

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 18-T-0499 - Application of NextEra Energy Transmission New York, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for the Construction of a 20 Mile 345 Kilovolt Transmission Line Located in the Town of Royalton, Niagara County, and the Towns of Alden, Newstead, Lancaster, and Elma in Erie County.

ORDER GRANTING CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED

Issued and Effective: June 16, 2020

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STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on June 11, 2020

COMMISSIONERS PRESENT:

John B. Rhodes, Chair
Diane X. Burman
James S. Alesi
Tracey A. Edwards
John B. Howard

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(Issued and Effective June 16, 2020)

BY THE COMMISSION:

INTRODUCTION

In this order, we grant NextEra Energy Transmission New York, Inc. (NEETNY), a Certificate of Environmental Compatibility and Public Need (Certificate), pursuant to Public Service Law (PSL) Article VII. This Certificate authorizes NEETNY to construct and operate the Empire State Line Project (ESL Project), a 20-mile long 345-kilovolt (kV) transmission line and associated switchyards in the town of Royalton in Niagara County and the towns of Alden, Newstead, Lancaster, and Elma in Erie County (Proposed Line); a new 345 kV switchyard,

the Dysinger Switchyard, in Niagara County; and a second, new switchyard, the East Stolle Switchyard, in Erie County. Construction of the ESL Project will relieve transmission congestion in Western New York and will allow for more renewable energy to be delivered into New York State.

BACKGROUND AND PROCEDURAL HISTORY

In 2011, the Federal Energy Regulatory Commission (FERC) issued Order 1000 that reformed FERC's electric transmission planning and cost allocation requirements for public utility transmission providers. Among other things, Order 1000 required local and regional transmission planning processes to consider transmission needs driven by public policy concerns. The New York Independent System Operator (NYISO) developed a Public Policy Transmission Planning Process to comply with the FERC Order and address any transmission issues identified by the Commission.

In 2015, the Commission found "that significant environmental, economic, and reliability benefits could be achieved by relieving the transmission congestion identified in Western New York."¹ Identified potential benefits of reducing or relieving the congestion included increased output from the Niagara hydroelectric facility, additional imports of renewable energy from Ontario, increased operational flexibility and efficiency.² The Commission identified Western New York Congestion Relief as a Public Policy Requirement and referred

¹ Case 14-E-0454, Public Policy Transmission Needs, Order Addressing Public Policy Requirements for Transmission Planning Purposes (issued July 20, 2015), p. 27.

² Id.

the Public Policy Requirement to the NYISO for the solicitation of potential solutions and evaluation.³

In November 2015, NYISO solicited potential solutions to address the Western New York need, receiving 15 proposed projects from eight developers.⁴ The Commission confirmed the congestion in Western New York as a Public Policy Transmission Need and directed the NYISO to conduct a full evaluation of the proposed solutions deemed viable and sufficient, identifying particular considerations that NYISO should review.⁵ The NYISO issued a report on October 17, 2017, with the NYISO Board's determination that NEETNY's project is the most efficient and cost-effective solution to address the Western New York public policy transmission needs.

On August 10, 2018, NEETNY filed an application (Application) for a Certificate seeking authority to construct and operate the ESL Project. It would construct the Proposed Line in an existing utility corridor, owned by New York State Electric and Gas Corporation (NYSEG), connecting the proposed new switchyards to one another and interconnecting the new switchyards to pre-existing transmission facilities by two sets of transmission lines, approximately 0.5 and 0.4 miles long, respectively.

With its Application, NEETNY submitted a motion requesting waivers of certain Commission regulations governing the content of an application for a Certificate. Specifically, NEETNY sought waivers of 16 NYCRR §§ 86.3(a)(1) and (b)(2) relating to the filing of certain maps and aerial photographs.

³ Ibid., pp. 28-29.

⁴ Case 14-E-0454, Public Policy Transmission Needs, Order Addressing Public Policy Transmission Need for Western New York (issued October 13, 2016), p. 2.

⁵ Ibid., p. 14.

Following notice and an opportunity to comment on the waiver requests, the Commission granted NEETNY's waiver motion on November 19, 2018.⁶

By letter dated October 19, 2018, the Secretary to the Commission informed NEETNY that its Application contained certain deficiencies that needed to be cured before the Application could be deemed to comply with PSL § 122. NEETNY filed a supplement to its Application on November 16, 2018. By letter dated January 2, 2019, the Secretary notified NEETNY that, as supplemented and pursuant to the Commission's order granting NEETNY's waiver requests, the Application was compliant with PSL § 122 as of November 19, 2018.⁷

A prehearing conference was held before an Administrative Law Judge (ALJ) on February 20, 2019. In addition to the statutory parties actively participating in the proceeding, NEETNY, the Department of Environmental Conservation (DEC), the Department of Agriculture and Markets (Ag&Mkts), and trial staff of the Department of Public Service (DPS Staff),⁸ party status was conferred to NYSEG, Consolidated Edison Company of New York, Inc. (Con Edison), New York State Power Authority (NYPA) and Martin DeRiso. In a ruling issued on March 7, 2019, party status was also granted to Niagara Mohawk Power Corporation d/b/a National Grid (National Grid) and the New York State Thruway Authority (Thruway Authority).⁹ Challengers of the Empire State Line (CESL), a group of owners and residents of

⁶ Case 18-T-0499, Order on Waiver Requests (issued November 19, 2018).

⁷ The January 2, 2019 letter contained certain errors that were corrected in a letter from the Secretary dated January 4, 2019.

⁸ PSL § 124(1)(a), (b), (e) and PSL § 124(2), respectively.

⁹ Case 18-T-0499, Ruling on Schedule and Party Status (issued March 7, 2019).

properties located near the ESL Project, was later granted party status and awarded intervenor funding to facilitate its participation in the proceeding.¹⁰

On March 4, 2019, NEETNY filed a Notice of Impending Settlement Negotiations. The ALJ found that the notice was insufficient and NEETNY filed a revised notice on March 22, 2019. That notice was served on all active parties and impacted landowners. Settlement negotiations continued for an extended period of time after the notice was filed. Application updates were filed by NEETNY on April 19, 2019, March 13, 2020, and March 27, 2020.

On April 23, 2020, NEETNY filed a Joint Proposal purporting to resolve all issues in the case signed by NEETNY, DPS Staff, DEC, Ag&Mkts, Thruway Authority and CESL (together, the Signatory Parties).¹¹ The Joint Proposal describes the ESL Project as proposed by the Signatory Parties with various appendices attached, including proposed Commission findings, Certificate Conditions, specifications for developing an Environmental Management and Construction Plan (EM&CP), DEC supplemental specifications for wetlands and waterbodies, specifications for an invasive species management plan, and a proposed Water Quality Certification.¹² The Joint Proposal also includes general provisions that articulate the Signatory Parties' agreements and understandings.¹³ The Signatory Parties request that we fully adopt the terms and provisions of the

¹⁰ Case 18-T-0499, Ruling Granting Party Status and Awarding Intervenor Funding (issued April 4, 2019). CESL was granted \$25,000 to participate in the case.

¹¹ NEETNY filed a letter identifying several corrections to the Joint Proposal on May 6, 2020.

¹² See Joint Proposal Appendices C-H.

¹³ See Joint Proposal ¶¶ 1-9.

Joint Proposal and grant a Certificate to NEETNY. No party opposes the Joint Proposal.

Public Outreach

As stated in the Joint Proposal, NEETNY's public outreach included "conversations and in-person meetings with elected representatives of and landowners residing in the municipalities traversed by the Project."¹⁴ It also held an informal open house on October 1, 2018, and conducted informational meetings before the public statement hearings.

In addition, pursuant to PSL § 122(2)(c), NEETNY sent host and adjacent landowners notice of the filing of the Application by providing a fact sheet describing the Project and providing instructions on how they could become a party to the proceeding.¹⁵ NEETNY also published legal notice of the Project in the Buffalo News, Clarence Bee, Niagara Gazette, Depew/Lancaster Bee and East Aurora Advertiser; created a website with information about the Project and a local telephone number for members of the public to direct questions and leave voice messages; and provided copies of its Application to the Clarence Public Library, Eden Library, Elma Public Library, Lancaster Public Library, Marilla Free Library, Newstead Public Library and Royalton-Hartland Community Library.

On February 13, 2019, afternoon and evening information forums and public statement hearings were held in

¹⁴ Joint Proposal ¶ 137.

¹⁵ PSL § 122(2)(c) states that "to the greatest extent practicable, each landowner of land on which any portion of such proposed facility is to be located shall be served by first class mail with a notice that such landowner's property may be impacted by a project, including a description of the project and an explanation of how to file with the commission a notice of intent to be a party to the certification proceedings and the timeframe for filing such application."

the Town of Alden. The Secretary issued notice of those events on January 15, 2019, NEETNY subsequently mailed copies of the notice to potentially affected landowners, and the Commission issued a press release about the information forums and public statement hearings on February 6, 2019. Ten people provided statements at the afternoon session and six in the evening.

Representatives of the Buffalo-Niagara Partnership, the Niagara U.S.A. Chamber of Commerce, the Lancaster Area Chamber of Commerce and IBEW Local 1249 voiced support for the facility. They noted that the ESL Project would enhance the electric grid and reliability, would promote clean energy, create local jobs, and provide tax revenue. Local residents raised concerns with the proposed project including: potential health and safety impacts related to electric and magnetic fields; visual impacts due to the increased tower height and proposed additional clearing; potential impacts on property values; the proposed project's proximity to their homes; and the potential increased unauthorized use of the expanded right-of-way by snowmobilers, four-wheelers and hunters. Several speakers raised concerns with notice of the ESL Project and several proposed undergrounding for safety and visual mitigation purposes. One speaker opined that the new transmission line may emit noise that may negatively impact his child.

A site visit was conducted with the ALJ and interested parties on February 14, 2019.

Public Comments

Prior to the filing of the Joint Proposal approximately 35 comments were received. One comment was received in support of the Project, others raised concerns similar to those raised at the public statement hearings regarding: visual impacts, particularly in consideration of clearing additional portions of the right-of-way; potential

health effects due to electric and magnetic fields and the facility's proximity to existing residences; property devaluation; and impact on community character. Others voiced concerns about the use of herbicides to maintain the right-of-way and the potential for increased unauthorized use of the right-of-way for recreation. One commenter submitted a petition, signed by 39 individuals, requesting action to remove or reduce negative impacts of the ESL Project.

A Notice of Joint Proposal and Opportunity for Public Comments was issued on April 30, 2020, inviting submission of public comments by May 27, 2020. NEETNY served copies of the notice on owners of all parcels of land located within 150 feet of the edge of the proposed right-of-way, the proposed Dysinger and East Stolle Switchyards and the Stolle Road Substation.¹⁶ No comments were filed in response to that notice.

Statements in Support

Statements in support of the Joint Proposal were filed by NEETNY, DPS Staff, DEC, Ag&Mkts and CESL on May 15, 2020. No party opposes the Joint Proposal.

The briefing parties urge approval of the Joint Proposal in full, opining that the Joint Proposal and evidentiary record demonstrate that the Commission has adequate information to make all required findings pursuant to PSL § 126 and that the Joint Proposal was developed in compliance with the Commission's Settlement Rules¹⁷ and is in the public interest.

NEETNY emphasizes: the need for the ESL Project and the benefits that the Project will bring to New York in furtherance of State policy and the NYISO planning process; that the ESL Project will occupy an existing right-of-way, reducing

¹⁶ Case 18-T-0049, May 4, 2020 letter from NEETNY with attached affidavit of service.

¹⁷ 16 NYCRR § 3.9.

impacts to the environment; that the monopole design, due to its small footprint, is advantageous both to wetlands and agriculture; and that the ESL Project will be constructed in a manner that is mindful of the concerns of the public and includes provisions to engage with members of the communities.

DPS Staff requests approval of the Joint Proposal stating that, in its view, "it achieves a fair balance of interests among the parties, produces constructive results that may not have been achievable except through settlement, and conforms to Commission policies."

DEC states that the Joint Proposal satisfies all of its concerns and, consequently, rendered litigation unnecessary. It states that the terms of the Joint Proposal meet DEC's interests in that it: complies with the Environmental Conservation Law and its regulations; provides for detailed environmental protection measures through the development of EM&CP with specifications developed by the parties; includes provisions that enables DEC to review environmental submittals; permits DEC personnel entry and inspection to assure compliance with matters under DEC's jurisdiction; avoids, minimizes or mitigates environmental impacts; and requires the development of a Wetland Mitigation Plan.

Ag&Mkts states that its concerns and issues are satisfied by the terms of the Joint Proposal and that the ESL Project represents the minimum adverse impacts on agricultural lands and active farming operations, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. Particularly, Ag&Mkts notes that impacts on agricultural lands are minimized by locating the facility on an existing transmission right-of-way and that continued agricultural operations within the right-

of-way will be facilitated by using self-supporting monopole transmission structures.

CESL explains that it is an organization made up of about 42 residents of Erie and Niagara Counties, most whom reside in developments adjacent to the NYSEG corridor where the ESL Project is proposed to be sited. CESL states that it became a party to the proceeding because of concerns about the proximity of the proposed facility to its members' homes and clearing associated with the facility that would reduce the screening of the utility corridor. Member concerns include visual and privacy impacts, increased unauthorized recreational use of the right-of-way and associated noise, increased noise and electric and magnetic fields (EMF) from the transmission lines, impacts to telecommunication services, and impacts to property values.¹⁸ CESL supports the Joint Proposal because "it establishes processes within the Certificate Conditions intended to address or mitigate members' concerns." Specifically, it identifies proposed Certificate Conditions that require pre- and post-construction meetings with adjacent residents to discuss landscaping restoration and visual mitigation; plans to prevent unauthorized access to the right-of-way; an objective to limit clearing; EM&CP Specifications related to visual impact mitigation; compliance with applicable standards for EMF; and complaint response procedures.¹⁹

¹⁸ Many of the comments filed in the case and statements made at the February 13, 2019 Public Statement Hearing were made by individuals who are now identified as members of CESL. See CESL Member List filed May 15, 2019.

¹⁹ See Joint Proposal Appendix D, Certificate Conditions 129, 130, 131, 59, 31, 19, 42, 44.

Description of the Proposed Project

As described in Appendix B to the Joint Proposal, the ESL Project includes construction of the Dysinger Switchyard in Niagara County that would become the new 345 kV hub in Western New York where seven 345 kV lines will intersect. It also includes to the south, the new East Stolle Switchyard in Erie County that will be connected to the existing NYSEG Stolle Road Substation. The new, Proposed Line will connect the Dysinger and East Stolle Switchyards and will be located on the NYSEG right-of-way. The Dysinger Switchyard will connect to the 345 kV Niagara lines owned by NYPA with two double-circuit transmission lines approximately 0.3 miles in length and to NYSEG's Kintigh 345 kV lines with two single-circuit transmission lines approximately 0.15 miles in length (together these lines are referred to as the "Dysinger Tie-Ins"). The East Stolle Switchyard will connect to NYSEG's Stolle Road Substation with a single-circuit transmission line approximately 0.2 miles in length and to NYSEG's 345 kV Stolle Road to Homer City transmission line with a single-circuit transmission line approximately 0.2 miles in length (together, these lines are referred to as the "East Stolle Tie-Ins").

The Dysinger Switchyard will be a four bay breaker and a half configuration with a 700 mega volt ampere (MVA) normal-rated/875 MVA emergency-rated phase angle regulator. It is proposed to be located on an approximately 7-acre site in the town of Royalton in Niagara County on a site currently used as a hayfield. The Dysinger Switchyard is approximately 600 feet south of Akron Road and 900 feet east of Block Church Road. It is approximately 150 feet from the western edge of the NYSEG utility corridor and approximately 1,500 feet north of the right-of-way used for NYPA's 345 kV Niagara lines. The Dysinger Tie-Ins, described above, will be coordinated with the

interconnecting transmission owners for engineering, design and construction pursuant to the NYISO Open Access Transmission Tariff (OATT).

The Proposed Line will use galvanized steel structures that range from 110 to 140 feet in height.²⁰ The Proposed Line will start at the Dysinger Switchyard, coming out of the north side and running east approximately 0.6 miles to the NYSEG right-of-way. The Proposed Line will cross over the L65 230 kV line and then head south parallel to the 230 kV line. It will then cross underneath the existing NYPA 345 kV lines (Niagara-Rochester and Kintigh-Rochester). The Proposed Line will be located east of the L65 230 kV line and west of the gas regulator station owned jointly by NYSEG and National Fuel Gas Company. The line will continue south, past the regulator station and parallel on the east side to the L65 230 kV line. The Proposed Line will then cross underneath the Thruway by horizontal directional drill. The Proposed Line will then continue to run south, parallel to the L65 230 kV line and terminate at the East Stolle Switchyard.

The East Stolle Switchyard will initially be configured as a three breaker ring bus designed for future expansion into a two bay breaker and a half configuration. It will include a 30 MVAR shunt reactor. The East Stolle Switchyard will be located 500 feet north of the existing Stolle Road Substation on a 6-acre site within the NYSEG utility corridor in the town of Elma in Erie County. The site is currently used as a hayfield. The East Stolle Tie-Ins, described above, will be coordinated with the interconnecting

²⁰ Joint Proposal Appendix B, pp. 3-4.

transmission owners for engineering, design and construction pursuant to the NYISO OATT.²¹

The Joint Proposal lists necessary system upgrades that were identified in the NYISO Facilities Study report and states that the engineering, design and construction of those components will be coordinated with the interconnecting and affected transmission owners pursuant to the NYISO OATT.

