PROPEL NY ENERGY PROJECT

CASE 24-T-0446

JOINT PROPOSAL

APPENDIX A

DESCRIPTION AND LOCATION OF PROJECT

April 2026

TABLE OF CONTENTS

A.1 PROJECT DESCRIPTION A-1

A.2 TRANSMISSION FACILITY AND LANDFALLS A-2

BARRETT TO UNIONDALE HUB (SEGMENT 1) A-3

UNIONDALE HUB TO TREMONT (SEGMENT 2) A-4

UNIONDALE HUB TO SHORE ROAD (SEGMENT 3) A-5

RULAND ROAD TO SHORE ROAD (SEGMENT 4) A-6

SYOSSET TO SHORE ROAD (SEGMENT 5) A-7

SHORE ROAD TO SPRAIN BROOK (SEGMENT 6) A-8

A.3 NEW STATIONS A-10

NEW BARRETT SUBSTATION A-10

NEW SHORE ROAD SUBSTATION A-11

NEW RULAND ROAD SUBSTATION A-11

NEW TRANSITION STATION UNDERNEATH THE HUDSON PARK AND BEACH PARKING LOT (GITB VAULTS) A-12

A.4 LAYDOWN YARDS/AREAS A-12

LIST OF TABLES

Table A.1-1: Propel NY Energy Project Electric Transmission Facilities 1

Table A.1-2: Proposed New Stations 2

ACRONYMS AND ABBREVIATIONS

Con Edison	Consolidated Edison Company of New York, Inc.
EM&CP	Environmental Management and Construction Plan
ft	feet
GIS	gas-insulated switchgear
GITB	gas-insulated transition bus
HDD	horizontal directional drilling
HVAC	high voltage alternating current
kV	kilovolt
LIE	Long Island Expressway
LIPA	Long Island Power Authority
LIRR	Long Island Rail Road
MP	Project milepost
MVA	megavolt-ampere
NY Transco	New York Transco LLC
NYCDOT	New York City Department of Transportation
NYCDPR	New York City Department of Parks and Recreation
NYPA	New York Power Authority
NYS	New York State
NYSDOT	New York State Department of Transportation
NYSDPS	New York State Department of Public Service
NYSPSC	New York State Public Service Commission
NYSTA	New York State Thruway Authority
PAR	phase angle regulator
POI	point of interconnection
Project	Propel NY Energy Project
Propel NY	Propel NY Energy
ROW	rights-of-way
TJV	transition joint vaults

A.1 PROJECT DESCRIPTION

New York Transco LLC (NY Transco) and the New York Power Authority (NYPA) (together, the Certificate Holder), through their collaboration known as Propel NY Energy (Propel NY), will construct, operate, and maintain the Propel NY Energy Project (the Project).

The Project involves submarine and terrestrial components within New York State (NYS), including approximately 89.6 miles of new underground transmission lines (approximately 78.7 miles at 345 kilovolts [kV] and approximately 10.9 miles at 138 kV) and direct interconnection with nine existing and/or new substations located within Suffolk, Nassau, Queens, Bronx, and Westchester counties. The Project includes: an approximately 9.2-mile crossing of the Long Island Sound, inclusive of the horizontal directional drilling (HDD) and trenching elements (the Submarine Cable), and approximately 80.4 miles of new underground transmission lines, including the land-to-land HDD crossings of the East River and Westchester Creek (the Terrestrial Cable). Together, the Submarine Cable and Terrestrial Cable are referred to as the Transmission Facility.

The Transmission Facility is discussed in six primary components (each, a Project Segment): (1) Barrett to Uniondale Hub Substation (Uniondale Hub), (2) Uniondale Hub to Tremont, (3) Uniondale Hub to Shore Road, (4) Ruland Road to Shore Road, (5) Syosset to Shore Road, and (6) Shore Road to Sprain Brook. Additionally, the Project includes three new substations and a new transition station in New Rochelle underneath the Hudson Park and Beach Parking Lot (the gas-insulated transition bus [GITB] vaults) (together, the Stations).[1] Each Project Segment and Station is summarized in Tables A.1-1 and A.1-2.

Table A.1-1:

Propel NY Energy Project Electric Transmission Facilities

Project Segment	Transmission Line Name	Route Length (Miles)	Voltage Class (kV)	Facility Type	Project Category
1	Barrett to Uniondale Hub	8.9	345	Underground - Single Circuit	New
2	Uniondale Hub to Tremont	24.8	345	Underground - Single Circuit	New
3	Uniondale Hub to Shore Road	9.3	345	Underground - Single Circuit	New
4	Ruland Road to Shore Road	17.9	345	Underground - Single Circuit	New
5	Syosset to Shore Road	10.9	138	Underground - Single Circuit	New
6	Shore Road to Sprain Brook	17.8	345	Submarine and Underground - Double Circuit	New

Key: kV = kilovolt

[1] In the Public Service Law Article VII application (the Application) that opened this docket, the Project was described as involving three new substations and six upgrade substations. The Application noted that the six upgrade substations were anticipated Network Upgrade Facilities that, if declared as such, may ultimately be constructed by the relevant incumbent transmission owner. The Application further described that, if the relevant incumbent transmission owner elected to construct the upgrade stations, those stations would be removed from the Application and not encompassed in the definition of the "Project" that the New York State Public Service Commission (NYSPSC) was being asked to certify. Although that designation and election process is not yet complete, the scope of the Project must be clear for NYSPSC review. To that end, the Certificate Holder has removed the anticipated upgrade substations from the definition of the Project for purposes of this Joint Proposal.

