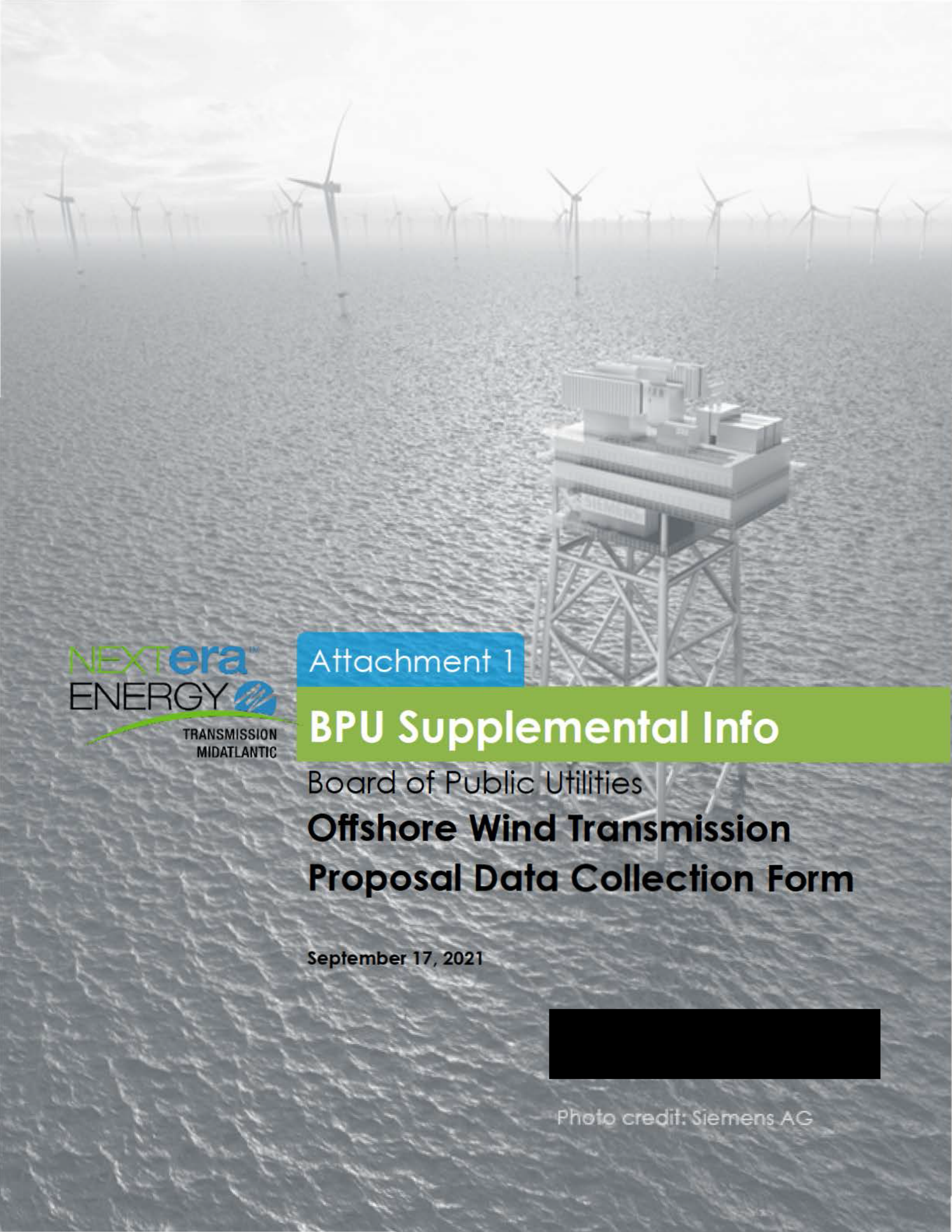


NEXTera ENERGY TRANSMISSION MIDATLANTIC

Attachment 1

BPU Supplemental Info

Board of Public Utilities

Offshore Wind Transmission Proposal Data Collection Form

September 17, 2021

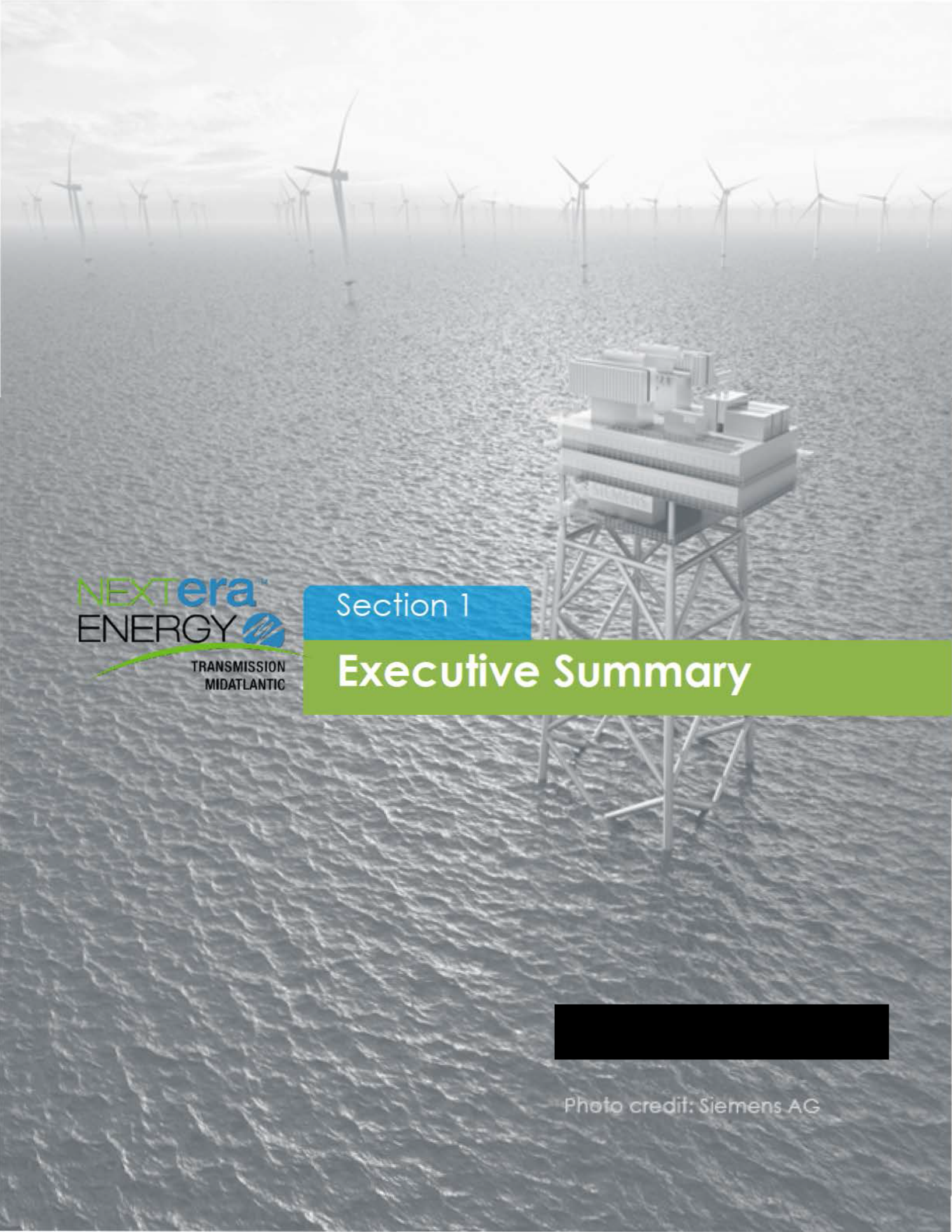
[redacted]

