# NEETMA RESPONSES TO BPU 2ND SET OF CALRIFYING QUESTIONS

### Q1. Please provide any additional information concerning alternative locations for the Fresh Ponds substation.

# NEETMA Response:

As set forth in NEETMA's response to Environmental Question No. 4.1 in BPU's 1st Set of Clarifying Questions and NEETMA's Supplemental Filing,<sup>[1]</sup> NEETMA continues to evaluate alternative locations for the Fresh Ponds substation. Additional alternative locations include:

As discussed in NEETMA's response to Question No. 2 in BPU's 2<sup>nd</sup> Set of Clarifying Questions, NEETMA performed significant diligence, outreach, and feasibility studies for the location of the Fresh Ponds substation before ultimately proposing the current location. NEETMA will continue to evaluate alternatives to the proposed location post-award and in consultation with key stakeholders—including the BPU, DEP, Middlesex County, and the community.

Q2. The lease or conveyance of state-owned lands may be granted only after all reasonable, feasible and available non-parkland alternatives have been evaluated and a compelling public need and significant public benefit from the project can be demonstrated by the applicant. As a follow-up to your answer to Clarifying Question, "Have you consulted with the Office of Transactions and Public Land Administration on the use of State-owned lands?

<sup>[1]</sup> See NEETMA's Supplemental Information Filing (March 28, 2022) at 22.

Specifically, regarding the construction of a converter station at Pigeon Swamp State Park? If yes, please describe. Have alternative locations for the converter station which avoid state lands been identified or an alternatives analysis conducted?" there is more to the overall lease or conveyance process, prior to the initiation of the intensive Ogden Rooney Request for Use NJDEP process starting with the of Property Form (https://www.nj.gov/dep/greenacres/pdf/request to use nidep property-2022.pdf). Please describe in detail NEETMA's plan to address the thorough application & alternatives process needed for the use of a significant amount of state-owned lands, as well as the required compensation, and timeframe associated with the process.

# NEETMA Response:

NEETMA's Project requires use of state-owned land because its routing and siting analysis did not locate parcels that met the technical criteria for siting the converter station to support a 6000MW project and be within an achievable connection distance to the existing 500 kV transmission line corridor. In addition, space and footprint of the state-owned parcel is more conducive to accommodating BPU's proposed Scenarios 1 and Scenarios 2 (as defined in questions 3 and 4) where multiple offshore wind developers might construct converter stations at different times. As explained below, the state-owned Deans Rhode Hall Road parcel is the most suitable for the location of the converter station. NEETMA has projected a two-year process to acquire the Deans Rhode Hall Road parcel. This includes coordinating with NJDEP, an appraisal of the parcel by a Green Acres certified appraiser and State House Commission approval.

As described in NEETMA's Attachment 19 Section 1.3 Routing and Siting to NEETMA's initial Proposal submission (submitted September 202), NEETMA conducted a robust routing and siting study for the Project. The routing and siting study was an integrated process that included a phased routing analysis approach and stakeholder outreach. The process began with a broad statewide study area to identify potential interconnection points. The goal of the routing and siting process was to avoid or minimize impacts to sensitive resources and maximize opportunities, while minimizing cable lengths and costs, and maximizing system reliability. Once interconnection points were identified, a study area of approximately five square miles was identified for the converter station parcel screening assessment. The parcels were screened based on the following technical criteria:













The Deans Rhode Hall Road (*i.e.* State-owned land) parcel was selected as it satisfies the Project technical criteria summarized above and reduces potential environmental impacts. The parcel has a history of disturbance and no tree clearing is anticipated (depending on final design). The parcel is located adjacent to the New Jersey Turnpike and contains rights-of-way for two existing 500kV transmission lines that connect into the Deans substation. Selecting a parcel adjacent to the existing transmission line is critical as it reduces environmental impacts from additional infrastructure (i.e. additional 500kv overhead transmission lines and/or underground cables and duct banks) that would be needed if the converter station was further away. In addition, the site provides sufficient space for construction access, including if the converter stations are installed sequentially over time. NEETMA will prepare a robust alternatives analysis for the Fresh Ponds site as part of the GAP and permit application process. The proposed parcels (PAMS PIN Numbers 1221\_21\_13.07 and 1221\_21\_12.02) are presently under cultivation for corn with a small area adjacent to the NJ Turnpike and Deans Rhode Hall Road set aside for a Christmas tree farm.