The Signatory Parties identify the property rights that NEETNY must obtain, including easement agreements, danger tree rights and access road easements with NYSEG and temporary construction easements, danger tree rights and aerial easements with private landowners. Agreements with NYSEG will be filed with the Commission pursuant to PSL § 70.²²

Other Permits and Authorizations

The Joint Proposal recognizes the need for a water quality certificate pursuant to Section 401 of the Federal Water Pollution Control Act (commonly referred to as the Clean Water Act).²³ The Joint Proposal therefore includes a proposed water quality certificate stating that, as conditioned, the ESL Project will comply with the applicable requirements of the Clean Water Act and will not violate any New York State water quality standards and requirements.²⁴

NEETNY also must obtain, as required, authorization for work performed at state and municipal road and highway crossings, including New York State Department of Transportation highway work and use permits; permits from applicable agencies required for the delivery of oversized components for the

²¹ Joint Proposal Appendix B, p. 5.

²² Joint Proposal Appendix B, pp. 6-7.

²³ Joint Proposal ¶ 141 and Appendix H to the Joint Proposal.

²⁴ Joint Proposal Appendix H.

Project; a determination by the Federal Aviation Administration that the final design of the structures proposed will have no impact on the public-use airports; a State Pollutant Discharge Elimination System (SPDES) General Permit; U.S. Army Corps of Engineers (USACE) permits for construction in federal wetlands affected by the facility pursuant to Section 404 of the Federal Clean Water Act.²⁵

NEETNY must also obtain a Certificate of Public Convenience and Necessity pursuant to PSL Section 68; it filed a petition that is pending before the Commission.²⁶

DISCUSSION

In evaluating the terms of a joint proposal submitted for our consideration, we must determine if the joint proposal, considered as a whole, produces a result that is in the public interest. Our Settlement Guidelines set forth factors to be used in conducting that analysis.²⁷ They include consideration of whether the terms of the joint proposal are consistent with the environmental, social and economic policies of the Commission and the State; produce results within the range of outcomes that might result if the issues in the case were fully litigated; appropriately balance the interests of the utility's ratepayers, its investors and the long-term viability of the utility; and provide a rational basis for our ultimate decision.

²⁵ See, e.g., Joint Proposal Appendix D, Certificate Conditions 13, 16, 18, 34, and 46.

²⁶ See Case 18-E-0765, Petition of NextEra Energy Transmission New York, Inc. for an Order Granting Certificate of Public Convenience and Necessity Pursuant to Section 68 of the Public Service Law.

²⁷ Cases 90-M-0255, et al., Procedures for Settlements and Stipulation Agreements, Opinion 92-2 (issued March 24, 1992) (Settlement Guidelines).

Consideration is also given to whether the record is complete and the extent to which the settlement is contested. To grant a Certificate, we must make all the requisite findings pursuant to PSL § 126.²⁸

The Joint Proposal in this case is supported by six parties that have been active in this proceeding - NEETNY, DPS Staff, DEC, Ag&Mkts, Thruway Authority and CESL. It addresses the statutory and regulatory issues pertaining to NEETNY's Certificate request, adequately discusses all probable environmental impacts, and addresses the steps needed to ensure that the ESL Project as proposed represents the minimal adverse environmental impact, considering the state of available technology and the nature and economics of various alternatives and other pertinent considerations. The process provided all interested parties and the public a full opportunity to participate, and the parties adhered to our settlement rules and guidelines.

The process employed provided numerous opportunities for public input. No written public comments in response to the Joint Proposal have been received. Many of the comments filed prior to the filing of the Joint Proposal and statements made at the public hearing held in this case expressing concern with the proposed facility were offered by members of CESL. CESL is signatory to and supports the Joint Proposal and has advised that the terms of the Joint Proposal satisfy the concerns of its members. No opposition to the Joint Proposal has been raised by

²⁸ PSL § 126(1)(a), (b), (c), (d), (e), (g) and (h).

the parties to the case who did not sign the Joint Proposal - NYSEG, Con Edison, NYPA and National Grid.²⁹

After a full review of the record, we find that the Joint Proposal produces a reasonable result that is in the public interest and consistent with applicable State and Commission policies.

Basis of the Need for the Facility³⁰

Based on the information provided in the record, we find that the ESL Project is needed to relieve congestion in Western New York. As described briefly above and in Exhibits 13, 19 and 22, the Commission previously identified a public policy transmission need for congestion relief in Western New York, including providing access to increased output from the Niagara hydroelectric facility and additional imports of renewable energy from Ontario. The ESL Project was identified by the NYISO Board as the most efficient and cost-effective solution to address the Western New York public policy transmission needs and stated that the facility "more efficiently utilizes both the existing and proposed transmission facilities."³¹

We find that congestion relief is still needed and that the ESL Project will meet the identified need and will deliver significant benefits to New York. The NYISO Report has identified that the ESL Project will: enable transmission of

²⁹ There are four individuals listed on the party list who are not individual signatories to the Joint Proposal - Martin DeRiso, W. Barry Jones, Diane Kozlowski and Lawrence Moessinger. Each of these individuals is a member of and represented by CESL.

³⁰ PSL § 126(1)(a).

³¹ New York Independent System Operator, Inc. Western New York Public Policy Transmission Planning Report (issued October 17, 2017), p. 78.

approximately 2,700 MW of renewable energy from the Niagara hydroelectric plant and 1,000 MW additional imports from Ontario; reduce New York Control Area Demand congestion by \$582 million; provide production cost benefits of \$274 million; reduce CO₂ emissions by approximately 7.4 million tons; and improve reliability and system operability. The ESL Project will strengthen and enhance the transmission system and maximize delivery of renewable energy to the benefit of the State.

Probable Environmental Impacts³²

The Joint Proposal summarizes the nature of the probable environmental impacts as they relate to the following areas: land use (including agricultural resources), visual resources, cultural and historic resources, terrestrial ecology and wetlands, protected wildlife and plants, topography and soils, transportation, water quality and river corridors, noise, communications, and electric and magnetic fields.³³ We agree with the Signatory Parties that the ESL Project, as proposed under the Joint Proposal, represents the minimum adverse environmental impact and minimum adverse impact on active farming operations, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations.³⁴

Land Use and Agricultural Resources

NEETNY proposes to locate the ESL Project primarily on the existing NYSEG right-of-way. The Dysinger Switchyard and Tie-Ins at the northern end of the line are located on private land, for which NEETNY has a purchase option, approximately 150 feet west of the existing NYSEG right-of-way. The Dysinger

³² PSL § 126(1)(b), (c) and (d).

³³ Joint Proposal, pp. 12-42.

³⁴ Joint Proposal Appendix C, ¶¶ 2-3.

Switchyard is proposed to occupy an approximately seven-acre site located on a 46-acre parcel that is currently used as a hayfield. The Proposed Line and East Stolle Switchyard, at the southern end of the line, are within the existing NYSEG right-of-way. The East Stolle Switchyard would occupy an approximately six-acre site that is active agricultural land used as a hayfield. By locating the ESL Project primarily within an existing utility transmission corridor, impacts on land uses will be minimized.

The NYSEG right-of-way is generally 500 feet wide with some areas that are as wide as 800 feet. Construction activities are expected to be predominantly conducted within this corridor. NYSEG is fee owner of the majority of the land within its right-of-way with some exceptions, including railroad, trail and road crossings and private land holdings. NEETNY will seek to acquire easements from NYSEG to construct and operate the facility. It will also require aerial and permanent easements with private landowners and approximately 21 temporary construction easements. Such easements may seek ingress and egress for construction, inspection and maintenance of the facility, clearing and tree removal and other activities.

The Proposed Line would cross forested (40%), open field/scrub-shrub (30%) and agricultural lands (28%) within the existing NYSEG right-of-way. Land adjacent to the right-of-way is predominantly forested and agricultural land with some rural residential areas. Tree and shrub clearing will be required for construction however, such clearing will be more limited than it would otherwise be, because of the use of existing right-of-way. The ESL Project is not anticipated to significantly impact land uses and patterns along the right-of-way. To the extent possible, shrubs and other low-growing vegetation will be maintained so long as they do not interfere with construction or

operation of the facility. No change to existing residential, commercial and industrial land uses on or adjacent to the right-of-way is anticipated. Direct impacts on existing land uses proximate to the proposed facility include temporary disturbance and inconvenience associated with construction activities. Given the linear nature of construction, these impacts are expected to be temporary and limited as construction proceeds along the right-of-way.

The Proposed Line traverses approximately 5.8 miles of agricultural land and five agricultural districts. The Dysinger and East Stolle Switchyards are located in Agricultural Districts 2 and 13 respectively and would result in the conversion of approximately 13 acres of farmland. However, Erie and Niagara Counties have approximately 142,679 and 142,818 acres of farmland respectively, and such conversion represent a minimal loss of active farmland. In addition to using an existing right-of-way, NEETNY attempted to avoid impacts to active agricultural fields when designing the ESL Project by lining up the new transmission structures with existing ones and using a monopole design to minimize the footprint of the structures. Impacts on farming resulting from construction of the facility are anticipated to be short-term in nature and will be minimized through scheduling, planning, and the use of protection, restoration and mitigation measures. Active agricultural activities on the existing right-of-way are expected to continue post-construction.

The ESL Project is consistent with the goals of the 2016 New York State Open Space and Conservation Plan and does not conflict with the conservation efforts identified in the Plan for Erie and Niagara Counties. The facility is also consistent with local land use plans and policies in Erie and

Niagara Counties as well as the towns of Royalton, Alden, Newstead, Lancaster and Elma.

Visual Resources

NEETNY conducted a Visual Resources Assessment, using the results of visibility modelling and the results of representative visual simulations to evaluate the ESL Project's impact on visual and aesthetic resources. The analysis found that existing transmission structures on the NYSEG right-of-way are commonly visible and many locations have views of the existing H-frame structures. The ESL Project will be visible and may provide a contrasting vertical view to the existing landscape due to the proposed monopole structure type that is taller and slenderer compared to the existing structures. The Dysinger Switchyard will contrast slightly with the existing landscape but is proposed to be located adjacent to four existing 345 kV and one 230 kV transmission lines. The East Stolle Switchyard is consistent with its surrounding landscape as it is proposed to be located just north of the existing Stolle Road Switchyard. In consideration of the visual impact on the visual character or scenic integrity of existing landscapes in the project area, the study suggests that the ESL Project will not be a noticeable or prominent feature from many locations and that topography, vegetation and localized structures will assist in screening views of the proposed structures.

The analysis also finds that there may be some visual impacts on certain DEC Policy Program resources or local visually sensitive areas, but that in almost every instance these resources or areas have views of the existing NYSEG right-of-way and existing transmission lines, and at the south, the Stolle Road Switchyard. Some residences and commercial facilities will also likely have visual impacts of the ESL

Project, but most have views of the existing transmission lines and therefore additional impacts will be minimal.

Potential visual impacts of the Project have been minimized through use of the existing NYSEG right-of-way and the use of slender monopole structures that have uniform profiles. The visibility of these structures, because of their narrow profile, will decrease as distance from the ESL Project increases reducing the perceived scale and contrast of the structures. Finally, the proposed Certificate Conditions include provisions that would require NEETNY to meet with owners and residents of residences adjacent to specified portions of the line, both pre- and post-construction, to address landscape restoration and also to file a landscape restoration plan.³⁵

Cultural Resources

As described in Exhibit 4, NEETNY conducted a cultural resources investigation, including searches of databases maintained by the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) and the National Parks Service. The investigation identified recorded archaeological sites and architectural resources within the study areas, 2 and 6 miles wide and centered on the Proposed Line. NEETNY consulted with OPRHP as required by Section 106 of the National Historic Preservation Act of 1996 which resulted in the New York State Historic Preservation Office (SHPO) making recommendations for archaeological and architectural investigations for the facility. SHPO defined the study area scope by establishing an area of potential effects (APE), defining both a direct APE and indirect APE, for identification of both archeological and architectural resources.

³⁵ See Joint Proposal Appendix D, Certificate Conditions 129-130.

NEETNY identified 62 known and previously recorded archaeological sites within the archaeological study area. It completed Phase 1A investigations that indicated the majority of the direct APE is archaeologically sensitive and it recommended further Phase 1B field investigations. SHPO concurred with that assessment and NEETNY undertook Phase 1B field investigations which resulted in the identification of five Precontact Period archaeological sites, nine Precontact Period isolated finds, and two locations with sparse historic artifacts. Avoidance or further study was recommended for two of the Precontact Period archaeological sites and no further investigation was recommended for locations with isolated finds or sparse historic artifacts. NEETNY also recommended archaeological field investigation for all portions of the APE not yet surveyed.

Of the two sites slated for further study or avoidance, NEETNY conducted further work at the first site location and planned avoidance of the second site. SHPO required additional work at the first site location which NEETNY completed. NEETNY will submit a final report to SHPO in May 2020. NEETNY will incorporate any measures to mitigate or avoid impacts on the first archaeological resource, located at the East Stolle Switchyard, in the EM&CP. NEETNY intends to avoid the second Precontact Period archaeological site and has prepared a plan that avoids the site and 50-foot buffer area around it that was approved by SHPO.

NEETNY identified 235 known and previously recorded architectural resources within the architectural resource study area of which 32 are considered historic properties because they are listed on the National Register of Historic Places (NRHP) or were previously determined to be eligible for listing. None of the identified architectural resources are located within a direct area of potential impact and construction is not expected

to result in any direct impacts or effects on these resources. NEETNY also conducted a reconnaissance level architectural survey with field survey to examine the previously inventoried architectural resources within the indirect APE. Forty-nine previously inventoried architectural resources were identified and 19 of those resources were selected for visual effect analysis. The modeling suggested that nine of the 19 resources have a view of the existing transmission facilities and ten of the resources would have views of the new facility components only. The study recommended that the ESL Project would not modify, directly or indirectly, any of the 19 previously inventoried architectural resources and would have no adverse visual effect on them. SHPO identified no concerns with impacts to buildings in the APE.

The Certificate Conditions contain provisions for restricting construction in undisturbed areas where archeological surveys have not been completed; protocols in the event archeological materials or human remains are encountered during construction; and confers on NEETNY a continuing obligation to respond to complaints or negative archeological impacts and mitigate them if necessary. In addition, the ESL Project EM&CP would identify mitigation measures with respect to archaeological and architectural resources identified through ongoing agency consultation.

Terrestrial Ecology and Wetlands

Vegetative land cover throughout the Proposed Line's right-of-way varies based on adjacent land use and development and the existing natural resources. Terrestrial communities are predominantly agricultural lands and successional northern hardwoods and wetland communities are predominantly forested and scrub-shrub. At the proposed switchyards, vegetation

communities are agricultural land with some successional scrub-shrub.

NEETNY has proposed to locate the new transmission structures as close to the edge of the existing cleared portion of the NYSEG right-of-way as possible and has selected a monopole design that requires a narrower clearing width in order to minimize loss of forest land. However, clearing will be required for construction and operation of the ESL Project and to improve road access. In sum, an estimated 73 acres of forest land conversion is associated with the ESL Project. Following construction, NEETNY proposes to manage the right-of-way with a vegetation plan that it develops with input from DPS Staff and will submit the plan for our approval.

As described in Exhibit 4, invasive species are present along the existing right-of-way and are common along transmission rights-of-way and other corridors. NEETNY will develop an Invasive Species Management Plan in consultation with DEC, Ag&Mkts and DPS Staff following the specifications identified in Appendix G of the Joint Proposal which will be submitted in the EM&CP.

NEETNY conducted wetland delineation surveys of the Proposed Line and Switchyard sites in April and May 2018. It has identified both state- and federally regulated wetlands within the facility area. There are 16 state regulated wetlands located within the proposed right-of-way for the project and no state-regulated wetlands are located on the proposed switchyard sites. Wetlands regulated by the U.S. Army Corps of Engineers (USACE) are located within the proposed right-of-way and at the Dysinger Switchyard -- 82 USACE wetlands are located along the right-of-way and two wetlands are present at the switchyard. Wetland types include palustrine emergent wetlands, palustrine

shrub-scrub wetlands and palustrine forested wetlands; the wetlands at the Dysinger Switchyard are emergent.

Wetlands will be permanently impacted by the ESL Project by the placement of structures in wetlands, both state- and federally regulated, and right-of-way clearing that will result in conversion of forested and scrub-shrub wetlands to emergent wetlands. State-regulated wetlands will also be impacted by the horizontal directional drill of the Thruway. Approximately 0.344 acres will be temporarily disturbed, and fill will be required to support the underground cable installation resulting in a total fill of approximately 0.22 acres.

NEETNY intends to avoid wetlands to the extent practicable and to minimize the areas of permanent disturbance. Structures will occupy approximately 0.06 acres within wetlands, the majority of which will be located within state-regulated wetlands. Temporary disturbance of wetlands is also anticipated for use of temporary work pads and timber mats. Approximately 38 acres of wetlands, approximately 28 acres of which are state-regulated, will be temporarily disturbed and restored following construction.

Clearing required for construction will result in approximately 35 acres of state-regulated forested wetlands to be converted to emergent and scrub-shrub wetlands within the right-of-way. DEC requires compensatory wetland mitigation for the conversion of state-regulated forests at a ratio of 2:1. NEETNY will develop a Wetland Mitigation Plan and include it in the EM&CP.

The ESL Project will also impact waters of the United States that are regulated by the USACE. The Dysinger Switchyard has approximately 0.2 acres of emergent wetlands and 0.03 acres of regulated drainages. In addition, for construction of the

Dysinger Switchyard an approximately 0.09 acres of an unnamed tributary to Mud Creek will be filled and relocated and a new bridge crossing of Mud Creek will result in approximately 100 square feet of fill within the waterbody. The East Stolle Switchyard will avoid wetlands, but the permanent access road will require filling 0.003 acres of forested wetlands.

NEETNY will avoid wetlands to the extent practicable by scheduling construction activities during drier periods of the year, staging construction outside of wetlands where possible and using timber mats for moving equipment in wetlands. It will also apply mitigation strategies during construction to address temporary impacts, including the use of sediment and erosion control methods. All mitigation strategies will be included in the EM&CP and adhere to the specifications for wetlands and waterbodies included as Appendix F of the Joint Proposal. Concurrently with the filing of its EM&CP, NEETNY will seek authorization from USACE pursuant to Section 404 of the Clean Water Act for construction activities in wetlands and other waters in which the USACE has jurisdiction.