Photo credit: Siemens AG

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES



NEXTera ENERGY TRANSMISSION MIDATLANTIC

Section 1

Executive Summary

[redacted]

Photo credit: Siemens AG

1. EXECUTIVE SUMMARY

1.1 Overview

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 flexibility to
- 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.

~54,727 MW
generating capacity
as of year-end 2020

$128 B
in total assets as
of year-end 2020

~$100 B
infrastructure capital
deployed since 2011

~87,610 miles
of transmission &
distribution lines

~14,900
employees as of
year-end 2020

$18 B
operating revenues
in 2020

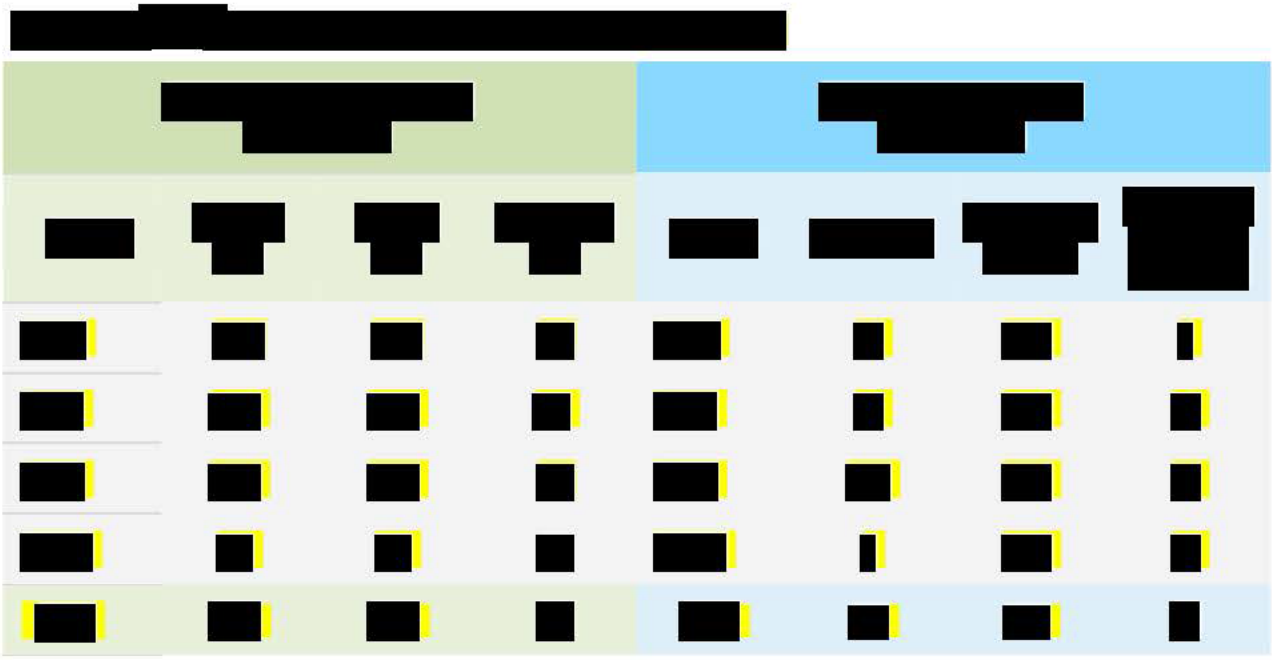
49 states
with operations and
development projects

4 provinces
in Canada with operations
and development projects

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.



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 regularly in the financial markets and year-to-date has raised more than $9 billion in new capital on very favorable terms. [redacted]

NextEra's confidence in providing this Project at the cost and financing structure has been reflected through an aggressive cost containment structure. [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 has current investment 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 two 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 went through a meticulous effort to ensure the proposals provided viable and flexible solutions for New Jersey. To ensure all possible combinations were explored, the evaluation combed through all possible interconnections and identified 19 potential locations. Based on initial powerflow studies and desktop analysis the 19 locations were prioritized to 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 went through a ranking process 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 criteria:

Cost	• Extremely cost effective versus individual gen-ties • Low cost structure and financing strategy • Aggressive cost containment measures • The ability to achieve investment tax incentives
Constructability	• HVDC design is used around the world • Utilizes construction techniques permitted by DEP • Utilizes site control and primarily public land for rights-of-way • Routes vetted through field visits, DEP and municipal consultation
Schedule	• Optimized schedules to maximize construction efficiency • Commitments from key vendors supporting project schedule • Schedule in advance of BPU solicitation dates • Meaningful schedule guarantees
Optionality	• Three injection points optimized for cost and injection levels • Solutions can be mixed and matched • Varying levels of injection capabilities • The ability to exceed New Jersey's offshore wind targets
Environmental	• HVDC reduces environmental impacts verses AC design • Incorporated feedback from Federal and State consultations • Single construction periods can achieve high injection levels
Benefits	• Schedule significantly reduces project-on-project risk • Market analysis indicates capacity and energy benefits in excess of the transmission cost