Table A.1-2:

Proposed New Stations

Ref	Station	Location	Voltage Class (kV)	Project Segment
1	New Barrett Substation	Town of Hempstead	345/138	1
2	New Shore Road Substation	Town of Oyster Bay	345/138	3, 4, 5, & 6
3	New Ruland Road Substation	Town of Huntington	345/138	4
4	New Transition Station/GITB Vaults	City of New Rochelle	345	6

Key: kV = kilovolt, GITB = gas-insulated transition bus

The Transmission Facility will be exclusively installed underground and largely be located within existing roadways. The totality of the Project will be installed on lands for which the Certificate Holder has secured the appropriate land use permissions.

The Project has a corridor within which the Transmission Facility, Substations, and GITB Vaults will be installed (the Project Corridor). The Project Corridor is shown in detail on the maps included in Appendix B to the Joint Proposal. The Project Corridor varies in width depending on location. For example, where the submarine cables cross the Long Island Sound, the Project Corridor is approximately 1,300 feet (ft) wide. In contrast, the Project Corridor width for much of the terrestrial cable length is curb-to-curb in existing roadways, varying by the size of the relevant roadway. The exact placement of the Transmission Facility within the Project Corridor will be decided in subsequent permitting phases as described in Certificate Condition 2.

Project construction activities will be confined within a Project Area that will include laydown yards, construction staging areas, and access roads, subject to any permanent and/or temporary easements, crossing agreements, leases, licenses, rights-of-way (ROW) agreements, other land use authorizations, or permits. The Project Area will correspond to the limits of disturbance that will be further defined in the applicable Environmental Management and Construction Plan (EM&CP).

The portion of the Project Corridor to be occupied by the Transmission Facility once construction is complete, plus the lands immediately adjacent thereto that are required to maintain and repair the Transmission Facility, are referred to as the Permanent ROW.

A.2 TRANSMISSION FACILITY AND LANDFALLS

The terrestrial portion of the Transmission Facility is primarily located within existing road ROW owned or controlled by the New York State Department of Transportation (NYSDOT), New York State Thruway Authority (NYSTA), New York City Department of Transportation (NYCDOT), counties (Nassau, Suffolk, Westchester), or local municipalities (cities, villages, and towns). The location of each Project Segment is described below.

The Transmission Facility will be installed using both traditional trenching and trenchless methods. The primary approach involves placing terrestrial cables in open-cut trenches and encasing the cables with concrete conduit. Trenchless methods include HDD or jack and bore and microtunneling and will be used to install cables beneath limited access roadways, water bodies, railroads, and other features along the Project route where a trenchless approach is

necessary. Splice vaults will be placed generally every 2,000 ft for the terrestrial portion of the Transmission Facility. Construction via HDD will involve launching (entry) and receiving (exit) locations. Microtunneling and jack and bore locations will require launching shaft or pit (entry) and receiving shaft or pit (exit) staging areas. Where trenchless methods are used, the disturbed areas will be restored at the end of construction.

BARRETT TO UNIONDALE HUB (SEGMENT 1)

Segment 1 will begin at a New 345-kV Barrett Substation (the New Barrett Substation), which will be constructed on a portion of the E.F. Barrett Generation Station parcel owned by National Grid and located in the Hamlet of Oceanside in the Town of Hempstead in Nassau County. The substation will step up the 138-kV point of interconnection (POI) voltage to 345 kV, and a new 345-kV underground transmission line will interconnect and run north approximately 8.9 miles through the villages of Rockville Centre, Hempstead, and Garden City and the Hamlet of Uniondale to the 345-kV East Garden City Substation (the Uniondale Hub) located in the Hamlet of Uniondale in the Town of Hempstead in Nassau County.

Segment 1 will follow predominantly existing road ROW under Nassau County's jurisdiction, aside from one NYSDOT road ROW (Fulton Avenue). The Project Corridor in Segment 1 is limited to the road ROW unless otherwise noted below.

Specifically, the transmission line will exit the New Barrett Substation site to the northeast using trenching where it will cross under an existing culvert east of the substation and exit along Daly Boulevard. The line will then continue on Daly Boulevard for approximately 0.2 miles before turning north on Long Beach Road. From there, the transmission line will follow Long Beach Road (North and South Long Beach Road) within the hamlets of Oceanside and South Hempstead and villages of Rockville Centre and Hempstead for approximately 5.5 miles before reaching Baldwin Road and Henry Street within the Village of Hempstead. While on Long Beach Road, south of Project milepost (MP)[2] 1-3, the terrestrial line will cross underneath the Long Island Rail Road (LIRR) Montauk Branch elevated train line.

After Henry Street, the line will continue east along Peninsula Boulevard and Fulton Avenue in the Village of Hempstead and Hamlet of Uniondale for approximately 1.0 mile before following Oak Street within the Hamlet of Uniondale near Hofstra University. Segment 1 will end along Commercial Avenue within the Hamlet of Uniondale where the transmission line will connect to the Uniondale Hub. North of MP 1-8.5, the transmission line will cross LIRR tracks via microtunneling or jack and bore trenchless technology methods before terminating at the Uniondale Hub at MP 1-8.9. The microtunnel or jack and bore receiving site will be within the Uniondale Hub site, and the launching site will be located off Commercial Avenue. The Project Corridor will be approximately 70 ft wide to encompass the temporary workspace associated with the launching site when exiting the road ROW up to the Uniondale Hub.

