation is not required.

As the State project will not result in any temporary or permanent impacts to existing mapped coastal wetlands, the State project meets the requirements of this rule.

Wetlands Buffers 7:7-9.28

As per N.J.A.C. 7:7-9.27(a), wetlands buffer or transition area means an area of land adjacent to a wetland which minimizes adverse impacts on the wetlands or serves as in integral component of the wetlands ecosystem. The proposed onshore work associated the electric transmission export cable installations will result in impacts to transition areas associated with unmapped coastal and freshwater wetlands. Therefore, the requirements of this rule are applicable to the State project.

In accordance with N.J.A.C. 7:7-9.28(b), all wetlands buffers (that is, transition areas) associated with wetlands subject to the Freshwater Wetlands Protection Act shall be regulated in accordance with the Freshwater Wetlands Protection Act Rules, N.J.A.C. 7:7A. As the State project will involve work within wetlands transition areas, the Applicant has applied for a Special Activity Transition Area Waiver for Linear Development. As discussed above, the Applicant has applied for an LOI in order to verify the extent of wetlands and transition areas within the proximity of the State project. The LOI will be issued concurrently with the State permit. The wetlands regulated under the Freshwater Wetlands Protection Act within the proximity of the State project as determined by the Division's wetlands specialist and the Program's reviewing biologist are ordinary, intermediate, or exceptional resource value wetlands. Wetlands transition areas adjacent to these wetlands measure 0 feet, 50 feet or 150 feet respectively. The appropriate wetlands transition areas are depicted on the State project permitting plans.

As indicated on the State project permitting plans, the construction of the State project will result in the temporary disturbance to 0.826 acres or 35,997 square feet of wetlands transition area under the Special Activity Transition Area Waiver for Linear Development. In accordance with the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A-2.3(b)2, the placement of utility lines under a legally existing, currently serviceable paved roadway is not a regulated activity in a transition area. Therefore, any installation of the electric transmission export cables within the paved roadway and/or ROW have not been quantified in the proposed transition area disturbance.

The proposed impacts to wetlands transition areas are necessary to implement the Project 1 offshore wind farm to deliver clean, renewable wind energy to New Jersey residents as well as aid in combating climate change and improving resiliency within the State of New Jersey. The components of the State project have been sited to the maximum extent practicable within areas outside of wetlands transition areas. It's important to note that while the installation of the electric transmission export cables will temporarily impact wetlands transition areas, the components of the State project will not impact any areas of wetlands. No other alternatives have been identified that would avoid or further minimize impacts to these resources. The disturbances to wetlands transition areas depicted on the project plans are in compliance with the applicable requirements of the Freshwater Wetlands Protection Act Rules at N.J.A.C. 7:7A, including 7:7A-8.1 & 8.3(e).

With implementation of the appropriate conditions for work within wetlands buffers, the State project meets the requirements of this rule, as well as with the requirements of the Freshwater Wetlands Protection Act Rules, N.J.A.C. 7:7A-1.1 et seq.

Historic and Archeological Resources 7:7-9.34

As per N.J.A.C. 7:7-9.34(a), historic and archaeological resources include objects, structures, shipwrecks, buildings, neighborhoods, districts, and man-made or man-modified features of the landscape and seascape, including historic and prehistoric archaeological sites, which either are on or are eligible for inclusion on the New Jersey or National Register of Historic Places.

The HPO is reviewing the Atlantic Shores South Project offshore wind project, which includes Project 1 and Project 2, as a whole under Section 106 of the National Historic Preservation Act of 1966. Section 106 requires Federal agencies to consider the effects of historic properties of projects they carry out, assist, fund, permit, license, or approve.

Initial comments received from the HPO via email on March 22, 2024 indicated that in consultation between the HPO and BOEM, it has been determined that the Atlantic Shores South offshore wind project as a whole will adversely affect historic properties. The following historic properties within the identified area of potential effects ("APE") have been identified:

- 22 marine archaeological resources;
- 59 ancient submerged landform features ("ASLFs");
- One (1) terrestrial archeological resource;
- One (1) historic aboveground resource;
- 112 aboveground historic properties in the visual APE (102 in the visual APE for offshore components, three (3) in the visual APE for onshore components, and seven (7) in the visual portion of the O&M facility APE);
- Two (2) National Historic Landmarks in the visual APE for offshore components, specifically the Atlantic City Convention Hall and Lucy, the Margate Elephant).

The HPO's initial March 22, 2024 comments indicated that Section 106 consultation was ongoing. At the time of the initial comments, BOEM was in the process of evaluating ways to avoid, minimize, and mitigate project adverse effects in accordance with 36 CFR § 800.6. To resolve the adverse effects of the Atlantic Shores South offshore wind project, which includes Project 1, BOEM proposed the development and execution of a Memorandum of Agreement in accordance with 36 CFR § 800.6(c) to memorialize the steps BOEM will take to avoid, minimize, and mitigate the Atlantic Shores South project's adverse effects. Execution of the Memorandum of Agreement will demonstrate BOEM's compliance with Section 106 of the National Historic Preservation Act. As a result, the Applicant is consistent with New Jersey's Coastal Management Program through the completion of Section 106 consultation and the execution of

the Memorandum of Agreement among the Section 106 consulting parties for the Atlantic Shores South offshore wind project. Final comments received from the HPO via email on June 27, 2024 confirms that the Memorandum of Agreement was fully executed. A copy of the executed Memorandum of Agreement is included in the Division's files for Project's 1 and 2.

With the completed execution of the Memorandum of Agreement to avoid, minimize, and mitigate the adverse effects of the project on historic properties and resources, the State project meets the requirements of this rule.

Endangered or Threatened Wildlife or Plant Species Habitats 7:7-9.36

Endangered or threatened wildlife or plant species habitats, as defined at N.J.A.C. 7:7-9.36(a), are terrestrial and aquatic (marine, estuarine, or freshwater) areas known to be inhabited on a seasonal or permanent basis by or to be critical at any stage in the life cycle of any wildlife or plant identified as "endangered" or "threatened" species on official Federal or State lists of endangered or threatened species, or under active consideration for State or Federal listing.

A review of Landscape 3.3 mapping indicates that areas within New Jersey State waters and onshore are mapped (ranks 4 and 5) for numerous threatened and/or endangered species and their associated habitats. As a result, comments on the application were requested from the MRA, the New Jersey Division of Fish and Wildlife's Office of Environmental Review ("OER"), and the Program's reviewing biologists to confirm any steps necessary to avoid and/or minimize impacts to documented species and their habitats.

Comments received via email on April 22, 2024 from the OER did not indicate any concerns with the construction of the State project. However, the comments did note that turbidity in the waterway should be minimized. The final comments received from the MRA via email on April 25, 2024 indicated that a timing restriction between March 1st and June 30th of each calendar year should be implemented in order to minimize disturbance to anadromous fish species during critical migration periods. This timing restriction will be included as a condition of the permit.

Final comments on the State project were received from the Program's reviewing biologist via memo, dated August 15, 2024. The memo indicates that the following timing restrictions and measures should be implemented to protect endangered and/or threatened species:

1. To reduce the risk of harm to Northern Long-eared Bat, Tricolored Bat (proposed federal listing), as well as nesting migratory bird species, and potential violation of the NJ Endangered and Nongame Species Conservation Act (ENSCA; N.J.S.A. 23:2a-1-13), and to reduce the risk of direct impacts to sensitive habitat, the Permittee shall adhere to a seasonal restriction on the clearing of all woody vegetation from April 1 through November 15 of each calendar year.

2. To protect sensitive habitat for the State-listed Osprey, the Permittee shall adhere to a seasonal restriction on the use of heavy construction equipment/machinery within 1000 feet of all osprey nests from April 1 through August 31 of each calendar year. The initiation and implementation of work which generates disturbance (e.g., audial, visual) that is out of character with what currently exists at or surrounding the anticipated work area during the restricted time period recommended above may result in the Permittee being in violation of the "take" clause within State of New Jersey Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A-1 et seq). Please note that adherence to this seasonal restriction shall be applied if nest building and/or nest occupancy is observed during the months of March and April of the given calendar year of work.

3. If activity of rare beach-nesting shorebird species (i.e. State- or federally listed threatened or endangered species, or migratory shorebird species of special concern), or a State-/Federally listed endangered beach plant population, is discovered at or near the permitted limit of disturbance, work and recreational use of the area shall cease until the Permittee has coordinated with, and guidance on habitat management practices can be issued by, the NJ Department of Environmental Protection and, potentially, the US Fish & Wildlife Service. Please note that this coordination may result in the need for the Permittee's adherence to provisions as necessary to protect this sensitive habitat (e.g., seasonal restriction on regulated activities). The Department reserves the right to suspend all regulated activities onsite should it be determined that the Permittee has not taken proper precautions to ensure continuous compliance with this condition.

4. To reduce the risk of harm to anadromous fish species such as the federally listed Atlantic sturgeon and Shortnose sturgeon, the Permittee shall adhere to a seasonal restriction on all work below the mean high-water line from March 1 through June 30 of each calendar year. Physical measures that will be utilized to avoid impacts to habitat (e.g., installation of a floating turbidity barrier) shall be implemented prior to the commencement of authorized activities and monitored weekly, maintained in working condition, and kept in place until project completion.

The August 15, 2024 memo also indicates that North Atlantic Right Whale, Humpback Whale, Fin Whale, Atlantic Leatherback, and Atlantic Loggerhead are associated within the State project location offshore. These species are present in and around New Jersey waters from approximately June through October of each year. The memo indicates that they will defer to guidance on these species from the National Marine Fisheries Service ("NMFS") and/or the United States Fish & Wildlife Service ("USFWS") provided during the review of the required US Army Corps of Engineers permit application. The appropriate conditions from the Program's reviewing biologist's August 15, 2024 memo will be incorporated in the permit.

Vernal Habitat

"Vernal habitat" as defined at N.J.A.C. 7:7A-1.3 is a wetland or state open water that contains a confined basin depression, feature evidence of breeding by one or more species of fauna adapted to reproduce in ephemeral aquatic conditions, maintains ponded water for at least two continuous months between March and September of a normal rainfall year, and is free of reproducing fish populations throughout the year or dries up at some time during a normal rainfall year.

Initial feedback from the Program's reviewing biologists indicated concerns over an existing basin located on the Fire Road substation parcel that may feature suitable vernal habitat as defined above. Information was requested via email on April 25, 2024 regarding whether the basin was investigated as a potential isolated freshwater wetlands and if it features suitable vernal habitat. A response to this request was provided from the Applicant's agent via email on April 26, 2024. The information provided indicated that the basin was investigated and did not meet the criteria to be considered a wetland or a vernal habitat. A site inspection of this area was completed by Program staff on May 14, 2024. Final comments, dated July 9, 2024, received from the Program's reviewing biologist confirm that this area does not feature suitable vernal habitat. Therefore, the construction of Project 1 will not result in any impacts to vernal habitats.

With implementation of all required timing restrictions and measures referenced above, the State project meets the requirements of this rule.

Critical Wildlife Habitats 7:7-9.37

Critical wildlife habitats, as defined at N.J.A.C. 7:7-9.37, are specific areas known to serve an essential role in maintaining wildlife, particularly in wintering, breeding, and migrating. Based on guidance received from the NJ Division of Fish and Wildlife's Endangered and Nongame Species Program ("ENSP"), the Department considers patches of woody vegetation along the Atlantic seaboard to serve a critical role in providing resting and foraging habitat for migratory birds. Within the coastal zone mainland, patches of woody vegetation (i.e., trees, scrub-shrub, etc.) equivalent to 20 acres in size and greater function as migratory bird stopover habitat. Information provided on the State project plans indicates that the construction of the State project will result in the disturbance of 16.245 acres of woody vegetation. This includes both temporary and permanent disturbances. The proposed 16.245 acres of disturbance to woody vegetation associated with the cable installation and substation construction will result in impacts to critical wildlife habitat based on the threshold discussed above.

Pursuant to N.J.A.C. 7:7-9.37(b), development that would directly, or through secondary impacts on the relevant site or in the surrounding region, adversely affect critical wildlife habitats is discouraged unless: (1) minimal feasible interference with the habitat can be demonstrated; (2) there is no prudent or feasible alternative location for the development; and (3) the proposal includes appropriate mitigation measures to offset the direct loss of habitat to result from the proposed project. The Applicant has sited the electric transmission export cables and substation within disturbed areas and areas devoid of woody vegetation to the maximum extent practicable. No alternative to minimize disturbance to woody vegetation has been identified. Mitigation measures are necessary to offset the direct loss of Critical Wildlife Habitat and comply with this special area rule. The Department has established a practice of authorizing critical wildlife habitat mitigation for the direct loss of migratory songbird habitat at a 2:1 ratio.