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-effect 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:

Deans 500 kV Injections	This proposal utilizes a **single injection point** 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.
Oceanview 230 kV Injections	This proposal offers a **cost-effective** 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.
Cardiff 230 kV Injections	NEETMA is proposing a more **cost-effective alternative** 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 Proposed Injection and Corresponding Upgrade Proposal

Problem Statement 2 Injection Proposal	Problem Statement 1a Upgrade Proposal	Problem Statement 1a Peach Bottom Upgrade Proposals
2-D60	1A-D60	1A-WILEY1, 1A-WILEY2, or 1A-WILEY3
2-D45	1A-D45	1A-WILEY1, 1A-WILEY2, or 1A-WILEY3
2-D30	1A-D30	1A-WILEY1, 1A-WILEY2, or 1A-WILEY3
2-O30	1A-O30	1A-WILEY1, 1A-WILEY2, or 1A-WILEY3
2-O24	1A-O24	1A-WILEY1, 1A-WILEY2, or 1A-WILEY3
2-O15	1A-O15	1A-WILEY1, 1A-WILEY2, or 1A-WILEY3
2-C27	1A-C27	1A-WILEY1, 1A-WILEY2, or 1A-WILEY3
Combinations where total OSW Injection equals or exceeds 8300 MW (inclusive of Ocean Wind 1)	Corresponding Upgrade Proposals PLUS 1A-8300	1A-WILEY3

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 NextEra, New Jersey will find a reliable and committed partner to support a project of this scope and scale.

NEXTera ENERGY
TRANSMISSION
MIDATLANTIC

Section 2

Project Proposal ID

[redacted]

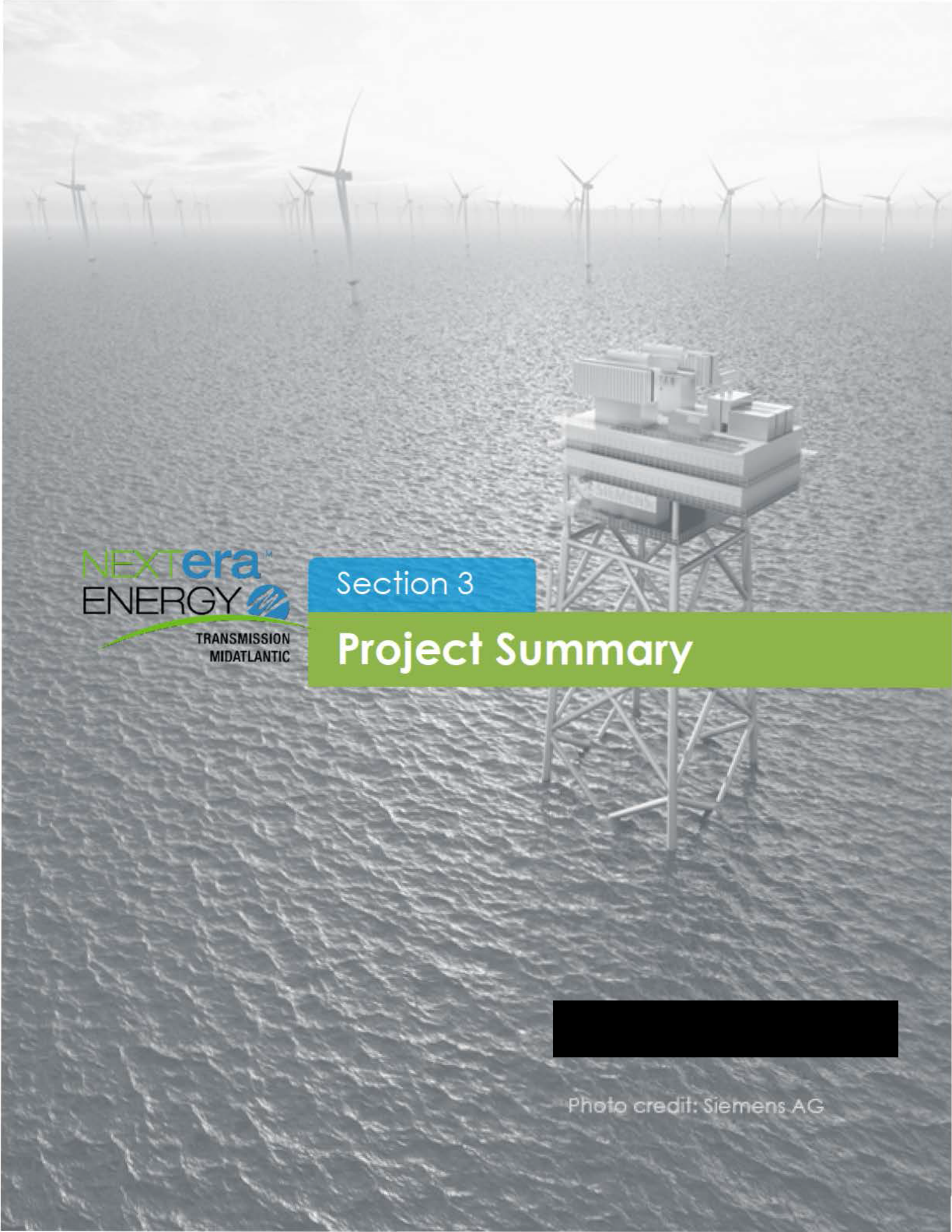
Photo credit: Siemens AG

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

Proposing Entity Name:	**NextEra Energy Transmission MidAtlantic Holding, LLC (NEETMH)**
Company ID:	**1A-WILEY1**
	1A-WILEY2
	1A-WILEY3
Project Title:	**Wiley Rd-Wheeler 500 kV**
	Wiley Rd-Wheeler 500 kV
	Wiley Rd-Conastone 500 kV
PJM Proposal ID:	**2021-NJOSW-11 (for 1A-WILEY1)** **2021-NJOSW-982 (for 1A-WILEY2)** **2021-NJOSW-587 (for 1A-WILEY3)**



NEXTera ENERGY TRANSMISSION MIDATLANTIC

Section 3

Project Summary

[redacted]

Photo credit: Siemens AG

3. PROJECT SUMMARY

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.