[2] Using a geographic information system, the Certificate Holder established MPs for each Project Segment that align with the distances or length of the segments. MPs are considered Project location references. The MPs begin at 0 at the beginning of each segment and increase to mark the exact length of the alignment centerline until its terminus. MPs are displayed on figures in 0.5-mile increments and labeled with the segment number, a hyphen, and the MP value. For example, Segment 1, MP 1, is shown as 1-1 and is placed exactly 1 mile along the line from the New Barrett Substation.

UNIONDALE HUB TO TREMONT (SEGMENT 2)

From the Uniondale Hub, a new 345-kV underground transmission line will extend approximately 24.8 miles, terminating at Consolidated Edison Company of New York, Inc.'s (Con Edison) existing 345-kV Tremont Substation (the Existing Tremont Substation).

Segment 2 will follow predominantly existing road ROW under Nassau County, NYSDOT, and NYCDOT jurisdiction, along with one village road ROW (Stewart Avenue). The Project Corridor in Segment 2 is limited to the road ROW and land under the jurisdiction of the New York City Department of Parks and Recreation (NYCDPR) unless otherwise noted below.

From the Uniondale Hub, the transmission line will extend approximately 1.2 miles west along Stewart Avenue. Between the Uniondale Hub and Clinton Road, for approximately 0.4 miles, the alignment along the Stewart Avenue will be off of the road ROW in the green space south of the sidewalk with Segment 3. At Clinton Road, the line will return to road ROW and will continue within the Stewart Avenue ROW before turning northbound and running approximately 1.2 miles through the Village of Garden City along Franklin Avenue and Old Country Road. The line will then follow Roslyn Road, 2nd Street, Willis Avenue, and Mineola Avenue within the villages of Mineola, Williston Park, and Roslyn and the hamlets of Albertson, Searingtown, and Roslyn Heights for approximately 4.7 miles before reaching Northern Boulevard. Along 2nd Street south of MP 2-2.5, the line will cross under the Ronkonkoma LIRR branches via standard trenching as Roslyn Road runs below the railroad tracks. Additionally, west of MP 2-2.5, the line will cross underneath the Oyster Bay LIRR branch via trenchless installation methods on 2nd Street. North of MP 2-5.5, the line will cross underneath the Northern State Parkway and Long Island Expressway (LIE) via trenching installation methods under the overpass portions of the roads.

Segment 2 will then follow Northern Boulevard for approximately 5.6 miles from the Village of Flower Hill in the Town of North Hempstead in Nassau County to the Little Neck and Douglaston neighborhoods in Queens County. West of MP 2-12, the line will deviate from Northern Boulevard to accommodate an HDD crossing across Alley Pond Park, Alley Creek, and the Cross Island Parkway. The Project Corridor will be approximately 50 ft wide to encompass the trenchless crossing around and within Alley Pond Park including the area between the trenchless temporary workspaces (entry/exit locations) and when off of road ROW connecting to the temporary trenchless workspaces. The HDD exit location will be on the western end of the Alley Pond Golf Center parking lot north of Northern Boulevard (approximately 110 ft by 150 ft). The HDD entry location will be at the athletic field west of Cross Island Parkway along Cloverdale Boulevard (approximately 210 ft by 235 ft). From there, the line will travel north to rejoin Northern Boulevard at the intersection with 223rd Street.

The line will continue west along Northern Boulevard approximately 1.0 mile before heading north along the Clearview Expressway Service Road East for approximately 1.3 miles. At 26th Avenue, the line will continue east through the Bayside and Bay Terrace neighborhoods toward Little Bay Park along 26th Avenue, Bell Boulevard, and Totten Road for approximately 1.4 miles. North of MP 2-16.5, along Totten Road, the line will cross underneath the Cross Island Parkway overpass via trenching installation. The line will continue along Cross Island Boulevard and south of the Throgs Neck Bridge for 0.7 miles toward the neighborhood of Whitestone-Beechhurst in Queens County. Within the Whitestone-Beechhurst neighborhood, the line will travel approximately 1.9 miles along Utopia Parkway, Cross Island Parkway Service Road North, and Whitestone Expressway toward Francis Lewis Park.

The line will cross under the East River to the east of the Bronx-Whitestone Bridge for approximately 0.9 miles. The line will be installed entirely by land-to-land HDD which will feature an HDD intersect pipe exit location and temporary workspace near MP 2-19.5 at the southwest entrance of Francis Lewis Park (approximately 155 ft by 225 ft), controlled by the NYCDPR, in the Whitestone neighborhood. Upon exiting the road ROW and associated HDD temporary workspace, the Project Corridor width for the trenchless crossing within Francis Lewis Park will be up to approximately 50 ft to provide flexibility for the underground HDD cable alignments. The Project Corridor width will be up to approximately 160 ft within the East River for the HDD crossing and will exit near the small parking lot at Ferry Point Park (South HDD location, approximately 245 ft by 280 ft), north of MP 2-20 and east of the Bronx-Whitestone Bridge on a property controlled by the NYCDPR in the Ferry Point neighborhood of the Borough of the Bronx. From this HDD location, the line will run north near the Bally's Golf Links parking lot at Ferry Point Park and east of the Bronx-Whitestone Bridge via trenching. The line will then cross under the Hutchinson River Parkway westward within Ferry Point Park and then travel northwest to the HDD workspace south of the Ferry Point Park parking lot. The distance between the two HDD workspaces within Ferry Point Park is approximately 0.3 miles. Within Ferry Point Park, the Project Corridor width between the trenchless crossings will be approximately 50 ft to provide flexibility in routing and spacing for the underground HDD cable alignments.

