



Attachment 1

## BPU Supplemental Info

Board of Public Utilities

# Offshore Wind Transmission Proposal Data Collection Form

September 17, 2021

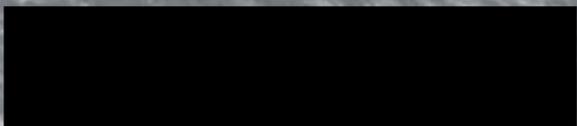


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Section 1

# Executive Summary

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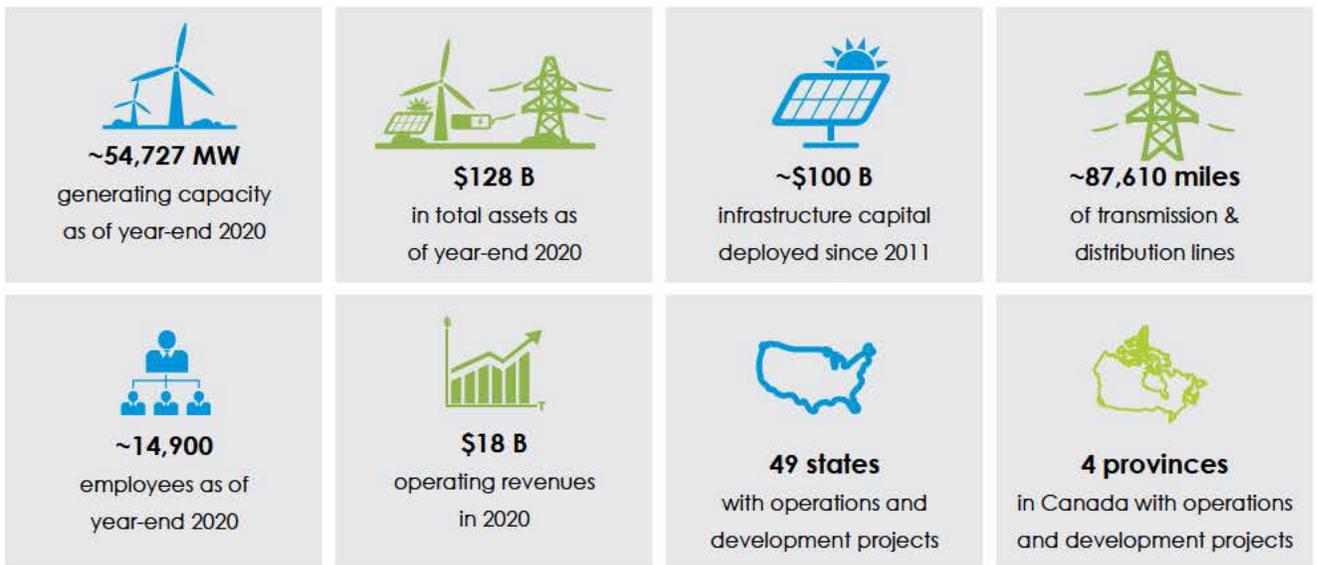
# 1.

## EXECUTIVE SUMMARY

NextEra Energy Transmission MidAtlantic Holdings, LLC (NEETMA) is pleased to submit these proposals to finance, develop, build, own, operate, and maintain the New Jersey Seawind Connector (NJSC). These solutions have been developed to support New Jersey on the path to 100% clean energy by 2050 and meets the objectives for offshore wind development by providing New Jersey with the ability to:

- Interconnect up to 11,700 MW of offshore wind, for a total of 12,758 MW
- Mix and match 31 different combinations via multiple transmission proposals
- Deliver cost-effective and cost-contained solutions for New Jersey rate payers

NEETMA is an indirect, wholly-owned subsidiary of NextEra Energy, Inc. (NextEra). Headquartered in Juno Beach, Florida, NextEra is a leading clean-energy company and one of America's largest infrastructure capital investors in any industry.



NextEra owns Florida Power & Light Company, which is the largest rate-regulated electric utility in the United States and serves more than 11 million residents across Florida with clean, reliable and affordable electricity. NextEra also owns a competitive clean energy business, NextEra Energy Resources, LLC (NEER), which, together with its affiliated entities, is the world's largest generator of renewable energy from the wind and sun and a world leader in battery storage. A Fortune 200 company and included in the S&P 100 index, NextEra has been recognized often by third parties for its efforts in sustainability, corporate responsibility, ethics and compliance, and diversity.

NextEra's financial strength and experience in building large infrastructure projects positions it to be the best partner for New Jersey to deliver these projects on-time and on-budget. NextEra is committed to financial discipline and maintains the strongest balance sheet in the industry. As a demonstration of balance sheet strength, NextEra has an A- credit rating from Standard & Poor's. NextEra will utilize its balance sheet strength to ensure the success of the New Jersey Seawind Connector project.

As the fifth largest infrastructure builder in the United States, not only is NextEra able to deliver on large infrastructure projects, but our track record of delivering significant projects on-time and on-budget is unparalleled in the industry. From 2003 through year-end 2020, NextEra subsidiaries have constructed over \$59 billion and 263 new, stand-alone infrastructure projects with every project including a transmission component. An additional strength is the NextEra procurement process and team which manages vendor relationships, leverages economies of scale and secures the most favorable terms. NextEra supply chain capability procures for an approximate \$11 billion annual capital program which provides NextEra significant buying power and strong relationships with top vendors in the industry. These relationships during the COVID-19 pandemic enabled NextEra to continue to deliver during times when others had supply chain disruptions. Through NextEra's robust construction and procurement execution track record, NEETMA can offer guaranteed cost and schedule for the NJSC.

**Table 1.1-1 NextEra Completion On-Budget and On-Time**

On Budget Performance 2003 – 2020				On Time Completion 2003 – 2020			
Energy	Budget (\$B)	Actual (\$B)	Variance (\$B)	Energy	# Projects	% On Time or Early	Avg. Days Ahead of Schedule
Fossil	13.3	12.7	0.6	Fossil	15	73%	6
Solar	13.0	12.6	0.4	Solar	76	86%	18
Wind	32.1	32.1	0.1	Wind	167	78%	14
Trans.	1.7	1.6	0.1	Trans.	5	80%	10
<b>Total</b>	<b>60.0</b>	<b>58.9</b>	<b>1.2</b>	<b>Total</b>	<b>263</b>	<b>80%</b>	<b>15</b>

To make this project a success for New Jersey customers, NEETMA has provided a robust package of low-cost financing, aggressive cost containment and ability to capitalize on the proposed transmission investment tax credit.

NextEra is an active participant in the financial markets and year-to-date has raised more than \$9 billion in new capital year-to-date on very favorable terms. [REDACTED]

[REDACTED]

NEETMA's confidence in offering this Project at the cost and financing structure described in this proposal has been reflected through an aggressive cost containment structure. [REDACTED]

[REDACTED]

[REDACTED]

NEETMA's unique ability to be a long-term partner is further proven by having demonstrated experience in operating HVDC submarine cable systems. NEET, NEETMA's direct parent company, has current investments in 3 out of the 4 HVDC submarine cable systems in operation today in the U.S:

- Owner and operator of Trans Bay Cable (TBC), the world's first commercially operated Modular Multilevel Converter (MMC) Voltage Source Converter (VSC) HVDC technology. TBC provides 40% of San Francisco's power needs on a daily basis.
- 49% stake in PowerBridge, the developer and operator of HVDC submarine and underground systems. The Neptune project connects New Jersey to New York's Zone J and Hudson project connects New Jersey to New York's Zone K.

No one has the demonstrated experience and expertise to rival NextEra on HVDC submarine system in the U.S. market, including NJ and NY. For more information please see **Attachment 17**.

Finally, NEETMA meticulously evaluated our proposals to ensure they provided viable and flexible solutions for New Jersey. To ensure all possible combinations were explored, the evaluation started by analyzing all possible interconnections and identifying 19 potential locations. Based on initial powerflow studies and desktop analysis the 19 locations were narrowed down to the 10 top injection points. An extensive analysis ensued that ranked the injections sites based on the BPU selection criteria. This included thousands of planning studies and their related upgrade cost and in-person field visits. This process allowed NEETMA to identify Cardiff, Oceanview and Deans as the preferred set of solutions. These solutions provide significant savings and are less impactful to the environment versus building individual generation tielines for each New Jersey wind solicitation. Further information on the study process is included in Section 1.2 and discussion on Project benefits is included in Section 4.