The comments received from the Program's reviewing biologist via memo dated August 15, 2024 indicate that the Applicant is required to submit to the Program within 90 days of permit issuance and prior to any construction activities, a proposal for mitigation to the specified impacts to 16.245 acres of woody vegetation which meets the criteria for providing critical wildlife habitat for migratory birds.

With implementation of the required mitigation for disturbance to critical wildlife habitat, the State project meets the requirements of this rule.

Public Open Space 7:7-9.38

As per N.J.A.C. 7:7-9.38(a), public open space constitutes land areas owned or maintained by State, Federal, county and municipal agencies or private groups (such as conservation organizations and homeowner's associations) and used for or dedicated to conservation of natural resources, public recreation, visual or physical public access or, wildlife protection or management. This also includes, but is not limited to, State Forests, State Parks, State Fish and Wildlife Management Areas, lands held by the New Jersey Natural Lands Trust, lands held by the New Jersey Water Supply Authority, and designated Natural Areas within DEP-owned and managed lands.

The State project proposes the construction of electric transmission export cables on the following properties which are Green Acres encumbered parkland:

- Bader Field located at 545 Albany Avenue in Atlantic City, Block 794, Lot 1
- Pete Pallitto Field and Boat House Parcel: Intersection of Fairmont and Sovereign Avenue in Atlantic City, Block 370, Lots 1.01, 2 & 2.01.
- Public beach and boardwalk parcel between South Texas and Iowa Avenues in Atlantic City, Block 1, Lots 58 & 59.

During the review of this application, comments were requested from Department's Office of Transactions and Public Lands Administration ("OTPLA") (formerly the Green Acres Program) ("OTPLA"). Email correspondence from OTPLA on February 15, 2024 confirmed that the preapplication for a major diversion was submitted by the City of Atlantic City to the OTPLA in November of 2023. The final application for the major diversion of above lands has been submitted to the Department's OTPLA for approval by the Department's Commissioner and by the State House Commission ("SHC"). As compensation for the diversion of the Atlantic City-owned lands described above, the City has agreed to encumber other City-owned lands north of West End Avenue (identified as Block 757 Lot 1; Block 756 Lot 1; Block 755, Lot 1; Block 754, Lot 1; Block 753 Lots 1,2,3,4; Block 752, Lot 1; Block 751, Lot 1; Block 750, Lot 1; Block 749, Lot 1; Block 748, Lot 1; Block 747, Lot 1; Block 746, Lot 1; Block 745, Lots 1 and 3; and paper streets to be vacated) for recreation and conservation purposes. The Applicant has also proposed a public enhancement project on the compensation parcels, as well as compensation for tree removal. The Applicant has also agreed to compensate Atlantic City for temporary workspace.

Recent discussions with OTPLA confirmed that the OTPLA is in the process of preparing the SHC summary for the Department Commissioner's signature. It is anticipated that the diversion application will be presented for SHC approval at the next held SHC meeting in the fall of this year. A standard permit condition is included in every issued permit requiring the permittee to obtain all necessary local, state, and federal approvals for the project (see N.J.A.C. 7:7-27.2, N.J.A.C. 7:7A-20.2, and N.J.A.C. 7:13-22.2). This standard condition will be clarified to indicate that all appropriate diversion approval must be obtained prior to any work on encumbered lands.

The portions of the State project on public land, which includes only the installation of the below grade electric transmission export cables, will not adversely affect any open space and is compatible with adjacent and surrounding land uses in accordance with N.J.A.C. 7:7-9.38(b) and (c). The below grade electric transmission export cables will not preclude the use of the open space by the public. Furthermore, the buried cables will be sited to the maximum extent practicable within existing, maintained right-of-way where other utility lines are currently situated.

With implementation of the condition to obtain all the necessary approvals for the State project, which includes the approval for work on encumbered lands, the State project meets the requirements of this rule.

Special Hazard Areas 7:7-9.39

As per N.J.A.C. 7:7-9.39(a), special hazard areas include area with a known actual or potential hazard to public health, safety, and welfare, or to public or private property, such as the navigable air space around airports and seaplane landing areas, potential evacuation zones, and areas where hazardous substances as defined at N.J.S.A. 58:10-23.11b are used or disposed, including adjacent areas and areas of hazardous material contamination.

The State project does not propose the construction of any residential or labor-intensive economic development, which are particularly discouraged in special areas in accordance with 9.39(b). A review of the work proposed within state waters and onshore indicates that areas of Bader Field in Atlantic City and a property known as Block 833, Lot 4 in Atlantic City are mapped on the Department's GIS mapping as known contaminated sites. Additionally, the Applicant has noted that the State project could interact with the additional known contaminated sites: 155 Iowa Avenue, NJEMS Preferred ID: G000029458, Former Spencer Gifts located at 1635 North Albany Avenue, NJEMS Preferred ID: 031650, and Delancey Avenue Groundwater Contamination, NJEMS Preferred ID: G000011407. These properties are currently under the supervision of a Licensed Site Remediation Professional ("LSRP"). Additionally, the Applicant has indicated in the submitted application that the linear portions of the State project will be enrolled under the Department's Site Remediation Program ("SRP") as a linear construction project and handled in accordance with all applicable regulations. The Applicant has also indicated that they intend to manage

any encountered contamination in accordance with the Department's SRP guidance as well as a Materials Management Plan and Materials Handling Plan, both of which will be developed prior to project construction. With implementation of these measures and coordination with the Department's SRP, the construction of the State project will not adversely impact public health and safety. A condition will be added to the permit requiring the permittee to conduct any necessary remediation activities under the supervision of a LSRP.

In addition, the Division requested a review of the State project from the Department's Emergency Management Program, Bureau of Emergency Response (BER) via email on February 26, 2024. Comments received from BER in a memo, dated March 7, 2024, and provided to the Division via email on the same date indicate the following:

1. The State project application materials did not provide any information regarding any munitions and explosives of concern (MECs) or unexploded ordinances (UXOs) within the State project area. However, BER reviewed the State project proposal for any MECs or UXOs in the State project area.
2. The comments indicate that there is a potential to encounter MECs and/or UXOs during the proposed Project activities along the near shore and offshore in the Atlantic Ocean along the coast of New Jersey. Historic military activities and dumping of munitions occurred both in the near shore and offshore of the State. Several MEC and/or UXO items have been recovered along the New Jersey coastline by fisherman and clammers over the years. Some exposures to the chemical warfare materiel (CWM) mustard agent have been confirmed. MECs and/or UXOs may be present both on the surface and in the subsurface off the coast. Therefore, BER recommends that MEC/UXO surveys be completed in the State project area prior to initiation of intrusive activities to safely protect workers from MEC/UXO hazards. MEC/UXO investigations should be performed pursuant to BOEM's Guidance Document, *Munitions and Explosives of Concern Survey Methodology and In-field Testing for Wind Energy Areas on the Atlantic Outer Continental Shelf*, Carton-et-al, July 2017 (attached to email). The goal for the MEC/UXO surveys is to identify a path for the offshore cables and wind farms that is free of MEC and CWM or subsurface anomalies (if the cables will be buried).
3. The comments note that an assessment of the seabed subsurface was performed in the near shore for any potential cultural or archeological resources using guidance and navigation equipment including primary Global Navigation Satellite System (GNSS), gradiometer mounted magnetometer, side-scan sonar, shallow penetration sub-bottom profiler, single-channel ultra high-resolution seismic system, ultra high-resolution multichannel seismic system, and multibeam echosounder. BER requests information on whether any MECs and/or UXOs were encountered during these investigations.
4. The comments indicate that the former Atlantic City Naval Air Station (NAS) operated between 1943 and 1958 by the US Navy for aircraft combat training in Atlantic City. Munitions associated with the Atlantic City NAS may have been buried in the area that is now the Atlantic City International Airport and surrounding areas. If any intrusive work pertaining to this project is to occur in the area surrounding the Atlantic City International Airport, then care should be taken to address the potential for MECs and UXOs.
5. The comments indicate that due to the possible presence of MECs and/or UXOs on the surface and/or subsurface of the ocean floor, BER recommends that at a minimum, MEC/UXO Construction Support be utilized during all activities in the near shore and offshore State project area to address any potential MEC/UXO finds during the Project construction.
6. The comments indicate that if MECs and/or UXOs are encountered during the State project activities, the **3Rs** of Explosive Safety should be followed: **Recognize** when you may have encountered a munition, and that munitions are dangerous; **Retreat** and do not approach, touch, move, or disturb it, but carefully leave the area; and **Report** by call 911 and advise police of what

you saw and where you saw it. Local law enforcement will arrange for Department of Defense Explosive Ordnance Disposal or police bomb squad personnel to locate, evaluate, and address the situation.

7. The comments provided information on MECs and UXOs and what should be done if MECs and/or UXOs are encountered. The literature provided consists of:

    - *Munitions and Explosives of Concern Survey Methodology and In-field Testing for Wind Energy Areas on the Atlantic Outer Continental Shelf*, Carton-et-al, July 2017.
    - *Munitions At Sea, Maritime Industry, 3Rs Explosives Safety Guide*, July 2013.

In response to the above comments, the Applicant provided additional information on May 22, 2024 consisting of a response letter, compliance statement addendum, and confidential version of the Applicant's MEC Reports. The submitted information confirms that the appropriate studies and surveys were completed to assess the potential for MECs and/or UXOs to be encountered during construction of the State project. The completed studies determined that the risk for encountering MECs and/or UXOs during construction of the State project is low. The submitted information was sent to BER for further review.

Upon review of the submitted information by BER, follow up comments were submitted to the Division via email on June 6, 2024. The additional comments indicate that the submitted additional information adequately addressed the concerns expressed by BER related to MECs and UXOs in the State project area. Furthermore, the Applicant is taking the necessary steps to ensure that any identified/encountered MECs and/or UXOs are properly handled and addressed. These measures will ensure that any development within a special hazard area will not adversely impact public health and safety.

A condition will be added to permit requiring the permittee to notify the USCG if MECs or UXOs are encountered during State project construction.

With implementation of the proposed measures by the Applicant and the permit condition referenced above, the State project meets the requirements of this rule.

Pinelands National Reserve and Pinelands Protection Area 7:7-9.42

As discussed at N.J.A.C. 7:7-9.42(a), the Pinelands National Reserve (PNR) includes those lands and water areas defined in the National Parks and Recreation Act of 1978, Section 502(P.L. 95-625). The Pinelands Area is a slightly smaller area within the Pinelands National Reserve.

The portions of the State project within CAFRA jurisdiction area not located within the PNR. However, as portions of Project 1 are located within the state-designated Pinelands Area, a request for comments on the project was made to the Pinelands Commission from the Division's Application Support Unit ("ASU") via email on February 20, 2024. Comments on the Project were received from the Pinelands Commission in a memo, dated March 6, 2024, and provided to the Division via email on March 8, 2024.

The received March 6, 2024 Pinelands Commission memo indicates that approximately 4.16 miles of the proposed electric transmission cables are proposed within the state-designated Pinelands Area. The Pinelands Commission exercises direct regulatory authority in the state-designated Pinelands Area. Therefore, an application to the Pinelands Commission for this proposed work in the state-designed Pinelands Area must be submitted. The memo indicates that an application was submitted to the Pinelands Commission on February 1, 2024 and the appropriate application fee was submitted on February 16, 2024. This application is currently under review by the Pinelands Commission.

A Certificate of Filing ("COF"), dated April 16, 2024, was issued to the Applicant. The COF is not an approval of the submitted application to the Pinelands and the application remains under review by the Pinelands Commission.

As mentioned above, the remaining approximately 9.69 miles of proposed electric transmission cables and substation construction is located in the CAFRA area but located outside of the state-designated Pinelands Area or the federally designated PNR. Therefore, the Pinelands Commission does not have any regulatory authority over this work and no comments on this work were provided. Review of this portion of the work will remain with the Division under the submitted State permit application.

Based on the comments received on the project from the Pinelands Commission, it can be concluded that the State project is not subject to the requirements of this rule as the State project will not be located in the PNR or the state-designated Pinelands Area.

Geodetic Control Reference Marks 7:7-9.45

As per N.J.A.C. 7:7-9.45(a), geodetic control reference marks are traverse stations and benchmarks established or used by the New Jersey Geodetic Control Survey pursuant to P.L. 1934, c. 116.

The initial comments received by the Division via email on March 5, 2024 from the New Jersey Department of Transportation (NJDOT) Geodetic Survey indicates that there are twenty-three (23) geodetic monuments within the proposed project area. The National Geodetic Survey (NGS) data sheets were included with the initial comments.