Protected Wildlife and Plants

Habitats along the right-of-way support many varieties of wildlife species. Most species and habitat in the vicinity of the ESL Project are common throughout Erie and Niagara Counties. Wildlife species may be temporarily displaced during construction due to clearing and noise and seek shelter in a suitable habitat. Following construction such wildlife species may return. Where there is permanent conversion of wooded areas, wildlife species may seek suitable habitat in adjacent areas. No significant loss of forage, shelter or nesting habitat is anticipated on either a local or regional basis.

The New York Natural Heritage Program (NYNHP) identified several State-protected threatened and rare species

in the vicinity of the ESL Project, including the pied-billed grebe (*Podilymbus podiceps*), northern long-eared bat (*Myotis septentrionalis*), northern brook lamprey (*Ichthyomyzon fossor*), bigmouth shiner (*Notropis dorsalis*) and bigeye chub (*Hybopsis amblops*).

The ESL Project is not anticipated to have any impact on pied-billed grebe. The location of the wetland that supports the species is sufficiently distant from the East Stolle Switchyard and Tie-In locations and thereby avoids impacts from construction and operation of the facility. Likewise, construction and operation of the ESL Project is not expected to have any impact on long-eared bat hibernaculum in that construction activities will occur greater than three miles from the closest documented hibernaculum.

Northern brook lamprey and bigmouth shiner have been documented in Little Buffalo Creek. If final design requires an access road across the creek or its tributaries, NEETNY will consult with DPS Staff and DEC to develop avoidance and minimization measures to avoid impacts to the species. Bigeye chub has been identified in historical records as being present in Cayuga Creek in the town of Lancaster and the Proposed Line will cross the creek. To prevent impacts to the bigeye chub, hand clearing will be conducted within 50 feet of the stream top of the bank, no permanent infrastructure will be located within 50 feet of the bank and no access roads will cross the stream.

Potential Western Chorus Frog breeding populations are present in some State-regulated wetlands in the project area. NEETNY will, to the extent practicable, stage construction mats before the breeding window (April 1 - May 31).

NEETNY will provide further detail about identifying and mitigating impacts to sensitive resources in its EM&CP as well as provisions in the Certificate Conditions regarding

protected species. No threatened or endangered plant species were identified and therefore, no impacts to threatened or endangered plant species are anticipated to occur during construction of the Project.

Topography and Soils

The Project is located within the Erie-Ontario Lowland physiographic province in the north and the Allegheny Plateau physiographic province to the south. Soil management issues in the northern portion of the line is principally poor natural drainage and in the southern portion of the line, soil erosion. However, no known geologic features are expected to impact the transmission structures.

Construction and operation of the Project is not expected to result in extensive alterations in either slope or gradient of the existing topography. Soils will be re-graded post-construction back to their original contours and compacted soils will be returned to their original states. In agricultural areas, precautions will be taken to protect farms from erosion, compaction, and soil mixing, including the use of timber mats. The EM&CP will include measures to avoid, minimize and mitigate disturbing soils and topography along the right-of-way, access roads, laydown areas and marshalling yards, best management practices to minimize topsoil disturbance and restoration procedures.

Transportation

The Federal Aviation Administration (FAA) requires notification of any construction or alteration over 200 feet above ground level or where construction or alteration exceeds "imaginary surfaces" as defined in regulation.³⁶ Two public-use and one private-use airports are located within the imaginary

³⁶ See Application Exhibit E-6, pp.1-2; 14 CFR Part 77.

distance thresholds for FAA notification. NEETNY does not anticipate any impacts to Merkel Airport, a private-use airstrip located in Clarence Center approximately 3.1 miles west of the Proposed Line, or Akron Airport, a privately-owned public-use airport located in Akron, approximately 2.8 miles east of the Proposed Line. In both instances NEETNY states that the ESL Project will not cross the imaginary surfaces. The Proposed Line would locate two structures within 6,500 feet of the runway at Buffalo-Lancaster Regional Airport, a public airport located in Lancaster approximately 1-mile northwest of the Proposed Line, and will cross the FAA imaginary surface that requires notification. NEETNY states that the structures may be considered obstructions to air navigation and will submit the required Notice of Proposed Construction or Alteration to the FAA to confirm there is no impact on air navigation or airport operations. The Certificate Conditions include a requirement that NEETNY secure and provide to the Secretary, prior to the commencement of construction, evidence of the FAA's determination that the final design of the structures proposed for the facility will have no impact on the airports or will have impacts to the airports mitigated by FAA-directed modifications to such final design.

The ESL Project crosses railroad lines operated by CSX in the Town of Alden which accommodates both freight and passenger trains and a rail line used for freight operated by Norfolk Southern Railway in the Town of Lancaster. The ESL Project is not expected to impact the operation of those railroads. NEETNY is coordinating with CSX and Norfolk Southern Railway and would incorporate appropriate railway operator-specified clearance requirements, transmission facility design criteria, and appropriate setbacks to avoid adverse impacts on the safe operation of the railroad. NEETNY will coordinate

construction with the rail operators to ensure no conflict with operations.

The ESL Project crosses 23 public road, including Interstate-90, U.S. Highway 20, four state routes and 10 county roads. During construction, the right-of-way would be accessed from those road crossings as well as new or existing access roads. Construction access points from local roads would be located to ensure maintenance of safe traffic operations. Any work conducted within state highway and local road rights-of-way will be performed in accordance with all applicable safety and traffic standards. Underground installation of the Proposed Line beneath Interstate-90 will comply with all permit conditions of the Thruway Authority. Best management practices, traffic control measures, temporary storage locations, and provisions for conductor stringing will be incorporated into the EM&CP.

The ESL Project would also cross two pedestrian trails, the Lancaster Heritage Trail in the Town of Lancaster and the Clarence Pathways Trail in the Town of Newstead. The EM&CP will include provisions to ensure pedestrian and trail user safety and the transmission line will be constructed with appropriate clearances specified in the National Electric Safety Code.

Water Quality and River Corridors

There are no National Wild and Scenic Rivers or rivers under study for such designation and no State Wild, Scenic and Recreational Rivers within three miles of the Project and therefore there will be no impacts on those resources.

The Proposed Line will cross Cayuga Creek in both the Buffalo River and Niagara River Watersheds and will cross Tonawanda Creek in the Niagara River Watershed. The Proposed Line will span the creeks and erosion and sediment controls will

be installed where structures are located in proximity of stream or stream tributary crossings. Consequently, no direct impacts to the creeks are anticipated, nor are any conflicts with conservation efforts in those watersheds and no permit will be required related to these resources for the Proposed Line pursuant to Section 404 of the Clean Water Act. The Proposed Line will not be placed in, on or over a navigable water body and therefore no permit is required pursuant to Section 10 of the 1899 Rivers and Harbors Act.

Construction may have temporary impacts on streams, waterbodies and surface waters. To minimize impacts, vehicular access across streams and other watercourses will be avoided to the extent possible and, if necessary, will utilize timber mats or minimally intrusive bridge materials to minimize stream bed and bank disturbance and water quality impacts. Provisions for stream crossings will be included in the EM&CP. Surface waters may be impacted by spills from construction equipment and vehicles. Measures to minimize and mitigate spills will be included in the EM&CP.

Noise

Construction activities such as vegetation clearing, grading and excavation and structure installation in the proposed right-of-way and at the proposed switchyards is anticipated to have temporary impacts on noise levels. Construction noise is associated with equipment operation; heavy-duty vehicles; grading and foundation work; and equipment used for stringing transmission lines, structure transportation and erection. In general, noise impacts would be temporary during construction due to the linear nature of the construction activities - construction will typically be performed in short stretches for limited periods of time thereby avoiding any

single receptor to significant noise levels for extended periods.

Operation of the Proposed Line and switchyards will result in new sources of noise. Sound impacts of the Proposed Line are expected to be low-level including corona effect in certain conditions and from routine inspection and maintenance of the line. During wet and high humidity conditions, when water collects or impinge on conductors, corona discharges are produced and will create noise. However, the Proposed Line will parallel existing transmission facilities and will generate similar audible noise levels or may perhaps result in slightly elevated levels. These levels are below recommended limits to avoid potential for adverse impacts on public health and safety in accordance with DEC policy limits and operation of the Proposed Line is not expected to result in adverse impacts.

NEETNY conducted acoustic modeling of the switchyards to determine expected noise levels from their operations which were included with the Application. For the Dysinger Switchyard, the noise contribution at the nearest residence to the west is 33.5 dBA and 36.5 dBA at the nearest residence to the north. At the East Stolle Switchyard, the noise contribution at the nearest residence to the northeast is 27.1 dBA and 24.0 at the nearest residence to the northwest. As described in Exhibit 4, sound levels at these receptors are not anticipated to increase from existing levels. These levels are below the Commission's standard requirement for transmission and substation facilities not to exceed a maximum noise level of 40 dBA Leq without prominent tones for both day- and night-time. Maintenance and inspection at the switchyards may produce short-term day-time noise levels that are not expected to result in adverse impacts.

Communications

The ESL Project is not expected to result in any significant adverse effects on communications systems, including radio, television, and cellular phone reception during construction or operation. If interference with such communications is reported, NEETNY would investigate and resolve such issues consistent with the provisions in the proposed Certificate Conditions.

NEETNY would comply with applicable provisions of the National Electric Safety Code related to appropriate spacing between the proposed transmission lines and communication facilities. NEETNY will consult with any third parties with communications cables to ensure proper clearance. NEETNY will also would ensure that the locations of communication facilities, both under and above-ground are accurately depicted on construction drawings and, if any underground facilities may potentially interfere with construction, locations will be verified in the field to ensure accuracy on EM&CP plan and profile drawings.

Electric and Magnetic Fields

EMF are produced by power lines during operation. Pursuant to the Commission's Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities, the peak field at the edge of the right-of-way as measured one meter above ground when phase currents are equal to winter normal conductor ratings shall not exceed 200 milligauss (mG).³⁷ The Commission established that the maximum electric field at the

³⁷ Cases 26529 and 26559, Proceeding on Motion of the Commission as to Regulations Regarding Electric and Magnetic Field Standards for Transmission Lines, Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued September 11, 1990).

edge of the right-of-way shall not exceed 1.6 kV/m when measured one meter above ground level with the line at the rated voltage.³⁸

NEETNY prepared an EMF Calculation Report included as Appendix H to Exhibit 4 of the Application (Exhibit 16). The maximum electric field produced by the transmission lines at the edge of NEETNY's proposed right-of-way ranged from 0.090 kV/m to 1.188 kV/m for the various cross sections analyzed and, at the edge of the NYSEG utility corridor, ranged from 0.0 kV/m to 0.023 kV/m. The electrical fields at the edge of both the ESL Project right-of-way and the wider NYSEG right-of-way are well within the 1.6 kV/m maximum electric field at the edge of the right-of-way established by the Commission. The calculated magnetic field level for the ESL Project ranged from 52.96 mG to 104.15 mG at the edge of NEETNY's proposed right-of-way and ranged from 0.0 mG to 58.12 mG at the edge of NYSEG's utility corridor. Both sets of calculations result in magnetic field levels below the 200 mG peak field at the edge of the right-of-way corresponding to the winter-normal conductor rating set by the Commission.

Alternatives

Exhibit 3 of the Application and Section D of the Joint Proposal describe alternatives to the ESL Project. The Signatory Parties reviewed alternative routes within the NYSEG utility corridor, alternative switchyard sites for both the Dysinger and East Stolle Switchyards, alternative designs, alternative transmission line technologies, and a no action alternative. The Signatory Parties assert that the "no action" alternative is not viable because of the need to relieve

³⁸ Case 26529 and 26559, Power Authority of the State of New York and Health/Safety of Extra-High Voltage Lines, Opinion No. 78-13 (issued June 19, 1978).

congestion in Western New York, and because the ESL Project was selected by the NYISO to address that need. We concur. The Signatory Parties submit that the route described in Appendix B of the Joint Proposal is preferred to alternative routes and should be adopted and, based on the record, we agree.

Use of existing right-of-way is preferred in consideration of the environment and use of an existing right-of-way was one consideration in NYISO's selection of the ESL Project. Compared to the alternatives considered, the switchyard locations would provide additional screening, minimize the length of the transmission tie-in lines and avoid environmental impacts; the design of the proposed monopole structures have smaller footprints than H-frame or steel monopole designs with delta configurations thereby reducing environmental impacts and clearing; and, alternating current technology, as proposed is preferred to high voltage direct current technology, particularly in light of the length of the Proposed Line, due to reliability and cost, both monetarily and environmentally. Undergrounding was considered, both for the entirety and select portions of the line and is recommended only for the portion of the line that crosses Interstate-90, based on cost and reliability considerations as well as Thruway Authority requirements.

Active Farming Operations That Produce Crops, Livestock, and Livestock Products³⁹

The Signatory Parties propose a Commission finding that the ESL Project represents the minimum adverse environmental impact on active farming operations that produce crops, livestock and livestock products, as defined in Section 301 of the Agriculture and Markets Law, considering the state of

³⁹ PSL § 126(1)(d).

available technology and the nature and economics of various alternatives, and the ownership and easement rights of the impacted property.⁴⁰ Based on the record cited by the Signatory Parties, the Commission makes such a finding. Impacts on agricultural lands are minimized to the maximum extent practicable by the use of existing utility transmission corridors and, as previously discussed above, use of self-supporting monopole structures that will facilitate continued agricultural operations within the right-of-way. The Certificate Conditions⁴¹ contain numerous safeguards designed to protect agricultural lands that NEETNY must follow during and post-construction.

Undergrounding/Conformance to Long-Range Plan⁴²

The Proposed Line will be located underground only to cross Interstate-90. The Signatory Parties considered locating the facility underground in its entirety, at forested wetland crossings and at the Interstate-90 crossing. The Signatory Parties maintain that underground construction is not desirable because of increased environmental impacts, impacts on traffic patterns, extended construction duration, and additional cost. Underground construction using horizontal directional drilling was considered to minimize clearing in forested wetlands of which there are approximately 16 such complexes with varying sizes. The Signatory Parties maintain that this construction method may potentially subject the transmission line to underground termination/transition failing affecting reliability, would result in increased maintenance and increased costs. The Thruway Authority has required underground

⁴⁰ Joint Proposal Appendix C, ¶ 3.

⁴¹ Joint Proposal Appendix D, Certificate Conditions 88-112.

⁴² PSL § 126(1)(e).

installation at the Interstate-90 crossing and therefore the Signatory Parties propose undergrounding this section of the Proposed Line consistent with the Thruway Authority's permit requirements. We find that the extent to which underground installation of the ESL Project is proposed is both reasonable and appropriate in consideration of the alternatives.

Based on the record in this proceeding, including Exhibits 13 and 19, we find that the ESL Project conforms to a long-range plan for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems, which will serve the interests of electric system economy and reliability. As described above, the ESL Project was selected by the NYISO Board in response to a Commission-identified public policy transmission need. NEETNY is required by the NYISO to have the ESL Project in service by June 1, 2022. As previously discussed, the ESL Project is expected to reduce congestion in this area of the State, allow for greater utilization of renewable energy and produce other benefits such as production cost benefits, reduction in CO₂ and reliability and operational benefits. Construction of the ESL Project may also promote the goal of achieving 70% renewable energy by 2030 by allowing for additional renewable resources to access the power grid.

Conformance to State and Local Laws⁴³

PSL § 126 requires conformance to the substantive provisions of applicable State laws and regulations issued thereunder. The Signatory Parties assert that the ESL Project, as proposed in the Joint Proposal, fully complies with the substantive provisions of all applicable State laws.⁴⁴ We agree

⁴³ PSL § 126(1)(g).

⁴⁴ Joint Proposal, ¶ 133.

and find that, with the terms of the Joint Proposal, the proposed Certificate Conditions and the EM&CP in place, the ESL Project would conform to all applicable State laws and regulations.⁴⁵

The ESL Project also must comply with all substantive local laws and regulations, except that the Commission may refuse to apply any such laws or regulations that, as applied to the project, the Commission finds to be "unreasonably restrictive in view of the existing technology, or of factors of cost or economics, or of the needs of consumers whether located inside or outside of such municipality."⁴⁶ The ESL Project is proposed to be located in the Towns of Royalton in Niagara County and the Towns of Alden, Newstead, Lancaster and Elma in Erie County.

The Signatory Parties state that Exhibit 7 to the Application identifies every substantive local law that is applicable or potentially applicable to the ESL Project, every local law for which NEETNY seeks a waiver, and provides an explanation as to why particular local laws should be waived as unreasonably restrictive.⁴⁷ The Joint Proposal provides that, with certain exceptions identified in Exhibit 7 to the Application, NEETNY would comply with all substantive local provisions applicable to the Project.⁴⁸

NEETNY requests that the Commission not apply various local law provisions including, for example, local laws

⁴⁵ Under PSL § 130, with certain limited exceptions, procedural requirements to obtain any State or local approval, consent, permit, certificate or other condition for the construction or operation of the Project are inapplicable.

⁴⁶ PSL § 126(1)(g).

⁴⁷ Joint Proposal, ¶ 134.

⁴⁸ Joint Proposal, ¶ 134.