The line will cross under the Westchester Creek in Bronx County for approximately 0.2 miles. The terrestrial cable will be installed entirely by HDD from an HDD intersect pipe exit location within a vacant industrial lot along Zerega Avenue between MPs 2-21 and 2-21.5. The Westchester Creek HDD crossing will connect at Ferry Point Park at the HDD intersect pipe entry location (North HDD location, approximately 170 ft by 250 ft). The Project Corridor width between the North HDD location within Ferry Point Park and along HDD intersect pipe exit location along Zerega Avenue will be approximately 50 ft to accommodate HDD operations. From here, the line will continue north for approximately 2.5 miles along Zerega Avenue, Homer Avenue, Havemeyer Avenue, Cross Bronx Service Road North, and Waterbury Avenue. Northeast of MP 2-22.5, the line will cross underneath the Cross Bronx and Bruckner Expressway overpasses via trenching. The line will continue toward the Van Nest neighborhood of the Borough of the Bronx for 0.5 miles along Castle Hill and Bronxdale Avenues before heading westbound for approximately 0.4 miles along Van Nest, Matthews, and Baker Avenues. Northwest of MP 2-24, along Bronxdale Avenue, the line will cross underneath the Amtrak elevated rail. At MP 2-24.7, the line will reach the Con Edison Van Nest Yard before terminating at the Existing Tremont Substation.

UNIONDALE HUB TO SHORE ROAD (SEGMENT 3)

From the Uniondale Hub, a new 345-kV underground transmission line will extend approximately 9.2 miles north through the Village of Garden City in the Town of Hempstead, continue through the villages of Westbury, Old Westbury, and East Hills in the Town of North Hempstead, and cross into the villages of Roslyn Harbor and Old Brookville in the Town of Oyster Bay to a New 345-kV Shore Road Substation (the New Shore Road Substation) in the Town of Oyster Bay, all located in Nassau County. This substation will serve as the transition station and new connection for the existing, adjacent Long Island Power Authority (LIPA)-owned 138-kV Shore Road Substation (the Existing Shore Road Substation).

Segment 3 will follow predominantly existing road ROW under Nassau County and NYSDOT jurisdiction. The Project Corridor in Segment 3 is limited to the existing road ROW, with a few exceptions noted below.

From the Uniondale Hub, the line will travel for approximately 0.4 miles westbound on Stewart Avenue, where after exiting the Uniondale Hub, the alignment along the Stewart Avenue will be off of the road ROW in the green space south of the sidewalk with Segment 2. At Clinton Road, the line will return to road ROW and will continue northbound for approximately 6.2 miles along Clinton Road, Glen Cove Road, and Old Westbury Road in the hamlets of Carle Place and Greenvale and the villages of Garden City, Westbury, Old Westbury, East Hills, Roslyn Harbor, and Old Brookville. Along Glen Cove Road north of MP 3-1.5, the line will cross under the LIRR overhead tracks for the Ronkonkoma Branch. Additionally, between MP 3-4 and 3-4.5, the line will diverge from Glen Cove Road to cross the LIE using microtunneling or jack and bore trenchless technology methods with the launch site to be located south of the LIE and the receiving site to be located north of the LIE and south of Old Westbury Road. When diverging from Glen Cove Road and Old Westbury Road toward the trenchless crossing of the LIE, the Project Corridor width for the trenchless crossings will be approximately 100 and 120 ft before returning to the existing road ROW to provide flexibility in routing and spacing for the underground trenchless crossing activities.

The line will exit Glen Cove Road north of MP 3-6.5 along Back Road and Glen Cove Avenue for approximately 1.2 miles within the Village of Roslyn Harbor and into the Hamlet of Glenwood Landing. Once within the Hamlet of Glenwood Landing, the line will run along Glenwood Road for approximately 1.0 mile toward Hempstead Harbor. The line will then run along Shore Road for approximately 0.3 miles before terminating at the New Shore Road Substation. Segments 3 and 4 will both be installed within Glenwood Road and Shore Road in this vicinity until they enter the New Shore Road Substation.

RULAND ROAD TO SHORE ROAD (SEGMENT 4)

From a newly constructed 345-kV Ruland Road Substation (the New Ruland Road Substation) in the Town of Huntington in Suffolk County, a new 345-kV underground transmission line will extend approximately 17.8 miles to the New Shore Road Substation. More specifically, this line will begin in the Town of Huntington in Suffolk County before extending west into Nassau County. Once in Nassau County, the line will cross through the villages of Brookville, Upper Brookville, and Old Brookville in the Town of Oyster Bay.

Segment 4 will follow predominantly existing road ROW under Nassau County and NYSDOT jurisdiction and town road ROW (towns of Huntington and Oyster Bay). The Project Corridor in Segment 4 is limited to the existing road ROW, with a few exceptions noted below.