N.J.A.C. 7:7-9.45(b) discourages the disturbance of geodetic control reference marks. The Applicant provided additional information on July 11, 2024 regarding the location of the identified monuments in relation to the State project. In addition, the Applicant indicated in their July 11, 2024 Information Request Letter response that while the monuments are located within the vicinity of the State project, the monuments will be avoided and remain undisturbed as they are located outside the State project's limit of disturbance. Furthermore, the response from the Applicant indicates that in the unlikely event that any geodetic control survey markers must be moved, raised or lowered to accommodate construction of the State project, they will contact the NJDOT Geodetic Survey at least 60 days prior to disturbance and arrangements will be made to protect the position in accordance with N.J.A.C. 7:7-9.45(b). This will be made a condition of the State permit.

This information was sent to the NJDOT Geodetic Survey on July 19, 2024 to review. After reviewing the additional information, the NJDOT Geodetic Survey confirmed via email on August 7, 2024 that the information provided by the Applicant satisfies their concerns. The State project is not anticipated to disturb any existing geodetic control reference marks.

With implementation of proposed measure by the Applicant to contact the NJDOT Geodetic Survey if a monument will be impacted in accordance with the permit condition referenced above, the State project meets the requirements of this rule.

Atlantic City 7:7-9.47

This rule is applicable to those lands within the municipal boundary of the City of Atlantic City per N.J.A.C. 7:7-9.47(a). As portions of the State project will occur within the boundaries of Atlantic City, the requirements of this rule are applicable to those portions of the project.

The State project does not involve casino hotel development, development on or over existing ocean piers, or construction of new commercial piers and/or expansion of existing commercial piers. Therefore, the requirements specified at N.J.A.C. 7:7-9.47(b), (c) and (d) do not apply to the State project.

Additionally, the State project does not involve intercept parking, thereby making the standards at N.J.A.C. 7:7-9.47(k) inapplicable to the State project.

N.J.A.C. 7:7-9.47(e) applies to all development proposed in the Boardwalk right-of-way. The State project involves the installation of electric transmission export cables which will be installed via HDD below grade beneath the Boardwalk right-of-way. As the development activities will occur below the Boardwalk right-of-way and not in the right-of-way, the requirements at 9.47(e) are not applicable to the State project.

The State project will not be located within one of the street rights-of-way listed at 9.47(f). Therefore, the requirements specified at 9.47(f)4 are not applicable to the State project. Additionally, the State project will not be located in or over one of the streets southeast of Pacific Avenue listed at 9.47(g). Furthermore, the State project will not be located in or over a right-of-way of any street perpendicular to the Atlantic Ocean and southeast of Pacific Avenue as the work southeast of Pacific Avenue will be located within a paved parking area outside of a right-of-way. No mitigation is required for the construction of the State project in accordance 9.47(i).

The State project meets the requirements of this rule.

New Dredging 7:7-12.7

New dredging is defined under this rule at N.J.A.C. 7:7-12.7(a) as the removal of sediment that does not meet the definition of maintenance dredging at N.J.A.C. 7:7-12.6 or the definition of environmental dredging at N.J.A.C. 7:7-12.8. In addition, the temporary or permanent displacement or removal of sediment for the purpose of installing submerged pipelines and cables is considered new dredging.

As mentioned previously, the installation of the electric transmission export cables crossing the waterways of the back bay of Atlantic City will occur utilizing trenchless installation methods, specifically HDD. As the electric transmission export cables will be installed below the seabed, no temporary or permanent displacement or removal of sediment within the waterways will occur. Therefore, no new dredging, as defined by this Rule, will occur within these waterways.

However, the proposed installation of electric transmission export cables within the Atlantic Ocean will involve the temporary displacement of sediment. However, this rule only applies to this type of disturbance for the installation of submerged pipelines and cables. Submerged pipelines are defined at N.J.A.C. 7:7-12.15(a) as “underwater pipelines which transmit liquid or gas, including crude oil, natural gas, water, petroleum products or sewerage”. The proposed electric transmission export cables are not pipelines being installed to transmit a liquid or gas. Submerged cables are defined at N.J.A.C. 7:7-12.21(a) as “underwater telecommunication cables” and “all associated structures in the water”. The installation of electric transmission cables to convey electricity from an offshore wind farm to a POI for the Cardiff Substation onshore are not telecommunication cables. Since the electric transmission export cables to be installed within the Atlantic Ocean do not meet the definitions of submerged pipelines or cables, their installation is not considered new dredging and the requirements of this rule are not applicable to the State project.

Dredge Material Disposal 7:7-12.9

As per N.J.A.C. 7:7-12.9(a), dredged material disposal is the discharge of sediments removed during dredging operations in water areas. As discussed in detail below, the installation of the electric transmission export cables within the Atlantic Ocean will not result in the removal of any sediment from the waterway.

The HDD pit to be constructed in the Atlantic Ocean for the transition of the electric transmission export cables to the landfall location in the paved parking area between South Belmont Avenue and South California Avenue will be done via gravity cell. As indicated in the submitted application and reiterated in July 22, 2024 email correspondence from the Applicant's agent, once the exact position of the exit area is identified, divers will utilize a water jet for an area approximately 10 ft wide × 20 ft long × 6 ft deep (3.0 m by 6.1 m × 1.8 m) over the exit location using a water lift system. The system is designed with a diver deployed tube utilizing a 30-degree bend near the intake end. At the bend, a high-pressure water jet is connected. The water jet is positioned toward the discharge along the center line of the main pipe. The jet moves the water in the main pipe and creates suction at the inlet. The system can move multiple cubic yards of material per hour and turbidity is localized to the area of the pipe discharge. The sediment will be shifted with the high-pressure water, creating a depression in the seafloor. The crane on the jack up barge will lower a gravity cell to the ocean bottom and maneuver it into place over the exit location. A pump will be placed near the depression to pump the collected drilling fluid up to the marine support vessel for processing and disposal. Additional jetting may be required to set the gravity cell at a sufficient depth to contain any drilling fluid and prevent it from migrating away from the exit location. This method of installation will negate the need to remove any sediment from the bottom of the waterway for the HDD exit location.

As no sediment will be removed from the waterway, the requirements of this rule do not apply to the State project.

Filling 7:7-12.11

Filling is defined at N.J.A.C. 7:7-12.11(a) as the deposition of material including, but not limited to, sand, soil, earth, and dredged material, into water areas for the purpose of raising water bottom elevations to create land areas.

The electric transmission export cables to be installed within State waters of the Atlantic Ocean will be placed between 5 and 6.6 feet below the seabed. The installation of the cables will not involve the placement of fill for the purpose of raising water bottom elevations to create land areas.

Therefore, the requirements of this rule do not apply to the State project.

Submerged Pipelines 7:7-12.15

As per N.J.A.C. 7:7-12.15(a), submerged pipelines are underwater pipelines which transmit liquids or gas, including crude oil, natural gas, water petroleum products, or sewerage.

As discussed above, the proposed electric transmission export cables to convey electricity from an offshore wind farm within Atlantic Shores's Lease area off the coast of New Jersey to a POI do not meet the definition of submerged pipelines per this Rule since the cables will not transmit liquid or gas, such as crude oil, natural gas, water, petroleum products, or sewerage.

Therefore, the requirements of this rule do not apply to the State project.

Submerged Cables 7:7-12.21

As per N.J.A.C. 7:7-12.21(a), submerged cables are underwater telecommunication cables, and shall include all associated structures in the water, such as repeaters.

As discussed above, the proposed electric transmission export cables to convey electricity from an offshore wind farm within Atlantic Shores's Lease area off the coast of New Jersey to a POI do not meet the definition of submerged cables per this Rule since the cables are not telecommunication cables.

Therefore, the requirements of this rule do not apply to the State project.

Subchapter 13 – Requirements For Impervious Cover and Vegetative Cover for General Land Areas and Certain Special Areas

The State project consists of the installation of electric transmission export cables onshore and in State waters and the construction of one (1) onshore electrical substation. An electrical substation, as defined at N.J.A.C. 7:7-1.5, includes "the footprint of the substation equipment, the safety zone, and the area necessary for access and parking". In accordance with N.J.A.C. 7:7-13.1(d)2 and 9, Subchapter 13 does not apply to linear developments, such as electric transmission export cables, or electrical substations. As the Rule rationale notes, certain activities such as linear projects and substations need not address impervious cover and vegetative cover requirements because they serve a public need, the benefit of which would be reduced if the requirements applied. That is true here as well. The electric transmission export cables are necessary to bring the offshore wind turbines' electricity onshore and the substation is required to transmit the renewable energy to New Jersey's grid. Therefore, the impervious cover and vegetative cover requirements of Subchapter 13 do not apply to the portion of the State project within State waters and onshore.

Rule on Location of Linear Development 7:7-14.1

"Linear development" is defined at N.J.A.C. 7:7-1.5 as "a development with the basic function of connecting two points, such as a road, drive, public walkway, railroad, sewerage pipe, stormwater management pipe, gas pipeline, water pipeline, or electric, telephone or other transmission lines. The State project includes the installation of electric transmission export cables to transfer electric power from the Atlantic Shores Project 1 offshore wind farm to be located in their Lease Area off the coast of New Jersey to a POI near the Cardiff substation in Egg Harbor Township, Atlantic County. The proposed electric transmission export cables meet the definition of a "linear development" as defined above and, therefore, the requirements of this Rule apply to this portion of the State project.

As per N.J.A.C. 7:7-14.1(a), the proposed alignment of a linear development is acceptable provided there is no prudent or feasible alternative alignment which would have less impact on sensitive areas and marine fish or fisheries, there will be no permanent or long-term loss of unique or irreplaceable areas, appropriate measures will be used to mitigate adverse environmental impacts, and the alignment is located on or in existing transportation corridors and alignments to the maximum extent practicable. Information provided in the submitted application, specifically the Project 1 Alternative Analysis provided in Appendix B of the application, indicates the Applicant evaluated numerous electric transmission export cable routes during the design phase Project 1. The selected electric transmission export cable routes and alignment were chosen to avoid impacts to special areas to the maximum extent practicable which includes siting the cables below grade within existing, disturbed public ROWs. In addition, selected installation methods were chosen based upon constructability and the method's ability to avoid impacts to protected resources, such as beaches, dunes, wetlands, and shellfish habitat with the use of HDD cable installation technology. While some impacts to special areas, such as riparian zone vegetation, critical wildlife habitat and wetlands transition areas, will occur, measures will be implemented to mitigate these impacts in accordance with the applicable regulations. Any required mitigation for these impacts will be required as a condition of the State permit. In addition, the Applicant has committed to restoring any temporarily impacted areas to pre-disturbance condition upon completion of construction activities

Based on the above discussion, the State project meets the requirements of this rule.

Basic Location Rule 7:7-14.2

As discussed at N.J.A.C. 7:7-14.2(a), a location may be acceptable for development under N.J.A.C. 7:7-9, 12, 13, and 14, but the Department may reject or conditionally approve the proposed location of the

development as reasonably necessary to promote the public health, safety, and welfare; to protect public and private property, wildlife and marine fisheries; and to preserve, protect and enhance the natural environment.

The construction of the State project is necessary to support the construction of the Atlantic Shores Project 1 offshore wind farm located within their existing Lease Area off the coast of New Jersey. The construction of the offshore wind farm is intended to assist in New Jersey's established goal of 11 gigawatts (GW) of offshore wind energy generation by 2040 as outlined in New Jersey's Governor's Executive Order No. 307, issued on September 21, 2022. Benefits of wind power include, but are not limited to, the production of clean renewable energy to replace fossil fuel-based energy sources, air quality improvements, and economic growth. As discussed above, the siting and design of the State project components of the overall project will avoid environmental impacts to the maximum extent practicable. Measures taken to avoid environmental impacts include using HDD cable installation technology to avoid impacts to beaches, dunes, and other waters and locating the electric transmission export cables within existing, disturbed public ROWs to the maximum extent practicable.

The measures taken, as discussed above, to minimize environmental impacts, mitigate for unavoidable impacts, and to provide the overall benefit of clean, renewable energy to New Jersey residents promotes the public health, safety, and welfare, protects property, wildlife, and marine fisheries, and preserves, protects, and enhances the natural environment as required per this rule.

As discussed above, the State project meets the requirements of this rule.

Secondary Impacts 7:7-14.3

As per N.J.A.C. 7:7-14.3(a), secondary impacts are the effects of additional development likely to be constructed as a result of approval of a particular proposal and can include offsite traffic increases, increased recreational demand, and any other offsite impacts generated by onsite activities which affect the site and the surrounding region.