(1) pertaining to noise, odor, emission, vibration and weight prohibitions, because the impacts from construction equipment are technically impossible or impracticable to limit to the levels specified in the ordinances, and mitigation would be accomplished by the ESL Project's use of industry standards that muffle heavy equipment noise and emissions and suppress the spread of dust; (2) minimum lot width, frontage, depth and setback requirements, because it is not possible for the Proposed Line to comply with lot dimension provisions as it is located within an existing NYSEG utility corridor and crosses multiple roads, transmission structure locations depend on possible span lengths regardless of dimensional requirements and easement size and configuration will be based on required clearance and reliability criteria; (3) limiting maximum height requirements for structures, because compliance is technologically impossible and conflict with National Electric Safety Code requirements.⁴⁹

We recognize that many of the local laws at issue are not designed to apply to the construction and operation of major electric transmission facilities. Moreover, no local jurisdiction has filed any objection to NEETNY's requests that the Commission not apply the specified local laws, and the Signatory Parties agree that the justifications set forth above and in Exhibit 7 provide sufficient grounds for the Commission to refuse to apply the identified local law provisions. We will not apply the local laws identified in Exhibit 7 because we find that, as applied to the ESL Project, such requirements are unreasonably restrictive in view of the existing technology, or of factors of cost or economics, or of the needs of consumers whether located inside or outside of such municipality. We

⁴⁹ Joint Proposal, ¶ 135; Exhibit 7.

further find that the location of the ESL Project conforms to applicable State and local laws and regulations issued thereunder, with the exception of the local laws and regulations discussed above that we have refused to apply.

Provisions Not Adopted

With respect to the general provisions set forth in section I of the Joint Proposal, we note that, for the most part, these are routine terms governing the parties' relationships which we are not required to make any findings about to determine whether a Certificate should be issued. Therefore, except for Joint Proposal paragraphs 4 and 7 which are also reflected in Certificate Conditions 17 and 85 (relating to dispute resolution and DEC's right of access and inspection for purpose of assessing compliance with DEC-jurisdictional or permit-related matters), we do not adopt the provisions in Joint Proposal Section I.

Correction to Proposed Certificate Condition

By letter filed May 6, 2020, NEETNY advised of two errors in the Joint Proposal. Appendix A of the Joint Proposal provides a list of testimony, affidavits and exhibits that the Signatory Parties seek to move into the evidentiary record. The first error NEETNY identified is the mistaken inclusion of a document identified as Exhibit 29 in Appendix A of the Joint Proposal. It clarifies that this document does not exist and any such reference to the document should be ignored. The second error is a clerical one in Certificate Condition 129, Appendix D to the Joint Proposal. The condition erroneously references Certificate Condition 129 instead of Condition 130 and requests that the condition be corrected. Certificate Condition 129 shall hereby be modified by this order to reflect the proper reference to Condition 130.

Conclusion/Public Interest Finding

The basis of the need for the ESL Project and the nature of probable environmental impacts are discussed above. Based on the record developed in this proceeding, and for the reasons discussed above, we find that the ESL Project will be designed, constructed and operated in a manner that avoids or minimizes impacts to environmental resources and represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. The Project will have no adverse impact on active farming operations that produce crops, livestock and livestock products, as defined in section three hundred one of the New York Agriculture and Markets law. A portion of the ESL Project, the crossing of Interstate-90, will be located underground and the facility conforms to the requirements and planning objectives of the New York Independent System Operator and is consistent with the long-range plans for expansion of the electric power grid of the electric systems serving this state and interconnected utility systems. The ESL Project will serve the interests of electric system economy and reliability.

The location of the Project conforms to the substantive provisions of applicable State and local laws and regulations issued thereunder, except those local laws and regulations which the Commission refuses to apply because it finds, based on the justifications set forth in Exhibit 7 and the Joint Proposal, that as applied to the ESL Project, such are unreasonably restrictive in view of the existing technology, or of factors of cost or economics, or of the needs of consumers whether located inside or outside of such municipality. We find

that the ESL Project will serve the public interest, convenience and necessity.⁵⁰

The Commission orders:

1. Except as modified in and to the extent consistent with the discussion in this Order, the terms and provisions of the Joint Proposal attached to this Order are adopted and incorporated into and made a part of this Order.

2. Subject to the conditions adopted in this Order, NextEra Energy Transmission New York, Inc., is granted a Certificate of Environmental Compatibility and Public Need (Certificate) authorizing it to construct and operate the Empire State Line Project as described in Appendix B of the Joint Proposal.

3. The Proposed Certificate Conditions included as Appendix D to the Joint Proposal are approved and incorporated into this Order with one modification. Certificate Condition 129 is modified to state "The pre- and post-construction meetings shall address the need for landscape restoration is described in Certificate Condition 130."

4. The Water Quality Certification included as Appendix G to the Joint Proposal is authorized to be signed and issued by the Chief of the Environmental Certification and Compliance Section in the Office of Electric, Gas, and Water of the New York State Department of Public Service.

5. In the Secretary's sole discretion, the deadlines set forth in this order may be extended. Any request for an extension must be in writing, include a justification for the extension, and be filed at least one day prior to the affected deadline.

⁵⁰ PSL § 126(1)(h).

6. This proceeding is continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS
Secretary

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

18-T-0499 – Application of NextEra Energy Transmission New York, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for the Construction of a 20 Mile 345 Kilovolt Transmission Line Located in the Town of Royalton, Niagara County, and the Towns of Alden, Newstead, Lancaster, and Elma in Erie County.

JOINT PROPOSAL

By:

NextEra Energy Transmission New York, Inc.
Staff of the New York State Department of Public Service
New York State Department of Environmental Conservation
New York State Department of Agriculture and Markets
New York State Thruway Authority
Challengers of the Empire State Line

Dated: April 20, 2020 Albany, New York

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APPENDIX H.....
PROPOSED WATER QUALITY CERTIFICATION.....

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

18-T-0499 – Application of NextEra Energy Transmission New York, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the Public Service Law for the Construction of a 20 Mile 345 Kilovolt Transmission Line Located in the Town of Royalton, Niagara County, and the Towns of Alden, Newstead, Lancaster, and Elma in Erie County.

JOINT PROPOSAL

This Joint Proposal, which includes Appendices A through H attached hereto and incorporated herein, is made as of the 20th day of April, 2020, by and among the following (collectively referred to as the “Signatory Parties”): NextEra Energy Transmission New York, Inc. (“NEETNY” or “Applicant”); Staff of the New York State Department of Public Service designated to represent the public interest in this proceeding (“DPS Staff”); the New York State Department of Environmental Conservation (“NYSDEC”); the New York State Department of Agriculture & Markets (“NYSDAM”); New York State Thruway Authority (“NYSTA”); and Challengers of the Empire State Line (“CESL”).

INTRODUCTION

On August 10, 2018, NEETNY filed with the State of New York Public Service Commission (“Commission”) an application (“Application”) for a Certificate of Environmental Compatibility and Public Need (“Certificate”) to construct, operate and maintain the Empire State Line Project (“Project”). The Project includes an approximately 20-mile 345-kilovolt (“kV”) transmission line and associated switchyards, in the town of Royalton in Niagara County, New York, and the towns of Alden, Newstead, Lancaster, and Elma in Erie County, New York. Specifically, the Project includes a new 345 kV switchyard

("Dysinger Switchyard") in Niagara County, which will become the new 345 kV hub in Western New York where seven 345 kV lines will connect. It also includes a second new switchyard ("East Stolle Switchyard") in Erie County to be connected to the existing New York State Electric & Gas Corporation ("NYSEG") Stolle Road Substation. The approximately 20-mile 345 kV transmission line ("Proposed Line") will connect the Dysinger and East Stolle Switchyards. In turn, the Dysinger Switchyard will be connected to the Power Authority of the State of New York ("NYPA") 345 kV Niagara lines via two double circuit structures approximately 0.30 miles in length and the NYSEG 345 kV Kintigh lines via two single circuit structures approximately 0.15 miles in length ("Dysinger Tie-Ins"). Likewise, the East Stolle Switchyard will be connected to the NYSEG Stolle Road Substation via single circuit structures approximately 0.2 miles in length and NYSEG 345 kV Stolle Road to Homer City transmission line via single circuit structures approximately 0.2 miles in length ("East Stolle Tie-Ins"). Transmission line structures will consist of steel monopoles. The Proposed Line will primarily be built within the existing NYSEG Utility Corridor.¹

On October 19, 2018, the Secretary of the Department of Public Service issued a deficiency letter in response to the Application. NEETNY filed a response to the deficiency letter on November 16 and 19, 2018. Thereafter, on January 2, 2019, the Secretary deemed the Application in compliance with Section 122 of the Public Service Law as of November 19, 2018.

¹ As defined in Exhibit 2 of the Application, the NYSEG Utility Corridor is the 20-mile section between the proposed Dysinger and East Stolle Switchyards. In general, the NYSEG Utility Corridor is 500 feet wide with some areas widening to approximately 800 feet. NYSEG's 230 kV Line 65 extends along the length of the corridor. The 115 kV Line 926, 115 kV Line 928, and 34.5 kV Line 525 parallel Line 65 for varying distances. NYSEG maintains fee ownership of the majority of land within the corridor; exceptions include railroad, trail, and road crossings, as well as two private landowner holdings. In these areas, NYSEG owns right-of-way easements to operate their transmission system.

On April 18, 2019, the Applicant filed an update to the application, which included the following information:

1. Updated Figure 2-3: Project Map (Confidential)
2. Updated Figure 5-2: Cross Section Drawings
3. Updated Figure E-2.6: East Stolle General Arrangement
4. Updated Figure E-2.7: East Stolle One Line Diagram
5. Updated Attachment H, Table 8: EMF Results
6. Updated Exhibit 4, Tables 4.6-5 and 4.6-6 calculating impacts to NYSDEC regulated wetlands and U.S. Army Corps of Engineers regulated wetlands, respectively.

On March 13, 2020, the Applicant filed an additional update to the Application, which included:

1. Updated Figure 5-2: Cross Section Drawings
2. Updated Attachment H, Table 8: EMF Results
3. Updated Exhibit 4, Tables 4.6-5 and 4.6-6 calculating impacts to New York State Department of Environmental Conservation (“NYSDEC”) regulated wetlands and U.S. Army Corps of Engineers regulated wetlands, respectively.
4. Updated Table 4.3-3: Existing Utilities Crossed by the Project.

On March 27, 2020, the Applicant filed an additional update to the Application, which included:

1. Updated Figure 5-2: Cross Section Drawings
2. Revised Figures E-3-1 – E-3-4.

The Applicant held informational “open house” sessions for the public at 11 AM and 5 PM on October 1, 2018, at Newstead Cultural Center in Akron, New York. Public Statement Hearings were held before Administrative Law Judge (“ALJ”) Michele Phillips at 3 PM and 7 PM on February 13, 2019, at the Alden Town Hall in Alden, New York which were preceded in each case by informational sessions for the public. In addition, a guided site

visit with the parties and interested members of the public was held in the Project area on February 14, 2019. A procedural conference of the active parties was held before ALJ Phillips in Albany, New York on February 20, 2019.

After exploratory discussions among the parties, a Notice of Impending Settlement Discussions (“Notice of Settlement”) was sent to all active parties and other interested persons on March 4, 2019 and March 21, 2019. Settlement conferences were held in person or by telephone on May 1, 2019, June 5, 2019, July 16, 2019, August 14-15, 2019, September 4, 2019, September 30, 2019, October 24, 2019, January 10, 2020, February 20, 2020, March 12, 2020, March 25, 2020, and March 26, 2020. Electronic communications were also utilized to facilitate settlement discussions.

After thorough discussion of the issues, the Signatory Parties recognize that the parties’ various positions could be addressed through settlement and agree that settlement is feasible. The Signatory Parties further believe that this Joint Proposal gives fair and reasonable consideration to the interests of customers, transmission owners, and the public in assuring the provision of safe and adequate service. As detailed in this Joint Proposal, the Signatory Parties will work toward the objective of fully permitting the Project, including the Commission issuing the Certificate, as early as practicable, in order for construction to commence by November 1, 2020.

TERMS OF JOINT PROPOSAL

I. GENERAL PROVISIONS

1. It is understood that each provision of this Joint Proposal is in consideration and support of all the other provisions of this Joint Proposal and is expressly conditioned upon approval of the terms of this Joint Proposal in full by the Commission. If the Commission fails to adopt the terms of this Joint Proposal in full,

or adds additional terms, the Signatory Parties to the Joint Proposal shall be free to accept the Commission's terms or to individually pursue their respective positions in this proceeding without prejudice.

2. The Signatory Parties agree to submit this Joint Proposal to the Commission along with a request that the Commission adopt the terms and provisions of this Joint Proposal as set forth herein. The Signatory Parties agree that construction, operation and maintenance of the Project (as hereinafter defined) in compliance with the Joint Proposal and with the Proposed Certificate Conditions set forth in Appendix D attached hereto will comply with PSL Article VII and with the substantive provisions of applicable state law referenced in the Proposed Commission Findings set forth in Appendix C attached hereto.

3. All Signatory Parties fully support approval of the Joint Proposal in its entirety. The Signatory Parties recognize that certain provisions of this Joint Proposal contemplate actions to be taken by various parties in the future to effectuate fully this Joint Proposal. Accordingly, the Signatory Parties taking those actions agree to cooperate with all other Signatory Parties in good faith.

4. In the event of any disagreement over the interpretation of this Joint Proposal or implementation of any of the provisions of this Joint Proposal which cannot be resolved informally among the Signatory Parties, such disagreement shall be resolved in the following manner.

- a. the Signatory Parties shall promptly convene a telephone conference and in good faith attempt to resolve any such disagreement; and

- b. if any such disagreement cannot be resolved by the Signatory Parties, any Signatory Party may petition the Commission for resolution of the disputed matter.
5. This Joint Proposal shall not constitute a waiver by the Applicant of any rights they may otherwise have to apply for additional or modified permits, approvals, or certificates from the Commission or any other agency in accordance with relevant provisions of law.
6. Nothing in this Joint Proposal shall be construed as either waiving or expanding in any way the authority of any state agency to enforce the laws and regulations that are the subject of its jurisdiction.
7. NYSDEC may enter and inspect the Project to assess compliance with any NYSDEC-issued permit or applicable substantive statute or regulation under NYSDEC's jurisdiction. NYSDEC Staff field representatives will notify the DPS Staff representative and the Applicant's appropriate representatives of any activities that violate, or may violate, either the terms of the Certificate or the Environmental Conservation Law. The Certificate Holder may require site inspectors or visitors to comply with all safety and security requirements applicable to the construction site.
8. This Joint Proposal is being executed in counterpart originals and shall be binding on each Signatory Party when the counterparts have been executed.
9. Appendix A attached hereto lists the testimony, affidavits and exhibits that constitute the evidence agreed upon by the Signatory Parties to be admitted as record evidence in this proceeding (collectively, the "Evidentiary Record"). The Evidentiary Record includes all responses to information requests ("IRs") produced in this proceeding which the Signatory Parties believe contribute accurate, material and

relevant information to the Evidentiary Record in support of the Project described in this Joint Proposal.

II. DESCRIPTION OF PROJECT

10. The Signatory Parties agree that the Description and Location of Project set forth in Appendix B, attached hereto, accurately describes the location, configuration and ownership of the project as they recommend it be approved by the Commission (the “Project”). Appendix B includes a detailed description of the components of the Project (the “Project Components”) that would be constructed and owned by NEETNY.

III. ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

11. The Commission must consider the totality of all relevant factors in making its determination of environmental compatibility and public need. The relevant factors include, without limitation, the basis of the need, cost, environmental impact, availability and impact of alternatives, undergrounding considerations, conformance to long-range plans, electric system reliability, state laws and local laws, and the public interest, convenience, and necessity.

A. Need for the Project

12. As set forth in Exhibit E-4 of the Application, congestion adversely impacts the performance of the bulk power transmission system in Western New York by limiting the output of the state’s largest renewable resource, the Niagara hydroelectric power plant. Currently at the northern end, the 345 kV system consists of two 345 kV lines that are connected to NYPA’s Niagara 345 kV Substation, and run east towards Rochester. At the southern end, the 345 kV system consists of the NYSEG Stolle Road

345 kV substation, which is not interconnected with the northern 345 kV system. The Project will connect the northern and southern 345 kV systems.

13. The New York Independent System Operator (“NYISO”) developed a Public Policy Transmission Planning Process (“Public Policy Process”) to comply with the Federal Energy Regulatory Commission’s (“FERC”) Order 1000, to address transmission needs that are driven by public policy requirements identified by the Commission.

14. On July 20, 2015, the Commission issued an “Order Addressing Public Policy Requirements for Transmission Planning Purposes” in Case 14-E-0454, In the Matter of New York Independent System Operator, Inc.’s Proposed Public Policy Transmission Needs for Consideration (“July 2015 Order”). In the July 2015 Order, the Commission identified the relief of congestion in Western New York, including access to increased output from the Niagara hydroelectric facility and additional imports of renewable energy from Ontario, as a Public Policy Transmission Need. The Commission stated that “...congestion in Western New York was adversely impacting the performance of the bulk power transmission system, by limiting the output of the state’s largest renewable resource, the Niagara hydroelectric power plant” (NYISO 2017). It further determined that relieving congestion in Western New York would increase access to additional imports of renewable energy from Ontario. The Commission stated that “[i]ncreased dispatch of these renewable and economic resources could produce significant benefits to the State in terms of reduced air emission and energy costs.” Finally, the Commission determined that significant environmental, economic, and reliability benefits could be achieved by relieving the transmission congestion identified in Western New York, including access to increased

output from the NYPA Niagara hydroelectric facility, additional imports of renewable energy from Ontario, and system reliability benefits, specifically, increased operational flexibility, efficiency, and avoiding the need to maintain generation that would otherwise retire.

15. The Commission directed the NYISO to consider solutions for increasing Western New York transmission capability sufficient to ensure the full output from NYPA's Niagara hydroelectric generating facility (i.e., 2,700 megawatts ["MW"] including Lewiston Pumped Storage), as well as certain levels of simultaneous imports from Ontario across the Niagara tie lines (i.e., maximize Ontario imports under normal operating conditions and at least 1,000 MW under emergency operating conditions). The Commission held that "the anticipated congestion relief in Western New York, as well as the ancillary benefits of promoting renewables, reducing environmental emissions, and improving the reliability and resiliency of the electric system, are consistent with the final 2015 New York State Energy Plan."