After the proposals were designed to meet all applicable PJM reliability criteria, NEETMA evaluated the proposals using BPU's key selection criteria, to propose the most impactful and cost-effective Projects. As an example, NEETMA has eliminated AC injection proposals due to the environmental and cost impacts of AC construction as further described in Section 3.1. The resulting Projects were extremely robust and meet the following BPU key criteriaia:

<b>Cost</b>	<ul style="list-style-type: none"> <li>Extremely cost effective versus individual gen-ties</li> <li>Low cost structure and financing strategy</li> <li>Aggressive cost containment measures</li> <li>The ability to achieve investment tax incentives</li> </ul>
<b>Constructability</b>	<ul style="list-style-type: none"> <li>HVDC design is used around the world</li> <li>Utilizes construction techniques permitted by DEP</li> <li>Utilizes site control and primarily public land for rights-of-way</li> <li>Routes vetted through field visits, DEP and municipal consultation</li> </ul>
<b>Schedule</b>	<ul style="list-style-type: none"> <li>Optimized schedules to maximize construction efficiency</li> <li>Commitments from key vendors supporting project schedule</li> <li>Schedule in advance of BPU solicitation dates</li> <li>Meaningful schedule guarantees</li> </ul>
<b>Optionality</b>	<ul style="list-style-type: none"> <li>Three injection points optimized for cost and injection levels</li> <li>Solutions can be mixed and matched</li> <li>Varying levels of injection capabilities</li> <li>The ability to exceed New Jersey's offshore wind targets</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>HVDC reduces environmental impacts verses AC design</li> <li>Incorporated feedback from Federal and State consultations</li> <li>Single construction periods can achieve high injection levels</li> </ul>
<b>Benefits</b>	<ul style="list-style-type: none"> <li>Schedule significantly reduces project-on-project risk</li> <li>Market analysis indicates capacity and energy benefits in excess of the transmission cost</li> </ul>



## 1.2 Summary of NEETMA Proposals

NEETMA believes that an integrated approach to transmission is the most cost effective and least environmentally impactful way to deliver offshore wind to New Jersey. Through NEETMA's unparalleled capabilities in engineering, procurement and construction, NEETMA is able to develop, build, operate and maintain cost-effective utility-scale offshore collection and conversion platforms that will deliver tremendous value to the State and its ratepayers.

NEETMA is submitting multiple proposals with various injection points and injection amounts to provide PJM and New Jersey Board of Public Utilities (BPU) maximum flexibility and optionality in determining the best transmission proposal to satisfy New Jersey's offshore wind goals. NEETMA believes this can be best achieved by using primarily High Voltage Direct Current (HVDC) Voltage Source Converter (VSC) technology and Symmetrical Monopole cables. The advantages of HVDC utilizing symmetrical monopoles when compared to an AC cable alternative include: significant cost savings, significantly fewer cables required which means less environmental impacts and onshore cable crossings, lower losses, improved stability and reactive power support capabilities, and the ability to construct 1,500 MW or 1,200 MW blocks at different times. Using HVDC technology, NEETMA has identified three viable injection sites to achieve New Jersey's offshore wind goals:

<b>Deans 500 kV Injections</b>	This proposal utilizes a <b>single injection point</b> to meet and exceed BPU's offshore wind goals at 3,000 MW, 4,500 MW, and 6,000 MW utilizing 1,500 MW HVDC systems.
<b>Oceanview 230 kV Injections</b>	This proposal offers a <b>cost-effective</b> way to inject offshore wind at 1,500 MW, 2,400 MW, and 3,000 MW utilizing 1,500 MW or 1,200 MW HVDC systems.
<b>Cardiff 230 kV Injections</b>	NEETMA is proposing a more <b>cost-effective alternative</b> to the Ocean Wind 2 and Atlantic Shores projects interconnections which is less environmentally impactful.

NEETMA has identified the platform and injection combinations by site. Table 1.2-1 summarizes the proposals, platforms locations and technology for each proposal. Figure 1.2-1 contains a map of the platforms and routes.

**Table 1.2-1 Summary of NEETMA Proposals**

Proposal	Injection Location	Injection Amount (MW)	Potential Offshore Platform Pairings	Project Description
2-D60	Deans 500 kV	6,000	Hudson South Platforms A, B, C, D	Four 1,500 MW HVDC symmetrical monopoles
2-D45	Deans 500 kV	4,500	Hudson South Platforms A, B, C	Three 1,500 MW HVDC symmetrical monopoles
2-D30	Deans 500 kV	3,000	Hudson South Platforms A, B	Two 1,500 MW HVDC symmetrical monopole
2-O30	Oceanview 230 kV	3,000	Hudson South Platforms A, B	Two 1,500 MW HVDC symmetrical monopole
2-O24	Oceanview 230 kV	2,400	Hudson South Platforms A, B	Two 1,200 MW HVDC symmetrical monopole
2-O15	Oceanview 230 kV	1,500	Hudson South Platform A	One 1,500 HVDC symmetrical monopole
2-C27	Cardiff 230 kV	3,000	New Jersey Coast Platforms E, F	One 1,200 MW HVDC symmetrical monopole and one 1,500 MW HVDC symmetrical monopole

Figure 1.2-1 NEETMA Proposals



NEETMA's proposals can be blended in different combinations to provide PJM and BPU flexibility in achieving different offshore wind injection capabilities. For example, a Deans 3,000 MW Injection can be combined with an Oceanview 1,500 MW injection. Additionally, the modular nature of HVDC means that the entire project does not have to be constructed at once and can be constructed in stages. This allows BPU to determine the best combination of proposals to meet or even exceed New Jersey's Offshore Wind goals.

### **1.3 Conclusion**

NEETMA understands the complexities and challenges in executing this project and the benefits it will bring to New Jersey including clean energy, jobs, economic benefits while minimizing environmental impacts. NEETMA is a reliable and experienced partner that can help New Jersey achieve its offshore wind energy goals. NEETMA benefits from the extensive, enterprise-wide financial resources of its indirect parent company, NextEra. With NEETMA, New Jersey will find a reliable and committed partner to support a project of this scope and scale.



Section 2

# Project Proposal ID



Photo credit: Siemens AG

## 2.

# PROJECT PROPOSAL IDENTIFICATION

### 2.1 Proposing Entities Information

Proposing Entities shall include the following information in the BPU Supplemental Offshore Wind Transmission Proposal Data Collection Form

<b>Proposing Entity Name:</b>	<b>NextEra Energy Transmission MidAtlantic Holding, LLC (NEETMH)</b>
<b>Company ID:</b>	<b>3-PC</b>
<b>Project Title:</b>	<b>Platform Connections</b>
<b>PJM Proposal ID:</b>	<b>2021-NJOSW-359</b>



Section 3

# Project Summary



Photo credit: Siemens AG

### 3.1 Narrative Description of Proposed Project(s)

---

Provide a narrative description of the project(s) proposed in response to the PJM Problem Statements describing primary technical features, interconnection points (default or alternative POIs) and the associated transfer capability, timeframe for development, and how the project(s) will support New Jersey's policy to cost-effectively develop 7,500 MW of offshore wind.

---

The proposed project, Platform Connections, includes new 230 kV AC submarine cable connections between offshore platforms HVDC converter stations to provide shared capabilities and redundancy to the offshore wind facilities. This includes four potential connections:

- Platform A to Platform B 230 kV 800 MVA cable connection
- Platform A to Platform C 230 kV 800 MVA cable connection
- Platform C to Platform D 230 kV 800 MVA cable connection
- Platform E to Platform F 230 kV 800 MVA cable connection

The Platform Connections will connect to the 230 kV AC connection of the offshore converter stations and can be connected at any time once the platforms have been constructed. The 230 kV line would be operated in a normal-open state, meaning the line will not be in service as long as the HVDC platforms and the cables running back to shore are in service. Only when there is a planned or unplanned outage that interrupts one platform's capability to deliver power back to shore, would a specific Platform Connections be energized in order to deliver power to a different platform that can still deliver power back to New Jersey.

