STATE OF NEW YORK PUBLIC SERVICE COMMISSION

Application of PSEG Long Island LLC
on Behalf of and as Agent for the Long
Island Lighting Company d/b/a LIPA for
a Certificate of Environmental Compatibility
and Public Need Pursuant to Article VII of
the Public Service Law for the Southampton
to Deerfield Transmission Project
:

Case 24-T-

APPLICATION

PSEG Long Island LLC on behalf of and as agent for the Long Island Lighting Company d/b/a LIPA, a wholly-owned subsidiary of the Long Island Power Authority (the "Applicant") submits this Application¹ pursuant to PSL Article VII and the Commission's regulations thereunder, for a Certificate of Environmental Compatibility and Public Need for the construction, operation and maintenance of the Facility.

As specified in Section 122 of the PSL and Section 85-2.8 of the Commission's Regulations, this Application contains the following information:

- (a) Description of the Project;
- (b) Project Location;
- (c) Description of Reasonable Alternative Routes and Technologies;

1

- (d) Summary of Environmental Studies and Impacts;
- (e) Need for the Project; and
- (f) Other relevant information.

A. Description of the Project

The Project, called the "Southampton to Deerfield" or "SHDF" Transmission Project, is the construction of a new 138 kV underground transmission line of approximately 4.5 miles, to be

LIPA/PSEG Long Island SHDF Project

Application Article VII Application

¹ For clarity and consistency, the Application includes a Master Glossary of Terms that defines terms and acronyms used throughout the Application.

operated initially at 69 kV, primarily within municipal public roadway rights-of-way between the Southampton Substation and the Deerfield Substation, in the Town of Southampton, Suffolk County. The high voltage cable system components of the Facility include: (i) compacted, segmented copper conductor with water blocking compounds; (ii) super smooth semi-conductive conductor shield; (iii) super clean cross-linked polyethylene ("XLPE") insulation; (iv) super smooth semi-conductive insulation shield; (v) semi-conductive longitudinal water blocking tapes; (vi) corrugated seamless aluminum metallic sheath or equivalent; (vii) black high-density polyethylene ("HDPE") jacket; and (vii) semi-conductive polyethylene over jacket. Each cable will be installed in a 10-inch standard diameter ratio ("SDR") 11 HDPE conduit. In addition to these conduits, two 4-inch SDR11 HDPE conduits will be installed for fiber optic communication and ground continuity conductor. The three power conduits will be arranged in a trefoil (triangular) configuration.

A combination of different construction methods will be used to install the conduits. The Project will use open-cut trench excavation methods. While trenchless crossings are not anticipated, this method may ease construction spanning certain features or may minimize impacts should future conditions require it. Splice vaults, which serve to install (pull) and connect (splice) successive lengths of cable, will be installed at approximate intervals of 2,000 to 2,500 feet along the underground route.

The Project requires alterations at the existing Southampton and Deerfield Substations to accommodate bus support structures, potential transformers, circuit breakers, switches, and cable termination structures.

B. Project Location

Exhibit 2 of the Application describes the Project location in detail. The Facility will be located wholly within the Town of Southampton and will traverse the Village of Southampton. It will be constructed primarily within municipal public roadway rights-of-way. The Applicant currently has franchise rights which allow it to install permanent electric facilities in roadways along the general alignment of the proposed route of the Facility, and, to the extent practical, efforts will be made to

construct the Project within those roadway limits. Construction of the Project will involve one LIRR crossing: at a point in the Village of Southampton where the LIRR is elevated over North Sea Road, so conventional open trench installation techniques can be employed to cross. Detailed maps, drawings and explanations showing the proposed route for the Project are set forth in various exhibits to this Application.

C. Description of Reasonable Alternative Routes and Technologies

Exhibit 3 of the Application provides a description of the Applicant's evaluation of alternative routes and alternative methods to fulfill the need for which the Applicant proposes the Project. The evaluation includes a description of the comparative merits and detriments of each alternative as well as an explanation of why the Applicant believes the Project is superior to them.

D. Summary of Environmental Studies Impacts

Environmental studies and environmental impact assessments were prepared for the Project utilizing extensive field investigations, literature reviews, and agency consultations. A detailed description of these studies and the potential environmental impacts of the Project is set forth in the resource specific sections of Exhibit 4. Exhibit 4 also summarizes electromagnetic field ("EMF") impacts associated with the Project.

In sum, these studies and assessments conclude that the Project will result in limited, temporary adverse environmental effects, which will occur primarily during the construction phase. Due to the nature of the Project as a transmission facility located primarily underground within public road rights-of-way and within existing substations, the Applicant has avoided or minimized the potential for the Project to result in adverse impacts in the following areas: Land Uses, Visual Resources, Cultural Resources, Wetlands and Aquatic Resources, Topography and Soils, and Noise.

Nearby residences may experience short term disturbance and traffic inconvenience associated with Project construction activities. To minimize potential construction effects, the Applicant will provide timely information to the owners and occupants of adjacent properties regarding the

planned construction activities and schedules, and will coordinate with state and local transportation and safety officials to develop and implement traffic control measures.

E. Need for the Project

Exhibit E-4 of the Application, entitled Engineering Justification, details how this Project will reinforce LIPA's electric transmission system in the South Fork Area and improve the reliability of service to LIPA's customers on Long Island. In summary, the Project will solve a thermal constraint on the existing transmission circuit in case of an outage of a double circuit tower line in the area. It will enhance the voltage profile of the east end and avoid potential non-consequential load loss to the east of the overloaded element. The added transfer capability from this new circuit will improve reliability and source supply for the load pocket.

F. Other Relevant Information

Exhibit 1 provides the name, address and phone number of the Applicant; the name and address of the Principal Officer of the Applicant; and the names and addresses of those persons upon whom documents and correspondence are to be served.

The Application, particularly Exhibits 5, E-1 and E-4, shows that the Commission's grant of the Certificate will not be inconsistent with, and will not interfere with, the attainment of the statewide greenhouse gas emissions limits in Article 75 of the Environmental Conservation Law established by Section 2 of the Climate Leadership and Community Protection Act ("CLCPA").² The Project will contribute to the development of a robust and adaptable transmission grid that will help to facilitate the integration of renewable technologies consistent with the CLCPA. Additionally, the Project will not disproportionately burden any disadvantaged community ("DAC"), as that term is defined in Environmental Conservation Law. No portion of the Project would be located in or immediately adjacent to a DAC. Exhibit 4, Figure 4.2-3 shows that the nearest DAC to the Project ROW is approximately one mile west of the Southampton Substation.

G. Conclusion

² L. 2019, Ch. 106.

The Applicant respectfully requests that the Commission issue an order pursuant to Article VII of the Public Service Law granting the following:

- 1) A Certificate of Environmental Compatibility and Public Need to the Applicant authorizing the construction, operation and maintenance of the Project described herein; and
- 2) Such other and further authorizations, consents, certifications, permissions, approvals, waivers and permits, as may be necessary, for the construction, operation and maintenance of the Project described herein.

Dated: February 16, 2024