After exiting the New Ruland Road Substation, the line will remain in Suffolk County for approximately 1.8 miles along Maxess Road, Duryea Road, Broadhollow Road, and Spagnoli Road in the Hamlet of Melville before entering the Town of Oyster Bay in Nassau County. Once in Nassau County, the line will continue for approximately 3.0 miles along Bethpage Sweet Hollow Road, Old Bethpage Road, Haypath Road, and Grohmans Lane within the hamlets of Old Bethpage, Bethpage, and Plainview until reaching Old Country Road in the hamlets of Plainview and Hicksville. West of MP 4-3.5, the line will cross underneath the elevated Seaford-Oyster Bay Expressway. Along Old Country Road, the line will run westbound for approximately 1.6 miles before traveling north for approximately 1.9 miles within Hicksville along South Elm Street, Plainview Road, East Street, Miller Road, Ronald Avenue, Vincent Road, and Miller Place. The line will cross underneath the Northern State Parkway overpass via trenching activities along Miller Place just north of MP 4-8.

The line will continue for approximately 1.4 miles on Marlene Drive and Robbins Lane in the Hamlet of Syosset and cross underneath the LIE near MP 4-8.5 and LIRR tracks (Port Jefferson Branch) along Robbins Lane before reaching Jericho Turnpike in the Hamlet of Jericho. At the LIRR crossing, between MP 4-8.5 and MP 4-9, the line will cross the railroad tracks using HDD trenchless technology methods. The Project Corridor width will be approximately 40 ft to provide flexibility in routing and spacing for the underground trenchless crossing activities. Within the Hamlet of Jericho, the line will run along Jericho Turnpike, Old Jericho Turnpike, and Old Cedar Swamp Road for approximately 1.3 miles before reaching Cedar Swamp Road (Route 107).

Segment 4 will continue along Cedar Swamp Road (Route 107) for 4.7 miles through the Hamlet of Jericho and villages of Brookville, Upper Brookville, and Old Brookville. Just north of MP 4-15.5, the line will exit Route 107 and follow Glen Head Road and Glenwood Road for 1.9 miles within the Village of Old Brookville and hamlets of Glen Head and Glenwood Landing toward Hempstead Harbor. Along Glen Head Road between MPs 4-16 and 4-16.5, the line will cross LIRR tracks for the Oyster Bay Branch using microtunneling or jack and bore trenchless technology methods. The launch and receiving sites for the trenchless crossings will be located in parking lots adjacent to the LIRR Glen Head Station. Before rejoining Glen Head Road, the Project Corridor width for the trenchless crossings will be approximately 35 and 75 ft, to provide flexibility in routing and spacing for the underground trenchless crossing activities. The lines will then run along Shore Road for approximately 0.3 miles before terminating at the New Shore Road Substation. Segments 4 and 5 will both be installed within Cedar Swamp Road and Glen Head Road between Northern Boulevard and Glen Cove Avenue.

SYOSSET TO SHORE ROAD (SEGMENT 5)

From LIPA's existing 138-kV Syosset Substation (the Existing Syosset Substation) in the Town of Oyster Bay in Nassau County, a new 138-kV underground transmission line will be installed to the New Shore Road Substation. This line will extend approximately 10.9 miles northwest into the Village of Muttontown, continuing southwest through the Village of Upper Brookville, then extending northwest through the Village of Old Brookville in the Town of Oyster Bay before terminating at the New Shore Road Substation.

Segment 5 will follow predominantly existing road ROW under Nassau County and NYSDOT jurisdiction and town road ROW (Town of Oyster Bay). The Project Corridor in Segment 5 is limited to the existing road ROW, with a few exceptions noted below.

From the Existing Syosset Substation, the line will travel for approximately 1.2 miles along South Woods Road, Syosset Woodbury Road, and Cold Spring Road in the Hamlet of Syosset. West of MP 5-0.5, the line will cross LIRR tracks for the Port Jefferson Branch using HDD. The Project Corridor width will be approximately 50 ft to provide flexibility in routing and spacing for the underground trenchless crossing activities.

Near MP 5-1.5, the line will follow Muttontown Eastwood Road westbound for approximately 1.5 miles through the Hamlet of Syosset and Village of Muttontown before reaching Jericho Oyster Bay Road (Route 106). West of MP 5-2.5, the line will continue northbound along Route 106 for approximately 1.3 miles within the Village of Muttontown and Hamlet of East Norwich.

For approximately 3.2 miles from MP 5-4 to just west of MP 5-7, the line will follow Northern Boulevard within the Hamlet of East Norwich and villages of Muttontown and Upper Brookville. Near MP 5-7, the line will reach Cedar Swamp Road (Route 107) and travel northwest for approximately 1.6 miles within the Village of Old Brookville. Near MP 5-9, the line will exit Route

107 and follow Glen Head Road and Glenwood Road for approximately 1.9 miles within the Village of Old Brookville and hamlets of Glen Head and Glenwood Landing toward Hempstead Harbor. Along Glen Head Road between MPs 5-9.5 and 5-10, the line will cross LIRR tracks for the Oyster Bay Branch using microtunneling or jack and bore trenchless technology methods. The launch and receiving sites for the trenchless crossings will be located in parking lots adjacent to the LIRR Glen Head Station. Before rejoining Glen Head Road, the Project Corridor width for trenchless crossings will be approximately 35 to 75 ft to provide flexibility in routing and spacing for the underground trenchless crossing activities. After exiting the trenchless crossing of the LIRR, the line will turn north on Glen Cove Road for approximately 0.2 miles and head west on Kissam Lane for approximately 0.7 miles before terminating at the Existing Shore Road Substation west of MP 5-10.5.