### 3.2 Project Optionality, Flexibility, and Modularity

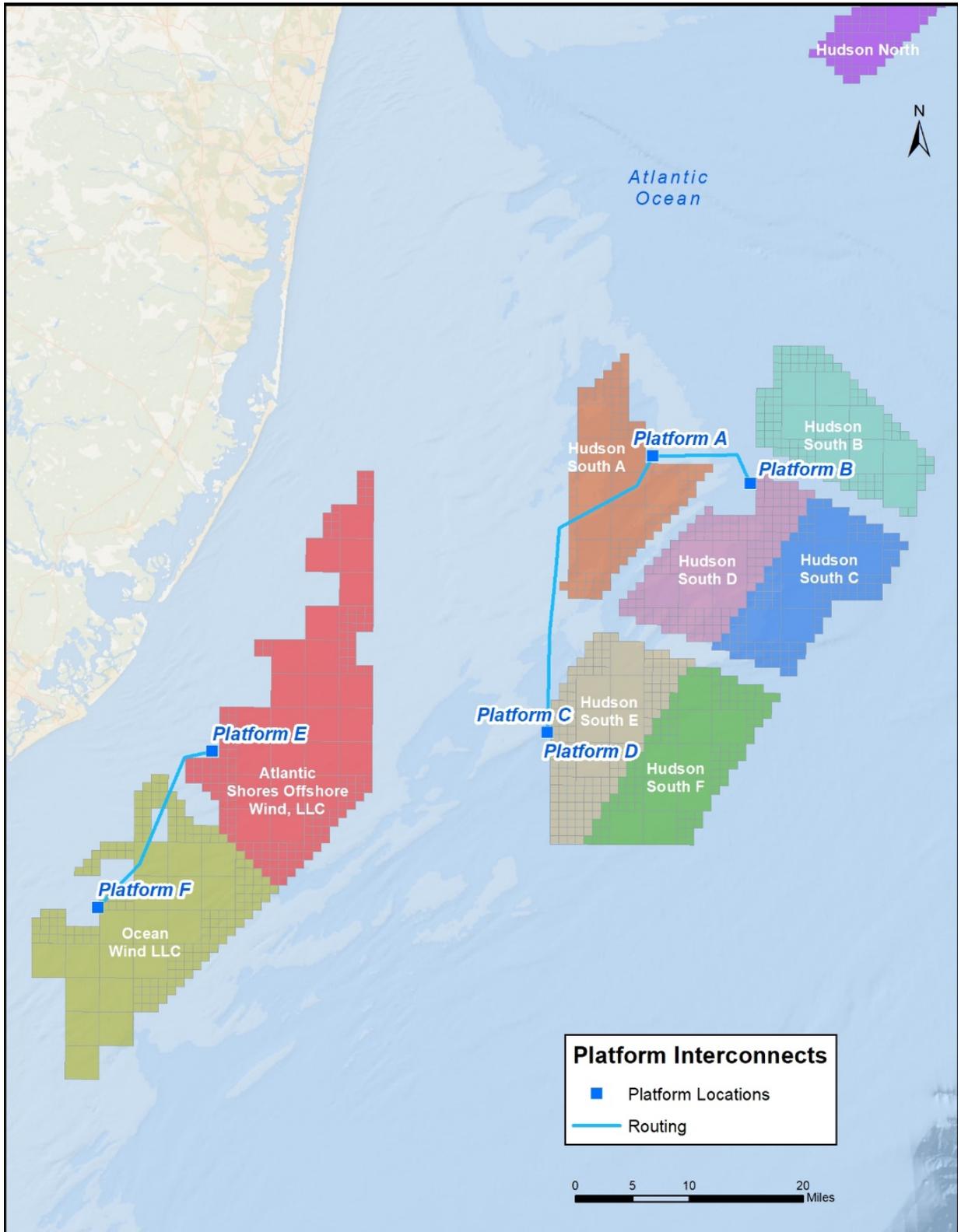
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Describe the optionality, flexibility, and modularity offered by the proposed projects, including: ability of project proposals to achieve efficient outcomes through combinations of solutions for Options 1a, 1b, 2 and 3 needs, or ways in which proposed solutions, or portions of proposed solutions, can be combined, integrated, and sequenced to more cost effectively achieve the State's overall public policy and risk mitigation objectives; ability of the proposed solution to accommodate future increases in offshore wind generation above current plans; innovative solutions that yield a transmission investment schedule that is optimally aligned with the planned schedule of offshore wind generation procurements.

---

NEETMA has provided four different platform connections, however the platform connections will only be necessary if the platforms are constructed and energized. For example, if BPU does not award a project that includes a Platform E or F, then the proposed Platform Connection from E to F is unnecessary. Therefore, each of the four Platform Connections proposed can be its own project. In addition, as discussed in NEETMA's Problem Statement 2 Injection Proposals, the offshore platforms can be further optimized based on what offshore wind projects get an award from BPU. Discussions with developers may mean that the platforms can shift, resulting in a change in the length of the Platform Connections, and added cost compared to what NEETMA has proposed.

Figure 3.2-1 New Jersey Offshore Platform Interconnects



### 3.3 Interdependency of options

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Describe any interdependence issues or benefits associated with any other proposal also submitted by your company. Namely, describe whether selection of another specific proposal will impact this proposal, and if so – how. Describe whether your project is severable, and the conditions that would be associated with selection of this single proposal (i.e. one option 1b proposal for one POI). Describe any benefits to cost, cost-containment mechanisms, phasing, or other relevant elements of the proposal that would stem from co-selection of other proposals. Explain any benefits from selection of multiple proposals that may not be available if a single proposal is selected.

---

NEETMA's proposed Platform Connection proposals are reliant on award and construction of platforms that can accommodate a 230 kV connection cable of at least 800 MVA. Each of NEETMA's Problem Statement 2 Injection proposals can accommodate such a connection.

### 3.4 Overview of Project Benefits

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Describe the benefits that the project offers in support of New Jersey's policy goals to reduce customer costs, advance offshore wind, maintain reliability, mitigate environmental impacts, and achieve other policy goals as outlined above. Explain how any project options or alternatives offered may create value in furtherance of the BPU's stated policy goals as described above.

---

The Platform will provide a cost-effective option to allow offshore wind to still deliver power to New Jersey in the event that one of the platforms experiences a planned or unplanned outage.

Example Outage Benefit:

- Platform A and B are offshore platforms each capable of delivering 1500 MW back to shore
- If Platform A and B are currently receiving 700MW from each of their windfarms, delivering a total of 1400MW to New Jersey
- When Platform A experiences an outage, the 700 MW of wind currently being delivered is curtailed temporarily.
- NEETMA would energize the 230 kV line, allowing power to be delivered from Platform A to Platform B, and utilize the 1500 MW HVDC cable to deliver power back to New Jersey

However, in the example above, if the platforms were both generating 1500 MW of power, the platform connection would be unable to transfer the full amount of power from platform to platform. NEETMA recognizes this but believes that the proposed design is the most cost-effective design for New Jersey. Additional discussion and analysis is provided in Section 4.3 as to why the proposed design is most cost effective for New Jersey.

### 3.5 Overview of Major Risks and Strategies to Limit Risks

---

Identify and describe project-related risks, such as: (a) uncertainties that may cause timeline delays or budget increases; (b) uncertainties that may reduce or delay the benefits to New Jersey customers; and (c) project-on-project risks that may exist between this project and other transmission or offshore wind projects. Describe the strategies that will be utilized to limit these risks and the impacts to New Jersey customers.

---

The main risk with the platform connections will be securing BOEM permits. Procuring cables and ships to install the cables, as well as any route adjustments due to seabed conditions, and platform shifts to optimize for the windfarms.

Upon award, NEETMA will immediately work with the BPU to hedge equipment and materials pricing. Through NextEra's long-standing relationships with vendors, NEETMA can lock in pricing and set procurement schedules. NEETMA will work with the BPU to define any schedule or project changes and procure the equipment such that major project costs are locked in as soon as practicable.

### 3.6 Overview of Project Costs, Cost Containment Provisions, and Cost recovery proposals

Summarize the project cost, any cost containment provisions that will be utilized to limit cost impacts on New Jersey customers, and the cost recovery approach.

[Redacted]



Section 4

# Proposal Benefits

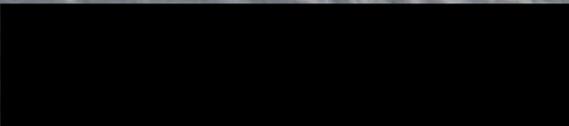


Photo credit: Siemens AG

#### 4.1 Reliability Benefits

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- Please explain the proposed project's ability to satisfy any applicable reliability criteria that may impact the evaluation of the project even if it was not explicitly stated as part of the original problem statement.
  - Please explain the proposed project's ability to provide additional benefits associated with reliability criteria, including reduce the need for must-run generation and special operating procedures, extreme weather outages and weather-related multiple unforced outages, reduced probability of common mode outages due to electrical and non-electrical causes, islanding, power quality degradation.
- 

The proposed project does not cause any new reliability issues, nor does it address any existing reliability issues. The main purpose is to provide redundancy for offshore wind to still deliver power back to New Jersey if a transmission line or converter station experiences an outage, allowing power to be diverted to a working platform. The proposed 230 kV line will be operated in a normal-open state, meaning it will only be energized in the event of an outage, resulting a brief and temporary curtailment of the wind farm.

#### 4.2 Public Policy Benefits

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- Please explain the proposed project's ability to maximize the energy, capacity, and REC values of offshore wind generation delivered to the chosen POIs, including reduce total costs of the offshore wind generation facilities (including generator leads to the offshore substations), mitigation of curtailment risks, and the level and sustainability of PJM capacity, congestion, or other rights created by the proposed solution that increase the delivered value of the wind generation or provide other benefits.
  - Please explain the proposed project's ability to accommodate future increases in offshore wind generation above current plans.
- 

The proposed platform connection offers a cost-effective option to provide redundancy for offshore wind generation in the event of an outage, ensuring that a significant amount of offshore wind energy can still be delivered to New Jersey in the event of an outage.

### 4.3 Market Efficiency Benefits

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Please explain for each item below the proposed project's ability to provide additional onshore-grid-related benefits that improve PJM market performance and provide New Jersey ratepayer cost savings.