16. Thereafter, the NYISO solicited potential solutions to address the Western New York need, focusing on greater utilization of renewable energy from the Niagara hydroelectric facility and additional import of renewable energy from Ontario. In response, the NYISO identified 10 viable and sufficient projects as submitted by the following entities: NEETNY (two projects); North American Transmission (four projects); Niagara Mohawk Power Corporation d/b/a National Grid ("National Grid") (two projects); NYPA/NYSEG (one project); Exelon Transmission Company (one project). The Commission issued an order on October 13, 2016, confirming the Western New York need and directing the NYISO to evaluate and select a transmission solution.

17. NYISO staff and its independent consultant, Substation Engineering Company (“SECo”), conducted a technical evaluation of the 10 project proposals. Each proposal was ranked according to several metrics, including capital costs, costs per MW, expandability, operability, performance, property rights and routing, and development schedule. Environmental permitting was also considered in the evaluation. For this component, NYISO staff determined, “There does not appear to be any environmental issues that would prevent the projects from being constructed based on the conceptual design information available for review” (SECo 2017).

18. Upon consideration of all factors, NYISO staff determined that, “...NextEra’s [NEETNY’s] Project T014 is the most efficient or cost-effective transmission solution to address the Western New York Need based on its total performance across the selection criteria and scenarios” (NYISO 2017). NEETNY’s Project T014 was also determined to more efficiently use both the existing and proposed transmission facilities.

19. On October 17, 2017, the NYISO Board determined that the Project is the most efficient and cost-effective solution to address the Western New York public policy transmission needs. Importantly, the NYISO held that compared with other projects, the Project “more efficiently utilizes both the existing and proposed transmission facilities.”

20. According to the NYISO report, the Project will provide the following benefits:

- a. Enables transmission of approximately 2,700 MW of renewable energy from the Niagara hydroelectric plant and 1,000 MW additional imports from Ontario.

- b. Reduces New York Control Area Demand congestion by \$582 MM.
- c. Provides production cost benefits of \$274 MM.
- d. Reduces CO₂ emissions by nearly 7.4 MM tons.
- e. Improves reliability and system operability.

21. Given that the existing power transmission system in Western New York is currently congested and unable to adequately utilize renewable energy from the Niagara hydroelectric facility, NEETNY has been directed by NYISO to have the Project in service by June 2022 in order to meet the Western New York need. A delay in the completion of the Project would perpetuate the system constraints and delay the Project benefits.

B. Cost

22. A detailed estimate of the total capital costs of the Project, as well as costs associated with development and permitting of the Project under Article VII, is set forth in Exhibit 9 and Attachment I to the Application. The Project's construction and operation expenses would positively affect regional employment and earnings. Local suppliers and contractors as well as local businesses that cater to the construction/operations work force, such as hotels/motels, eating and drinking establishments, and recreational providers, would all benefit from the Project. However, the Project will not impact the local area sufficiently to induce any significant changes in the economic or local residential, commercial, agricultural or industrial land use patterns. Accordingly, no mitigation is deemed necessary for economic impacts or for changes in residential, commercial, agricultural, or industrial land use patterns in the Project.

C. Environmental Impact

23. The Evidentiary Record describes the nature of the probable environmental impacts of the Project which are briefly summarized below. The environmental impacts have been minimized by siting the Proposed Line within the NYSEG Utility Corridor. As such, NEETNY does not anticipate any significant adverse impacts to existing land use.

24. The Signatory Parties agree that the Project, as this Joint Proposal and the accompanying Appendices propose it to be located and configured, represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. The proposed route and configuration are preferred because the Project makes use, to a great extent, of an existing electric transmission line utility corridor, avoids or minimizes the disturbance of natural habitat, is reasonable in terms of cost, and minimizes disturbance of residential, agricultural and commercial properties and activities and traffic.

25. The Project has been reviewed with respect to potential impacts to land uses, visual, cultural, terrestrial, wildlife, wetland and water resources, topography and soils, transportation, noise, debris, communications, and electric and magnetic fields. Taking into account all of these elements, the proposed design, as set forth in Appendix B of this Joint Proposal, represents the minimum adverse environmental impact.

26. Categorized by type of impact, the following sections address the potential for environmental impacts to result from the proposed construction and operation of the Project.

a. Land Use

27. The Proposed Line is within the existing NYSEG Utility Corridor. NEETNY's Proposed right-of-way ("ROW") will be immediately adjacent to the maintained ROW within the NYSEG Utility Corridor and, as such, will minimize impacts on land uses.

28. Project construction activities will occur primarily within the existing NYSEG electric transmission Utility Corridor. NYSEG maintains fee ownership of the majority of land within the corridor; exceptions include railroad, trail, and road crossings, as well as two private landowner holdings. In these areas, NYSEG owns ROW easements to operate their transmission system. NEETNY is currently seeking to acquire an easement from NYSEG for a ROW ("Proposed ROW") within the NYSEG utility corridor to construct and operate the Project. The Proposed Line and East Stolle Switchyard will be within the existing NYSEG utility corridor, and the Dysinger Switchyard will be on private land that NEETNY has an option to purchase. In addition to the NYSEG utility corridor, NEETNY anticipates that it will require two aerial and two permanent easements with private landowners, as well as approximately 21 temporary construction easements with various entities. The types of activities that would be permitted by these easements include, without limitation, general ROW ingress and egress for inspections and maintenance, transmission line construction; clearing and tree removal; and other Project-related activities.

29. The new Dysinger Switchyard will occupy an approximately 7-acre site on a 46-acre parcel adjacent to the NYSEG Utility Corridor in the town of Royalton, Niagara County. The site is approximately 600 feet south of Akron Road and 900 feet east of Block Church Road. The new switchyard will be offset approximately 150 feet from the western edge of the NYSEG Utility Corridor which currently includes the

Niagara (NYPA) – Kintigh Switchyard (NYSEG) 345kV and the Kintigh Switchyard (NYSEG) - Station 255 (Rochester – RG&E) 345kV lines, and approximately 1,500 feet north of the NYPA ROW that includes the Niagara (NYPA) – Station 255 (Rochester – RG&E) 345kV and Niagara (NYPA) – Kintigh Switchyard (NYSEG) 345kV lines.

30. The new East Stolle Switchyard will occupy an approximately 6-acre site within the NYSEG Utility Corridor in the town of Elma, Erie County. The site is approximately 800 feet south of Bullis Road and 4,000 feet east of Stolle Road. The new switchyard will be adjacent and north of the existing NYSEG Stolle Road Substation.

31. As noted in Exhibit 4 of the Application, the NEETNY ROW is within the NYSEG Utility Corridor and adjacent to existing NYSEG overhead transmission lines for its entire route. In general, the NYSEG Utility Corridor is 500 feet wide with some areas widening to approximately 800 feet. Within the existing NYSEG Utility Corridor, the Proposed ROW crosses primarily forested (40%), open field/scrub-shrub (30%), and agricultural land (28%). The remaining land uses crossed are residential areas and road crossings. Agricultural land is primarily hayfields with some row crops.

32. Adjacent land uses are primarily forested and agricultural land. Rural residential areas are scattered throughout the Project vicinity.

33. Trees and shrubs within the Project's access roads and work areas will be mowed or cleared as necessary to provide unimpeded and safe access to proposed work sites. Shrubs and low growing vegetation, as well as buffers at streams or in visually sensitive areas, will be maintained if they do not interfere with the construction activities or operational integrity of any of the facilities on the ROW. Existing

forestland in these easement areas that is converted to herbaceous cover and low-growing compatible shrub species is not anticipated to significantly affect land use patterns or uses along the Project ROW. Rights to remove trees outside of the easement area that may pose a danger or hazard to Project facilities (“Danger Tree Rights”) may be required for portions of the Project length.

34. The Project is not anticipated to change the existing residential, commercial and industrial uses adjacent to the ROW or in surrounding areas. Any potential encroachments in the Project ROW that the Applicant determine may contravene the Applicant’s property rights will be addressed by the Applicant on a case-by-case basis. The Applicant will include a Comprehensive Right-of-Way Encroachment Plan in the Environmental Management & Construction Plan (“EM&CP”) filing.

35. The Project ROW traverses active agricultural lands and five designated agricultural districts. The Dysinger Switchyard would be located in Agricultural District 2. The Proposed Line would also cross Agricultural District 14 and Agricultural District 1 in Newstead before crossing Agricultural District 16 in the towns of Alden and Lancaster. The East Stolle Road Switchyard would be located in Agricultural District 13. Many active agricultural activities, including both cropland and pasture, currently take place within the NYSEG utility corridor and are expected to continue upon the completion of construction. These activities demonstrate the potential for compatible co-existence of active farming and transmission line operation.

36. The Proposed ROW traverses active agricultural lands and designated New York Agricultural Districts. The Project represents a minimum adverse impact on active farming operations that produce crops, considering the state of available technology and the nature and economics of various alternatives, and the ownership

and easement rights of the impacted property. As discussed above, the conversion of approximately 13 acres of farmland for the Dysinger and East Stolle Switchyards represents a minor fraction of the 142,679 and 142,818 acres of farmland in Erie and Niagara counties, respectively (USDA 2012). During construction of the Project, agricultural operations may be temporarily disrupted within the Proposed ROW. Any short-term disruption to farming activities resulting from the Project construction shall be minimized by the Applicant through scheduling, planning, and the use of protection, restoration and mitigation measures. The Applicants will describe these measures in the EM&CP.

37. There will not be any direct impact on surrounding land uses, such as residences or commercial uses. Nearby residences may experience temporary disturbance and inconvenience (i.e., construction noise and traffic) associated with construction activities. These disturbances will occur primarily at locations where the Proposed Line crosses roadways that will be used by construction vehicles to access the Proposed ROW. These impacts will be temporary and short-term as the construction progresses along the ROW.

38. The Project is consistent with the goals of the 2016 New York State Open Space and Conservation Plan in that it recognizes that energy production and distribution capacity are important to New York State and the Northeast as a whole, and the Project makes use of a statewide planning and siting process that takes into consideration natural and recreational open spaces as well as the state's natural and cultural heritage. Moreover, the Project does not conflict with conservation efforts in the Buffalo River and Niagara River watersheds. The Project is also consistent with local land use plans or policies in Niagara and Erie Counties, and in the towns of

Royalton, Alden, Newstead, Lancaster, and Elma, respectively. These local plans were considered to guide routing, locations and configurations of the proposed 345 kV circuit and switchyards to promote compatibility with existing and future land use.

39. The Project does not traverse any state or local parks.

b. Visual Resources

40. As discussed in Exhibit 4 to the Application, the potential visual impacts of the Project within the existing landscape requires consideration of the compatibility of the Project with the visual character of the existing landscape in the Project study area, distances from which the Project would be viewed within the Project study area, and the duration, frequency, and circumstances associated with viewing the Project. The form of the regional landscape generally consists of gently rolling terrain with sinuous naturalistic hills. The existing landscape maintains a horizontal line formed by extended vistas. However, in instances where the existing cleared portion of the NYSEG Utility Corridor is seen traversing a hilltop or forested land, there is a clear interruption of other, often natural, landscape forms along the horizon.

41. The existing transmission structures within the NYSEG Utility Corridor are commonly visible and many locations within the study area will have views of the existing H-frame transmission structures located within the NYSEG Utility Corridor. Given the difference in height from the existing transmission lines, the Project will represent a higher vertical form in the existing landscape. Additionally, in those instances where existing transmission line structures are not visible, the new vertical form of the proposed transmission structures may introduce a contrasting and distinct perpendicular element into the generally horizontal line of the existing landscape. However, the proposed transmission structures will be highly compatible with the uses

within the existing NYSEG Utility Corridor. In the case of the proposed switchyards, the proposed Dysinger Switchyard will slightly contrast with the natural landscape, but will be located adjacent to four existing 345 kV transmission lines and an existing 230 kV transmission line. The proposed East Stolle Switchyard will be consistent with the adjacent existing Stolle Road switchyard to the south.

42. As set forth in Exhibit 4 of the Application, the results of visual impact analysis indicate that while there may be potential relatively minor visual impacts on specific NYSDEC Policy Program resources or local visually sensitive areas, in almost all cases, these resources or areas already contain views of the existing NYSEG Utility Corridor, including the existing transmission lines, and, in some cases, the existing substation at the southern end of the Project. Thus, the Project will be a landscape feature that is generally consistent with the existing landscape features that are already present in the setting, views, or viewsheds associated with these resources or areas.

43. Consideration of the potential visual impacts of the Project on the visual character or scenic integrity of the existing landscape of the overall Project area suggests that the Project will not be a noticeable or prominent feature in views from most locations. While there may be views of the Project from various vantage points, topography, vegetation, and localized structures will assist in screening views of the proposed structures from most locations within the Project area.

44. As set forth in Exhibit 4 of the Application, views from many locations would be generally limited to a few proposed structures in a particular view. Where visibility of the Project is found throughout the study area, there are often views of the existing transmission structures within the utility corridor and views of other electric distribution poles scattered along roadways within the landscape. Generally, if there

is visibility of the Project, there is also visibility of at least one of the existing transmission lines within the existing NYSEG Utility Corridor. Additionally, due to the proposed structures' slender profile, visibility of the Project will decrease as distance from the Project increases, reducing the perceived scale and visual contrast of the proposed new structures.

45. Certain residences and commercial properties along the Project ROW will likely have visual impacts from the Project. However, most of these residences and commercial properties are already in the viewshed of the existing transmission lines, so overall the additional impacts will be minimal.

46. As set forth in Exhibit 4 of the Application, construction and operation of the Proposed Line within the existing NYSEG Utility Corridor, and use of monopole structures, with their slender, uniform profiles that generally do not appear as a prominent landscape feature for the transmission line, minimize the potential for visual impacts on visual resources or visually sensitive areas. The need for landscape restoration will be assessed and performed in accordance with proposed Certificate Condition 128.

c. Cultural Resources

47. As discussed in Exhibit 4 of the Application, a cultural resources investigation was conducted through a desktop review of information for known and previously recorded cultural resources and historic properties that are included in databases maintained by the New York State Office of Parks, Recreation, and Historic Preservation ("NYSOPRHP") and the National Parks Service ("NPS"). This information consists of known and previously recorded archaeological sites and architectural or other built resources, and includes those archaeological sites and

architectural resources that are historic properties (i.e., listed, or previously determined eligible for listing, in the State Register and/or the National Register of Historic Places (“NRHP”). Information for known and previously recorded archaeological sites and architectural resources were identified within 2- and 6-mile-wide archaeological and architectural study areas, respectively, centered on the Proposed Line.

48. In addition, as a result of initiation of consultation for the Project with the NYSOPRHP in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended (“NHPA”), the New York State Historic Preservation Office (“SHPO”) recommended archaeological and architectural investigations for the Project. A Phase IA archaeological investigation was recommended to assess the archaeological sensitivity of the Proposed ROW and to make recommendations regarding the need for Phase IB archaeological investigations.

49. SHPO also defined an area of potential effects (“APE”) for the identification and evaluation of cultural resources and historic properties for the Project. This APE consists of a direct APE and an indirect APE. The direct APE consists of the construction footprint within which physical impacts or effects on archaeological sites or architectural resources could occur. The indirect APE consists of those portions of a 6-mile-wide architectural study area, centered on the Proposed Line, within which new visual impacts or effects on architectural resources could occur.

50. A total of 62 known and previously recorded archaeological sites were identified within the archaeological study area, including 16 generously defined New York State Museum (“NYSM”) archaeological sites or areas that were recorded by early 20th century avocational archaeologists and given overly large boundaries to protect the sites or areas from looters. Ten of these sites were previously evaluated for

NRHP-eligibility: one was previously determined NRHP-eligible, and nine were previously determined not NRHP-eligible. The remaining 52 have not been evaluated for NRHP-eligibility. As such their NRHP-eligibility status is undetermined.

51. With regard to cultural affiliation, 52 of the archaeological sites are prehistoric or historic Native American sites, eight of the archaeological sites are historic Euro-American sites, one of these sites has both prehistoric and historic components, and one is of unidentified cultural affiliation.

52. NEETNY completed the requested Phase IA investigation, a copy of which was provided in Attachment D of NEETNY's Application. The results of the Phase IA archaeological investigation indicated that the majority of the direct APE, with the exception of wetlands, waterbodies and areas of steep slope or prior subsurface ground disturbance, is archaeologically sensitive and Phase IB field investigations were recommended for these areas to confirm the presence or absence of any unidentified archaeological sites. The Phase IA report was submitted to the SHPO on July 13, 2018; the SHPO responded on August 13, 2018 with a request for revisions to the report. The revised Phase IA was submitted on September 5, 2018; the SHPO responded with their concurrence on September 13, 2018.

53. A Phase IB archaeological field investigation was conducted in order to identify any unidentified or otherwise undocumented archaeological resources and, if possible, to make recommendations regarding the eligibility of any newly identified archaeological sites for listing in the New York State and National Registers of Historic Places ("S/NRHP"). The Phase IB archaeological field investigation utilized the archaeological sensitivity assessment developed as part of the Phase IA archaeological investigation (noted herein). Fieldwork for the Phase IB archaeological field

investigation was conducted between October 11 to 30, November 2 to 20, and December 11 to 17, 2018. The archaeological field investigation resulted in the identification of five Precontact Period archaeological sites, nine Precontact Period isolated finds, and two locations with sparse historic artifacts. Avoidance or further investigations were recommended for two of the five Precontact Period archaeological sites. No further investigations were recommended for the locations where isolated Precontact Period artifacts were found or the two locations where historic artifacts were found. In addition, an archaeological field investigation was recommended for all portions of the APE that have not been surveyed. The Phase IB report was submitted to the SHPO on April 26, 2019. Additional information was requested by the SHPO, and this was submitted on June 5, 2019. The SHPO concurred with the recommendations noted within the report regarding site eligibility on June 14, 2019.