NEETMA is proposing this project to support ANY of the proposed Problem Statement 2 solutions that trigger overloads on the Peach Bottom – Conastone 500 kV line and the Hope Creek – LS Power Cable 230 kV lines. This includes new transmission facilities located in Maryland and Pennsylvania.

The proposed project includes the following scope:

- NEETMA to construct a new Wiley Rd 500 kV substation which include connections to Delta 500 kV, Peach Bottom 500 kV, and Conastone 500 kV.
- NEETMA to construct a new 500 kV line from Wiley to Conastone, approximately 14 miles adjacent to the existing utility right-of-way (ROW).
- Incumbent Transmission Owner to add new 500 kV breaker and line termination at the Conastone 500 kV switchyard to accommodate new 500 kV line from Wiley.
- Incumbent Transmission Owner to add one new phase Phase Angle Regulator (PAR) on the Hope Creek – LS Power 230kV Cable 1 and a new PAR on the Hope Creek – LS Power 230kV Cable 2.

3.2 Project Optionality, Flexibility, and Modularity

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 developed three options to address overloads identified in Section 4.1. These options have been identified by NEETMA as 1A-WILEY1, 1A-WILEY2, and 1A-WILEY3; and only one of proposals needed to address the reliability issue.

Table 3.2-1 Upgrade Proposals addressing Peach Bottom-Conastone

Upgrade Company Proposal ID	Project Description
1A-WILEY1	Wiley Rd – Wheeler 500 kV Project, Adjacent ROW, Existing ROW, Hope Creek PARs
1A-WILEY2	Wiley Rd – Wheeler 500 kV Project, Adjacent ROW, Hope Creek PARs
1A-WILEY3	Wiley Rd-Conastone 500 kV, Hope Creek PARs

3.3 Interdependency of options

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 proposes that the 1A-WILEY1, 1A-WILEY2, and 1A-WILEY3 projects can be paired with any of NEETMA's proposals in response to Problem Statement 2. Any offshore wind injection into New Jersey is likely to create an overload on the lines identified in Section 4.1; however, not all offshore wind injections may cause an overload of the Hope Creek – LSPower 230 kV cables. So BPU may decide the PARs are not necessary depending on the proposed injection locations and upgrades ultimately selected.

Table 3.3-1 Proposed Injection and Corresponding Upgrade Proposal

Upgrade Company Proposal ID	Project Description	Injection Proposal ID Pairing
1A-WILEY1	Wiley Rd – Wheeler 500 kV Project using existing ROW, Hope Creek PARs	Any individual or combination of NEETMA proposals 2-D60, 2-D45, 2-D30, 2-O30, 2-O24, 2-O15, 2-C27
1A-WILEY2	Wiley Rd – Wheeler 500 kV Project using adjacent ROW, Hope Creek PARs	Any individual or combination of NEETMA proposals 2-D60, 2-D45, 2-D30, 2-O30, 2-O24, 2-O15, 2-C27

1A-WILEY3	Wiley Rd-Conastone 500 kV using adjacent ROW, Hope Creek PARs	Any individual or combination of NEETMA proposals 2-D60, 2-D45, 2-D30, 2-O30, 2-O24, 2-O15, 2-C27

3.4 Overview of Project Benefits

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 proposed project reduces eliminates congestion, address thermal reliability issues as discussed in Section 4.1, and provides capacity benefits as discussed in Section 4.3.

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.

Through NextEra's long-standing relationships with vendors, NEETMA can lock in pricing and set procurement schedules. NEETMA will work with the BPU, Pennsylvania and Maryland state agencies to define any schedule or project changes and procure the equipment such that major project costs are locked in as soon as practicable. Additionally, NEETMA is prepared to take other steps upon award to ensure efficient project execution:

1	Coordinate closely and regularly with state and federal agencies to ensure timely approval of required permits to minimize project on project risk
2	Work with incumbent transmission owners to coordinate design requirements and required transmission outages in order to reliably connect the proposed project
3	Expand public outreach and communications efforts to all interested and impacted stakeholders

NEETMA has provided a more detailed project risk matrix and mitigation as **Attachment 13**.

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]

[redacted]

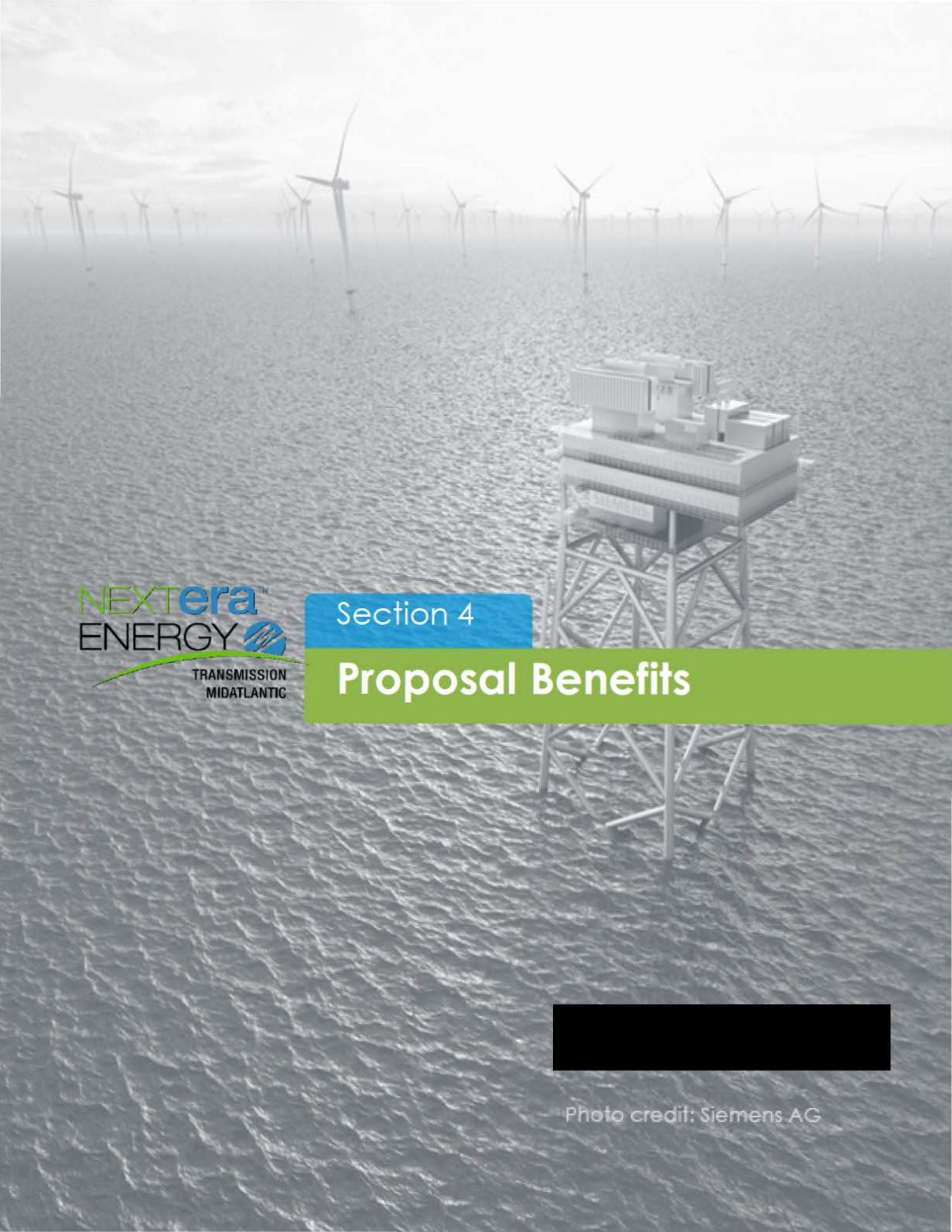
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