- Energy market benefits, such as ratepayer cost savings (the primary evaluation metric); production cost savings; or other benefits:
  - Transmission system benefits, such as synergies with transmission facilities associated with ongoing OSW procurements, replacement of aging transmission infrastructure, and other transmission cost savings to New Jersey customers:
  - Capacity market benefits, that may give rise to New Jersey ratepayer cost savings (which is the primary evaluation metric), including through CETL increases, improved resiliency/redundancy, avoided future costs (such as future reliability upgrades or aging facilities replacements):
  - Other benefits, including State energy sufficiency, reduced emissions, less dependence on fossil-based thermal resources, improvements in local transmission and distribution outages, improvements in local resiliency:
  - Please attach any relevant supporting analyses and benefits quantifications (including assumptions and analyses, if any) to support the benefits described above that have not been already submitted through the PJM submission forms.
- 

NEETMA has opted to provide partial redundancy with its platform connection design as it is the most cost-effective option for New Jersey for several reasons, first among them being cost. Providing full redundancy means that the cables going back to shore will need to have double the capacity in the event there is an outage of one of the paths or platforms. This will mean doubling up the cables, the number of converter stations which increases the cost, as well as the environmental impacts, plus increasing the need for any onshore upgrades to accommodate a higher injection amount. When an HVDC's availability is at least 98%, and outages are rare, this would be an extraordinary cost with little benefit to New Jersey. In other words, adding a second HVDC system back to shore for the purposes of redundancy is not cost effective. Therefore, NEETMA focused on a platform connection design that would optimize use of the proposed HVDC platform design.

Where two platforms, A and B, are in the same lease area, it is a safe assumption that the output of both windfarms would generally be the same. In other words, if one wind farm is operating at 40% capacity factor, the second windfarm, even if 30 miles away, would generally be at the same capacity factor. Assuming there are no outages, it's unlikely there would be a significant difference in the capacity factors. If the windfarms are operating at near full output, a redundant line does not offer much benefit unless the connection back to shore has double the capacity. However, the benefit of the redundant line increases as the output of the windfarms decrease. NEETMA's proposed 230 kV 800 MVA platform connection will be able to deliver 73% of the total MWhs that two 1500 MW HVDC platforms and cables would normally be able to deliver in a year

and would so at a fraction of a cost of building a second HVDC platform and cable back to shore, plus associated upgrades.

Table 4.3-1 below provides a summary calculation using offshore wind shapes from NREL, and a sensitivity using a higher capacity factor than what NREL provides. Attachment 2A includes a workbook that demonstrates how NEETMA derived these calculations.

**Table 4.3-1 Required System Upgrades**

Calculation	Outage	Platform Connection		NREL 39% CF	Adjusted NREL 52% CF
Total Offshore Wind delivered for both Platforms A and B	No Outage, Normal Operation	-	Annual MWH	10,204,651	13,660,268
Total MWH Curtailed	Outage of Platform B - Shore transmission cable	-	Annual MWH	5,102,325	6,830,134
Annual MWH's Delivered if Platform Connection is constructed	Outage of Platform B - Shore transmission cable	Platform Connection in-Service	Annual MWH	7,435,537	8,878,819
Annual MWH's curtailed if Platform Connection is constructed	Outage of Platform B - Shore transmission cable	Platform Connection in-Service	Annual MWH	2,769,113	4,781,449
<b>Curtailement Benefit of NEETMA Platform Connection</b>			<b>Annual MWH</b>	<b>2,333,212</b>	<b>2,048,685</b>



Section 5

# Proposal Costs

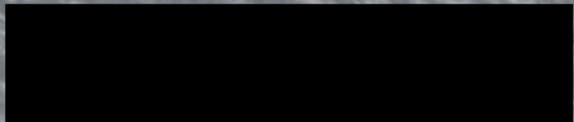


Photo credit: Siemens AG

## 5.

# PROPOSAL COSTS, COST CONTAINMENT PROVISIONS, AND COST RECOVERY

### 5.1 Additional Cost Information Including Ongoing Capital Expenditures

Any additional cost information not included in PJM's submission forms, including ongoing capital expenditures

The Project is not expected to need ongoing capital expenditures and therefore was not included. O&M was included to survey the lines and ensure the proper burial was maintained for the life of the Project. NEETMA has provided additional cost detail in **Attachment 8** and **Attachment 10**.

NEETMA has also provided a breakdown of each cable costs that makes up NEETMA's Platform Connection proposal.

[REDACTED]	[REDACTED]	[REDACTED]

### 5.2 Cost Estimate Classification

For the cost estimates submitted via PJM's submission forms, the cost estimate classification and expected accuracy range consistent with AACE International standards

NEETMA uses a standardized, thorough methodology for calculating constructions costs. Estimates are based on its significant construction knowledge, extensive database of supplier costs, and close relationships with vendors.

Market conditions and commodity pricing are consistently changing. Through NEETMA's culture of constantly capturing lessons learned and implementing improvements, the company has incorporated construction knowledge gained through decades of experience, enabling it to deliver projects on budget and on time.

For this power transmission project scope, main installation elements are included when

developing project costs. These elements included laying and horizontal installations in subsea conditions. Other special scope items include crossings of existing infrastructure in the seafloor. Route definition and certainty determine the complexity of the installation. Subsea installation adds additional layers of engineering, such as bathymetric and met-ocean studies, and specialized equipment and sea vessels. Prior to any construction, inputs from all stakeholders will need to be incorporated into the project scope. These are usually later defined after project award and agreements can be executed with the external stakeholders.

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted]

### 5.3 Estimated Energy Losses

[Redacted]

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The estimated energy losses of the proposed facilities.

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NEETMA is providing the estimated losses for each of the four cables provided in the proposal.

**Table 5.3-1 Estimated Losses**

INJECTION PROPOSAL ID	Losses for each cable when in-service	
	Cable losses (MW)	
	SUM	WIN
Platform A- Platform B	0.7	1.7
Platform A – Platform C	2	4.9
Platform C – Platform D	0	0
Platform E – Platform F	1.3	3.1

#### 5.4 The Physical Life and/or Economic Life of The Facilities

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The physical life and/or economic life (i.e., length over which the facility will request cost recovery) of the facilities

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#### 5.5 Cost Structure Proposed Including Cost Containment Mechanisms and Cost Recovery Approach

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A description of each cost structure proposed for the project, including cost containment mechanisms and cost recovery approach

If a fixed revenue requirement is being requested, files specifying the annual revenue requirements over the economic life of the proposal. Similar to the proposed cost cap mechanisms submitted to PJM, please include proposed contractual revenue requirement commitment language to be included in the Designated Entity Agreement. The Contractual revenue requirement commitment language must be identical to that submitted in the PJM Competitive Proposal Template.

- Please explain how the costs of the proposed projects may be impacted by selection of a subset of the options versus the entire proposed project



- Please explain any additional cost control mechanisms provisions for the BPU to consider that were not included in the PJM submission forms

[Redacted]

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Section 6

# Project Risk

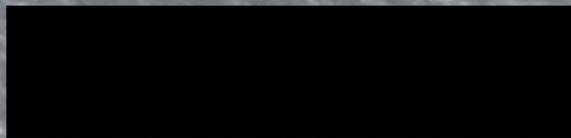


Photo credit: Siemens AG

### 6.1 Project's Plan for Site Control.

Discuss the project's plan for site control and the ability to achieve site control.

NEETMA is proposing a route to the Deans 500 kV substation using 100% publicly owned property and rights-of-way. NEETMA will work with appropriate authorities to obtain the necessary permits and approvals detailed in **Attachment 22**.

NEETMA's site control efforts for the Offshore Platform AC Interconnection (Proposal), is highlighted by the exclusive use of publicly-owned property for the offshore components in the Department of Interior, Bureau of Ocean Energy Management (BOEM) jurisdictional waters. Key details of NEETMA's site control efforts include:

- No private parcels are utilized by NEETMA's Proposal.
- NEETMA will coordinate with BOEM and BOEM leaseholders for the siting of offshore infrastructure.

As indicated above, all Proposal components are in BOEM jurisdictional waters. Table 6.1 below provides additional detail on the offshore cable corridor:

**Table 6.1-1 Summary of Offshore Mileages and ROW**

ROW Labels	Sum of Route Mileage	ROW Needed
Platform A to Platform B	10.2	325 ft.
Platform A to Platform C	28.8	325 ft.
Platform C to Platform D	0.01	325 ft.
Platform E to Platform F	18.0	325 ft.

\* All mileage is determined by the length of route. Portions of the route with multiple adjacent cables are counted the same as lengths of the route with a single cable.

For NEETMA's detailed Site Control Plan, including route calculations, ownership characteristics, and potential forms of agreements, please see **Attachment 22**.

## 6.2 Issuance of a Right-of-Way, Right of Use and Easement, Project's Plan and Timetable for Obtaining Authorization

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Identify whether the project will require the issuance of a right-of-way, a right of use and easement, or similar authorization from the U.S. Bureau of Ocean Energy Management ("BOEM"), and the project's plan and timetable for obtaining such any required authorization.

Identify whether the project will require the issuance of a right-of-way, a right of use and easement, or similar authorization from the U.S. Bureau of Ocean Energy Management ("BOEM"), and the project's plan and timetable for obtaining such any required authorization.