NEETMA coordinated with NJDEP prior to proposal submittal to discuss the process of granting a conveyance of state-owned lands for the Deans Rhode Hall Road location. In addition, NEETMA is currently coordinating with NJDEP and the Office of Transactions and Public Land Administration regarding accessing the site to conduct initial site-specific surveys to aide in project design and NEETMA is completing and submitting the Request for Use of NJDEP Property Form July 2022 to formally engage with NJDEP.

The Project schedule provided in Attachment 11 to NEETMA's September 2021 proposal included an 18-month period for the state lands process and an additional 6 months for agency coordination - a total of 2 years. NEETMA has developed the following approach for NJDEP coordination and approval which addresses the application and alternatives process as well as State House Commission approval.



### Figure 7: Proposed NJDEP Coordination

- NEETMA will provide DEP with a GIS map and shapefiles of the area to be occupied under Lease. The map will delineate area and provide the square footage that will become lease. The map will identify temporary construction areas and staging rights of entry (ROE). Upon acceptance by DEP, the map will be used to be basis for a fair market value appraisal by a Green Acres certified appraiser. Once agreed upon between DEP and NEETMA, the map will be used to be basis for Fair market value appraisal.
- The proposed lease and ROE areas will be appraised by a Green Acres certified appraiser using Highest and Best Use standard. Typically, the appraisal will be complete 3-6 months of the agreed upon Premises. NEETMA will abide by the appraiser's determination for the required compensation.
- Upon acceptance of the Appraised Value, DEP will prepare a summary to be presented to State House Commission (SHC) at the next earliest SHC meeting (which meets quarterly). NEETMA will be present to respond to any questions throughout the public process.
- Following the meeting, DEP will develop draft Lease Agreement consistent with SHC approval. This typically takes about 6 months for DEP to develop, however, if there are departures from typical agreement then the process can take longer. The timeline above assumed that this will be within the two-year process. In addition, we have assumed another 60 90 days for SHC sign off on lease within the two-year timeline.
- The process for the ROE agreement is similar to the Lease Agreement described above.

Q3. Please confirm whether or not NEETMA would be willing to construct the AC portion of the Reega, Neptune and Fresh Ponds – or a Fresh Ponds alternative – substations and acquire the adjacent land for DC converter(s) ("Scenario 1") even if the BPU chooses not to assign responsibility to NEETMA for installing the remaining transmission facilities necessary to connect to offshore wind, such as the DC cables and converter stations.

# NEETMA Response:

See NEETMA's response to Question No. 4.

Q4. Alternatively, for each location proposed, would NEETMA be willing to build or acquire the facilities and land described above plus the underground infrastructure included in NEETMA's proposal from the proposed substation to an offshore bulkhead location capable of hosting DC cables and converters later installed by offshore wind generation developers (i.e., land for converter station's, vaults and duct banks, but <u>not</u> the DC cables and converter stations themselves) ("Scenario 2"). In this scenario, NEETMA would complete all of the onshore work and near-offshore work necessary for use by multiple future offshore wind generation developers to be able to install their own DC cables and converters using the facilities built by NEETMA with interconnection at NEETMA's proposed AC substation.

### NEETMA Response:

NEETMA is willing to construct the following components:

- Deans: NEETMA is willing to construct the AC Substation and the duct bank and offshoreonshore conduits to host DC cables and converter stations installed by offshore wind generation developers at such time that BPU determines such facilities are needed. The indicative cost estimates for this revised scope of work is provided in Attachment 1 - 2nd Set of BPU Clarifying Questions Q5 to this response.
- Oceanview: NEETMA proposes to construct all the facilities associated with the Neptune substation, including both the onshore and offshore converter stations and HVDC cables.
- Cardiff: NEETMA is willing to construct the Reega substation, obtain the necessary land for converter stations, and construct the duct banks and offshore-onshore conduits to host the DC cables and converter stations installed by offshore wind generation developers. NEETMA is also currently preparing the necessary information that would allow Atlantic Shores Offshore Wind to update its existing Construction Operations Plan, if required, to utilize NEETMA's duct bank.



Q5. If so, please provide cost estimates (based on and at a similar level of detail as provided in its Option 2 proposal) for the facilities included in Scenario 1 and Scenario 2. Please include estimates with and without the land necessary to support the applicable number of DC converter stations.