SHORE ROAD TO SPRAIN BROOK (SEGMENT 6)

From the New Shore Road Substation, two new 345-kV transmission circuits will travel underground approximately 17.8 miles to Con Edison's existing 345-kV Sprain Brook Substation (the Existing Sprain Brook Substation), including the approximately 9.2-mile crossing of the Long Island Sound.

First, four, three-core submarine cables (a total of 12 submarine cable conductors) will leave the New Shore Road Substation and travel underground approximately 0.3 miles within the Town of Oyster Bay in Nassau County toward the Hempstead Harbor where the cables will enter the Hempstead Harbor and cross the Long Island Sound for approximately 9.2 miles to a landing point in the Hudson Park and Beach in the City of New Rochelle in Westchester County. From there, the submarine cables will enter two underground landfall cable transition vaults equipped with GITBs located beneath a portion of the Hudson Park and Beach parking lot. The GITB Vaults will transition the Project's 12 submarine cable conductors to six terrestrial cables, which make up the two terrestrial lines. Then, from the GITB Vaults, the two terrestrial lines will extend approximately eight additional underground miles across Westchester County through the Town and Village of Pelham and City of Mount Vernon and north toward the villages of Bronxville and Tuckahoe in the Town of Eastchester before reaching the City of Yonkers and terminating at the Existing Sprain Brook Substation.

The terrestrial portion of Segment 6 will follow predominantly existing road ROW under NYSDOT, NYSTA, and Westchester County jurisdiction, as well as various municipal road ROW (city, town, and village). The Project Corridor in Segment 6 is limited to the road ROW with a few exceptions noted below.

The Shore Road Landfall will be located on a 1.24-acre area adjacent to the New Shore Road Substation in a lot owned by National Grid and will accommodate HDD operations. The four, three-core submarine cables will be pulled through four HDDs into four transition joint vaults (TJVs). At the TJVs, the submarine cables are jointed to 12 terrestrial cables that are then terminated to the New Shore Road Substation.

From the Shore Road Landfall, the submarine lines will run west for approximately 0.3 miles to the HDD exit location within Hempstead Harbor south of MP 6-0.5. Each HDD bore hole will be approximately 24 inches in diameter. After exiting the HDD, the submarine cables will be buried approximately 6 ft within the seabed of Long Island Sound from MPs 6-0.5 to 6-9. Between MPs 6-9 and 6-9.5, the submarine cables will make landfall using HDD. The HDD installation will be approximately 0.5 miles long to bring the cables onshore at Hudson Park and Beach parking lot in the City of New Rochelle. The Hudson Park and Beach Landfall footprint will be approximately

180 ft wide by 100 ft in length (approximately 0.5 acres) to accommodate HDD operations and will be located in the northernmost parking lot.

Once onshore, near MP 6-9.5, at the Hudson Park and Beach Landfall in the City of New Rochelle, Westchester County, on a property owned by the City of New Rochelle, the 12 submarine cable conductors will be transitioned to six terrestrial cables at the GITB Vaults. After exiting the GITB Vaults, a standard double circuit terrestrial cable configuration will then resume for the remainder of Segment 6 between the Hudson Park and Beach Landfall to the Existing Sprain Brook Substation. From the GITB Vaults, the lines will continue for approximately 1.6 miles along Hudson Park Road, Franklin Avenue, Main Street, LeCount Place, Huguenot Street, and Cedar Street, where the Project will cross the New England Thruway (I-95) near MP 6-10.5. Just north of MP 6-10.5, the lines will cross underneath the Metro-North Railroad, New Haven Line tracks. From here, the lines will continue for approximately 1.4 miles along Orchard Place, Hamilton Avenue, Beaufort Place, 5th Avenue, Coligni Avenue, Pershing Avenue, and Mayflower Avenue within the City of New Rochelle.

West of MP 6-12, the lines will turn onto Pelhamdale Avenue and continue for approximately 0.4 miles toward the Town of Eastchester's border. Near MP 6-12.5, the lines will cross underneath the Hutchinson River Parkway via microtunneling or jack and bore near Eastchester Road and land east of Hutchinson Boulevard, where the lines will run north toward New Rochelle Road. The receiving site, approximately 55 ft wide, will be west of Pelhamdale Avenue to accommodate trenchless crossing operations. The launching site, approximately 100 ft wide, will be near Hutchinson Boulevard west of the Hutchinson River Parkway.

After the trenchless crossing of the Hutchinson River Parkway is complete, the lines will exit on Hutchinson Boulevard and continue through the Town of Eastchester for approximately 0.2 miles along New Rochelle Road to a crossing of the Cross County Parkway via microtunneling or jack and bore. The receiving site, approximately 95 ft wide, will be east of the bridge on New Rochelle Road, near the intersection of Labelle Road and New Rochelle Road to accommodate trenchless crossing operations. The launching site, approximately 85 ft wide, will be within the parking lot of the Eastchester Historical Society building west of the Cross County Parkway along California Road. After exiting the Eastchester Historical Society parking lot, the lines will continue along New Rochelle Road for approximately 0.8 miles north towards the Village of Bronxville.