The State project is not anticipated to result in any secondary impacts. The State project is not a proposed transportation project or development of any wastewater treatment systems, which would require a secondary impact analysis per N.J.A.C. 7:7-14.3(b). The nature of the work within New Jersey State jurisdiction is similar to that seen with other utility installation projects. The proposed project is in compliance with the Critical Wildlife Habitats Rule at N.J.A.C. 7:7-9.37, the Air Quality Rule at N.J.A.C. 7:7-16.8, and the Traffic Rule at N.J.A.C. 7:7-16.12 as discussed in detail in this report. The construction of the State project will not result in the future construction of additional unregulated development. Accompanying infrastructure to allow for manufacturing and assembly of the turbines and maintenance of the offshore wind farm have or will undergo review for compliance with the applicable Coastal Zone Management Rules, Flood Hazard Area Control Act Rules, and Freshwater Wetlands Protection Act Rules under separate State permit applications. Furthermore, any temporary impacts as a result of construction of the State project will be minor in nature. Restoration of temporarily disturbed areas is proposed by the Applicant and is required as a condition of the State permit.

The State project meets the requirements of this Rule.

Energy Facility 7:7-15.4

As per N.J.A.C. 7:7-15.4(a), energy facilities include facilities, plants or operations for the production, conversion, exploration, development, distribution, extraction, processing, or storage of energy or fossil fuels. The overall project involves the construction of an offshore wind farm along with the appropriate electric transmission export cable installations and an onshore substation. The components of the State

project include facilities for distribution and processing of wind energy. Therefore, the requirements of this rule apply to the State project.

N.J.A.C. 7:7-15.4(b) applies to new facilities, which would include the overall project. N.J.A.C. 7:7-15.4(b)1 states that new energy facilities shall not be sited in special areas as defined at N.J.A.C. 7:7-9.1 through 9.40, 9.42, 9.44 and 16.2 unless site-specific information demonstrates that such facilities will not result in adverse impacts to these areas. As discussed throughout this report, the components of the State project will be located within special areas as defined above. A detailed Alternatives Analysis, dated January 2024, and provided in Appendix B of the submitted application demonstrates that the selected locations for the State project components will result in the least impacts to regulated resources while maintaining project constructability. Additionally, any mitigation required for resource impacts in accordance with all applicable rules will be made a condition of the State permit. The Applicant has also committed to restoration of temporarily disturbed areas upon completion of construction.

N.J.A.C. 7:7-15.4(b)2 regarding the siting of energy facilities at least 500 feet inland of the mean high water line of tidal waters in the CAFRA area does not apply to the components of the State project as these components are associated with Atlantic Shores's Project 1 offshore wind farm, which is a water dependent energy facility as discussed throughout this report.

N.J.A.C. 7:7-15.4(b)3 requires wind energy facilities, including blades, towers, and site disturbance to be sited at least 50 feet inland of the MHWL of tidal waters in the CAFRA area. The State project does not include the construction of the offshore wind farm, but only includes the installation of below grade electric transmission export cables and substation construction. The offshore wind farm, which includes the turbines themselves, will be located within the Lease Area outside of New Jersey State waters and not within the CAFRA area. Therefore, the wind energy facilities or turbines, which include the blades and towers, are outside of New Jersey's direct State permitting jurisdiction.

N.J.A.C. 7:7-15.4(b)3 and 4 require public access to be provided and the scenic and visual qualities of coastal areas to be maintained. The State project's compliance with the requirements of N.J.A.C. 7:7-16.9 and N.J.A.C. 7:7-16.10 are discussed in detail below.

N.J.A.C. 7:7-15.4(c) requires coastal energy facilities construction and operation to not directly or indirectly result in net loss of employment in the State for any single year. As discussed in the submitted application, the construction of Project 1, which includes the State project components, is anticipated to result in an increase in full time construction jobs over a 10 year development period. Induced jobs, created by the expenditure of wages will be in sectors such as health care and social assistance, retail trade and accommodation and food services. Induced job creation is expected to occur during each phase of Project 1 (construction, operation, decommissioning). Additional activities associated with Project 1 that are anticipated to contribute to the local economy include, but are not limited to: increased housing demands, port utilization, vessel charters, and procurement of construction and/or maintenance materials. Furthermore, the Applicant's Construction and Operations Plan ("COP") approved by BOEM via the Record of Decision ("ROD") dated July 1, 2024 notes that the Atlantic Shores South Projects (Project 1 and Project 2) are expected to directly create more than 22,290 full time equivalent ("FTE") jobs, indirectly create more than 11,810 FTE jobs, and induce over 14,820 FTE jobs throughout their lifecycles. Based on this information, the State project will not result in a net loss of employment.

The requirements specified at N.J.A.C. 7:7-15.4(d), (e), (f), (g), (h), (i), (j), (k), (l), (m), (n), (o), (p), (q) and (s) are not relevant to the State project.

N.J.A.C. 7:7-15.4(r) applies to the construction of the one (1) onshore substation located along Fire Road in Egg Harbor Township. The new substation will be located on an existing vacant parcel with minimal special areas. The substation site does not contain significant areas of environmental resources, such as flood hazard areas, riparian zone vegetation, wetlands, or wetlands buffers. While the construction of the substation will impact critical wildlife habitat, the appropriate mitigation for this impact will be required. Therefore, the siting of the Fire Road substation will have the least practicable impacts to the coastal zone in accordance with N.J.A.C. 7:7-15.4(r)1i. N.J.A.C. 7:7-15.4(r)ii, iii, iv, and v do not apply specifically to electric energy produced via offshore wind as Project 1project proposes to do.

N.J.A.C. 7:7-15.4(r)vi indicates that electric generating facilities using renewable forms of energy, such as wind, are conditionally acceptable provided such facilities do not significantly detract from scenic or recreational values. The components of the State project only involve construction of below grade electric transmission export cables and an onshore substation, which will not detract from scenic or recreational values. The construction of the offshore wind farm itself within Federal waters is not the subject of the State permit application. The portion of Project 1 within Federal waters was determined to be consistent with the State's enforceable policies as outlined in the April 1, 2024 Federal Consistency Certification and accompanying decision documents. Compliance with this section of the Rule, in addition to N.J.A.C. 7:7-15.4(r)vii and viii which apply to wind turbines, is discussed in the prepared environmental report which accompanied the April 1, 2024 Federal Consistency Certification for the Federal project.

The State project meets the requirements of this rule.

Public Facility 7:7-15.6

As per N.J.A.C. 7:7-15.6(a), public facilities include a broad range of public works for production, transfer, transmission, and recovery of water, sewerage and other utilities. As discussed previously, the State project includes the installation of electric transmission export cables to transfer electric power from Project 1 wind farm off the coast of New Jersey to a POI for the Cardiff substation located in Egg Harbor Township, Atlantic County. The State project also includes the construction of an onshore substation, which will receive electric power from the cables. As the structures proposed under this application include production and transfer of electric power, the requirements of this Rule apply to the State project.

This application for the State project does not propose the construction of a solid waste facility or a wastewater treatment facility. Therefore, the requirements at N.J.A.C. 7:7-15.6(b) & (c) do not apply to the State project.

N.J.A.C. 7:7-15.6(d) states that new or expanded public facilities are conditionally acceptable provided the facility services a need that cannot be met by an existing public facility at the site or region, alternate technologies are impractical or infeasible, and the facility would not generate significant secondary impacts inconsistent with this chapter. As discussed throughout this report, the overall project will aid in advancing the use of renewable energy, reducing greenhouse gas emissions, combating climate change, and improving resiliency within the State of New Jersey. The proposed electric transmission export cables and substation components of Project 1 are necessary to serve the offshore wind farm being constructed within the Applicant's approved lease area off the coast of New Jersey. Additionally, an Alternatives Analysis, located in Appendix B of the submitted application, was prepared and considered during the design phase of Project 1, which includes the State project, to minimize impacts to regulated environmental resources to the maximum extent practicable.

Furthermore, as discussed in this report under the Secondary Impacts rule at N.J.A.C. 7:7-14.3, the construction of the State project is not anticipated to result in any secondary impacts. Any impacts to

regulated resources are being mitigated as required per applicable regulations. All appropriate mitigation conditions have been included in the permit.

The State project meets the requirements of this rule.

Industry 7:7-15.7

As per N.J.A.C. 7:7-15.7(a), industry uses are uses that involve industrial processing, manufacturing, storage, or distribution activities and include electric power production. The work proposed under this application is for electric transmission export cables and construction of an onshore substation to transmit electric power from the Applicant's Project 1offshore wind farm to be located in their existing Lease area in Federal waters off the coast of New Jersey to the POI for Cardiff Substation in Egg Harbor Township, Atlantic County. Therefore, the requirements of this rule apply to the State project.

Per N.J.A.C. 7:7-15.7(b), the proposed electric transmission export cables and substation will be located in existing, disturbed areas to the maximum extent practicable to minimize impacts to special areas. Temporary disturbances to special areas such as riparian zone vegetation and transition areas will be restored upon completion of construction. In addition, any required mitigation for impacts to environmental resources will be made a condition of the State permit. The State project is in compliance with the applicable location and resource rules as discussed in detail throughout this report, and N.J.A.C. 7:7-15.7(d), (e) and (f) are not applicable. Public access is being provided as described below.

Based on the above discussion, the State project meets the requirements of this rule.

Coastal Engineering 7:7-15.11

Coastal engineering measures include a variety of non-structural, hybrid, and structural shore protection and storm damage reduction measures to manage water areas and protect the shorelines from the effects of erosion, storms, and sediment and sand movement as per N.J.A.C. 7:7-15.11(a). Examples of coastal engineering measures include beach nourishment, sand fences, pedestrian crossing of dunes, stabilization of dunes, dune restoration projects, dredged material management, living shorelines, and the construction of retaining structures.

The State project does not include the construction of shore protection measures, beach nourishment, or dune restoration projects. However, the State project involves the installation of electric transmission export cables beneath an existing Federal beach nourishment project in Atlantic City. As beach nourishment projects are a non-structural shore protection and/or storm damage reduction measure that is encouraged per this Rule, it is appropriate to discuss how the portion of the State project in this area will not impact the Federal beach nourishment project.

In order to assess the potential impacts of the electric transmission export cable installation beneath the Federal beach nourishment project in Atlantic City, comments were requested from the Program's OCE via email on February 20, 2024. Initial comments on this component of the State project were provided to the Division from OCE via email on March 12, 2024. Below is a summary of the received comments:

- OCE noted that the State project area within the Atlantic Ocean contains several riparian grants.
- OCE requested that the Applicant coordinate with the United States Army Corps of Engineers ("USACE") Public Affairs to minimize any potential construction conflicts with the Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island nourishment project, which is on a 3 year renourishment cycle.
- OCE noted that any structures inshore of the 2,500 foot limit as measured from the Federal beach nourishment project survey baseline and at or above -35 feet NAVD88 within the

USACE beach and dune design template (including slopes) is subservient to the construction, operation, maintenance, repair, rehabilitation, and replacement of the Federal beach nourishment project and is subject to removal prior to future construction/nourishment.

- OCE requested that the electric transmission export cables not be laid within the 500 meter buffer around all borrow areas.
- OCE requested pre-construction and post-construction topographic and bathymetric surveys that capture the entire profile of the existing and post-construction conditions between the HDD entry and exit pits.
- OCE requested as-builts for the entire length of the electric transmission export cables installed from the HDD entry pit to the Lease Area.
- OCE requested that monitors be placed on the electric transmission export cables to ensure that the burial depth and location of the cables are always known and will not impact any borrow areas or their associated 500 meter buffer.
- OCE requested a hotline be established to report if the electric transmission export cables have been struck or exposed and to confirm the cables location, and to provide a point of contact to notice of nearby construction activities.
- OCE requested the use of seismographs to monitor vibration levels on structures within 500 feet of construction operations.
- OCE noted that all HDD electric transmission export cables must be a minimum of 100 feet away horizontally and 60 feet below the MHWL line at any pre-existing infrastructure (i.e. outfalls, jetties, groins, etc.).
- OCE noted that any crossing of the Intracoastal Waterway will require coordination with the USACE Navigation Program and the USCG. Any crossing of a State Navigation Channel will require coordination with the NJDOT's State Channel Dredging Program and the Program's OCE.

It should be noted that OCE has signed off on the State project permit application as an easement holder for the work within their easement across the beach and/or dunes in Atlantic City associated with the Brigantine Inlet to Great Egg Harbor, Absecon Island Federal beach nourishment project. Additionally, OCE provided a Statement of No Objection for Project 1 via letter dated January 23, 2024 for the required USACE Section 408 approval.