# NEETMA Response:

See Attachment 1 to this response for the requested cost estimates.

Q6. For Scenario 1, if NEETMA is willing to build the AC portions of the substations and acquire adjacent land for DC converters, would NEETMA allow the winners of future offshore wind solicitations to lease applicable portions of the land necessary to build and operate DC converter stations that connect to the AC portion of the substation? If so, please explain the approach NEETMA would take to provide all offshore wind generation developers equal access to the land while minimizing costs to New Jersey ratepayers. Please feel free to propose an alternative arrangement that would permit NEETMA to allow future offshore wind solicitation winners to use the land.

# NEETMA Response:

Yes, NEETMA is willing to work to provide equal and unbiased access to the land necessary to build and operate the DC converter station. At minimum, a Converter Station Lease and Duct Bank – Joint Ownership Agreement would be required to ensure coordination between BPU, NEETMA, and OSW Developers. NEETMA would consult with both the BPU and OSW developers to develop a pro-forma Converter Station Lease and Duct Bank – Joint Ownership Utilities Agreement to clearly set forth necessary requirements. NEETMA proposes the following initial non-inclusive terms for each agreement:

### **Converter Station Lease**

- Establish a minimum design criteria/guide for the converter stations to ensure that OSW developers optimize the land being utilized for the converter stations;
- Establishes a pre-determined boundary for each converter station that provides sufficient area to construct, operate, and maintain the converter station;
- NEETMA would charge a nominal fee for the lease and the amounts would be established by working with the BPU. The amounts collected on the lease from OSW generators would be a revenue credit that offsets NEETMA's revenue requirement collected from New Jersey customers for the Scenario 2 project. Therefore, consistent with FERC precedent, there

would not be a double collection of revenue associated with the converter station property from customers and OSW generators, and NEETMA would work with the BPU to ensure there was not a double collection but rather an offset to New Jersey customer rates for the lease;

- NEETMA would allow the BPU to allocate the converter sites based on BPU's selection of OSW generators;
- NEETMA would provide resources to ensure effective coordination with the OSW generators to ensure the interconnections proceed as optimally as possible. While the cost for these services has not been quantified, NEETMA expects it to be minimal and collected through the transmission rates; and
- NEETMA would coordinate with OSW generators to ensure an interconnection agreement was executed to enable the OSW to connect to the substations.

### Duct Bank – Joint Ownership Agreement

- Establish minimum design criteria for installing cables through the duct banks;
- Establish appropriate liability provisions in the event OSW developers damage duct banks or previously installed cables;
- Establish NEETMA as the primary entity responsible for maintaining the cables and duct banks; and
- Establish NEETMA's operating and maintenance criteria.
- Q7. For Scenario 2, if NEETMA is willing to build the facilities noted above, would NEETMA allow the winners of future offshore wind solicitations to access the underground facilities for installing their DC cables and to lease applicable portions of the land necessary to build and operate DC converter stations that connect to the AC portion of the substation? If so, please explain the approach NEETMA would take to provide all offshore wind generation developers equal access to these facilities and land while minimizing costs to New Jersey ratepayers. Please feel free to propose an alternative arrangement that would permit NEETMA to allow future offshore wind solicitation winners to use the land.

### NEETMA Response:

See NEETMA's response to Question No. 6.

Q8. Please indicate any other changes to NEETMA's proposal that would be impacted by BPU selecting just the components identified above in Scenario 1 and Scenario 2.

### NEETMA Response:



Q9. Please specify the maximum capacity rating of the AC portion of the proposed substation for each configuration proposed.

### NEETMA Response:

NEETMA's Fresh Ponds 500 kV substation currently proposes to use 3,000 Amp breakers. The proposed Fresh Ponds substation can support up to 8,000 MW in total -- 2,000 MW per converter station. Increasing the breaker amperage would allow more MW to be achieved, which would also increase the footprint of the substation as well as the cost.

The Reega and Neptune 230 kV substations currently propose to use 4,000 Amp breakers. These substations can accommodate 3,000 MW -- 1500 MW per converter station. Changing the design to 5,000 Amp breakers would allow up to 3,800 MW -- 1,900 MW per converter station. The larger breakers would increase the footprint of the substation as well as the cost.

NEETMA has not analyzed any potential necessary downstream upgrades to the network in order to accommodate the larger offshore wind generation injection.

Attachment 1 - Q5: AC Substation and Duct Bank Installation Costs