For approximately 0.3 miles, the lines will be in the Village of Bronxville along New Rochelle and Pondfield Roads and transition into the Village of Tuckahoe along White Plains Road south of MP 6-14 (0.8 miles). Within the Village of Tuckahoe, the lines will travel for approximately 0.5 miles along Winter Hill Road, Main Street, Cameron Place, and Underhill Street before crossing the Metro-North Railroad tracks of the Harlem Line using microtunneling or jack and bore trenchless technology methods. The trenchless launching site will be near the intersection of Columbus Avenue and Underhill Street and will be approximately 90 ft wide to accommodate trenchless crossing operations. North of MP 6-15.5, the receiving site, approximately 80 ft wide, will be in a parking lot along Lake Avenue in the Village of Tuckahoe.

The lines will then continue south on Lake Avenue for approximately 0.3 miles toward the Bronx River Parkway Reservation at the intersection of Lake and Garrett Avenues, where the lines will cross the Bronx River and Bronx River Parkway South using microtunneling or jack and bore trenchless technology methods. Within the Bronx River Parkway Reservation, the Project Corridor width for the trenchless crossing will be approximately 65 to 165 ft to accommodate trenchless crossing operations.

After the parkland crossing, the lines will reemerge onto Parkview Avenue and Tuckahoe Road within the City of Yonkers. The lines will continue within the City of Yonkers for approximately 1.2 miles along Parkview Avenue, Tuckahoe Road, Iroquois Road, Seneca Avenue, Central Park Avenue, June Street, Salisbury Road, and Tuckahoe Road. West of MP 6-16.5, the lines will cross the northern portion of Roosevelt High School via trenching near the athletic fields and tennis courts. West of MP 6-17, the lines will cross underneath the Sprain Brook Parkway via microtunneling or jack and bore and exit along Ridge Hill Lane. The trenchless launching site will be located east of the intersection of Ridge Hill Lane and Grassy Sprain Road, and the receiving site will be located within a commercial lot parking area off Tuckahoe Road. Here the Project Corridor width will be approximately 90 and 115 ft to accommodate trenchless operations.

The lines will then continue along Grassy Sprain Road, Ridge Hill Lane, Ridge Hill Boulevard, and Otis Drive for approximately 0.6 miles before terminating at the Existing Sprain Brook Substation.

A.3 NEW STATIONS

Three new substations (New Barrett Substation, New Shore Road Substation, and New Ruland Road Substation) and the GITB Vaults will support the Project's interconnection to the existing grid. The new substations provide the electrical equipment necessary to support interconnection where direct interconnection to an existing substation cannot be accommodated. All three new substations will step down the transmission voltage from 345 kV to 138 kV prior to connection. The proposed GITB Vaults will receive the submarine cables, which will be transitioned to terrestrial cables.

Construction activities associated with the installation of the new substations will include general site preparation, excavation, and the installation of the underground and aboveground structures. The Certificate Holder evaluated gas-insulated and air-insulated options for the design of all new substations. A gas-insulated substation design was selected due to the limited space available on site; this design enables the Certificate Holder to design a compact substation with the smallest footprint possible and minimize visual impacts in this urban area.

Each new substation will have an approximate 90- to 95-ft tall (actual height at each substation will be determined during the detailed design phase) lightning mast. The equipment in the outdoor areas will be generally ground-mounted on individual drilled piers or spread footer foundations, depending on the in-situ geotechnical properties and anticipated structural loading. Per current design, security fencing consisting of 8-ft-high fence with a 1-ft barbed wire top will be installed around the entire perimeter of each new substation. Gates will be provided to permit access for vehicles, equipment, and personnel to the substation sites. Fencing and gates will be designed to be tied to the substation ground grid. Final specifications for the fence and gates will be confirmed in the detailed design phase and included in the EM&CP. Equipment may also be mounted on tall structures to ensure personnel safety. Additional details on the new substations are provided below.

NEW BARRETT SUBSTATION

The New Barrett Substation (approximately 5.2 acres) is located on a portion of the E.F. Barrett Generation Station parcel in the Hamlet of Oceanside in the Town of Hempstead in Nassau County. Permanent access roads for the New Barrett Substation will be constructed within Nassau County ROW (0.43 acres). The substation's components are consistent with existing land use conditions; the parcel is zoned for mixed residential (business).

The New Barrett Substation will consist of a 345-kV three-breaker outdoor gas-insulated switchgear (GIS) expandable into a two-bay breaker and a half scheme and two 345-kV/138-kV, 500-megavolt-ampere (MVA) autotransformers, with 13.8-kV delta tertiary winding. On the 345-kV side, the substation will be connected to the Uniondale Hub, via 345-kV underground circuit 345-314, equipped with one 345-kV, oil-filled shunt reactor for reactive compensation and a corresponding GIS. The 138-kV side of the autotransformers will connect to the existing LIPA 138-kV Barrett Substation via two 138-kV underground circuits installed underneath the existing paved driveway off Daly Boulevard. Associated ancillary protection, disconnection, buses, termination equipment, control equipment, and a climate-controlled control enclosure will also be installed.