Coordination between the Division and OCE resulted in a request for information from the Applicant to address some of the above comments. Information in response to the OCE's March 12, 2024 was requested from the Applicant via letter, dated May 2, 2024. Responses to the requested May 2, 2024 information from OCE was submitted on July 11, 2024 and August 7, 2024. In the submitted response, the Applicant has agreed to the following: obtain USACE Section 408 approval and coordinate with USACE to avoid construction conflicts with the Federal beach nourishment project, submit georeferenced as-builts for the entire length of the electric transmission export cables from the onshore HDD entry pit to the Lease Area which will contain XYZ coordinates, monitor the installed electric transmission export cables in the Atlantic Ocean to inform burial depth and location, establish the required hotline, develop protocols with OCE, USACE, and USCG, and monitor vibration levels on the outfall pipe at South California Avenue during construction. Additionally, both the Applicant and OCE confirmed that the components of the State project beneath the Federal beach nourishment project will not be located inshore of the 2,500 foot limit as measured from the Federal project survey baseline and at or above -35 feet NAVD88 within the USACE beach and dune design template (including slopes). Furthermore, OCE also confirmed that the State project will not result in any electric transmission export cables within a 500 meter buffer of any borrow areas.

In regard to the proposed location of the electric transmission export cables within proximity of the existing outfall structure outshore of South California Avenue, the Applicant indicated in their August 7,

2024 response the electric transmission export cables will be located 55 feet away horizontally from the outfall and 90 feet below the sea floor in the vicinity of the outfall. This information was provided to OCE for review.

OCE confirmed via email on August 7, 2024 that the information provided from the Applicant and summarized above was sufficient to address their comments and concerns.

The appropriate conditions as agreed to by the Applicant will be included as conditions of the State permit. With implementation of the measures indicated by the Applicant, the State project will not adversely impact the Federal Brigantine Inlet to Great Egg Harbor, Absecon Island beach nourishment project.

The State project meets the requirements of this rule.

Dredged Material Placement on Land 7:7-15.12

As per N.J.A.C. 7:7-15.12(a), dredged material placement is the disposal or beneficial use of sediments removed during dredging operations. This rule applies to the placement of dredged material landward of the spring high water line.

As discussed previously, the State project will not involve the removal of any sediment in any waterways for the installation of the electric transmission export cables. Therefore, the disposal of sediment will not be required. As a result, the State project is not subject to the requirements of this rule.

Marine Fish and Fisheries 7:7-16.2

As per N.J.A.C. 7:7-16.12(a), marine fish are marine and estuarine animals other than marine mammals and birds. Marine fisheries means one or more stocks of marine fish which can be treated as a unit for the purposes of conservation and management and which are identified on the basis of geographical, scientific, technical, recreational, and economic characteristics and the catching, taking, or harvesting of marine fish. The State project involves the installation of electric transmission export cables in State waters, which provide habitat for marine fish. Therefore, the requirements of this rule apply to the work in State waters.

N.J.A.C. 7:7-16.2(b) discourages activities that would adversely impact the natural functioning of marine fish or New Jersey based marine fisheries. The natural functioning of marine fish is not anticipated to be permanently impacted as temporary impacts within the Atlantic Ocean would be limited to the small corridor occupied by the electric transmission export cables. In addition, the use of HDD installation technology for electric transmission export cable installations in the back bays will eliminate impacts to the seabed. Furthermore, the installation of the electric transmission cables within New Jersey State waters would not alter bathymetry to a significant degree to permanently reduce fish productivity in the State project area.

“Discouraged” is defined at N.J.A.C. 7:7-1.5. Where an activity is discouraged under the applicable rule, the proposed use may still be approved if the use is determined by the Department to be in the public interest, provided that mitigating or compensating measures can be undertaken so that there is a net gain in quality and quantity of the coastal resources of concern. As discussed above in Project Description and History, Project 1, which includes both the Federal and State projects, is in the public interest because it will aid in advancing renewable energy, reducing greenhouse gas emissions, combating climate change, and improving resiliency within the State of New Jersey. Additionally, the components of the State project have been sited to avoid adverse impacts to regulated marine resources to the maximum extent practicable.

However, initial comments received by the Division from the MRA via email on April 10, 2024 indicates that marine construction activities may affect commercial and recreational fishing, particularly during prime fishing season, March through October. Impacts during construction activities consist of increases in turbidity as well as limitation on access to prime fishing areas during installation activities. Information provided in the application indicates that real time monitoring and adaptive management, such as changing tool speed or water flow, will be utilized to minimize turbidity during installation. Furthermore, while a safety zone will be established around installation vessels limiting access, the safety zone will move with the vessels and will only exist in one location for a short duration of time. The overall cable installation activities are short-term, lasting only a few weeks. The short duration of the installation activities and implementation of measures to minimize turbidity will minimize impacts to commercial and recreational fishing.

The final comments from MRA provided via email on April 25, 2024 also indicate that the implementation of measures and mitigation strategies outlined in the Atlantic Shores Offshore Wind South Project's COP such as developing and implementing a Fisheries Communication Plan and working with commercial and recreational fishing entities should ensure that the Project 1, which includes the State project, will minimize potential conflicts, and will minimize impacts on commercial and recreational fishing.

In order to mitigate the potential impacts to marine fish and fisheries from the entirety of Project 1, the Applicant is currently coordinating with BOEM on a fisheries mitigation plan. Additionally, the Applicant has indicated that they will utilize BMPs, such as measures to reduce turbidity during electric transmission export cable installations, in order to avoid and/or minimize impacts to New Jersey based marine fisheries or fisheries access. These measures include changing tool speed or water flows during installation.

Furthermore, a Memorandum of Understanding ("MOU") to be executed by the Department and the Applicant will establish a Compensatory Mitigation Fund to compensate fishers for verifiable claims of negative impacts of a significant nature, including economic losses, caused by the Atlantic Shores South offshore wind facilities, which includes Project 1 (both the Federal and State projects) during its construction, operation and/or decommissioning. The Letter of Intent to execute the MOU was executed by the NJDEP and the Applicant on April 1, 2024. These mitigating measures will help alleviate impacts to New Jersey based marine fisheries.

N.J.A.C. 7:7-16.2(d) further clarifies that that activities that interfere with marine fish and fisheries include activities which block diadromous finfish spawning runs, create unacceptable increases in turbidity, and/or involve excavation of marine substrate. In order to reduce the potential for undue disturbance to critical migrations for anadromous fish species, a timing restriction will be implemented between March 1st and June 30th of each calendar year for all work within New Jersey State waters. Furthermore and as mentioned above, BMPs will be implemented during project construction to limit turbidity and impacts to water quality in order to avoid adverse impacts to marine fish and their habitats.

With implementation of the appropriate fisheries timing restriction and Applicant committed BMPs, the State project complies with the requirements of this rule.

Water Quality 7:7-16.3

In accordance with this Rule at N.J.A.C. 7:7-16.3(b), coastal development which would violate the Federal Clean Water Act, or State laws, rules and regulations is prohibited. Additionally, coastal development that is inconsistent with an approved Water Quality Management (208) Plan under the New Jersey Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., is prohibited.

The proposed Fire Road substation will be located entirely within the boundaries of an approved sewer service area. The electric transmission export cables will be located both within and outside of the boundaries of an approved sewer service area.

As indicated in the submitted June 19, 2024 Traffic Evaluation, the proposed substation will be monitored remotely with infrequent employee trips for maintenance and inspection purposes. Therefore, the onshore substation will not require potable water or sewer services and none are proposed. The installation of electric transmission export cables will also not result in an increased demand for sewer or potable water services. As the State project does not require an increase in demand for water or sewer services at the work locations, the State project is considered consistent with the applicable Water Quality Management (208) Plan.

A request was made to the New Jersey Geological and Water Survey ("NJGWS") via email on March 4, 2024 to review the proposed HDDs for electric transmission cable installations to confirm that the State project as proposed would not result in any adverse impacts to water quality. Initial comments on the proposed HDDs were provided to the Division via email on April 26, 2024. The Applicant provided a response to all of NJGWS comments via their July 24, 2024 response letter. The responses clarified that all drilling fluid materials will utilize NSF 60/61 certified products, that no cementitious grout would be used, and the additional materials requested by NJGWS were provided. An email to the Division from NJGWS on August 7, 2024 confirmed that they were still discussing the response from the Applicant's Agent regarding proposed use of the bentonite slurry in saltwater/saline water areas. NJGWS provided additional comments on the proposed HDDs to the Division via email on August 22, 2024. These comments were sent to the Applicant for a response. In response to the August 22, 2024 comments, the Applicant provided additional geotechnical reports as requested, confirmed that additional information will be forthcoming regarding the use of a conductor and grouting of the boreholes, and confirmed that they will maintain sufficient distances to avoid impacts to existing infrastructure.

With implementation of the permit conditions requiring the Applicant to use NSF 60/61 certified products, maintain sufficient distances to avoid impacts to existing infrastructure, adhere to the prepared HDD Inadvertent Release Contingency Plan, updated on July 25, 2024, and continued coordination with the Department on the use of a conductor and grouting of the boreholes, the proposed HDDs will not adversely impact water quality.

For locations in State waters where HDD is the proposed electric transmission export cable installation method, contingency plans have been prepared in the event of an inadvertent return of drilling fluid during cable installations. The originally submitted Inadvertent Release Contingency Plan, dated November 29, 2023, can be found in Appendix L of the State permit application. The Plan was updated on July 25, 2024 and provided to the Division.

With adherence to the appropriate permit conditions discussed above, water quality is not anticipated to be adversely impacted during cable installations in State waters.

Therefore, the State project meets the requirements of this rule.

<u>Surface Water Use 7:7-16.4 and Groundwater Use 7:7-16.5</u>
Surface water is defined at N.J.A.C. 7:7-16.4(a) as water in lakes, ponds, streams, rivers, bogs, wetlands, bays, and ocean that is visible on land. Groundwater, per N.J.A.C. 7:7-16.5(a), is all water within the soil and subsurface strata that is not at the surface of the land and water within the earth that supplies wells and springs

N.J.A.C. 7:7-16.4(b) requires that coastal development demonstrate that the anticipated surface water demand of the facility will not exceed the capacity of the local potable water supply system or reserve capacity, and that the construction of the facility will not cause unacceptable surface water disturbances, such as drawdown, bottom scour, or alteration of flow patterns. N.J.A.C. 7:7-16.5(b) requires that coastal development demonstrate to the maximum extent practicable that the anticipated groundwater withdrawal demand of the development in conjunction with other groundwater diversions proposed or existing in the region will not cause salinity intrusions into groundwaters, will not degrade groundwater quality, will not significantly lower the water table or piezometric surface, or significantly decrease the base flow of adjacent water sources.

As indicated in the submitted permit application, the State project will not require the use the potable water or surface waters for use in the development. In addition, groundwater withdrawal demand will not be required for the State project. Temporary dewatering of open cut trenching for duct bank installation will likely be required. The Applicant has indicated that the appropriate approvals for dewatering activities will be obtained from the Department. A condition will be included in the State permit requiring the Applicant to obtain all necessary Federal, State and local approvals prior to any construction activities. Furthermore, while the State project will result in the installation of electric transmission cables below the seabed within state waters, these installations will not result in any unacceptable surface water disturbances as described in this rule. BMPs will be utilized as appropriate to reduce turbidity.

The State project meets the requirements of this rule.

Stormwater Management 7:7-16.6

Per N.J.A.C. 7:7-16.6(a), if a project or activity meets the definition of a "major development" at N.J.A.C. 7:8-1.2, then the project or activity shall comply with the Stormwater Management Rules at N.J.A.C. 7:8.

A "major development" is defined at N.J.A.C. 7:8-1.2 as a development that individually or collectively results in the disturbance of one or more acres of land since February 2, 2004, the creation of one-quarter acres or more of regulated impervious surface since February 2, 2004, the creation of one-quarter acres or more of regulated motor vehicle surface since March 2, 2021, or a combination of impervious surface and motor vehicle surface that totals an area of one-quarter acre or more. A review of the submitted State permit application by the Division's reviewing engineer indicates that the State project involves the addition of a quarter acre of new impervious area, the addition of a quarter acre of new regulated motor vehicle surface, and the disturbance of greater than one acre of land. These disturbances are specifically related to the proposed Fire Road substation construction. Therefore, the State project meets the definition of a "major development" and compliance with the requirements of this rule is required.