[redacted]

[redacted]

[redacted]

[redacted]



NEXTera ENERGY TRANSMISSION MIDATLANTIC

Section 4

Proposal Benefits

[redacted]

Photo credit: Siemens AG

4. PROPOSAL BENEFITS

4.1 Reliability Benefits

- 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 table below provides an overview of reliability issues addressed by each of the proposals. See Attachment 2A for a detailed result of the studies performed for these projects.

Table 4.1-1 Analysis Performance

Upgrade Company Proposal ID	Overview of Reliability Benefits
1A-WILEY1	Addresses overloads of Hope Creek – Silver Run 230 kV, Peach Bottom – Conastone 500 kV, Furnace Run 500/230 kV Transformers 1 & 2, Peach Bottom – Furnace Run 500 kV, Furnace Run – Conastone 230 kV lines 1 & 2
1A-WILEY2	Addresses overloads of Hope Creek – Silver Run 230 kV, Peach Bottom – Conastone 500 kV, Furnace Run 500/230 kV Transformers 1 & 2, Peach Bottom – Furnace Run 500 kV, Furnace Run – Conastone 230 kV lines 1 & 2
1A-WILEY3	Addresses overloads of Hope Creek – Silver Run 230 kV, Peach Bottom – Conastone 500 kV, Furnace Run 500/230 kV Transformers 1 & 2, Peach Bottom – Furnace Run 500 kV, Furnace Run – Conastone 230 kV lines 1 & 2

4.2 Public Policy Benefits

- 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.

NEETMA's proposed project allows New Jersey to meet or exceed its offshore wind energy goals. Without this project, offshore wind would have to be curtailed so as to not cause an overload on existing transmission lines.

4.3 Market Efficiency Benefits

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):

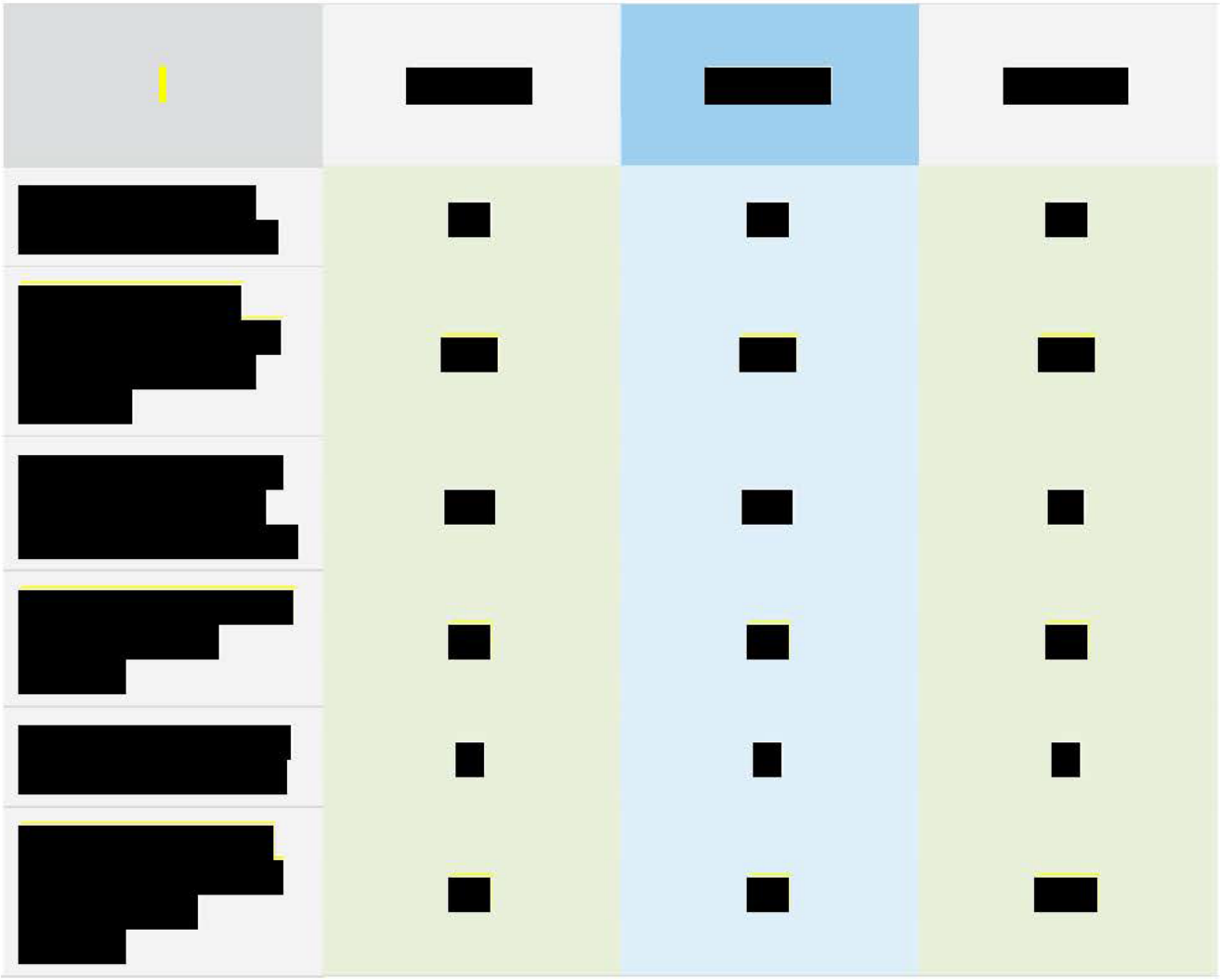
- Other benefits, including State energy sufficiency, reduced emissions, less dependence on fossil-based thermal resources, improvements in local transmission and distribution outages, improvements in local resiliency:

- 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 performed extensive analysis to identify the benefits of the proposed project, which are summarized in Table 4.3-1 below. See **Attachment 2A** for a detailed result of the studies

performed for these projects.

Table 4.3-1 Benefits of Proposed Project in 2028



NEXTera ENERGY TRANSMISSION MIDATLANTIC

Section 5

Proposal Costs

[redacted]

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

NEETMA has provided additional cost detail in **Attachment 8** and **Attachment 10**.

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, but are not limited to items such as, land clearing, foundation, and structure installation, and stringing of overhead conductors. Other special scope items included may consist of items such as crossings of water, rail, road, pipeline, and other existing infrastructure. Route definition and certainty determine the complexity of the installation. Installations in remote and/or environmentally sensitive areas present additional challenges for the project. 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]

5.3 Estimated Energy Losses

The estimated energy losses of the proposed facilities.

Losses are calculated according to PJM's dispatch of 60% offshore wind during the winter models, and 30% offshore wind capacity during the summer models.

Table 5.3-1 Estimated Losses

[redacted]

INJECTION PROPOSAL ID	Losses calculated on total design capacity	
	Reduction in overall system losses with upgrades (MW)	
	SUM	WIN
1A-WILEY1	13.0	25.6
1A-WILEY2	13.5	25.5
1A-WILEY3	2.1	5.9

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

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

[redacted]

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

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

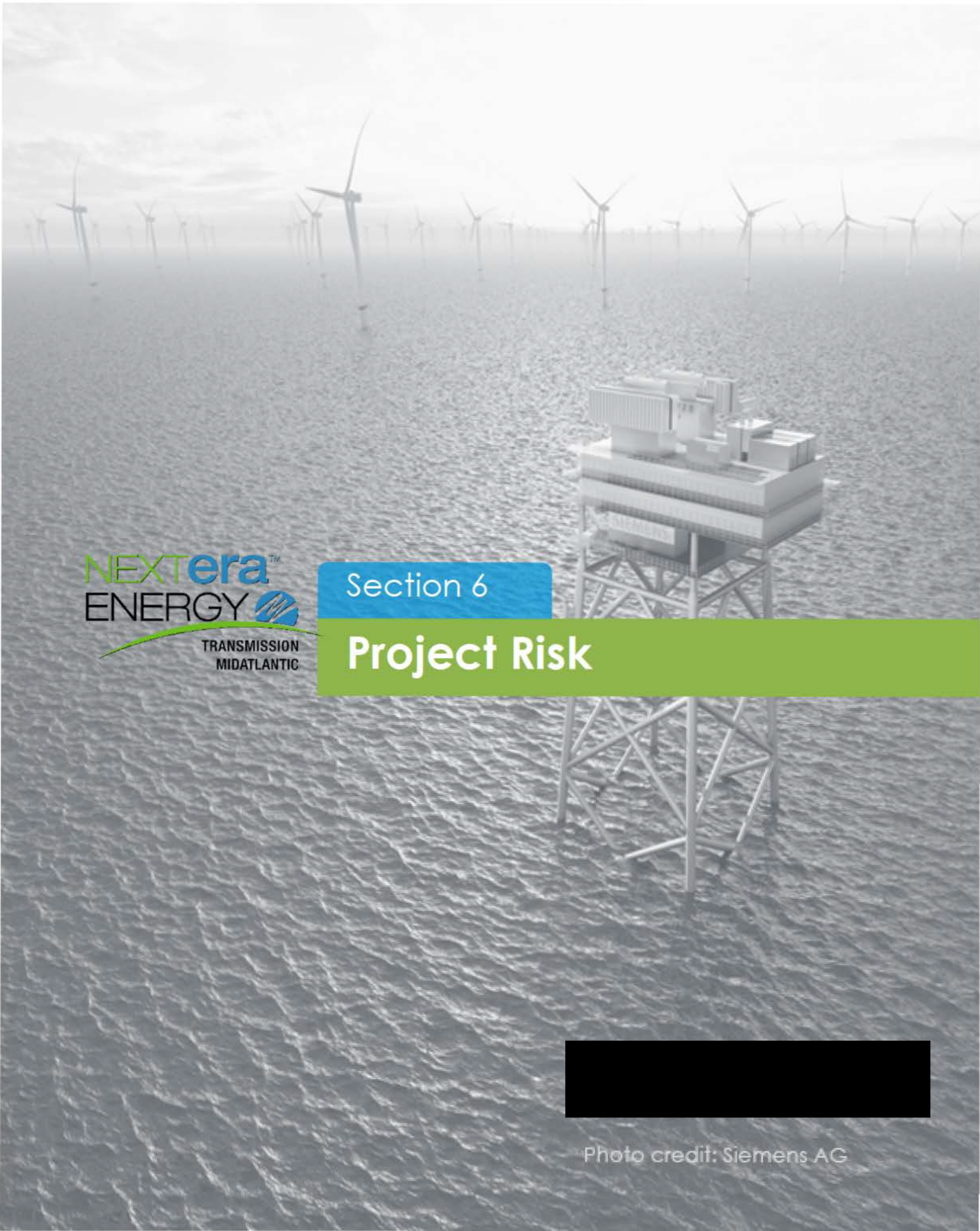
[redacted]

[redacted]

[redacted]

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

- [redacted]
- [redacted]
- [redacted]
- [redacted]



NEXTera ENERGY TRANSMISSION MIDATLANTIC

Section 6

Project Risk

[redacted]

Photo credit: Siemens AG

6. PROJECT RISKS AND MITIGATION STRATEGY

6.1 Project's Plan for Site Control

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

[redacted]

Additional details of NEETMA's site control plan is provided in **Attachment 22.**

Table 6.1-1 Summary of Land Ownership for Wiley Rd – Conastone

ROW Labels	Sum of Route Mileage	Percent of Route Mileage
Private	3.4767	24.06%
Road ROW	0.2160	1.49%
Utility	10.7602	74.45%
Grand Total	**14.4529**	**100.00%**

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

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.