NEW SHORE ROAD SUBSTATION

The New Shore Road Substation (approximately 9.7 acres) will be located at 375 Shore Road on a 25.8-acre parcel owned by National Grid, in the Town of Oyster Bay in Nassau County. The four underground TJVs will occupy a 1.07-acre area adjacent to the New Shore Road Substation. The adjacent LIPA-owned Existing Shore Road Substation is located on the same parcel. By building the New Shore Road Substation, the Project will create a strong transmission network around and beyond Shore Road. The New Shore Road Substation components are located on the same parcel as the Existing Shore Road Substation, which is zoned for nonresidential (waterfront) and is consistent with existing land use conditions.

The new Shore Road Substation will consist of a 345-kV GIS and one 500-MVA, 345-kV/138-kV autotransformer. There will be a 345-kV underground connection to the New Ruland Road Substation, circuit 345-568. The 345-kV underground connection to the Uniondale Hub, circuit 345-317, will be equipped with one 345-kV reactor for reactive compensation. Two new 345-kV submarine cable circuits, each with two cables per phase and designated as Y922L and Y922M (first circuit) and Y924L and Y924M (second circuit) will exit the New Shore Road Substation toward the Existing Sprain Brook Substation. Each submarine circuit will be equipped with one 345-kV shunt reactor and one 345-kV phase angle regulator (PAR).

The 138-kV voltage level of the substation will be connected to the LIPA-owned Existing Shore Road Substation via a 345-kV/138-kV autotransformer in series with a 138-kV PAR and 355 ft of 138-kV underground cable circuit. Associated ancillary protection, disconnection, buses, termination equipment, control equipment, and a climate-controlled control enclosure will also be installed.

NEW RULAND ROAD SUBSTATION

The New Ruland Road Substation (approximately 6.9 acres) will be located on Ruland Road on a 33.0-acre parcel owned by LIPA in the Town of Huntington, Suffolk County. The LIPA-owned Existing Ruland Substation is located on the same parcel. The New Ruland Road Substation will connect to the Existing Ruland Road Substation and provide the electrical equipment necessary to step down the transmission voltage from 345 kV to 138 kV prior to interconnection at the Existing Ruland Road Substation. Because the spatial constraints of the Existing Ruland Road Substation do not permit the inclusion of all equipment necessary for direct interconnection, the New Ruland Road Substation is required to support the Project. The New Ruland Road Substation components are located on the same parcel as the Existing Ruland Road Substation, which is zoned for primarily residential (R-40) and is consistent with existing land use conditions.

The New Ruland Road Substation will consist of a 138-kV outdoor GIS six-position ring bus and a 345-kV outdoor GIS six-position ring bus. They will be connected via three 500-MVA, 345-kV/138-kV autotransformers. On the 345-kV side, except for the transformers, there will be a connection to the New Shore Road Substation, circuit 345-568, equipped with a shunt reactor for reactive compensation.

On the 138-kV voltage level, the New Ruland Road Substation will be connected to the LIPA-owned Existing Ruland Road Substation via two underground circuits (approximately 600 ft per circuit). Additionally, three 138-kV cable circuits will tie the autotransformers to the 138-kV GIS bus. A new PAR and shunt reactor located in the New Ruland Road Substation will be installed on the upgraded existing 345-kV line to Uniondale Hub, circuit 345-567. Associated ancillary protection, disconnection, buses, termination equipment, control equipment, and a climate-controlled control enclosure will also be installed.

NEW TRANSITION STATION UNDERNEATH THE HUDSON PARK AND BEACH PARKING LOT (GITB VAULTS)

Two underground landfall GITB Vaults, equipped with a total of six GITBs (three GITBs per vault) will be installed beneath a portion of the Hudson Park and Beach's parking lot in the City of New Rochelle, Westchester County. The GITB Vaults will receive the submarine cables, which will be transitioned into terrestrial cables. More specifically, the 12 submarine cable conductors will be transitioned to six terrestrial cables, and those terrestrial cables will extend to the Existing Sprain Brook Substation. The selection of the GITB Vaults was necessary due to the limited amount of space available for an air-insulated transition station and because it will allow this transition station to be located underground, which will allow the parking lot to return to its existing condition following construction.

The GITB Vaults will take up approximately 0.54 acres on a 10.3-acre lot owned by the City of New Rochelle. The GITB components are within the northern portion of the Hudson Park and Beach parking lot zoned as Recreation Open Space. The GITB Vaults will be constructed underground, and upon completion of construction, the site will be restored to existing conditions consistent with existing land use conditions.

A.4 LAYDOWN YARDS/AREAS

The Certificate Holder will use temporary laydown yards to support the staging of necessary equipment and materials required for the construction of the Project. These areas will be generally confined to locations containing open land or previously disturbed commercial/industrial sites with existing roadway access to the extent possible, to minimize disturbance to surrounding areas and reduce restoration needs. Environmentally sensitive areas will be avoided to the greatest extent possible. Following the completion of the Project, locations used for temporary laydown yards will be restored to preexisting conditions in accordance with landowner requests and permit requirements, as applicable.

The Certificate Holder plans to have temporary pipe laydown space for pullback activities tied to trenchless crossings. The Certificate Holder will coordinate with each pertinent municipality or park agency for pullback activities within the road ROW or parkland. For temporary pipe laydown space on parkland, the area will be restored to its existing conditions.

Locations of temporary laydown areas required for construction of the Project, temporary pipe laydown space for pullback activities tied to trenchless crossings, and details of subsequent restoration will be included in appropriate phases of the EM&CP.

***