As documented in the engineering report, dated and approved on August 22, 2024, prepared by the Division's reviewing engineer, the electric transmission export cable installations are linear developments, and therefore, exempt from the requirements of groundwater recharge, quality, and quantity as per N.J.A.C. 7:8-5.2(d)1. However, the proposed Fire Road construction activities are required to meet all applicable requirements of the Stormwater Management Rules at N.J.A.C. 7:8 and provide its own stormwater management system.

As detailed in the August 22, 2024 approved engineering report, the substation components of the State project meet the applicable requirements of the Stormwater Management Rules at N.J.A.C. 7:8 provided the conditions referenced in the permit are implemented.

With implementation of the appropriate conditions referenced in the approved engineering report, the portions of the State project subject to the requirements of the Stormwater Management Rules at N.J.A.C. 7:8 meet the requirements of this rule.

Vegetation 7:7-16.7
As per N.J.A.C. 7:7-16.7, vegetation is the plant life or total plant cover that is found on a specific area, whether indigenous or introduced by humans.

N.J.A.C. 7:7-16.7(b) requires coastal development to preserve, to the maximum extent practicable, existing vegetation within a development site and to plant new vegetation, particularly appropriate coastal species, native to New Jersey to the maximum extent practicable. As discussed in detail throughout this report, the proposed electric transmission export cables have been sited in areas that are devoid of vegetation or significantly disturbed to the maximum extent practicable to minimize impacts to existing vegetation. Areas where vegetation must be temporarily disturbed for construction activities will either be restored to pre-construction conditions or will be allowed to revert back to pre-disturbance conditions upon completion of regulated activities. Furthermore, the appropriate mitigation will be provided for impacts to woody vegetation associated with impacts to critical wildlife habitat as discussed previously.

Additionally, a condition will be added to the permit indicating that any landscaping or plantings shall be done with coastal native species to the maximum extent practicable.

With implementation of the appropriate permit condition discussed above, the State project meets the requirements of this rule.

Air Quality 7:7-16.8
The project proposes the installation of electric transmission export cables within existing roadways and/or rights of way to the maximum extent practicable. Additionally, the work will involve the construction of one unmanned, automated and remotely operated substation at a property located on Fire Road in Egg Harbor Township, Atlantic County.

As per N.J.A.C. 7:7-16.8(b), coastal development shall conform with all applicable State and Federal regulations, standards, and guidelines and be consistent with the strategies of New Jersey's State Implementation Plan (SIP).

As discussed in detail below, a Traffic Evaluation, dated June 19, 2024, was provided to the Division to review. The evaluation analyzed traffic impacts during the construction of the unmanned, automated and remotely operated substation along Fire Road in Egg Harbor Township, Atlantic County. The evaluation notes that while the substation will be unmanned, infrequent trips to the substation by employees will occur for maintenance and inspection purposes. Significant increases in traffic associated with a new development can contribute to degradation of air quality in the region. While traffic is anticipated to be impacted temporarily during construction activities as noted in the completed evaluation for the substation construction and in the permit application documents for the electric transmission export cables, these impacts will cease once construction is completed. Therefore, the operation of the State project will not result in any significant impacts to air quality in the region. Furthermore, the State project in conjunction with the Federal project will conform to all applicable State and Federal regulations and any necessary air permits for the overall Project 1 will be obtained.

The installation of electric transmission export cables and the construction of an unmanned substation will not result in any significant impacts to ambient air quality and will not cause or contribute to an exceedance of ambient air quality standards at the site and in the surrounding area. Therefore, it can be concluded that the State project meets the requirements specified at (b).

As discussed above, the State project meets the requirements of this rule.

Public Access 7:7-16.9 & Public Access Law

Public access, as defined at N.J.A.C. 7:7-16.9(a), is the ability of the public to pass physically and visually to, from, and along tidal waterways and their shores and to use such shores, waterfronts and waters for activities such as navigation, fishing, and recreational activities. Additionally, the 2019 Public Access Law requires public access to be provided for any coastal application involving the change in the footprint of a structure.

The State project involves the construction of onshore electric transmission export cables on waterfront properties located in Atlantic City, Atlantic County. Atlantic City has submitted to the Department a draft Municipal Public Access Plan (MPAP) for review. However, the submitted draft MPAP has not been approved by the Department or incorporated into the municipal Master Plan. Therefore, in accordance with N.J.A.C. 7:7-16.9(c)2, public access is required in accordance with N.J.A.C. 7:7-16.9(k)3.

In accordance with N.J.A.C. 7:7-16.9(k)3ii of this rule, new industrial or public development shall provide onsite public access during normal operating hours unless it can be demonstrated that onsite public access is not practicable based on the risk of injury from proposed hazardous operations, or substantial permanent obstructions, or upon documentation of a threat to public safety due to unique circumstances concerning the subject property, and no measures can be taken to avert these risks. In this instance, offsite public access shall be provided on the same waterway in the same municipality as the development in accordance with N.J.A.C. 7:7-16.9(k)3iii. As the State project is a utility project spanning multiple locations including roadways, rights-of-way, and private properties, onsite access is not feasible or practicable, with the exception of the Atlantic City landfall location under the public beach and dune. At this location, with the exception of temporary closures for public safety during installation activities, the public beach will remain open and accessible to the public. Additionally, the Fire Road substation property does not have direct access to tidal waters. Furthermore, the Fire Road substation property, once developed, will contain energized equipment that could provide a hazard to public safety if accessible by the public. Based on the above, the State project is subject to provide public access in accordance with 16.9(k)3iii.

An initial request to provide a proposal for satisfying the public access requirements of this rule and the 2019 Public Access Law was made in the Division's May 2, 2024 information request letter. An initial response to this request was provided by the Applicant via email on June 18, 2024. The conceptual proposal and rendering included the construction of a viewing platform and public parking at the intersection of West End Avenue and Annapolis Avenue for back bay public access in the City of Atlantic City. Upon review of the proposal by the Program's reviewing biologist, further refinement and potential relocation of the proposed public access was requested to ensure that the project would not adversely impact any threatened and/or endangered species. The Department is currently working with the Applicant to further refine the conceptual design of the back bay public access project. A condition will be added to the State permit requiring the Applicant to continue its coordination with the Department to finalize the design of this public access project prior to any construction or site preparation of the State project authorized by the permit. Once the public access project has received Department approval, the Applicant will be required to place the funds necessary to implement the project in escrow. Additionally, a conservation restriction will be required to be placed on the public access project so it remains as public access in perpetuity. The public access project will be required to be constructed prior to or concurrently with the construction of the State project.

Since the State project also involves work along the Atlantic City oceanfront, in addition to the conceptual back bay public access project proposed by the Applicant, the Division requested an additional proposal to enhance public access along the City's oceanfront. In response to this request, an additional proposal for public access was provided to the Division from the Applicant via email on August 13, 2024.

The proposed improvements for oceanfront public access consisting of the purchase and installation of Americans with Disabilities Act ("ADA") beach mobility mats and benches at a cost of $175,000. Per the submitted proposal, 12 locations will receive the ADA beach mobility mats to access the Atlantic City beach from the Boardwalk. The beach mats will be placed at the following beach access locations: South Carolina Avenue, Martin Luther King Boulevard, Missouri Avenue, Mississippi Avenue, Iowa Avenue, Chelsea Avenue, Providence Avenue, Albany Avenue, Bartram Avenue, Tallahassee Avenue, New Hampshire Avenue, and Raleigh Avenue. The 30 waterfront benches will be placed at the following locations: 5 benches at the Montpelier Avenue pavilion, 2 benches at Iowa Avenue, 2 benches at Belmont Avenue, 2 benches at Florida Avenue, 1 bench at Columbia Avenue, 3 benches at Michigan Avenue, 1 bench at Bally's beach bar entrance, 2 benches at Indiana Avenue, 3 benches at Martin Luther King Boulevard, 1 bench at New York Avenue, 2 benches at the South Carolina Avenue pavilion, and 6 benches at Maryland Avenue. The Applicant will be required per a condition of the State permit to purchase the mobility mats and benches and donate them to the City of Atlantic City for placement at the above referenced locations prior to construction of the State project or within 60 days of permit issuance, whichever is sooner.

The State project is in compliance with the requirements of this rule and the Public Access Law with implementation of permit conditions as described above to provide Department approved public access. The State project meets the requirements of this rule.

Scenic Resources and Design 7:7-16.10

Scenic resources include the views of the natural and/or built landscape as described at N.J.A.C. 7:7-16.10(a). As per N.J.A.C. 7:7-16.10(c), new coastal development that is not visually compatible with existing scenic resources in terms of large-scale elements of building and site design is discouraged.

The State project involves the installation of underground electric transmission export cables. As these cables will be below grade, they will not result in any visual conflicts with existing scenic resources. The proposed construction of a substation on a vacant parcel located on Fire Road in Egg Harbor Township, Atlantic County is compatible with existing scenic resources in the area. Additionally, a vegetated buffer will be maintained along the perimeter of the substation property.

The WTGs, which are part of the Federal project not under review as part of the State permit application, will introduce visual effects to New Jersey's coastline. An analysis of the Federal project's compliance with the requirements of this rule has been detailed in the decision documents accompanying the issued April 1, 2024 Federal Consistency Certification #0000-21-0022.1 CDT210001.

No work proposed as part of the State project will result in the construction of a structure higher than 15 feet from the existing grade of the site adjacent to a bay or ocean or bayfront or oceanfront beach, dune, or boardwalk. Therefore, the requirements at 16.10(d), (e) and (f) do not apply to the State project.

The State project meets the applicable requirements of this rule.

Buffers and Compatibility of Uses 7:7-16.11

As per N.J.A.C. 7:7-16.11(a), buffers are natural or man-made areas, structures, or objects that serve to separate distinct uses or areas. Compatibility of uses is the ability for uses to exist together without aesthetic or functional conflicts.

The installation of electric transmission export cables will occur below grade within existing roadways and rights-of-way, consistent with other public utility infrastructure, to the maximum extent practicable. The installation of electric transmission export cable outside of existing roadways and rights-of-way will be located on parcels within appropriately zoned districts for electric infrastructure. Therefore, the below

grade infrastructure is compatible with adjacent land uses to the maximum extent practicable per 16.11(b).

The proposed onshore Fire Road substation will be constructed on an existing undeveloped parcel of land within an area surrounded by existing commercial and residential development. The substation will maintain required setbacks, will maintain an existing vegetative buffer along the perimeter of the site, will utilize neutral material colors, and will implement outdoor lighting considerations. With the implementation of these measures, the construction of the Fire Road substation will be compatible with adjacent land uses to the maximum extent practicable per 16.11(b).

As indicated in the submitted permit application, temporarily disturbed areas will be restored to pre-existing pre-construction conditions or will be allowed to revert back naturally to pre-disturbance conditions.

The State project meets the requirements of this rule.

Traffic 7:7-16.12
As per N.J.A.C. 7:7-16.12(a), traffic is the movement of vehicles, pedestrians or ships along a route.

16.12(d) states that any development that causes the location on a roadway to operate in excess of capacity Level D is discouraged. The State project proposes the installation of electric transmission export cables within existing roadways, rights-of-way, and other parcels zoned appropriately for electrical infrastructure. Additionally, the work will involve the construction of an unmanned automated and remotely operated substation on Fire Road in Egg Harbor Township, Atlantic County. The proposed substation development will not involve the construction of any parking spaces as the proposed substation will be unmanned and remotely operated a majority of the time. Infrequent trips to the substation will occur by employees for maintenance and inspection purposes.

A Traffic Evaluation, dated June 19, 2024, was prepared by Langan Engineering & Environmental Services to assess traffic impacts during construction of the Fire Road substation. The submitted evaluation considered the following intersections along with the substation site driveways proposed along Fire Road and Hingston Avenue: Tilton Road (CR 563) and Fire Road (CR 651); Tilton Road (CR 536) and Hingston Avenue; Old Egg Harbor Road (CR 687) and Fire Road (CR 651); and Old Egg Harbor Road (CR 687) and Hingston Avenue/Oak Tree Drive. A review of the Intersection Level of Service Analysis Summary within the evaluation indicates that overall, during construction of the substation, the intersections will operate at Level of Service D or better during construction activities. However, there are a few specific movements which will operate below Level of Service D during construction activities, specifically the southbound left turn movement at the intersection of Tilton Road and Hingston Avenue and the eastbound movements at the intersection of Old Egg Harbor Road and Hingston Avenue. These traffic impacts will only be temporary during construction activities and short-term and will revert to pre-disturbance traffic conditions once construction of the substation is completed. This is typical with construction of any proposed development. The Division does not analyze temporary traffic impacts during construction activities. Traffic impacts are analyzed on the constructed and operational development. As mentioned above, an analysis of Level of Service for the development once constructed was not undertaken as the infrequent employee trips to the unmanned substation will have a minimal impact on traffic operations and does not warrant a traffic analysis.