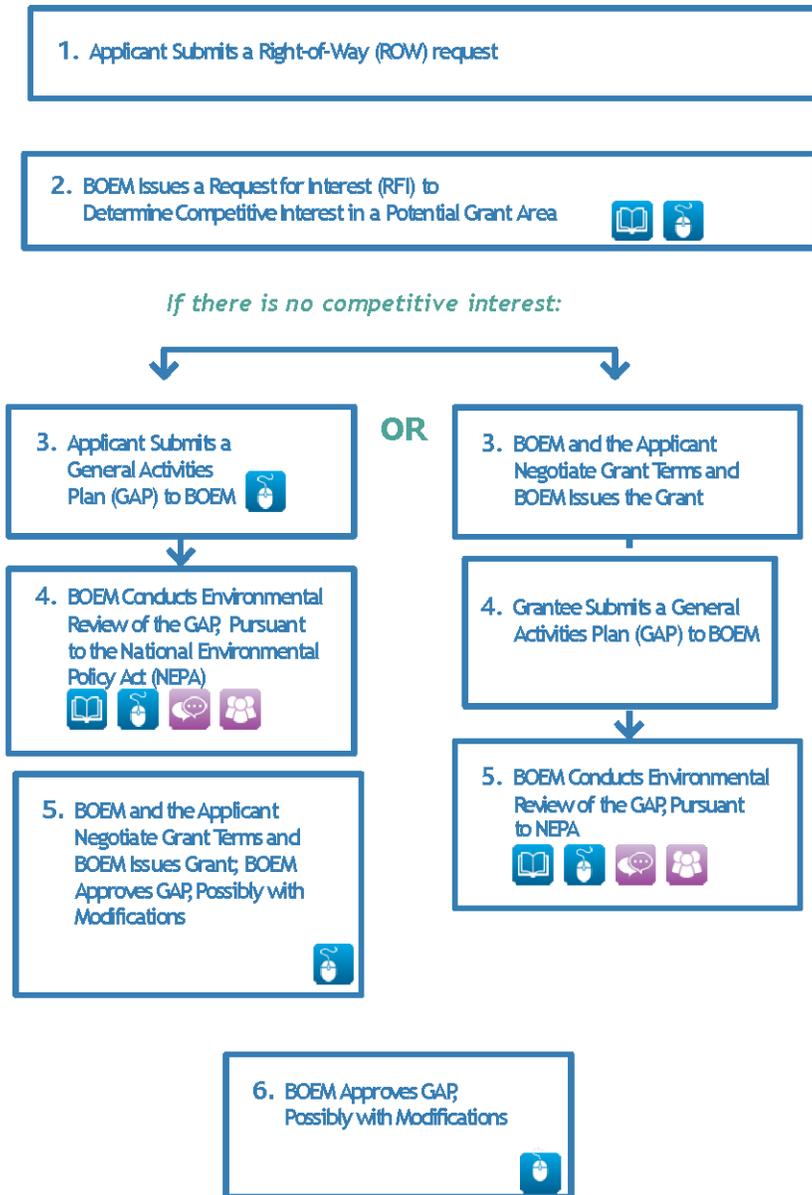
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NEETMA has developed a Permitting Plan, Attachment 20, which summarizes the Federal permit approvals required for project approval. As the project includes project components located on the outer continental shelf, permits with BOEM will be required. The timelines can be found in both the Permitting Plan, Attachment 20 and the Project Schedule, Attachment 11. NEETMA anticipates a three-year permitting timeline. This timeline includes the development of the General Activities Plan (GAP), BOEM NEPA and acquisition of required federal permits. Based on coordination with the agencies and project development schedule (i.e. conducting surveys early and sufficient detail for GAP submittal), this is a reasonable and achievable timeline.

BOEM may issue two types of grants associated with renewable energy projects: Right-of-Way (ROW) — A ROW grant authorizes the installation of cables, pipelines, and associated facilities that involve the transportation or transmission of electricity or other energy produced from a renewable energy project that is not located on the OCS. Right-of-Use (RUE) — A RUE grant authorizes the construction and maintenance of facilities or installations that support the production, transportation, or transmission of electricity or other energy produced from a renewable energy project in the OCS.

NEETMA is in the process of qualifying with BOEM for a right-of-way and/or a right of use grant so that we can begin the grant application process per 30 CFR Subpart C §585.300. NEETMA will apply for a joint ROW/ROU grant for the development of the offshore platform and the submarine cable route in federal waters. Upon receiving the grant, NEETMA will develop, construct and operate the project per BOEM grant conditions. Per 30 CFR Subpart C §585.640, NEETMA will conduct project specific studies and surveys and develop a GAP so that BOEM can initiate their NEPA process. The GAP describes how the lessee/ grantee will construct and operate renewable energy facilities on a limited lease or ROW/RUE grant. The GAP includes a description of construction activities for all planned facilities, associated activities, and conceptual decommissioning plans. BOEM must approve the GAP before the lessee can install facilities or conduct activities described in the GAP. Below is a summary of the ROW/ROU grant process ([Renewable-energy-program/KW-CG-Broch](#)).

Figure 6.2-1 ROW/ROU Grant Process



Given the precise geographic nature of ROW grant applications, BOEM finds it unlikely that ROW proposals would be overlapping and subject to competition. However, if there is competitive interest, BOEM will undertake a competitive process for authorizing a ROW grant.

### 6.3 Stakeholder Engagement

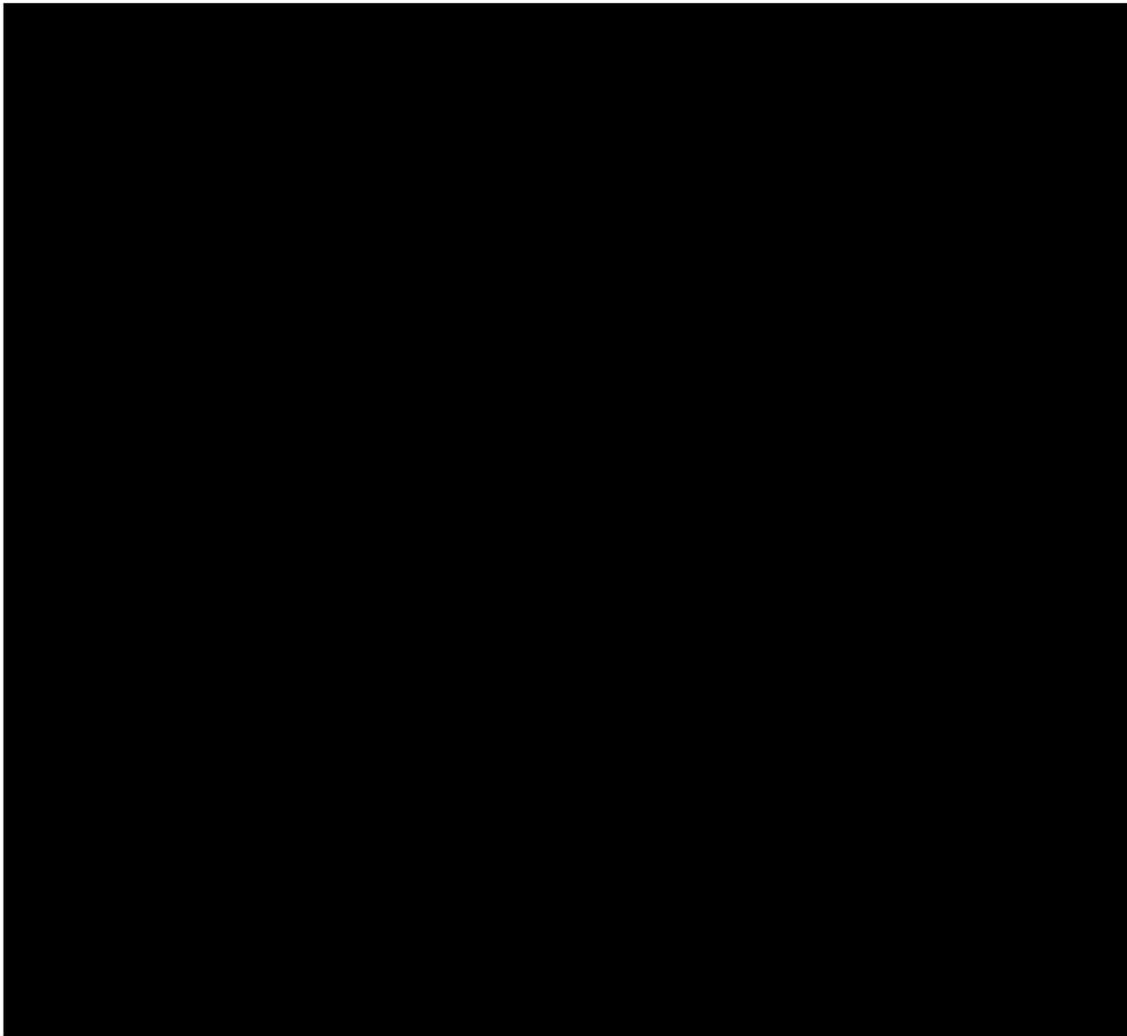
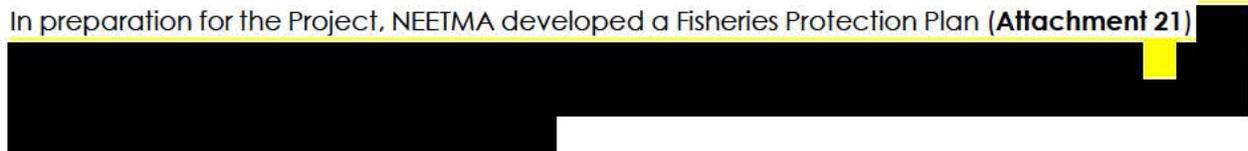
---

Discuss the project stakeholder engagement plan's ability to minimize public opposition risk from the fishing industry, coastal and beach communities, and other stakeholder groups.