This Project does will not 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") as it is an

independent project and includes only onshore components.

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 stakeholders may have regarding the Project and is committed to partnering with them throughout all phases of the Project. It is no question that agricultural communities are vital to Maryland and Pennsylvania's culture and economy. As these communities have valid concerns about potential negative impacts– such as visual impacts, we have taken that into account during the routing and siting process.

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 anticipates that any coordination work with incumbent Transmission Owners, as well as any crossings required will be the main reason for any delay in construction work.

Below is a list of major construction tasks that will be performed for both Wiley Rd 230/500 kV and Wheeler 230/500kV Substations. NEETMA intends to utilize multiple crews for the duration of construction activities.

- **Substation Construction:** NEETMA will begin the substation construction with site preparations and installation of concrete foundations and continue through our below grade activities such as conduit, grounding and cable trench installation. Then NEETMA will begin our above grade activities to include steel structures, bus work, switches, electrical equipment install, cable, fence and final clean-up. NEETMA will also address other key items such as safety, staffing, material handling and training.

- **Transmission Line Constructions:** For the transmission construction, NEETMA will mobilize equipment to the project and first begin clearing trees for access to the ROW corridor. Trees will be cut by one of three clearing types; mechanically cut with a feller buncher, mechanically mulched in place with a forestry mulching attachment, or hand cut with a chainsaw.

  Storm Water Pollution Prevention Planning (SWPPP) crews will follow directly behind the clearing crews and begin installing temporary erosion control and other best management practices (BMPs), where feasible, before ground disturbance activities begin.

  After initial erosion control BMP's are installed, access crews will begin to construct access to each structure, working linearly down the ROW. Once ROW access is available NEETMA will request an outage to support the demolition of approximately 5 miles of the existing 230 kV line between Cooper and Graceton. Once the demolition is complete and the ROW is and ready for new construction, the foundation contractor will begin digging and installing new foundations for the new 500kV line between Wiley Rd and Wheeler. Once the foundation contractor has made enough progress NEETMA will begin pole delivery to the ROW.

  Pole setting crews will start after enough poles are framed to keep the setting crew working continuous through the ROW. After enough poles have been set, conductor stringing operations will commence. All conductor stringing will be done in accordance with an approved tension stringing method per the IEEE Guidelines.

Once the line is tested and commissioned and the final operations in an area are finished, crews will ensure each site is cleaned up. Reclamation procedures will be in complete compliance with the specifications. Conditions will be left in equal or better conditions than found pre-construction.

Risks identified for 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 the onshore construction and can be found **Attachment 11**. The schedule was built to include typical state and federal time of year restrictions associated with flora and fauna listed species, species of concern and/or managed species. Typical time of year restrictions 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
Indiana Bat	April 1 – October 14	Forest stands and forested hedgerows
Northern Long-eared Bat	April 1 – October 14	Forest stands and forested hedgerows

6.6 Anticipated Construction-Related Outages

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

NEETMA Proposal	Proposed Language
1A-Wiley 1 Proposal	Outage of Peach Bottom to Conastone 500 kV to loop into Wheeler 500 kV, Outage of Peach Bottom to Delta 500 kV line to loop into Wiley 500 kV
1A-Wiley 2 Proposal	Outage of Peach Bottom to Conastone 500 kV to loop into Wheeler 500 kV, Outage of Peach Bottom to Delta 500 kV line to loop into Wiley 500 kV
1A-Wiley 3 Proposal	Outage of Peach Bottom to Delta 500 kV line to loop into Wiley 500 kV

6.7 Impact of Supply Chain Constraints or Material Procurement Risks

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

The majority of material and equipment procurement will be performed by the substation and transmission line contractors per the specifications developed by the Engineer of Record (EOR) and NEETMA subject matter experts. NEETMA typically procures directly long lead time items such as power transformers, high voltage breakers, conductor, transmission line structures, conductors, and optical and overhead shield wires. For equipment purchased directly by NEETMA, the Integrated Supply Chain (ISC) department will coordinate all delivery to the site, monitor vendor progress, and expedite delivery of materials to maintain schedule. The contractor will be responsible for the procurement of all materials in their individual scope and will be required to coordinate delivery, monitor vendor progress, and expedite delivery of materials as needed to maintain the Project schedule.

As part of preparing our proposal, NEETMA solicited quotes from vendors of substation equipment, including ABB, Siemens, HICO, and SMIT for transformers; due to the size and requirements, pricing for HV Circuit Breakers was limited to Siemens and ABB. This approach provides market-based data that adds specificity to our proposal as well as prequalifying suppliers able to meet performance requirements.

As indicated throughout our proposal, NEETMA anticipates continuing to project execution with the members of our proposal team listed above. These contractors represent the best in the industry, and each brings with it an extensive experience executing projects of similar scale and scope. However, to ensure that the rate payer receives the best value, NEETMA reserves the right to check the market for engineering and construction costs to validate that our team members remain competitive.

6.8 Project Risks related to Timing or Completion

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.

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

6.9 Proposed Contractual Language for Project Schedule Guarantees

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 providing a schedule guarantee for this project.

6.10 Additional Risk Associated with Project

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**.