In regard to the installation of electric transmission export cables within existing roadways and rights-of-way, temporary and short-term impacts to traffic during the construction activities are anticipated to occur. The Applicant has committed to coordinate with and obtain all necessary approvals from the NJDOT as well as local municipalities prior to project mobilization. The Applicant has also developed a

NJDOT approved Maintenance and Protection of Traffic (MPT) Plan and intends to adhere to traffic control measures in accordance with the Plan. Once construction activities are completed, the roadways and rights-of-way will be returned to their pre-construction state thereby preventing any permanent traffic impacts.

The parking requirements specified at N.J.A.C. 7:7-16.12(e) do not apply to the onshore Fire Road substation development proposed in Egg Harbor Township, Atlantic County. Egg Harbor Township is not a municipality bordering the Atlantic Ocean. The work proposed within the municipalities of Egg Harbor Township and Pleasantville City in Atlantic County is not subject to (e) as these municipalities do not border the Atlantic Ocean. Additionally, the work proposed within the oceanfront municipality of Atlantic City, Atlantic County involves only the installation of electric transmission cables and does not require any parking facilities.

Therefore, as discussed above, the State project meets the requirements of this rule.

Section 10 Compliance N.J.S.A 13:19-1 et seq. for work within the CAFRA Area

a. **Conforms with all applicable air, water and radiation emission and effluent standards and all applicable water quality criteria and air quality standards.** The State project conforms with all applicable standards, which are air, water, effluent and water quality standards. The required Outer Continental Shelf ("OCS") Air Permit and Section 401 and 404 of the Clean Water Act permits for Project 1 will be obtained. As discussed above, the requirements of the Stormwater Management Rules at N.J.A.C. 7:8 apply to the proposed substation construction along Fire Road in Egg Harbor Township, Atlantic County. This portion of the State project will implement appropriate stormwater measures that comply with the applicable requirements of the Stormwater Management Rules, ensuring the regulations at N.J.A.C. 7:8 are being met for the State project. Additionally, the Applicant has committed to implementing BMPs and a NJDPES and a Spill Prevention Control Countermeasure ("SPCC") plan to further protect water quality.
b. **Prevents air emissions and water effluents in excess of the existing dilution, assimilative, and recovery capacities of the air and water environments at the site and within the surrounding region.** The State project will implement all necessary measures to prevent air emissions and water effluents in excess of the existing dilution, assimilative and recovery capacities of the air and water environments at the site and within the surrounding regions. The State project will not result in any negative impacts to air or water quality in the area as discussed in detail in the report above. Additionally, as mentioned above, the Applicant has indicated that they will obtain the appropriate OCS Air Permit for Project 1.
c. **Provides for the handling and disposal of litter, trash, and refuse in such a manner as to minimize adverse environmental effects and the threat to the public health, safety, and welfare.** The Applicant will dispose of solid waste, trash, and debris generated by Project 1 in accordance with applicable Federal, State, and local regulations. All onshore waste with the potential to result in environmental harm will be stored in designated, secured, and bermed locations away from depressions and drainage areas that carry surface water until collected by the waste contractor. Proper spill containment gear, absorption materials, and spill kits will be provided onsite. Additionally, as mentioned above, the Applicant will implement a SPCC plan a Discharge Prevention, Containment, and Countermeasure ("DPCC"), and Discharge Cleanup and Removal ("DCR") plans in accordance with N.J.A.C. 7:1E once approval is obtained by the Department.
d. **Would result in minimal feasible impairment of the regenerative capacity of water aquifers or other ground or surface water supplies.** The State project will not require the use of potable water or sewer services. The State project will not impact water aquifers or

other ground or surface water supplies. Temporary dewatering activities will be completed under the appropriate permitting and discharges and releases will be managed using the SPCC plan. The proposed construction of the State project will, therefore, not impair the regenerative capacity of water aquifers or ground/surface water supplies.

e. **Would cause minimal feasible interference with the natural functioning of plant, animal, fish, and human life processes at the site and within the surrounding region.** As discussed above and in the submitted application, the State project has been sited and designed to minimize impacts to regulated resources and the environment to the maximum extent practicable. The requirements for tree preservation and plantings in Subchapter 13 of the Coastal Zone Management Rules (N.J.A.C. 7:7-1.1 et seq.) are not applicable to the linear portion of the State project and electric substation as discussed above. Avoidance, minimization, and mitigation measures will be implemented to preserve existing trees and vegetation to the maximum extent practicable. The State project will not result in any adverse impacts to threatened and/or endangered species or their habitats or critical wildlife habitats with implementation of the conditions in the permit. The disturbance to marine fish and fisheries, riparian zone vegetation, and wetlands transition area is consistent with the applicable regulations as discussed throughout this report. The construction of the State project will, therefore, only cause minimal interference with the natural functioning of plant, animal, fish, and human life processes at the site and within the surrounding region.

f. **Is located or constructed so as to neither endanger human life or property nor otherwise impair the public health, safety, and welfare**. The State project has been sited and designed so as to neither endanger human life or property nor otherwise impair the public health, safety, and welfare. Minimization of impacts will be accomplished through avoidance and mitigation. The onshore electric transmission export cables will be buried below grade and located within roadways, disturbed rights-of-way, and on disturbed parcels of land to the maximum extent practicable to minimize and/or avoid impacts. The onshore substation will be constructed on a currently undeveloped lot in the vicinity of existing residential and commercial development. The appropriate security measures will be implemented to control access to the substation property during construction and operation to protect public health, safety, and welfare.

g. **Would result in minimal practicable degradation of unique or irreplaceable land types, historical or archaeological areas, and existing scenic and aesthetic attributes at the site and within the surrounding region**. The portions of the State project within the CAFRA area include the installation of below grade electrical transmission export cables and the construction of an onshore substation. This work, which has been sited and designed to minimize environmental impacts, is not anticipated to result in degradation or unique or irreplaceable land types, historical or archaeological areas, and existing scenic and aesthetic attributes at the site and within the surrounding region. As discussed in detail above, both components of Project 1, the State and Federal project, are being reviewed as a whole through Section 106 consultation with BOEM. In consultation between the HPO and BOEM, it has been determined that Project 1 as a whole will adversely affect historic properties and/or archaeological resources. To resolve the adverse effects of Project 1, BOEM, in conjunction with other parties including the Applicant, is proposing the development and execution of a Memorandum of Agreement in accordance with 36 CFR § 800.6(c) to memorialize the steps BOEM will take to avoid, minimize, and mitigate Project 1's adverse effects. Execution of the Memorandum of Agreement will demonstrate BOEM's compliance with Section 106 of the National Historic Preservation Act. As a result, the Applicant is consistent with New Jersey's Coastal Management Program through the completion of Section 106 consultation and the execution of the Memorandum of Agreement among the Section 106 consulting parties for Project 1. The Memorandum of Agreement was fully executed. With implementation of the measures outlined in the Memorandum of Agreement, Project 1, which

includes the components of the State project within the CAFRA area, will only result in minimal practicable degradation of unique or irreplaceable land types, historical or archaeological areas, and existing scenic and aesthetic attributes in the onshore State project area and the surrounding region.

h. **Provides, pursuant to standards established by rule or regulation adopted pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.S2:14B-1 et seq.), on-site public access to the waterfront and adjacent shoreline, or off-site public access to the waterfront and adjacent shoreline if on-site public access is not feasible as determined by the Department. Nothing in this subsection shall be construed to abrogate or otherwise affect any public access obligations or requirements of any permit, administrative order, consent decree, or court order in effect prior to the effective date [Jan. 19, 2016] of P.L.2015, c.260.** As discussed in detail above, the State project will take place directly adjacent to tidal waterbodies. Therefore, the requirements for public access are applicable to the State project. As discussed above, conceptual proposals and supporting information for providing new and enhanced public access was provided by the Applicant in email correspondence to the Division on June 18, 2024 and August 13, 2024. The appropriate conditions will be added to the permit requiring the Applicant to finalize the public access projects and implement the required public access improvements prior to or concurrently with construction of the State project.

PERMIT CONDITIONS
Coastal Permit Conditions

1. This permit is issued subject to compliance with N.J.A.C 7:7-27.2, Conditions that apply to all coastal permits.

2. The Permittee shall obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit. Approvals include, but are not limited to, authorization from the US Army Corps of Engineers to conduct work below the high tide line and a Section 408 approval.

3. Additional development or other related construction will require either a modification to this permit #0000-21-0022.2 LUP240001 or, a new permit depending on the size and scope of the proposed development as well as the activity status of the existing permit.

4. Prior to any construction or site preparation, the Permittee must receive a new Tidelands license for the electric transmission export cables and the installation of the cables below the mean high water line authorized by this permit. The application for a new Tidelands license is pending under file# 0000-21-0022.2 TDI240001. Failure to comply with this condition will result in fines up to $1000 plus $100 per day, a higher fee for the conveyance and possible prosecution by the Attorney General's office to remove unauthorized structures and to pay use and occupancy charge.

5. Prior to the commencement of site preparation, inclusive of site clearing, project staging, onsite storage of materials, pre-construction earth movement, other site disturbance, and all authorized activities, and within 90 days of the issuance of this permit authorization, the Permittee shall complete mitigation for the direct loss of Critical Wildlife Habitat. To the NJDEP Watershed and Land Management Program, Endangered & Threatened Species Unit, the Permittee shall first submit a proposal of mitigation for direct impacts to 16.245 acres of stopover habitat for migratory birds. After the mitigation proposal is accepted by the Division in writing, the Permittee shall then proceed with the placement of a conservation restriction over the approved mitigation site. The Permittee shall record the conservation restriction on the deed and shall file the restriction with the appropriate

County Clerk's Office (the Registrar of Deeds and Mortgages). The conservation restriction shall run with the land and be binding upon all successive owners. A copy of the recorded conservation restriction shall be forwarded to and received by the Division. No project site preparation and authorized activities may commence until the required conservation restriction has been recorded and a signed copy has been received by the Division of Land Resource Protection. Any activities undertaken on the site before a copy of the recorded restriction is received by the Division will be considered a violation of the Coastal Area Facility Review Act.

6. To reduce the risk of harm to Northern Long-eared Bat, Tricolored Bat (proposed federal listing), as well as nesting migratory bird species, and potential violation of the NJ Endangered and Nongame Species Conservation Act (ENSCA; N.J.S.A. 23:2a-1-13), and to reduce the risk of direct impacts to sensitive habitat, the Permittee shall adhere to a seasonal restriction on the clearing of all woody vegetation from April 1 through November 15 of each calendar year.

7. To protect sensitive habitat for the State-listed Osprey, the Permittee shall adhere to a seasonal restriction on the use of heavy construction equipment/machinery within 1000 feet of all osprey nests from April 1 through August 31 of each calendar year. The initiation and implementation of work which generates disturbance (e.g., audial, visual) that is out of character with what currently exists at or surrounding the anticipated work area during the restricted time period recommended above may result in the Permittee being in violation of the "take" clause within State of New Jersey Endangered and Nongame Species Conservation Act (N.J.S.A. 23:2A-1 et seq). Please note that adherence to this seasonal restriction shall be applied if nest building and/or nest occupancy is observed during the months of March and April of the given calendar year of work.

8. If activity of rare beach-nesting shorebird species (i.e. State- or federally listed threatened or endangered species, or migratory shorebird species of special concern), or a State-/Federally listed endangered beach plant population, is discovered at or near the permitted limit of disturbance, work and recreational use of the area shall cease until the Permittee has coordinated with, and guidance on habitat management practices can be issued by, the NJ Department of Environmental Protection and, potentially, the US Fish & Wildlife Service. Please note that this coordination may result in the need for the Permittee's adherence to provisions as necessary to protect this sensitive habitat (e.g., seasonal restriction on regulated activities). The Department reserves the right to suspend all regulated activities onsite should it be determined that the Permittee has not taken proper precautions to ensure continuous compliance with this condition.

9. To reduce the risk of harm to anadromous fish species such as the federally listed Atlantic sturgeon and Shortnose sturgeon, the Permittee shall adhere to a seasonal restriction on all work below the mean high-water line from March 1 through June 30 of each calendar year. Physical measures that will be utilized to avoid impacts to habitat (e.g., installation of a floating turbidity barrier) shall be implemented prior to the commencement of authorized activities and monitored weekly, maintained in working condition, and kept in place until project completion.