---

NEETMA understands the concerns that public groups such as fisheries and coastal communities may have regarding the Project and is committed to partnering with them throughout all phases of the Project. It is no question that coastal and fishing communities – both commercial and recreational – are vital to New Jersey's culture and economy. As these communities have valid concerns about potential negative effects – such as visual impacts, we have taken that into account during the routing and siting process especially for offshore platform locations to minimize potential impacts.

In preparation for the Project, NEETMA developed a Fisheries Protection Plan (**Attachment 21**)



NEETMA believes that engagement – both with key stakeholders and public communities – is not just one isolated phase of a project. Instead, engagement must be woven through all facets. NEETMA’s subject matter experts are excited to work closely with representatives from these communities from the start of the Project through a stakeholder taskforce. Through regular meetings and a dedicated channel between these communities, NEETMA can work to identify potential impacts and concerns early on. Partnering closely with these stakeholders through a taskforce will allow NEETMA to identify mitigation measures that meet the communities’ needs. During project development, NEETMA will also be conducting a visual impact assessment and will enhance engagement efforts with specific populations based on the findings. While all impacts may not be avoided, thorough and empathetic engagement through all stages of the Project can help NEETMA develop the Project into one that reflects the needs of the diverse public and stakeholder communities in the area. **Attachment 12** provides a narrative description of NEETMA’s phased communications and outreach plan.

#### 6.4 Construction Techniques That May Result in Project Delays or Cost Overruns

---

Identify any construction techniques that will be needed – benthic substrate, long HDD spans, existing cables, pipelines or other infrastructure, sandwaves/megaripples, contaminated sediment, dredging, or onshore waterbody crossings – that may result in project delays or cost overruns.

---

NEETMA has been working closely with the selected vendors to put in developing a preliminary construction plan for the project. Supplemental drawings can be found in **Attachments 5 and 6**, and a crossing matrix and proposed construction crossing techniques are provided in and matrix can be found in **Attachment 7**.

- **Subsea Cable Installation** – The project is expected use 2000 mm<sup>2</sup> AC 230 kV AC subsea cable connections between offshore HVDC converter stations to provide shared capabilities and redundancy to the offshore wind facilities. The cable will be manufactured and spooled onto a cable installation vessel. NEETMA will typically use a jet-plow/or other construction methods to lay the cable. Matting will be used as required to avoid damage to any cable being crossed and NEETMA will meet requirements specified by the utility being crossed as well as any applicable code requirements. The subsea cable will traverse federal waters as well as many different marine habitats. NEETMA has performed a detailed routing analysis to minimize the impacts.

Local New Jersey ports shall be used to stage equipment, and any materials needed while work is underway to install the sub-sea cables. This shall include a field office, a yard for materials, etc.

Risks identified with the construction techniques above and associated costs are described in the Project Risk Register (**Attachment 13**).

## 6.5 Potential Time of Year Restrictions on Construction Activity

Identify known or potential time of year restrictions on construction activity, particularly related to listed species or beach restrictions.

NEETMA has developed a detailed project schedule and construction sequencing plan for offshore construction (**Attachment 11**). The schedule was built to include typical state and federal time of year restrictions (i.e fish spawning, fish migration, nesting birds and marine mammal presence) associated with flora and fauna listed species, species of concern and/or managed species. Typical offshore time of year restrictions for pile driving and construction were based on existing permits and coordination with regulatory agencies. Potential time of year restrictions are associated with the following:

**Table 6.5-1 Potential Time of Year Restrictions**

Species	Time of Year	Applies to
Anadromous fish	January 1 - May 31	1. All regulated waters identified as anadromous migratory pathways including 2. Unimpeded tidal regulated waters open to the Atlantic Ocean or any coastal bay
North Atlantic Right Whale	November 1 – April 30	Seasonal and Dynamic Management Areas  Vessel speed restrictions to and from construction site.

In addition, based on coordination with local stakeholders, NEETMA has incorporated a time of year restriction to limit impacts to beach and coastal communities during Memorial Day to Labor Day. As the project develops, NEETMA will coordinate with local municipalities regarding what activities would take place during the summer months.

## 6.6 Anticipated Construction-Related Outages

Identify anticipated construction-related outages and expected duration on existing PJM transmission facilities.

Brief outages of the offshore platforms will be required to connect the 230 kV lines.

## 6.7 Impact of Supply Chain Constraints or Material Procurement Risks

---

Identify supply chain constraints or material procurement risks that may impact the project.

---

NEETMA shall ensure the offshore submarine cabling material shall be ordered in synchrony with the project's execution schedule. Submarine cable manufacturing capacity is typically reserved years in advance for offshore projects. NEETMA is not only ready, willing, and able to secure its reservation for the submarine cable to meet the proposed project schedule by strategically aligning directly with the submarine cable manufacturer, but through the strategic alliance has the ability to utilize multiple cable manufacturing plants ensuring delivery alignment with the project schedule. NEETMA shall coordinate deliveries with construction of the HVDC converter platforms.

## 6.8 Project Risks related to Timing or Completion

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Identify project-on-project risks related to the timing or completion of other transmission and offshore wind projects built to achieve the New Jersey public policy requirement.

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NEETMA has developed a Project Risk Register as **Attachment 13**.

## 6.9 Proposed Contractual Language for Project Schedule Guarantees

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Describe and provide proposed contractual language for any project schedule guarantees, including but not limited to guaranteed in-service date(s), financial assurance mechanisms, financial commitments contingent on meeting targeted commercial online dates, and delay damage or liquidated damage payment provisions, that have been proposed.

---

NEETMA is not offering a schedule guarantee for the platform connections as it is dependent upon completion of both the offshore and onshore converter stations and the transmission lines required to deliver offshore wind back to New Jersey.

## 6.10 Additional Risk Associated with Project

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Identify any additional risks associated with the project that could lead to increased costs, reduced project benefits (reliability, market efficiency, and/or public policy), or delayed development and delivery of the proposed offshore wind generation.

---

NEETMA has developed a Project Risk Register as **Attachment 13**.

## 6.11 Compensatory Mitigation Estimate for Wetland Impacts and Potential Risk

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Identify compensatory mitigation estimates needed for wetland impacts and any potential risk with availability of wetland credits.

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There will be no wetland impacts from this project.



Section 7

# Environmental

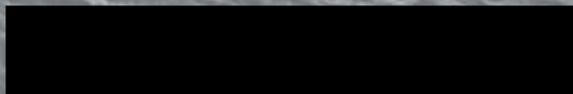


Photo credit: Siemens AG

### 7.1 Environmental Protection Plan

---

Please provide an Environmental Protection Plan which describes all associated onshore and/or offshore environmental impacts from the planning, construction, and operation phases of the project

---

NEETMA and its parent NextEra Energy continues to be an industry leader in environmental stewardship and continues to demonstrate that commitment. We invest in low- and zero-emissions generation and support environmental conservation and research. On all projects, we engage with environmental and government agencies and local stakeholders. We adhere to our corporate Environmental Policy that includes strategies to prevent pollution, minimize waste and conserve natural resources and habitats where we develop, construct and operate projects.

A number of environmental impact analyses have already been performed off the coast of New Jersey by BOEM, the state of New Jersey and offshore wind developers. In 2010, NJDEP published their baseline survey assessment for the development of offshore wind off of New Jersey, in 2012, a Finding of No Significant Impact (FONSI) was issued for BOEM's environmental assessment to develop Commercial Wind Lease Issuance and Site Assessment Activities on the Atlantic OCS Offshore New Jersey, Delaware, Maryland, and Virginia. (77 FR 5560) and in 2020, New Jersey published the offshore wind strategic plan which provides a regional analysis of potential environmental impacts associated with regional offshore wind development including transmission and recommendations for collaboration and avoidance and minimization of environmental impacts. NEETMA has used these existing studies to inform their desktop study and to site preliminary platform locations and subsea cables to connect platforms. If selected, NEETMA would coordinate with offshore wind developers to finalize locations. Platforms are currently sited in areas that are of lower overall environmental susceptibility and locations that minimize impacts to commercial and recreational fishing.

As part of the siting process, NEETMA conducted an environmental desktop study as the first Phase of project development. The desktop analysis identified and reviewed readily available data for biological, geological, cultural, and anthropogenic resources within the Project Study Area and included analysis of the resources to identify potential opportunities and constraints offshore. The overall objectives of this study were to:

- Inform the routing and siting;
- Identify potentially sensitive resources to avoid and minimize impacts during route and site selection;
- Identify data gaps or areas of additional study that will be needed for NEPA and permitting;
- Identify the types of environmental permits needed; and
- Inform strategic planning for stakeholder outreach and the permitting program.

In response to this solicitation, NEETMA has developed an Environmental Protection Plan (EPP) (See BPU Supplemental **Attachment 19**) which summarizes existing conditions, identifies potential impact producing factors, describes potential impacts and provides preliminary best management practices to mitigate potential impacts that could not be avoided. The Environmental protection Plan was drafted for both Problem Statement 2 and Problem statement 3. For problem statement 3, the environmental impacts would be limited to the outer continental shelf. The information contained within the Environmental Protection plan that addresses impacts to nearshore, coastal and terrestrial environments would not be pertinent to Problem statement 3.