54. As noted above, two Precontact Period archaeological sites were recommended for additional work or avoidance. Subsequently, a Phase II Investigation work plan for one of the two archaeological sites was submitted to the SHPO on January 16, 2019 and was accepted by the SHPO on February 4, 2019. Phase II fieldwork was conducted between April 22 and May 16, 2019. This Precontact Period archaeological site appears to be a multiple-component site comprised of largely indistinguishable small camps and workshops spread across an approximately 18.1-acre (7.3-hectare) area. The archaeological site was not recommended as being eligible for listing in the S/NRHP by the investigators. The report for these investigations was submitted to the SHPO on August 23, 2019. The SHPO responded on September 19, 2019, indicating that additional work to include mechanical soil stripping is needed at this location. A plan for mechanical soil stripping was submitted to and approved by

the SHPO in November 2019. NEETNY is planning to complete the mechanical soil stripping in March 2020. NEETNY conducted mechanical soil stripping between February 3-5, 2020 and February 10-12, 2020. Preliminary results were submitted to the SHPO on February 21, 2020, together with recommendations for additional mechanical soil stripping to complete archaeological investigations at the site. On February 24, 2020, the SHPO concurred with the recommended additional mechanical soil stripping. NEETNY then conducted additional mechanical soil stripping in March 2020 and is coordinating with the SHPO regarding the final report that will document the results of mechanical soil stripping at the site. NEETNY plans to submit its final report to the SHPO in May 2020. Any measures developed with the SHPO to avoid or mitigate impacts on archaeological resources at the East Stolle Switchyard will be documented in the EM&CP.

To address the second Precontact Period archaeological site, a plan was prepared to document short- and long-term measures that will be implemented by NEETNY to avoid the site and a 50-foot buffer of the site. The plan was submitted to and approved by the SHPO in November 2019.

55. A total of 235 known and previously recorded architectural resources were identified within the architectural resources study area (see Table 4.5-2). One hundred twenty-nine (129) of these were previously evaluated for NRHP-eligibility. Thirty-two (32) are considered historic properties because they are either NRHP-listed or they were previously determined NRHP-eligible. The remaining 203 are not considered historic properties because they were previously determined not NRHP-eligible or have not been evaluated for NRHP-eligibility, so their NRHP-eligibility status is undetermined. None of the 235 known and previously recorded architectural resources

are located within the direct area of potential impacts. Therefore, construction activities are not expected to result in direct impacts or effects on known and previously recorded architectural resources.

56. A reconnaissance level architectural survey was conducted within the 6-mile wide architectural study area that was evaluated as the indirect APE. The architectural field survey was conducted during July 2018. The scope for the architectural survey consisted of the examination of previously inventoried architectural resources within the indirect APE. It also confirmed visible information for each resource, such as architectural style, physical characteristics, and building materials. The architectural survey also collected visible data for the setting of each resource, including viewsheds that may represent character-defining features, as well as documentation and evaluation of the current integrity of each of these previously inventoried resources. This information was used to make recommendations regarding the NRHP-eligibility of the previously inventoried architectural resources and was used in conjunction with visibility modeling to make recommendations regarding the potential visual effects of the Project. A total of 49 previously inventoried architectural resources were identified in the indirect APE; these consisted of one previously NRHP-listed property; seven previously determined National Register Eligible (“NRE”) resources; eight undetermined resources that were recommended NRE per the study; three previously undetermined resources that could not be seen from public ROWs; and 30 recommended not eligible for the NRHP by the current study. A total of 19 of the 49 previously inventoried architectural resources were carried forward for the visual effect analysis. Visibility modeling conducted for the proposed Project indicated that nine of the 19 previously inventoried architectural resources considered for potential visual

effects are in locations that already had a view of existing transmission facilities within the NYSEG ROW. The remaining 10 previously inventoried architectural resources considered for potential visual effects are in locations where visibility modeling indicates that only the proposed new project components would be visible. The recommendations of the architectural resource study indicated that the proposed project would not alter, directly or indirectly, any of the characteristics, significance, and/or integrity of any of the 19 previously inventoried architectural resources and would have no adverse visual effect on any of these 19 previously inventoried architectural resources. The architectural survey report was submitted to the SHPO on February 11, 2019. The SHPO responded via email on March 25, 2019 that they have no concerns with impacts to buildings in the APE.

57. In the event that there are direct physical impacts on any NRHP-eligible archaeological sites identified within the direct APE or indirect visual impacts on any NRHP-listed or –eligible architectural resources within the indirect APE, continued coordination with SHPO in consideration of Section 106 of the NHPA would be necessary. (Proposed Certificate Condition 55.)

58. Any proposed mitigation measures related to archaeological and architectural resources identified through ongoing agency consultation will be included in the EM&CP.

d. Terrestrial Ecology and Wetlands

59. The dispersion and density of vegetative land cover (including invasive plant species) throughout the Project ROW correlate with adjacent land use, land development, and existing natural resources and include cultivated cropland, wetland communities, and intermixed forested upland communities along the existing ROW.

60. The Project has been designed to minimize loss of forest land by locating new structures as close to the edge of the existing cleared portion of the NYSEG Utility Corridor as possible, and by selecting a monopole design configuration that requires a narrower clearing width than an H-frame configuration.

61. The most significant effect on vegetation is the long-term conversion of existing forested communities to managed early to mid-successional or shrubland that will occur as a result of construction and maintenance of the Project. Construction of the Project will require the permanent removal of forest cover, while improved road access and other construction activities will require the selective clearing of undesirable woody species and/or saplings. The extent of direct impacts will vary depending on the quality of vegetation and soils, the type of proposed Project activity, and the methods used to facilitate construction. The estimated total area of forest land (upland and wetland) conversion associated with the Project ROW is approximately 73 acres.

62. Following construction activities, the NEETNY ROW will be managed in accordance with NEETNY's vegetation management plan that will be submitted to the Commission for approval. (Proposed Certificate Condition 11.)

63. Implementation of an invasive species management plan will mitigate potential spread of invasive plant and insect species. (Proposed Certificate Condition 154.)

64. As stated in Exhibit 4 of the Application, the presence of state regulated wetlands were confirmed, and their boundaries were refined during NEETNY's wetland delineation surveys. Based upon wetland delineation results, 16 state regulated wetlands are located within the Proposed ROW. No state regulated wetlands

are present on the proposed switchyard sites. The NYSDEC issued a letter to NEETNY on September 4, 2019, providing verification of the delineated wetland boundaries.

65. A total of 82 USACE-regulated wetlands were delineated within the Proposed ROW. These include the following wetland types: palustrine emergent wetland (PEM); palustrine shrub-scrub wetland (PSS); and palustrine forested wetland (PFO). An additional two wetlands were delineated at the Dysinger Switchyard site, both of which are classified as PEM.

66. Wetlands within the Proposed ROW will be impacted as a result of structure placements in wetlands, conversion of forested and scrub-shrub wetlands to emergent wetlands to establish a new cleared ROW. Every practical attempt will be made to avoid wetlands and minimize the area of permanent disturbance. However, as shown in Exhibit 4 to the Application, structures will be placed within wetlands, including within state regulated wetlands. Each structure will occupy a small footprint covering approximately 7 to 79 square feet. Cumulatively, the structures are expected to occupy approximately 0.06 acres within wetlands, of which approximately 0.05 acres are within state regulated wetlands. The structures placed within wetlands will be detailed in the EM&CP. Additional disturbance will occur in wetlands from placement of temporary work pads at the structure locations and placement of timber mats for temporary access roads. These activities will temporarily disturb approximately 38 acres of wetlands, including approximately 28 acres of state regulated wetlands. Any disturbed areas will be restored following construction.

67. Construction of the proposed Dysinger and East Stolle switchyards will impact U.S. Army Corps of Engineers (“USACE”) Waters of the U.S. (e.g., streams and wetlands). Approximately 0.2 acres of PEM wetland and 0.03 acres of regulated

drainages will be filled at the Dysinger Switchyard. An additional 0.09 acres of a previously altered stream channel (NYSDEC Class C water, unnamed tributary to Mud Creek) will be filled and relocated to construct the Dysinger Switchyard, while a new bridge crossing of Mud Creek (NYSDEC Class C water) for the switchyard permanent access road will result in approximately 100 sq. ft. of fill within this waterbody. The East Stolle Switchyard was configured to avoid wetland impacts; however, the permanent access road for the switchyard will require 0.003 acres of PFO wetland fill.

68. The underground crossing of Interstate 90 will impact State-regulated wetlands. Approximately 0.344 acres of CL-23 and CL-10, which comprises emergent and scrub-shrub wetland, will be temporarily disturbed to complete the horizontal direction drill (“HDD”) crossing. A small amount of fill totaling 0.022 acres will be placed in the wetlands to install the supporting infrastructure associated with the underground cable installation (i.e., transition/riser structures and vaults).

69. Approximately 35 acres of state regulated forested wetlands will be cleared and converted to emergent and scrub-shrub wetland within the Proposed ROW. The NYSDEC advised NEETNY that compensatory wetland mitigation is required for the conversion of state regulated forested wetlands to emergent and scrub-shrub wetlands. In correspondence sent to NEETNY on July 24, 2019, the NYSDEC notified NEETNY that the mitigation ratio for loss of forested wetlands shall be 2:1. NEETNY is in the process of developing a Wetland Mitigation Plan to offset the conversion on forested wetland associated with the Project, and the plan will be included in the EM&CP.

70. Mitigation strategies will be utilized to address short-term (temporary) wetland impacts during construction. Sediment and erosion control methods will be implemented, which may include silt fencing, use of water bars, and

planting/seeding/mulching of exposed soils to prevent soil erosion and sedimentation in nearby wetlands and surface waters due to runoff. Wetland disturbance will be minimized to the extent practicable by scheduling construction activities during drier periods of the year, staging construction materials outside of wetlands when possible, and utilizing timber mats when moving equipment in wetlands. All mitigation strategies will be included in the EM&CP.

71. It is expected that Project construction activities in wetlands and other waters over which the USACE has regulatory jurisdiction will be authorized by the USACE under Section 404 of the Clean Water Act (33 U.S.C. § 1344); this authorization will be sought from the USACE concurrently with the submission of the EM&CP for approval.

e. Wildlife

72. As set forth in Exhibit 4 of the Application, a desktop review of publicly available data sources was conducted to identify the distribution of wildlife potentially occurring within the vegetation communities in the Project Area. Distribution maps from the NYSDEC Amphibian and Reptile Atlas were reviewed to assess the presence of reptile and amphibian species potentially occurring in the Project area (NYSDEC 2007). Avian species potentially occurring in the Project area were identified based on records from The Second Atlas of the Breeding Birds in New York State (McGowan and Corwin 2008). A review of the Checklist of Amphibians, Reptiles, Birds and Mammals of New York State, Including Their Legal Status (NYSDEC 2010) was conducted to identify mammals that may be common in the area.

73. Wildlife habitats along the Proposed ROW includes undeveloped forest and shrub land, interspersed with agricultural land. A cleared and maintained electric

transmission corridor borders the western side of the Proposed ROW, while the eastern side is bordered by a similar composition of vegetation communities as occurs within the Proposed ROW. The transition zone between the forested and shrub habitats within the Proposed ROW and adjacent cleared corridor support a large number of animal species. The forested and shrub upland and wetland habitats within the Proposed ROW also provide habitat for numerous bird, mammal, reptile, and amphibian species. Open area communities in the Proposed ROW, such as those found in actively cultivated areas, provide grazing habitat for a wide variety of wildlife species, such as white-tailed deer, wild turkey, raccoon, gray and red squirrel, cottontail rabbit, and Eastern chipmunk.

74. Wildlife occurring on the proposed switchyard sites includes species noted above in the open area communities. White-tailed deer and wild turkey were observed on both switchyard sites during field surveys.

75. Wildlife species and habitat occurring within the Project area are common throughout Erie and Niagara Counties. Wildlife species may experience temporary displacement during construction due to vegetation clearing and noise from construction activities. These effects will be short-term in duration and limited within, and adjacent to, the existing Utility Corridor. Wildlife species will likely seek temporary shelter in suitable habitat in adjacent areas and those species preferring edge and early successional habitats are expected to return following construction. Removal of woody vegetation during Project construction and maintenance will likely require some wildlife species to seek suitable habitat in adjacent areas. There will be areas where forested communities will be permanently converted to other community types (i.e., old field, shrub land, shallow emergent wetland, etc.). Species that require forest

cover types for food, shelter, and nesting may be affected. However, land cover adjacent to the ROW largely consists of the same community types to be disturbed during construction. Therefore, significant loss of forage, shelter, and nesting habitat on a local or regional basis is not anticipated.

76. A letter request was submitted to the New York Natural Heritage Program (“NYNHP”) on November 8, 2017, for information regarding the presence of state-listed threatened and endangered species and unique natural communities in the Project area. A response from the NYNHP dated December 20, 2017, identified pied-billed grebe (*Podilymbus podiceps*; state threatened), northern long-eared bat (*Myotis septentrionalis*; state threatened), northern brook lamprey (*Ichthyomyzon fossor*; state rare), bigmouth shiner (*Notropis dorsalis*; state rare), and bigeye chub (*Hybopsis amblops*; state rare) as recorded in the vicinity of the Project (Chaloux 2017).

77. NEETNY consulted with NYSDEC regarding potential impacts on pied-billed grebe from construction and operation of the Project, in particular near the East Stolle Switchyard. NYSDEC indicated that the proposed switchyard site, adjacent to the existing NYSEG Stolle Road Substation, is an acceptable location given the distance from the sensitive habitat. Based on the distance of the proposed East Stolle Switchyard and East Stolle Tie-Ins from the wetland complex supporting the pied-billed grebe, no impacts on this species are expected from construction and operation of the Project.

78. All Project activities will occur greater than 3 miles from a documented northern long-eared bat hibernaculum in the Town of Newstead. Therefore, construction and operation of the Project is not anticipated to affect the hibernaculum.

79. The northern brook lamprey and bigmouth shiner have been documented in Little Buffalo Creek. If during final design a need is identified to install an access road across Little Buffalo Creek or any of its tributaries, NEETNY will consult with DPS Staff and NYSDEC to develop appropriate avoidance and minimization measures to prevent impacts on northern brook lamprey and bigmouth shiner. Based on historical records, the bigeye chub could potentially be present in Cayuga Creek in the town of Lancaster. The Proposed Line will span Cayuga Creek. Hand clearing will be required within 50 feet of the stream top of bank, but no permanent infrastructure will be placed closer than 50 feet and no access roads will be constructed across the stream. Consequently, construction and operation of the Project will not impact the bigeye chub.

80. In State-regulated wetlands (WO-13, WO-15, WO-21, WO-25 and WO-37) where there are potential breeding populations of the Western Chorus Frog, NYSDEC requests, to the extent practicable, the Certificate Holder to put construction mats in place before the start of the breeding window (April 1 through May 31). The Certificate Holder will provide all workers with pertinent information on sensitive resources in the Project area in accordance with Certificate Condition 60 and paragraph 10 of Section A of Appendix E.

f. Topography and Soils

81. The Project is located within the Erie-Ontario Lowland physiographic province to the north and the Allegheny Plateau physiographic province to the south, while Niagara County lies wholly within the Erie-Ontario Lowland province (ESRI 2018). The Proposed ROW is distributed almost equally within the two provinces.

82. The Erie-Ontario Lowlands has little significant relief and typifies topography of an abandoned lakebed. The contrasting Allegheny Plateau contains steep valley walls, wide ridgetops, and flat-topped hills (USDA 1986). Topography crossed by the Proposed ROW is nearly horizontal, with the ground surface sloping gently from south to north at less than 15 feet per mile. Elevation ranges from approximately 850 feet above mean sea level (amsl) near the southern end of the Project, to approximately 580 feet amsl at the crossing of Tonawanda Creek near the northern end.

83. The Proposed ROW is underlain by bedrock of the Middle Silurian and Middle and Upper Devonian periods, with the oldest members occurring to the north. The bedrock dips slightly (less than 1 degree) south, and is comprised of layers of limestone, dolostone, and shale with minor occurrences of sandstone and evaporate (Isachsen et al. 2000).

84. Glacial deposits overlie bedrock in the Proposed ROW. These include sorted and stratified lacustrine sand, silt and clay; and unsorted, unstratified glacial till. Till is a heterogeneous mix of clay and silt to boulder-sized particles mobilized as glaciers advanced and deposited as they receded. Recent (less than 10,000 years) alluvial deposits are also found in the overburden (Isachsen et al. 2000).

85. Local surficial deposits generally range in thickness from absent (where bedrock crops out), to tens of meters (Natural Resource Conservation Service [“NRCS”] 2018). Sand and gravel deposited in glacial lakes provide an important economic resource in the Project area.

86. Based on a review of data available from the USGS and NYSDEC, nine sand and gravel mines or quarries, roughly 390 natural gas wells, and one mineral refinery have been identified within the 3-mile vicinity of the Project (USGS, NYSDEC 2018).

However, with the exception of one abandoned natural gas well, none of the above resources were mapped within the Proposed ROW or the footprints of the proposed switchyards. The Applicant did not find any evidence of the one abandoned natural gas well within the Proposed ROW during visual investigation of the area. As a precaution, the Applicant will identify the approximate location of the single abandoned natural gas well mapped within the Proposed ROW on the Plan and Profile drawings in the EM&CP.

87. In general, poor natural drainage is a principal soil management issue in the Erie-Ontario Lowland soils found in the northern portion of the Project area, while erosion is an issue in the Allegheny Plateau soils found in the south. Loam with varying proportions of silt, sand, and gravel is the dominant texture. Drainage of soils varies widely, from very poorly to excessively drained (NRCS 2018).