10. Prior to any construction or site preparation and within 60 days of permit issuance, the Permittee shall purchase mobility mats and benches for placement at the beach access points within Atlantic City which are presented in the submitted August 13, 2024 public access proposal and provide the mats and benches to Atlantic City for placement. Proof of purchase of the mobility mats and benches and confirmation of the donation of the mats and benches to Atlantic City must be provided to the Division for review and approval prior to any site preparation or construction and within 60 days of permit issuance, whichever is earlier.

11. Prior to any construction or site preparation, the Permittee shall continue to coordinate with NJDEP on finalizing the design of the offsite public access project proposed by the Permittee. The project presently consists of the construction of a public access project along Annapolis Avenue for back bay public access in Atlantic City, Atlantic County. Should this project not be deemed acceptable by NJDEP, an alternate public access project proposal shall be submitted by the Permittee to NJDEP for review and approval within 90 days of NJDEP's written response to the Permittee that the proposed project or its project design is deficient or unacceptable.

12. Prior to any construction or site preparation and within 90 days of NJDEP's written approval of the public access project referenced in #11 above, the Permittee shall submit a draft escrow agreement (for review and approval by NJDEP) between NJDEP, the Permittee, and their attorney for placement of the funds necessary to design, permit and construct the NJDEP approved public access project in escrow. Within 30 days of execution of the escrow agreement, all the public access project funds shall be deposited in escrow in the attorney trust account of a licensed New Jersey attorney. The NJDEP approved public access improvements must be constructed prior to or concurrent with construction of the project authorized under this permit.

13. Prior to the start of the NJDEP approved public access improvements or the start of the project construction, but in no event later than 6 months from the date of issuance of the Permit, the Permittee in conjunction with the property owner shall record a conservation restriction dedicating the improvements for public access. The permittee shall include the conservation restriction on the deed and shall file the restriction with the Atlantic County Clerk's Office (the Registrar of Deeds and Mortgages). Said restriction shall run with the land and be binding upon the property owner and all successors and assigns. The conservation restriction shall conform, verbatim, to the format and content of the model Declaration of Restriction for Public Access to the Waterfront on the Division's website at www.nj.gov/dep/landuse/forms.html. A complete copy of the recorded conservation restriction shall be emailed to the Division's Project Manager, Lindsey Davis, at Lindsey.Davis@dep.nj.gov within 30 days of recordation of the conservation restriction.

14. If any military munitions and explosives of concern (MECs) or unexploded ordinances (UXOs) are encountered during project construction, the permittee shall immediately notify the United States Coast Guard (USCG) of the munition and its location.

15. Any necessary remediation activities shall be conducted in accordance with all applicable regulations and under the supervision of a Licensed Site Remediation Professional.

16. The Permittee shall coordinate with the NJDEP's Office of Coastal Engineering and the US Army Corps of Engineers regarding construction schedules to minimize construction conflicts with the Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island Federal beach nourishment project.

17. Any modifications of the project which would result in work within the limits of the Brigantine Inlet to Great Egg Harbor Inlet, Absecon Island beach nourishment project inshore of the 2,500-foot limit as measured from project baseline and/or at or above -35 feet NAVD88 within the US Army Corps of Engineers beach and dune design template (including slopes) is subservient to the to the construction, operation, maintenance, repair, rehabilitation and replacement of the Federal beach nourishment project and is subject to removal prior to future Federal beach nourishment project-related construction.

18. The electric transmission export cables shall not be laid within the 500 meter buffer around all NJDEP and US Army Corps of Engineers sand borrow areas as proposed.

19. The Permittee shall monitor vibration levels during electric transmission export cable installations on the outfall pipe located outshore of South California Avenue as proposed.

20. The Permittee shall provide to the NJDEP's Office of Coastal Engineering and the US Army Corps of Engineers cable locations and as-installed surveys post-construction. Cables shall be monitored regularly throughout the operational life of the project and after major storm events as proposed.

21. The electric transmission export cables installed via horizontal directional drill shall be installed a minimum of 55 feet away horizontally and 90' below the seabed in the area of the existing outfall pipe outshore of South California Avenue as proposed.

22. The Permittee shall conduct and provide to the NJDEP pre-construction topographic and bathymetric surveys that capture the entire profile of the existing conditions between the Horizontal Directional Drill ("HDD") entry pit located in the parking lot between South California Avenue and South Belmont Avenue in Atlantic City and the offshore HDD exit pit in the Atlantic Ocean for each HDD installation before commencing construction.

23. The permittee shall conduct and provide to the NJDEP post-construction topographic and bathymetric surveys that capture the entire profile of the existing conditions between the HDD entry pit located in the parking lot between South California Avenue and South Belmont Avenue in Atlantic City and the offshore HDD exit pit in the Atlantic Ocean for each HDD installation before commencing construction.

24. No excavation or grading of a beach or dune is authorized by this permit.

25. No disturbance to dune vegetation or dune fencing is authorized by this permit.

26. No disturbance to dune crossovers, including but not limited to split rail fencing, subsurface geotextile base matting, compacted I-5 surface, etc., within the City of Atlantic City is authorized by this permit.

27. Beach berm elevations and widths shall not be lowered or lessened during temporary occupation within the limits of the Federal beach template during construction.

28. All occupations within the limits of the Federal beach template shall maintain and not alter any public access without the pre-approval of all local, State and Federal agencies including the US Army Corps of Engineers, the NJDEP's Office of Coastal Engineering, and NJDEP's Division of Land Resource Protection.

29. The permittee shall provide to the NJDEP's Office of Coastal Engineering as-built surveys for the entire length of the electric transmission export cables installed from the HDD entry pit located in the parking lot between South California Avenue and South Belmont Avenue to the State's 3 nautical mile (nm) jurisdictional limit.

30. Prior to electric transmission cable export installation, the Permittee shall establish a hotline with contact information, including an email and a phone number. Protocols regarding unintended interaction with the electric transmission export cables and proposed nearby construction activities should be included with the hotline information. Coordination of the development of these protocols shall occur with NJDEP's Office of Coastal Engineering, the US Army Corps of Engineers, and the US Coast Guard.

31. To protect water quality, the Permittee shall adhere to the procedures in the prepared Inadvertent Release Contingency Plan, updated on July 25, 2024, and prepared by BOND Civil & Utility Construction, Inc.

32. If any geodetic control reference marks must be moved, raised or lowered to accommodate construction, the Permittee shall contact the NJDOT's Geodetic Control Survey at least 60 days prior to disturbance, and arrangements shall be made to protect the position.

33. Any landscaping of the properties shall be done with native plants to maximum extent practicable. The use of plastic or other impervious material under newly landscaped or gravel areas is prohibited. All sub-surface liners must be made of filter cloth or other permeable material.

34. Vegetation within a riparian zone shall only be disturbed in the areas specifically shown on the approved drawing(s). No other vegetation within a riparian zone shall be disturbed for any reason.

35. Upon completion of the project, all temporarily disturbed areas within a riparian zone shall be restored to original topography and replanted with indigenous, non-invasive vegetation in accordance with N.J.A.C. 7:13-11.2(z).

36. The Permittee shall implement measures to minimize turbidity in the waterway during construction.

37. All excavated material must be lawfully disposed of outside any flood plain, open water, freshwater wetlands or transition area.

38. All areas of temporary disturbance shall be restored to pre-disturbance conditions upon completion of construction.

39. All debris generated from the construction is to be disposed of at an approved disposal site.

Freshwater Wetlands Special Activity Transition Area Waiver for Linear Development Permit Conditions

1. The authorized activities shall comply with the applicable conditions set forth under N.J.A.C. 7:7A-8.1 and 20.2. Failure to comply with these conditions shall constitute a violation of the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et. seq.). Any additional un-permitted disturbance of freshwater wetlands, State open waters, or transition areas besides that shown on the approved plans shall be considered a violation of the Freshwater Wetlands Protection Act Rules unless the activity is exempt or a permit is obtained from the Department prior to the start of the disturbance.

2. Prior to the commencement of site clearing, grading, or construction onsite, the permittee shall install a sediment barrier at the limits of disturbance authorized herein, which is sufficient to prevent the sedimentation of the remaining freshwater wetlands and transition areas and shall serve as a physical barrier protecting these areas from encroachment by construction vehicles or other soil-disturbing activities. All sediment barriers and soil erosion control measures shall be kept in place and maintained throughout the duration of construction, until such time that the site is stabilized.

3. This authorization is based upon a Letter of Interpretation Line Verification issued by the Division under File and Activity No. 0000-21-0022.2 LLI240001. The Department has determined that the freshwater wetlands affected by this permit authorization are of exceptional and intermediate resource value and the standard transition area or buffer required adjacent to these wetlands is 150 feet and 50 feet. respectively. Any additional regulated activities conducted within the standard transition area

onsite shall require a separate transition area waiver from the Division. Regulated activities within a transition area are defined at N.J.A.C. 7:7A-2.3. Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing Rules (N.J.A.C. 7:7A) for additional information.

4. There shall be no disturbance to any wetlands during construction of the authorized project.

5. The total amount of disturbance to wetlands transition areas associated with this authorization for a Freshwater Wetlands Special Activity Transition Area Waiver for Linear Development shall not exceed 0.826 acres.

Engineering Conditions

1. The Department has determined that this project meets the requirements of the Stormwater Management Rules at N.J.A.C. 7:8. Any future expansion or alteration of the approved stormwater management system, which would affect water quality, increase the rate or volume of stormwater leaving the site, affect the infiltration capacity on the site, or alter the approved low impact site design, shall be reviewed and approved by the Department prior to construction. This includes any proposed changes to the discharge characteristics of any basin, the construction of new inlets or pipes that tie into the storm sewer network and/or the replacement of existing inlets or pipes with structures of different capacity.

2. The Permittee shall make specific arrangements to ensure the continuous maintenance and efficient operation of all proposed stormwater management measures onsite. This includes the inspection (and cleaning where necessary) of any and all constructed swales, basins, inlets, and mechanical treatment devices at least four times per year and after every major storm totaling 1 inch of rainfall or more, the use of appropriate soil conservation practices onsite, and any other reasonable effort required to maintain the stormwater management system in good working order.

3. Prior to the start of any construction onsite, the Permittee/owner shall record a deed notice for all stormwater management measures authorized under this permit which shall be recorded in the Office of the County Clerk or the registrar of deeds and mortgages of the county in which the development, project, project site, or mitigation area containing the stormwater management measure is located. A form of deed notice shall be submitted to the Watershed and Land Management Program (Program) for approval prior to filing. The deed notice shall contain a description of the stormwater management measure(s) used to meet the green infrastructure, groundwater recharge, stormwater runoff quality, and stormwater runoff quantity standards at N.J.A.C. 7:8-5.3, 5.4, 5.5, and 5.6 and shall identify the location of the stormwater management measure(s) in NAD 1983 State Plane New Jersey FIPS 2900 US Feet or Latitude and Longitude in decimal degrees. The deed notice shall also reference the maintenance plan required to be recorded upon the deed pursuant to N.J.A.C. 7:8-5.8(d). Prior to the commencement of construction, proof that the above required deed notice has been filed shall be submitted to the Program. Proof that the required information has been recorded on the deed shall be in the form of either a copy of the complete recorded document or a receipt from the clerk or other proof of recordation provided by the recording office. However, if the initial proof provided to the Program is not a copy of the complete recorded document, a copy of the complete recorded document shall be provided to the Program within 180 calendar days of the authorization granted by the Program.

Horizontal Directional Drill ("HDD") Installation Conditions

1. Prior to any HDD installations, the Permittee shall provide to the NJDEP, for review and approval, information regarding situations where the use of a conductor during horizontal directional drilling

installations is appropriate and/or warranted. The Permittee shall implement the use of a conductor in situations agreed upon in writing by the Permittee and the NJDEP.

2. Prior to any HDD installations, the Permittee shall provide to the NJDEP, for review and approval, information regarding why the use of grouting within the boreholes upon completion of the horizontal directional drilling installations is not necessary and/or warranted. The Permittee shall implement the use of grouting of the boreholes in situations agreed upon in writing by the Permittee and the NJDEP.

3. All drill fluid materials utilized for the horizontal directional drill electric transmission export cable installations shall be NSF 60/61 certified as proposed.

4. The Permittee shall maintain sufficient horizontal and vertical setbacks from existing infrastructure during horizontal directional drill installations in order to avoid damage and other potential hazards, such as structural instability, to existing infrastructure.

Prepared by: Date: August 26, 2024

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Division of Land Resource Protection

Reviewed by: Date: August 26, 2024

Janet L. Stewart, Bureau Chief
Division of Land Resource Protection

Approved by: Date: August 26, 2024

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Watershed and Land Management Program