As the Project is still in early stages of design, specific project impacts cannot be quantified at this time. NEETMA, through coordination with regulatory agencies and stakeholders, will develop site specific surveys to fill in data gaps and will quantify potential impacts during GAP and permit application development. At that time, appropriate mitigation measures will be developed. It is anticipated that the majority of the impacts are local and temporary in nature during the construction of the facilities. The installation of offshore platforms and their foundations is a benefit as it creates structure habitat for species.

## 7.2 Anticipated Environmental Benefits of a Particular Transmission Proposal

---

Please provide a description of the anticipated environmental benefit of a particular transmission proposal in comparison to radial lines:

- How does the project reduce environmental impacts to fisheries, habitat, and sensitive resources in comparison to radial lines?
  - What is the reduction in impacts (approximate area) compared to radial lines, temporary and permanent?
  - A description of whether and how the project infrastructure, including offshore platforms, could provide direct ocean and ecological observations throughout the water column.
- 

NEETMA's proposal offers the optionality to add cables between platforms and to provide redundancy between platforms. This partial redundancy approach does not require additional lines to shore and optimizes what will already be installed by fully utilizing NEETMA's proposals and

bypassing any need to increase the number of cables to shore, thereby minimizing environmental impacts.

### 7.3 Fisheries Protection Plan

---

Please provide a Fisheries Protection Plan that must include the following information:

- A scientifically rigorous description of the marine resources that exist in the Project area, including biota and commercial and recreational fisheries, that is informed by published studies, fisheries-dependent data, and fisheries-independent data, and identifies species of concern and potentially impacted fisheries;
  - A scientifically rigorous plan to detect impacts to marine resources, including biota and recreational and commercial fisheries;
  - Identification of all potential impacts on fish and on commercial and recreational fisheries off the coast of New Jersey from pre-construction activities through project close out;
  - A plan that describes the specific measures the Applicant will take to avoid, minimize, and/or mitigate potential impacts on fish, and on commercial and recreational fisheries;
  - An explanation of how the Applicant will provide reasonable accommodations to commercial and recreational fishing for efficient and safe access to fishing grounds;
  - A description of the Applicant's plan for addressing loss of or damage to fishing gear or vessels from interactions with offshore wind structures, array or export cables, survey activities, concrete mattresses, or other Project-related infrastructure or equipment.
- 

Commercial and recreational fisheries are culturally and economically significant to the State of New Jersey. NEETMA is committed to minimizing impact on these important resources throughout all phases of the development of the offshore transmission infrastructure. This will be achieved through careful review of existing fisheries resource data, fishing activity datasets, and stakeholder engagement to inform the project siting and design. NEETMA understands that early, active, and ongoing engagement with commercial and recreational fishing stakeholder is of critical importance to a successful Project outcome. BPU Supplemental **Attachment 21** provides a narrative description of NEETMA's Fisheries Protection Plan.

**Table 7.3-1 Summary of Fisheries Protection Plan**

BPU Supplemental Solicitation Requirements	Section Reference
A scientifically rigorous description of the marine resources that exist in the Project area, including biota and commercial and recreational fisheries, that is informed by published studies, fisheries-dependent data, and fisheries-independent data, and identifies species of concern and potentially impacted fisheries	<b>Attachment 21, Section 2; Attachment 19, Section 4</b>
A scientifically rigorous plan to detect impacts to marine resources, including biota and recreational and commercial fisheries	<b>Attachment 21, Sections 2; Attachment 19, Section 4</b>
Identification of all potential impacts on fish and on commercial and recreational fisheries off the coast of New Jersey from pre-construction activities through project close out	<b>Attachment 21, Sections 2.2, 2.3, 3, 4; Attachment 19, Section 3.1</b>
A plan that describes the specific measures the Applicant will take to avoid, minimize, and/or mitigate potential impacts on fish, and on commercial and recreational fisheries	<b>Attachment 21, Sections 2.2, 2.3, 3, 4; Attachment 19, Section 3.1.</b>
An explanation of how the Applicant will provide reasonable accommodations to commercial and recreational fishing for efficient and safe access to fishing grounds	<b>Attachment 21, Section 5</b>
A description of the Applicant's plan for addressing loss of or damage to fishing gear or vessels from interactions with offshore wind structures, array or export cables, survey activities, concrete mattresses, or other Project-related infrastructure or equipment	<b>Attachment 21, Section 5</b>

## 7.4 Environmental and Fisheries Stakeholders Outreach

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Please provide a description of how the Applicant will identify (or has identified) environmental and fisheries stakeholders, and how the Applicant proposes to communicate with those stakeholders during preconstruction activities through project closeout, as well as a plan for transparent reporting of how stakeholders' concerns were addressed.

---

Environmental, commercial, and fishery stakeholders are integral to all phases of the Project. NEET's communications team has already begun developing a phased communications and outreach plan (**Attachment 12**) in order to establish a roadmap for inclusive and transparent engagement. The current preliminary plan is designed to be a living document and will continue to summarize communications and engagement strategies as they evolve. The communications and outreach plan will serve to:

- Identify environmental NGOs who are focused on protecting New Jersey's offshore resources.
- Identify fisheries that have a history of fishing in or near the Project area. Contacts from these fisheries will serve as liaisons and inform the Project team on historic fishing techniques, needs, targeted species, and seasonality of fishing.
- Identify potential stakeholder concerns and develop strategies for preventing conflicts.
- Identify demographics of public and stakeholder groups in the Project area in order to develop inclusive and accessible outreach strategies.
- Address concerns about building offshore platforms and transmission cables through the identification of mitigation strategies.
- Plan for stakeholder workshops and meetings in order to review specific aspects of the Project (e.g. routing and siting) and collect input.
- Plan for inclusive public-facing information meetings in order to present Project details and allow for feedback through a number of channels including but not limited to: virtual meetings and in-person pop-up events.
- Plan for the Project's dedicated website through the development of Project description, FAQs, accompanying social media content, and user-friendly graphics.
- Plan for comment management database and protocols in order to track all stakeholder concerns, including their themes and responses.

As the plan evolves, its list of key stakeholders in fisheries and environmental NGOs will grow. In developing the plan thus far, our team has begun discussions with regulatory agencies and several key stakeholders. These discussions and outreach touchpoints are summarized in **Attachment 12**. In order to establish a solid channel of communication between fisheries and environmental stakeholders, points of contact have been identified and will serve as liaisons

between their communities and NEETMA to help both disseminate information and generate feedback. These relationships will continue to be critical throughout all phases of the Project.

## 7.5 Analysis Showing That Project Infrastructure Will Not Impact Communities

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Please provide an analysis showing that project infrastructure will not impact overburdened communities in a disproportionate fashion.

---

The proposed project will not impact New Jersey communities as the Platform Connections are located entirely in the Ocean. Local coastal communities may have concerns of visual impacts from offshore platforms. Visual simulations and analyses will be conducted during the BOEM permitting to analyze these impacts. Given the height of these structures and the distance of the platforms from shore, it is not anticipated that visual impacts will be significant.

## 7.6 Applicant's Permitting Plan

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Please provide a description of the applicant's permitting plan that includes the following:

- Identify all local, State and/or Federal permits and/or approvals required to build and operate the Project and the strategy and expected time to obtain such permits and/or approvals;
  - Provide documentation of consultation with USACE beach replenishment projects and sand borrow areas, if applicable;
  - Identify all applicable Federal and State statutes and regulations and municipal code requirements, with the names of the Federal, State, and local agencies to contact for compliance;
  - Submit a land use compatibility / consistency matrix to identify local zoning laws and the consistency of applicant's activities in each local jurisdiction;
  - Identify each appropriate State or Federal agency the Applicant has contacted for land acquisition issues and provide a summary of the required arrangements;
  - Include copies of all submitted permit applications and any issued approvals and permits; and
  - Include copies of all filings made to any other regulatory or governmental administrative agency including, but not limited to, any compliance filings or any inquiries by these agencies.
- 

The Platform connections will likely only require BOEM permits with limited permits required by the state. See **Attachment 20** for the permitting plan.



Appendix A

# DEP Checklist Items



Photo credit: Siemens AG

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Prior to the Pre-Submission meeting with DEP, bidders should complete and submit to the NJDEP Appendix A of the BPU Offshore Wind Transmission Proposal Data Collection Form.

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NEETMA conducted a routing and siting assessment to develop the proposed projects. Information based on desktop assessments, windshield reconnaissance surveys, and agency and stakeholder outreach informed the proposed project route selection, which aimed to avoid sensitive environmental resources and maximize opportunities (i.e. existing transmission lines, right-of-ways). If sensitive environmental resources could not be avoided, NEETMA developed proposed project routes to minimize impacts. NEETMA has developed BMPs to mitigate proposed project impacts. The KMZ files provided identify where the proposed projects would cross the resources identified in the NJDEP checklist.