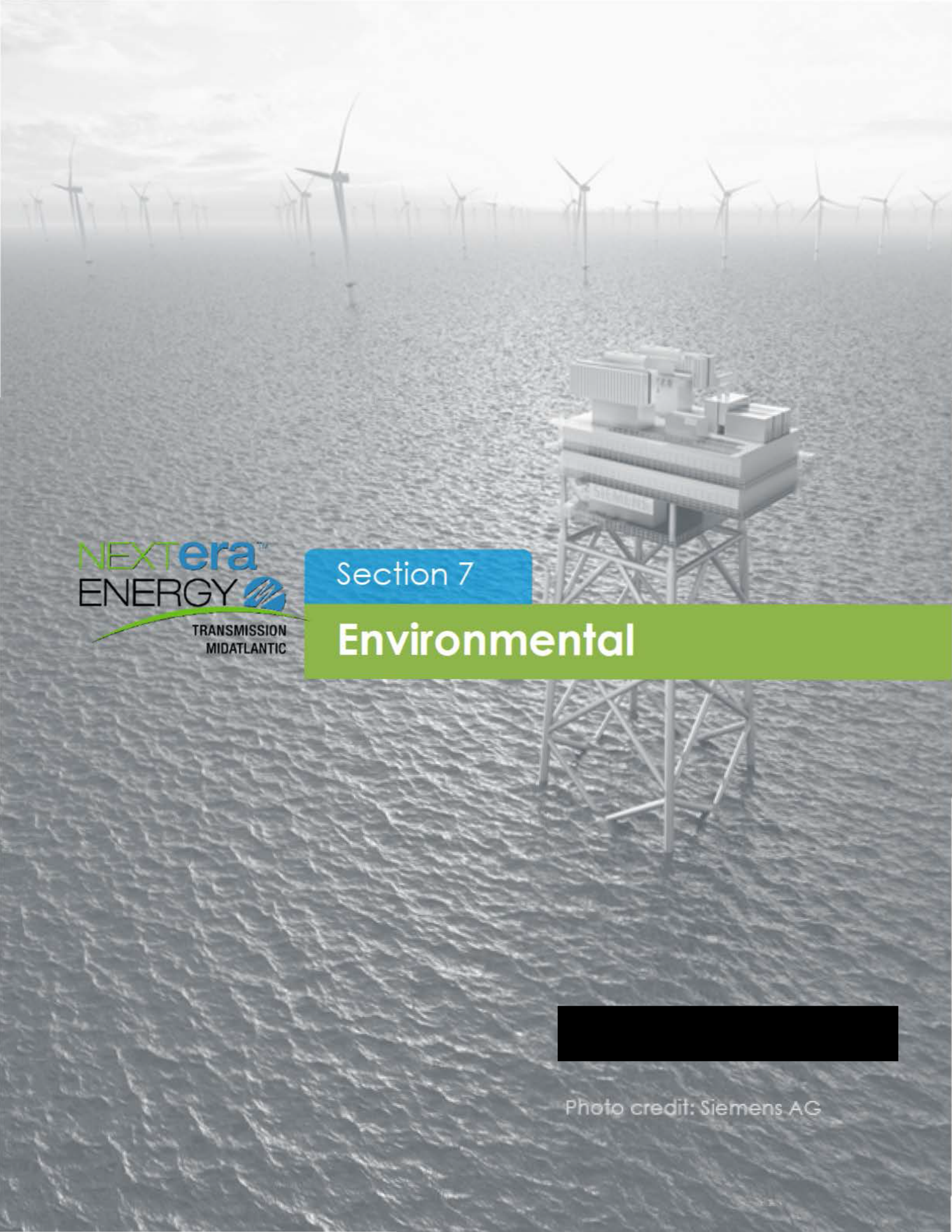
6.11 Compensatory Mitigation Estimate for Wetland Impacts and Potential Risk

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

The current Wiley projects routes include wetland crossings but given the ability to span wetlands with overhead transmission, permanent impacts to wetlands will be minimal, if any. The goal is to avoid and minimize impacts to wetlands. Poles will not be placed into wetlands, and during construction wetland areas will be flagged for avoidance. Equipment needed for stinging lines will be placed outside of wetlands. If permits are necessary, USACE nationwide permits can be used. No wetland mitigation will likely be needed for these projects.

Table 6.11-1 Wetland Crossings

Injection Proposal ID Included	Estimated Acres of Wetland Crossings
1A-WILEY1	2.290
1A-WILEY2	2.290
1A-WILEY3	2.290



NEXTera ENERGY TRANSMISSION MIDATLANTIC

Section 7

Environmental

[redacted]

Photo credit: Siemens AG

7. ENVIRONMENTAL IMPACTS AND PERMITTING

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.

As part of the integrated routing and 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. 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 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 **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 may not be avoided.

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.

This project is an upgrade identified needed as a result of injecting offshore wind. By identifying common upgrades, this allows NEETMA to develop transmission lines that ultimately have fewer environmental impacts compared to an offshore wind developer trying to avoid system upgrade impacts and routing transmission lines to multiple landing sites.

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.

Not applicable for this project.

7.4 Environmental and Fisheries Stakeholders Outreach

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.

Fisheries stakeholders will not be involved in this project as there are no coastal or offshore components. However, other environmental stakeholders are integral to all phases of the Project. NEET's communications team has already begun developing a phased communications and outreach plan 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 MD and PA resources.
- 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.
- 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 and environmental NGOs will grow. In order to establish a solid channel of communication between NEETMA and environmental stakeholders, points of contact are being identified that 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

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

A detailed discussion of demographics, employment and environmental justice is included in the Environmental Permitting Plan (Attachment 19). According to the US Census, in 2019, a total of 10,667 persons lived within the study area. In terms of ethnicity, whites comprised the largest race in the study area (96.3%) followed by black or African American and Two or more Races (1.3% each). Approximately 3.7% of the population identified by the Census identified themselves as a minority.

The median household income between 2015 and 2019 was $61,744 in Pennsylvania and $84,805 in Maryland. This was slightly lower than the national median value of $62,843 for the same time period in Pennsylvania, and significantly higher for Maryland. Median household incomes in York County, Peach Bottom Township, Harford County, and Harford County District 4 are higher than their respective state averages, while Harford County District 5 is slightly lower. While the poverty rate in Pennsylvania (12.0 percent) is higher than the rate nationally (10.5 percent), the poverty rate in York County is lower (9.4 percent), as are the rates in Maryland (9.0 percent) and Harford County (6.7 percent) (US Census Bureau, 2021).

7.6 Applicant's Permitting Plan

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.

Attachment 20 provides a narrative description of NEETMA's permitting plan, a detailed permit matrix that identifies the various permits and approvals required for the proposed projects, and the projected local, State, and Federal timelines for seeking and obtaining required permits and approvals.