88. County-level soil survey information from the USDA NRCS Soil Survey Geographic (“SSURGO”) database was reviewed to assess the soil types within the Proposed ROW. Analysis of SSURGO data indicates 67 individual soils are within the Proposed ROW. Fifty-one of the 67 soil units encountered within the Proposed ROW are classified as follows with respect to agricultural considerations: (i) 21 are classified as Prime Farmland, if drained; (ii) 19 are classified as Prime Farmland; and (iii) 11 are classified as Farmland of Statewide Importance as defined by the USDA. However, these soil units do not necessarily correspond to active agricultural areas.

89. As noted in Exhibit 4 of the Application, extensive alterations of slope and gradient are not anticipated for any Project components. After construction activities are complete, soils will be re-graded to pre-construction contours, and compacted soils will be returned to their native state. Construction in agricultural areas will be managed

to protect farm soils from erosion, compaction, and soil mixing. There are no known geologic features expected to affect the integrity of the proposed structures, as demonstrated by the long-standing presence of existing transmission lines within the NYSEG utility corridor.

90. The avoidance, minimization, and mitigation measures for disturbed soils and topography along the Project ROW, access roads, laydown areas, and marshaling yards will be specified in the EM&CP.

91. Construction in active agricultural areas will be managed to protect farm soils from erosion, compaction, and soil mixing. Consistent with NYSDAM recommendations, NEETNY will use timber mats where access is required through agricultural areas, in accordance with NYSDAM Guidelines for Electric Transmission Right-of-Way Projects. Best management practices (“BMPs”) will be identified in the EM&CP to minimize topsoil disturbance. Detailed restoration procedures will also be included in the EM&CP.

g. Transportation

92. Two public-use airports and one private-use airport are located within the maximum imaginary surface horizontal distance threshold (20,000 feet) for FAA notification. Merkel Airport is a private-use airstrip in Clarence Center, New York, located 3.1 miles west of the Proposed Line. The Akron Airport, a privately owned airport that is open to the public, is located approximately 2.8 miles east of the Proposed Line in Akron, New York. Based on the length of the runways and height of proposed transmission structures, the Project would not cross the imaginary surfaces of the Merkel Airport or the Akron Airport.

93. The Buffalo-Lancaster Regional Airport is a public airport located in the town of Lancaster approximately 1-mile northwest of the Proposed Line. Transmission structures 114 and 115 would be within 6,500 feet from the runway at the Buffalo-Lancaster Airport and, based on their proposed height (130 feet), would cross the FAA imaginary surface for notification (14 CFR §77.9). Based on a preliminary evaluation of FAA standards for determining obstructions to air navigation that consider visual approaches and takeoff and landing areas (14 CFR §77.15, §77.17, §77.19) these transmission structures may be considered an obstruction to air navigation at the Buffalo-Lancaster Regional Airport. A Notice of Proposed Construction or Alteration will be submitted to the FAA to confirm that the proposed construction activities in the vicinity of the airport will not impact air navigation or airport operations.

94. The Proposed Line crosses rail lines operated by CSX in the town of Alden. This line accommodates freight as well as Amtrak's Empire Line intercity passenger service between Buffalo and Albany. Amtrak operates four daily roundtrip passenger trains along this stretch of the rail line (New York State Department of Transportation ["NYSDOT"] 2009). A second rail line used for freight and operated by Norfolk Southern Railway is crossed by the Proposed Line in the town of Lancaster.

95. NEETNY is coordinating with CSX and Norfolk Southern Railway regarding the crossing of the two rail lines. The closest transmission structure to the CSX rail line is set back approximately 95 feet from the rails. The closest transmission structure to the Norfolk Southern Railway is setback approximately 150 feet from the rails. Both transmission structures are setback farther from the rails than existing structures adjacent to the Proposed Line. The crossings will be designed to meet the railway's clearance requirements, National Electric Safety Code ("NESC") requirements, and to

ensure there is no adverse impact on the safe operation of the railroad. Construction activities will be coordinated with the active rail lines to ensure that they do not conflict with railroad operations.

96. The Proposed Line crosses 23 public roads, including Interstate 90, U.S. Highway 20, four state routes, and 10 county roads. Throughout construction, the Project ROW will be accessed at these public road crossings and potentially from new or existing construction access roads. The specific locations of access points to the ROW from local roadways will be developed with consideration for the maintenance of safe traffic operations. The EM&CP will address traffic control measures, including temporary signs, construction entrance locations, procedures for the movement of equipment and materials to the ROW, and potential road closure locations. The EM&CP will also identify potential temporary storage locations for materials and equipment that will be used for construction of the Project. The traffic control measures set forth in the EM&CP will also address procedures for conductor stringing to ensure maintenance and protection of traffic (“MPT”) during construction of the Project.

97. All work within state highway and local road ROWs will be designed and performed in accordance with all applicable safety and traffic standards, including the requirements contained in 17 New York Codes, Rules, and Regulations Part 131 – *Accommodation of Utilities within State Highway Right-of-Way*; applicable standards from the American Association of State Highway and Transportation Officials; the Manual of Uniform Traffic Control Devices; the Highway Design Manual; the Policy and Standards for Entrances to State Highways; the Accommodation Plan; and NYSDOT 2018 Standard Specifications. BMPs, as detailed in the EM&CP, will be employed to prevent the placement of materials onto local roadways, and all soil

deposited outside of the limits of disturbance or on public roadways will be removed in a timely manner.

98. The Interstate 90 crossing will be installed underground and will comply with permit conditions of the New York State Thruway Authority.

99. The Proposed Line will cross the Lancaster Heritage Trail in the Town of Lancaster. The Clarence Pathways Trail will be crossed by the Proposed Line in the Town of Newstead. Measures will be included in the EM&CP to ensure the safety of pedestrians and trail users during construction. Design and construction of the Proposed Line will follow the NESC for clearances.

h. Water Quality and River Corridors

100. There are no rivers designated as National Wild and Scenic Rivers or under study for such designation within 3 miles of the Project. There are also no State Wild, Scenic and Recreational Rivers located within 3 miles of the Project.

101. The Proposed Line crosses Cayuga Creek in the Buffalo River Watershed, and Cayuga Creek and Tonawanda Creek in the Niagara River Watershed. The Proposed Line will span Cayuga and Tonawanda Creeks alongside the existing NYSEG lines such that no direct impacts on or impediments to access these streams will occur. Proper erosion and sediment controls will also be installed where structures are located in proximity to these stream crossings, as well as at crossings of any of these streams' tributaries. In summary, the Project will not conflict with conservation efforts in the Buffalo River or Niagara River watersheds.

102. Because the vast majority of the Proposed Line will be installed overhead, structures have been located to span streams and avoid the discharge of fill material such that a USACE permit pursuant to Section 404 of the Clean Water Act will not be

required for those areas. Additionally, the Proposed Line will not be placed in, on, or over a navigable water body. Accordingly, a permit under Section 10 of the 1899 Rivers and Harbors Act is not required.

103. Project-related impacts to surface waters could potentially result from clearing and matting in areas adjacent to, within, and downstream of the Proposed ROW for construction access and installation and maintenance of the Proposed Line. Spills, including diesel and gasoline fuels, lubricating oils, and cooling fluids, may result from operation of construction equipment and vehicles. These types of spills would likely be confined to work sites which will limit the potential flow into surface waters. All spills will be cleaned up in accordance with the applicable regulations, and in accordance with a spill plan to be prepared for the Project and included in the EM&CP.

104. Vehicular access across streams and other watercourses will be avoided, to the extent possible. Where equipment stream crossings are necessary, NEETNY will span the streams with timber mats or air bridges to avoid disturbing the stream beds.

105. Stream crossings will utilize timber mats and other minimally intrusive bridge materials designed to minimize stream bed and bank disturbance and water quality impacts. They will be installed at right angles to the stream, where practicable, and will be designed appropriately for one traffic lane. All stream crossings and specific crossing techniques will be included in the EM&CP.

i. Noise

106. Temporary noise sources associated with the Project will include construction activities, such as vegetation clearing, grading and excavation, and structure installation in both the Proposed ROW and at the proposed switchyards. Noise from

operation of the Project will include the corona effect of the Proposed Line under atmospheric conditions, such as rain, fog, and high humidity, and from routine inspection and maintenance of the Proposed Line and switchyard. Operation of the proposed Dysinger and East Stolle Switchyards will result in new sources of noise during post-construction daily operations.

107. Overhead transmission line construction will generate noise levels that are periodically audible. The primary sources of construction noise will be associated with equipment operation; use of heavy-duty vehicles; grading and foundation work activities; and equipment use for the transmission lines wire stringing, tower transportation, and erection. A significant reduction in the potential impact of construction noise associated with construction will result from construction occurring over relatively short 50- to 400-foot stretches. Work in the proximity of any single general location along the Proposed Line will likely last approximately a few days to one week, as construction activities move along the Proposed ROW. Therefore, no single receptor will be exposed to significant noise levels for an extended period.

108. Noise generated by transmission lines typically contributes very little to area noise levels when compared to other common noise sources, such as motor vehicles, aircraft flyovers, and industrial sources. However, because sound impacts related to the addition of the Proposed Line are expected to be low-level and generate corona sound levels below the recommended guideline limits to avoid the potential for adverse noise impacts on public health and safety in accordance with NYSDEC policy limits, the operation of the Proposed Line is not expected to result in adverse noise impacts.

109. Noise modeling shows that the noise contribution from the operation of the Dysinger Switchyard at the nearest residence to the west (R2) is 33.5 dBA, and for the

nearest residence to the north (R1) is 36.5 dBA. These levels are below the Commission standard requirement for transmission facilities and substation designs not to exceed a maximum noise level of 40 dBA Leq without prominent tones (for both daytime and nighttime). Noise modeling shows that the noise contribution from the operation of the East Stolle Switchyard at the nearest residence to the Northeast (R1) is 27.1 dBA and at the nearest residence to the northwest (R2) is 24.0 dBA. These levels are below the Commission standard requirement for transmission facilities and substation designs not to exceed a maximum noise level of 40 dBA Leq without prominent tones (for both daytime and nighttime). Substation maintenance will generate short-term, daytime traffic noise during Project maintenance and inspection that is not expected to result in adverse noise impacts.

j. Communications

110. The Project is not expected to have any adverse effects on communications (e.g., radio, cell phone, and television) during construction or operation. NEETNY will comply with the applicable standards of the NESC in relation to appropriate spacing between power and communication cables. As part of the final design that will be provided in the EM&CP, NEETNY will consult with any third parties with communication cables within or adjacent to the Proposed ROW to ensure that appropriate clearances are maintained.

111. During operation, Project facilities are not anticipated to result in interference with radio or television reception. Generally, transmission lines do not cause interference with radio or television reception because the level of interference is very low at the ROW's edge. In addition, all television broadcasts are required to broadcast exclusively using digital broadcasting reducing the likelihood of noise interference

from a transmission line. If NEETNY receives any complaints of suspected interference from the Proposed Line, these complaints will be investigated and resolved by NEETNY consistent with certificate conditions.

112. NEETNY will depict any existing underground facilities on the Plan and Profile drawings in the EM&CP based on input from the facility owner and any above ground features. Any existing underground facilities that would potentially interfere with the construction of the Project will be verified via an actual field mark out and surveyed for accurate placement on the drawings for the EM&CP.

k. Electric and Magnetic Fields

113. The Electromagnetic Field (“EMF”) Calculations Report (Exhibit 16 of the Evidentiary Record) indicates that the maximum levels at the edge of the Proposed ROW are below the levels recommended in the Commission’s Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities.

114. Under the Commission’s September 11, 1990, “Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities,” the peak field at the edge of the ROW as measured at one meter above ground when the circuit phase currents are equal to the winter normal conductor rating shall not exceed 200 milligauss (“mG”). The calculated magnetic field for the winter normal rating for the Project varies from 5.04 mG to 58.12 mG at the edge of the NYSEG utility corridor for the various Project cross sections investigated, which is within the standard limit. Under the standard set forth in Commission Opinion No. 78-13, the maximum electric field at the edge of the ROW shall not exceed 1.6 kV/m. The calculated electric field for the Project ranges from 0.023 kV/m to 0.19 kV/m for the various cross sections analyzed, which is within the standard limit.

D. The Availability and Impact of Alternatives

115. The Application and exhibits agreed upon by the Signatory Parties to be admitted as record evidence in this proceeding describe the availability and impact of alternatives to the Project and are briefly summarized below. Considering all factors, the Signatory Parties agree that the Project as described in Appendix B is preferable, on balance, to any of the alternatives considered. The location is preferred due to its relatively minimal impacts to wetlands, floodplains, topography, and residential areas. The selected route and configurations are preferred because they use existing electric transmission corridors and avoid or minimize impacts to existing land uses.

Alternative Routes

116. NEETNY submitted to the NYISO alternative routes that did not utilize the NYSEG Utility Corridor for the Project. However, given the Commission's directives to utilize existing ROW to the extent practicable, NYISO selected the Project which used the NYSEG Utility Corridor. NEETNY considered alternative methods to implement the Project. Such methods included alternative switchyard sites; alternative routes within the NYSEG utility corridor; design alternatives for the Proposed Line; and alternative transmission line technologies.

117. With respect to the switchyard alternatives, the Signatory Parties considered and rejected Dysinger Switchyard Alternative Site 2 and East Stolle Alternative Sites 2 and 3 identified in Application Exhibit 3, Section 3.3.

118. The Signatory Parties agree that Dysinger Switchyard Alternative Site 1 is the preferred location. Site 1 has several advantages over Dysinger Switchyard Alternative Site 2 including proximity to the NYSEG 345 kV Kintigh lines, a direct route for tie-ins to the NYPA 345 kV Niagara lines on property for which NEETNY has an option

to purchase, and reduced wetland impacts. Dysinger Alternative Site 1 is also well screened from residences along Akron Road. In contrast, Dysinger Alternative Site 2 is closer in proximity to a residence, has high visibility from Simms and Block Church roads, and greater wetland impacts than Site 1. Site 2 also requires a longer tie-in to the NYSEG 345 kV Kintigh lines than Site 1.

119. The Signatory Parties also agree that East Stolle Alternative Site 1 is the preferred location. East Stolle Alternative Site 1 has several advantages over the alternative sites, including proximity to the NYSEG Stolle Road Substation that minimizes tie-in distances. The site will allow the switchyard and tie-ins to be located within NYSEG's existing ROW. The site also has natural screening from the nearest public road and residences. In comparison, East Stolle Alternative Site 2 would have impacts on the regulated buffer of a NYSDEC-mapped wetland and is in close proximity to a sensitive habitat for a threatened species. Similarly, the East Stolle Alternative Site 3 would have potentially significant wetland impacts. The East Stolle Alternative Site 3 also lacks natural screening from nearby residences.

120. With respect to the route in the NYSEG utility corridor considered for mitigating AC Interference levels on NYSEG-owned gas facilities, the Signatory Parties agree that the Proposed Route described in Appendix B will be used, and that any AC Interference as a result of the project on NYSEG-owned gas facilities will be mitigated to guidelines set forth by the National Association of Corrosion Engineers.

121. The Signatory Parties agree that the use of a steel monopole with vertical configuration of insulators is the preferred design. In contrast to the monopole design, an H-frame design or a steel monopole design with a delta configuration would require

a larger footprint or require more tree clearing, resulting in greater environmental impacts.

122. NEETNY considered high voltage direct current (“HVDC”) technology and underground construction as potential alternative transmission technologies to the proposed overhead 345 kV transmission line. The Signatory Parties agree that these alternatives should not be pursued.

123. HVDC technology is not cost effective for a 20-mile transmission line. To utilize HVDC technology for the Project, AC/DC converter stations would have to be built at both ends of the HVDC segment – substantially increasing costs of the Project while providing no compelling technological advantage. Further, the AC/DC converter stations would be required in addition to the proposed switchyards, creating a greater disturbance and requiring additional private land acquisition.

124. NEETNY considered three scenarios related to underground transmission line construction: (1) placement of the entire line underground; (2) underground construction at forested wetland crossings; and (3) underground construction at the Interstate 90 (I-90) crossing.

125. For the engineering, environmental, and economic reasons described below, the Signatory parties do not propose underground construction for the entire line. Underground cable installation would involve excavating a trench along the entire length of the line with heavy machinery resulting in unavoidable direct impacts on streams, wetlands, and possibly other sensitive habitats. Numerous roadways would also be crossed resulting in impacts on traffic patterns and/or increased costs associated with trenchless crossing techniques to cross the roadways. Moreover, underground construction would require an extended construction duration, with the potential for

blasting, and various heavy equipment, laydown yards, and post-construction monitoring. In contrast, an overhead transmission line largely avoids or minimizes these types of impacts by spanning the affected resources.

126. The cost of underground construction would also be considerably higher than overhead construction. Higher costs result from much longer construction duration and significantly more earthwork. NEETNY estimates the cost to install the Proposed Line underground would be on the order of 8 to 10 times higher than overhead installation. In addition, the NYISO, at least in part, considered the cost effectiveness of NEETNY's proposed overhead construction for the Proposed Line when it selected the Project as part of the Western New York Public Policy Transmission Need competitive solicitation.

127. Underground construction using trenchless methods (e.g., HDD) was considered to minimize clearing of forested wetlands. The Project crosses approximately 16 forested wetland complexes, and crossing distances range in size from approximately 40 feet to 4,000 feet. The utilization of additional underground construction would potentially subject the electrical performance standards of the transmission line to additional overhead to underground termination/transitions failings. The cost of underground construction at each of the forested wetlands would also be considerably higher than overhead construction. Consequently, the Signatory Parties determined that completing multiple HDDs at the forested wetland crossings is not practical due to reliability concerns, increased maintenance, and increased costs.