To support the BPU's review of potential environmental impacts and, ultimately, the decision-making process to select optimal and reliable project sites, NEETMA has conducted a preliminary environmental impact analysis of the proposed projects, as described in the EPP (see **Attachment 19**). NEETMA's EPP provides a summary of existing conditions, potential impacts, and avoidance, minimization and mitigation measures for each resource potentially affected by the proposed projects during planning, construction, operation, and decommissioning.

### Natural and Historic Resources

Is any portion of the project site on land owned or administered by the NJDEP?

If yes, please visit [https://www.nj.gov/dep/greenacres/pdf/Request to Use NJDEP Property 2019.pdf](https://www.nj.gov/dep/greenacres/pdf/Request%20to%20Use%20NJDEP%20Property%202019.pdf) for information on initiating a request to use NJDEP property. The submission of a request to use NJDEP property is a prerequisite to the scheduling of a pre-application meeting.

Yes  No

### Green Acres Program

Is any part of the project site on land that is subject to a Green Acres restriction? If yes, please describe.

Yes  No

Does the project require the use of property funded with federal Land and Water Conservation Funding? If yes, please describe.

Yes  No

Does the project include activities that are under the jurisdiction of the Watershed Property Review Board? If yes, please describe.

Yes  No

Has the Watershed Property Review Board made a jurisdictional determination for the project site? If yes, please describe.

Yes  No

Does the project include a beach crossing? If so, please consult with the Green Acres program regarding potentially Green Acres encumbered parcels.

Yes  No

#### **Office of Leases and Concessions**

Is the temporary use of DEP lands administered by the Divisions of Parks & Forestry and/or Fish & Wildlife required for pre-construction, construction and/or post construction activities? If yes, please describe.

Yes  No

#### **State Historic Preservation Office – SHPO**

Is the site a Historic Site or district on or eligible for the State or National registry?

Not applicable. The proposed project is located on the Outer Continental Shelf.

Will there be impacts to buildings over 50 years old?

As part of BOEM NEPA process, a visual analysis will be conducted to determine if impacts to historic onshore building located in coastal communities could be impacted.

Are there known or mapped archeological resources (including submerged) within the Project Area?

During the routing and siting process, NEETMA selected proposed project routes to avoid known mapped archeological resources, including submerged resources. As part of the BOEM NEPA

process a marine and terrestrial archeological resource assessment report will be developed. NEETMA will coordinate with BOEM.

### **Division of Fish and Wildlife**

Has the applicant utilized New Jersey's Landscape Project mapping (v3.3) to determine if their subject property or the land immediately adjacent contains any Rank 3, 4, or 5 polygons, Vernal habitat, or Freshwater mussel habitat? If yes, please identify the species which these habitats are valued for.

Yes  No

Has the applicant utilized the NJDEP – Surface Water Quality Standards (SWQS) to determine if their project footprint contains any (streams, brooks, or rivers) that are classified as Trout Maintenance or Trout Production or other surface waters that are trout stocked or inhabited by other fish species, including any migratory species that are regulated by the DFW? If yes, what Surface Water Quality Standard(s) or fisheries resources are identified on the site?

Yes  No

Has the applicant applied for a NJDEP, Office of Natural Lands Management (NLM) Natural Heritage Database data request for endangered and threatened species of flora and fauna? If yes, please include a copy of the NLM database response with this submission.

Yes  No

Has the applicant consulted the DFW's Connecting Habitat Across New Jersey (CHANJ) project mapping available at <https://www.nj.gov/dep/fgw/ensp/chanj.htm> and considered designing the project in a manner that incorporates concerns regarding wildlife habitat connectivity?

Not applicable. The proposed project is located on the Outer Continental Shelf.

Is the project located on a New Jersey Division of Fish and Wildlife, Wildlife Management Area (WMA)? A list as well as a map of WMAs can be found by going to the following link: <https://www.nj.gov/dep/fgw/wmaland.htm>

Not applicable. The proposed project is located on the Outer Continental Shelf.

If you have consulted with the New Jersey Division of Fish and Wildlife on the proposed use, please include any correspondence with this submission. *New Jersey's Landscape Project mapping (v3.3) and the Surface Water Quality Standards (SWQS) can be viewed for free by visiting the NJDEP – Geo Web, GIS interface. Failure to provide the information requested above may impact the DFW*

*ability to provide formal consultation/comments regarding potential impacts to Threatened and Endangered Species.*

Not applicable. The proposed project is located on the Outer Continental Shelf.

### **Division of Land Resource Protection**

Does the project involve development at or near, or impacts to the following; describe the type and extent of development in regard to location and impacts to regulated features:

- Water courses (streams)

Not applicable. The proposed project is located on the Outer Continental Shelf.

- State Open Waters?

Not applicable. The proposed project is located on the Outer Continental Shelf.

- Freshwater Wetlands and/or freshwater wetland transition areas?

Not applicable. The proposed project is located on the Outer Continental Shelf.

- Flood Hazard areas and/or riparian buffers

Not applicable. The proposed project is located on the Outer Continental Shelf.

- Waterfront development areas

Not applicable. The proposed project is located on the Outer Continental Shelf.

- Tidally Flowed Areas

Not applicable. The proposed project is located on the Outer Continental Shelf.

- Bureau of Tidelands Management

Not applicable. The proposed project is located on the Outer Continental Shelf.

- The CAFRA Planning Area?

Not applicable. The proposed project is located on the Outer Continental Shelf.

### **Division of Coastal Engineering**

Will the project impact any Army Corp of Engineers beachfill projects or sand borrow areas either onshore, nearshore, or offshore?

The proposed project route would not cross USACE beachfill projects because the proposed project is located on the Outer Continental Shelf. During the routing and siting process, NEETMA selected proposed project routes to avoid any sand borrow areas. The proposed project route would not cross any onshore, nearshore, offshore sand borrow areas. See Attachment 19, Sec. 3.1.1. During project development, NEETMA will coordinate with USACE.

Is the project being proposed in the vicinity of any shore protection structures such as jetties, groins, seawalls, revetments, bulkheads, reefs, or outfalls?

Not applicable. The proposed project is located on the Outer Continental Shelf.

Does the project propose any cabling through inlets or areas that are regularly dredged for maintenance?

The proposed project route would not cable through inlets because the proposed project is located on the Outer Continental Shelf. The proposed project route is not anticipated to cross areas that are regularly dredged for maintenance. See Attachment 19, Sec. 1.2. During project development, NEETMA will coordinate with USACE.

What if any restrictions will be placed on anchoring and navigation around proposed cables?

The cable will be designed to appropriate burial depths. Typically, restrictions are tied to permit conditions. During project development, NEETMA will coordinate with USACE and USCG.

Have you contacted the USACE or NJDEP Division of Coastal Engineering regarding your proposed project?

Yes, NEETMA coordinated with the USACE Philadelphia District on July 9, 2021 and the USACE New York District on July 12, 2021 regarding the proposed project. NEETMA coordinated with the NJDEP regarding the proposed project on June 7, 2021 and August 5, 2021..

## Community Engagement

The Department is committed to the principles of meaningful and early community engagement in the project's approval process. The Department has representatives available to discuss community engagement issues with you and we encourage this communication to take place at the earliest possible time.

- (a) What community groups and stakeholders have you identified that may be interested in or impacted by this project?

**See Attachment 12.**

- (b) How have you or will you engage community and stakeholders in this project?

**See Attachment 12.**

(c) What are the potential impacts of this project on the community?

**See Attachment 19, Section 4.4**

(d) What are the community concerns or potential concerns about this project?

**See Attachment 12.**

(e) How do you intend to address these concerns?

**See Attachment 12.**

(f) As part of this project, do you plan to perform any environmental improvements in this community? If yes, describe

Yes. As the proposed project develops, NEETMA will continue to communicate and collaborate with affected stakeholders and/or communities. Environmental improvements will be selected based on final design. See **Attachment 12** for proposed additional environmental benefits.

Please provide the Department with an additional narrative description function and its local/regional environmental, social, and economic benefits and impacts. Also, what sensitive receptors are present and how might they be affected by this project?

NEETMA included environmental NGOs and the fisheries stakeholders in the routing and siting process through a phased communications and outreach plan. The proposed project routes were selected to avoid sensitive receptors. See **Attachment 1**.

## **Air Quality**

Will activity at the site release substances into the air?

Yes. **See Attachment 19, Sec. 4.1.3.** NEETMA will conduct an air quality impact analysis to evaluate the potential effects of the proposed project on air quality.

Does the project require Air Preconstruction permits per N.J.A.C. 7:27-8.2(c)?

Not applicable. The proposed project is located on the Outer Continental Shelf.

Will your project require Air Operating permits (N.J.A.C. 7:27--22.1)?

Not applicable. The proposed project is located on the Outer Continental Shelf.

Will the project result in a significant increase in emissions of any air contaminant for which the area is nonattainment with the national ambient air quality standards (all of NJ for VOC and NOx; 13 counties for fine particulates), thereby triggering the Emission Offset Rule at NJAC7:27-18?

Not applicable. The proposed project is located on the Outer Continental Shelf.

Will the project result in stationary diesel engines (such as generators or pumps) or mobile diesel engines (such as bulldozers and forklifts) operating on the site? If so, which?

Not applicable. The proposed project is located on the Outer Continental Shelf.