128. The NYSTA Occupancy and Work Permit Accommodation and Guidelines state that new utility crossings need to be placed underground, "...except in limited

circumstances where the Authority, in its discretion, determines that placement of Utilities underground is not feasible” (NYSTA 2010).

129. An underground crossing of I-90 would need to be completed by an HDD. The construction footprint to complete the HDD would cover approximately one acre for the drill entry and exit points, which is larger than the area required to complete an overhead installation. In addition, the cost to complete an HDD crossing of I-90 would be higher compared to an overhead crossing. NEETNY submitted a waiver request to the NYSTA to allow an overhead crossing of I-90 in an effort to reduce Project costs and given that there were existing electrical transmission line overhead crossings. However, on June 13, 2018, NYSTA denied NEETNY’s waiver request to cross overhead, stating “...we found no applicable reason why the electrical line cannot be installed underground.” Therefore, the Signatory Parties propose an underground crossing of I-90, consistent with NYSTA’s crossing permit requirements. The proposed Thruway Crossing will consist of two duct banks and associated equipment in order to match the rating of the overhead transmission line component of the Project.

130. The Signatory Parties recognize that a no-action alternative is not a viable option. NEETNY was selected by the NYISO to construct the Project to relieve congestion of the current electric system in Western New York (e.g., Western New York Public Policy Transmission Need).

E. Conformance to Long-Range Plans for Expanding the Electric Power Grid

131. The Project conforms to the requirements and planning objectives of the NYISO. NEETNY has executed a development agreement with NYISO. The development agreement requires NEETNY to develop and construct the Project and

provide updates to key milestones, and has a required in-service date of June 1, 2022. Without the proposed Project in place, greater utilization of renewable energy from the Niagara hydroelectric facility and additional imports of renewable energy from Ontario would not occur. Furthermore, the production cost benefits, congestion reduction, reduction in CO₂ emissions, improved reliability and operational benefits, and local economic benefits resulting from construction and operation of the Project would not be realized. In addition, New York State has established renewable goals seeking to achieve 70% renewable energy by 2030. For these reasons, the no-action alternative is not considered a viable option.

F. System Impact Study

132. The System Impact Study (“SIS”) was issued November 17, 2017. The Facility Studies (“FS”) were issued June 6, 2019. The SIS and FS were performed under the applicable NYISO Tariff provisions in Attachment P, Transmission Interconnection Procedures (“TIP”), of NYISO Open Access Transmission Tariff (“OATT”). The NYISO has indicated that the Project will require upgrades and expansions to existing transmission facilities that are required to satisfy the Western New York Public Policy Transmission Need. Transmission Owners (“TO”) whose facilities are affected by the project include NYSEG, Rochester Gas and Electric (“RG&E”), National Grid (“NG”), and NYPA. The confidential SIS was provided in Attachment J to the Application.

G. State and Local Laws

133. The Signatory Parties agree that the Project, as proposed in this Joint Proposal, fully complies with the substantive provisions of all applicable state laws, including

without limitation the PSL, the Public Authorities Law, the Environmental Conservation Law and the Agriculture and Markets Law.

134. Exhibit 7 of the Application identifies, for each local jurisdiction, every substantive local legal provision (ordinance, law, regulation, standard, and requirement) potentially applicable to the Project, as well as every such local legal provision that the Applicants request that the Commission not apply because, as applied to the Project, such local legal provision is unreasonably restrictive in view of the existing technology, factors of costs or economics, or the needs of consumers. Except for those provisions the Applicants specifically requested that the Commission refuse to apply, the Applicants will comply with, and the location of the Project as proposed conforms to, all substantive local legal provisions that are applicable to the Project. Due to the preemptive effect of PSL Section 130, procedural requirements to obtain any approval, consent, permit, certificate or other condition for the construction or operation of the Project do not apply.

135. The following are examples of local laws that the Applicants request the Commission not apply, as well as the corresponding justifications for such requests:

- a. noise, odor, emission, vibration, and weight prohibitions, on the grounds that these impacts from construction equipment are technically impossible or impracticable to limit to levels specified in the ordinances, and mitigation will be accomplished by the Project's use of industry standard methods that muffle heavy equipment noise and emissions and that suppress the spread of dust;
- b. minimum lot width, frontage, depth and setback requirements, because it is not possible for the transmission line component of the Project to comply with the lot dimension provisions because it is located within an existing NYSEG

Utility Corridor and crosses multiple roads. Individual structure locations along the transmission line will depend upon possible span lengths regardless of dimensional requirements, and the size and configuration of any necessary easements will be based on required clearance and reliability criteria rather than minimum lot size; and,

- c. maximum height requirements, because compliance is technologically impossible and conflict with NESC requirements.

136. No local jurisdiction has filed any objection to the Applicant's requests, set forth in Exhibit 7 of the Application, that the Commission not apply specified local laws. The Signatory Parties agree that the justifications set forth in Exhibit 7 provide sufficient basis for the Commission to refuse to apply the identified ordinances.

H. Public Interest, Convenience, and Necessity

137. The Applicants conducted public outreach and information efforts in support of the Project. Public Notices were published in the Buffalo News, Clarence Bee, Niagara Gazette, Depew/Lancaster Bee, and the East Aurora Advertiser for two consecutive weeks prior to filing each of the initial Article VII application. In addition, copies of the Application were provided to the following libraries for public inspection: Clarence Branch, Eden Branch, Elma Branch, Lancaster Branch, Marilla Branch, Newstead Branch, and Royalton-Hartland Community Library. Adjacent property owners were sent a Project Fact Sheet which explained the Project and provided a toll-free number (for people seeking additional information about the Project). Between July 2018 and February 2019, representatives of the Applicants engaged in conversations and in-person meetings with elected representatives of and landowners residing in the municipalities traversed by the Project. The Applicant held an informal

“open house” for the public on October 1, 2018, at The Newstead Cultural Center in Akron, NY. The Applicants conducted informational meetings prior to the Commission’s Public Statement Hearings held on February 13, 2019, and representatives of the Applicants familiar with all aspects of the Project were available to informally address questions and concerns from the public. On February 14, 2019, a site visit was conducted with the Administrative Law Judge and interested parties. Shortly before commencement of construction, the Applicants will notify adjacent landowners and residents of construction commencement and include a safety message and the toll-free phone number that can be used to obtain additional information.

IV. PROPOSED FINDINGS

138. The Signatory Parties agree that the record in this proceeding supports the Proposed Commission Findings set forth in Appendix C attached hereto.

V. PROPOSED CERTIFICATE CONDITIONS

139. The Signatory Parties agree that the Proposed Certificate Conditions set forth in Appendix D attached hereto are acceptable and appropriate for inclusion in a Certificate of Environmental Compatibility and Public Need authorizing construction and operation of the Project.

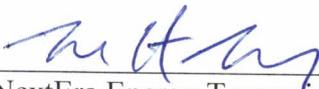
VI. ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN

140. The Signatory Parties agree that the specifications for the development of the EM&CP set forth in Appendix E attached hereto are acceptable and appropriate for application to the Project as described herein.

VII. WATER QUALITY CERTIFICATION

141. The Signatory Parties agree that the record in this proceeding supports the water quality certification substantially in the form of Proposed 401 Water Quality Certification set forth in Appendix H attached hereto.

IN WITNESS WHEREOF, the Signatory Parties hereto have this day signed and executed this Joint Proposal



NextEra Energy Transmission New York, Inc. :

By: Leonard H. Singer, Esq.
Couch White LLP
Attorneys for NEETNY
540 Broadway
Albany, New York 12201

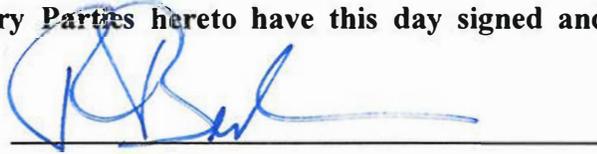
April 22, 2020

IN WITNESS WHEREOF, the Signatory Parties hereto have this day signed and executed this Joint Proposal



Staff of the New York State Department of Public
Service designated to represent the public interest in
this proceeding
By: Heather P. Behnke

IN WITNESS WHEREOF, the Signatory Parties hereto have this day signed and executed this Joint Proposal

A handwritten signature in blue ink is written over a solid horizontal line. The signature is stylized and appears to be the name 'Thomas Berkman'.

New York State Department of Environmental
Conservation
By: Thomas Berkman, Deputy
Commissioner and General Counsel

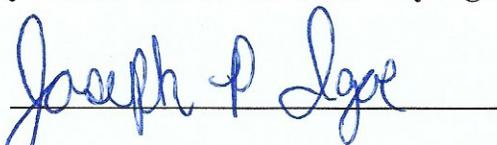
IN WITNESS WHEREOF, the Signatory Parties hereto have this day signed and executed this Joint Proposal



New York State Department of Agriculture &
Markets

By: Tara B. Wells, Senior Attorney

IN WITNESS WHEREOF, the Signatory Parties hereto have this day signed and executed this Joint Proposal

A handwritten signature in blue ink, reading "Joseph P. Igoe", written over a horizontal line.

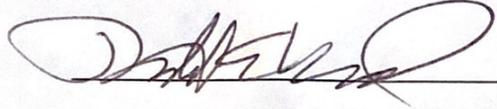
New York State Thruway Authority

By: Joseph P. Igoe

Deputy General Counsel

Apr. 22, 2020

IN WITNESS WHEREOF, the Signatory Parties hereto have this day signed and executed this Joint Proposal

A handwritten signature in black ink, appearing to read "Dwight E. Ranyuck", written over a horizontal line.

Challengers of the Empire State Line

By: DWIGHT E. RANYUCK

Attorney for Challengers of the
Empire State Line

APPENDIX A
LIST OF TESTIMONY, AFFIDAVITS AND EXHIBITS TO BE ADMITTED

Testimony:

Direct Testimony of Brian Duncan (adopted by Richard Allen); Michael Lannon (adopted by John Hawkins, Jr.); Daniel Mayers; Aziz Brott (adopted by Daniel Mayers); and Greg Netti sponsoring Exhibits 1 through 9 (Exhibits 1 through 9 to the Application as supplemented in this proceeding (the “Application”)), Exhibits 10 through 15 (Exhibits E-1 through E-6 to the Application), and Exhibits 16 through 25.

Affidavits:

Affidavits of Richard Allen; John Hawkins, Jr.; Daniel Mayers; Greg Netti; and Johnbinh Vu.

Exhibits:

- Exhibit 1: The Application, and General Information (Exhibit 1 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 2: Location of Facilities (Exhibit 2 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 3: Alternatives (Exhibit 3 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 4: Environmental Impacts (Exhibit 4 to the Application) (DMM Item No. 1 - filed 8/10/2018) (Updated Exhibit 4, Tables 4.6-5 and 4.6 – DMM Item No. 40 – Filed 4/19/2019, DMM Item No. 57 – Filed 3/13/2020; Updated Exhibit 4, Table 4.3-3 – DMM Item No. 57 – Filed 3/13/2020)
- Exhibit 5: Design Drawings (Exhibit 5 to the Application) (DMM Item No. 1 - filed 8/10/2018) (Updated Figure 5-2 – DMM No. 40 – Filed 4/19/2019, DMM Item No. 57 – Filed 3/13/2020, DMM Item No. 58 – Filed 3/27/2020)
- Exhibit 6: Economic Effects of Proposed Facility (Exhibit 6 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 7: Local Ordinances (Exhibit 7 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 8: Other Pending Filings (Exhibit 8 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 9: Cost of Proposed Facilities (Exhibit 9 to the Application) (DMM Item No. 1 - filed 8/10/2018) (Attachment I to Exhibit 9: Cost of Proposed Facility was filed with the

Records Access Officer on 8/10/2018)

- Exhibit 10: Description of Proposed Transmission Facilities (Exhibit E-1 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 11: Other Facilities (Exhibit E-2 to the Application) (DMM Item No. 1 - filed 8/10/2018) (Updated Figures E-2.6 and E-2.7 – DMM No. 40 – Filed 4/19/2020)
- Exhibit 12: Underground Construction (Exhibit E-3 to the Application) (DMM Item No. 1 - filed 8/10/2018, Updated Figures E-3.1 – E-3.4, DMM-58 – Filed 3/27/2020)
- Exhibit 13: Engineering Justification (Exhibit E-4 to the Application) (DMM Item No. 1 -filed 8/10/2018)
- Exhibit 14: Effect on Communications (Exhibit E-5 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 15: Effect on Transportation (Exhibit E-6 to the Application) (DMM Item No. 1 - filed 8/10/2018)
- Exhibit 16: Application Attachments A-J (DMM Item No. 1 – Filed 8/10/2018; Updated Attachment H, Table 8 (DMM Item No. 40 – Filed 4/19/2019, DMM Item No. 57 – Filed 3/13/2020) (Attachments I and J were filed with the Records Access Officer on 8/10/2018)
- Exhibit 17: EMF Report (DMM Item No. 57 – Filed 03/13/2020)
- Exhibit 18: Project Construction Sequence
- Exhibit 19: NYISO *Western New York Public Policy Transmission Planning Report* (October 17, 2017)
- Exhibit 20: ROW Cross-Section Profiles – Figure 5-2 (10 sheets) (DMM Item No. 58 – Filed 03/27/2020)
- Exhibit 21: Aerial Location of Proposed Facility (19 sheets)
- Exhibit 22: NEETNY Responses to DPS-1 through DPS-36 (including supplemental responses) and Deficiency Responses DPS-1 through DPS-15 and DPS-PIP (including supplemental response) (Deficiency Responses DPS-1 – DPS-5, DPS-7 – DPS-11, DPS-13-DPS - 15 and DPS-PIP are located at DMM Item No. 10 –filed 11/16/2018) (Deficiency Responses DPS-6 and DPS-12 were filed with the Records Access Officer on 11/19/2018)
- Exhibit 23: NEETNY Responses to DAM-1 through DAM-4 (including supplemental

responses)

- Exhibit 24: NEETNY Responses to CESL-1 through CESL-5
- Exhibit 25: DPS Response to CESL-6
- Exhibit 26: NYSEG Responses to NEETNY 1-1, and 3-1 through 3-6
- Exhibit 27: NYSEG Responses to DPS-NYSEG-1 through 2
- Exhibit 28: NYPA Response to NEETNY 4-1
- Exhibit 29: NYPA Response to DPS-NYPA-1

APPENDIX B
DESCRIPTION AND LOCATION OF PROJECT

General Project Description

NextEra Energy Transmission New York, Inc. (NEETNY or the Applicant) proposes to construct and operate the Empire State Line Project (Project), an approximately 20-mile 345-kilovolt (kV) transmission line and associated switchyards, in the town of Royalton in Niagara County, New York, and the towns of Alden, Newstead, Lancaster, and Elma in Erie County, New York, respectively. The expected in-service date is June 1, 2022.

The Project includes a new 345 kV switchyard (Dysinger Switchyard) in Niagara County, which will become the new 345 kV hub in Western New York where seven 345 kV lines will intersect. It also includes a second new switchyard (East Stolle Switchyard) in Erie County to be connected to the existing New York State Electric and Gas (NYSEG) Stolle Road Substation. The approximately 20-mile 345 kV transmission line (Proposed Line) will connect the Dysinger and East Stolle Switchyards. In turn, the Dysinger Switchyard will be connected to the New York Power Authority (NYPA) 345 kV Niagara lines with two double circuit transmission lines approximately 0.30 miles in length and NYSEG's Kintigh 345 kV lines with two single circuit transmission lines approximately 0.15 miles in length (Dysinger Tie-Ins). The East Stolle Switchyard will be connected to the NYSEG Stolle Road Substation with a single circuit transmission line approximately 0.2 miles in length and the NYSEG 345 kV Stolle Road to Homer City transmission line with a single circuit transmission line approximately 0.2 miles in length (East Stolle Tie-Ins). Transmission line structures will consist primarily of steel monopoles.

Detailed Project Description

Proposed Transmission Lines

Proposed Line: A new approximately 20-mile 345 kV line from the proposed Dysinger 345 kV switchyard to the proposed East Stolle 345 kV switchyard. The Proposed Line will be located, to the extent practicable, 100 feet east of the existing NYSEG L65 230 kV line, measured from centerline-to-centerline.

Segment 1, Overhead Transmission Line: Starting at the Dysinger 345 kV switchyard, the Proposed Line will come out of the switchyard on the north side and run east approximately 0.06 miles to the NYSEG ROW. From mile points 0.06 to 0.60, the Proposed Line will cross over the L65 230 kV line, and head south parallel to the east of the L65 230 kV line. At mile points 0.60 to 0.70, the Proposed Line will cross underneath the existing NYPA 345 kV lines (Niagara-Rochester and Kintigh-Rochester). From mile points 0.70 to 0.87, the proposed line will then be located east of the L65 230 kV line, and west of the gas regulator station jointly owned by NYSEG and National Fuel Gas Company (NFG). The Proposed Line will continue south past the gas regulator station. From mile points 0.87 to 10.1, the Proposed Line will run south, parallel on the east side of the L65 230 kV line.

Segment 2, Underground Cable: From mile points 10.1 to 10.4, the Proposed Line will cross underneath the Thruway via HDD. The crossing will consist of two duct banks including associated equipment.

Segment 3, Overhead Transmission Line: From mile points 10.4 to 20.5, the Proposed Line will run south, parallel on the east side of the L65 230 kV line and terminate in the East Stolle Road 345 kV switchyard.

Proposed Dysinger Tie-Ins: Two double circuit transmission lines connecting the Dysinger Switchyard to the NYPA 345 kV Niagara lines and two single circuit transmission lines connecting the Dysinger Switchyard to the NYSEG 345 kV Kintigh lines. Engineering, Design and Construction of these components will be coordinated with the interconnecting transmission owners under Attachment P of the NYISO Open Access Transmission Tariff.

Proposed East Stolle Tie-Ins: Two sets of transmission lines connecting the East Stolle Switchyard to the NYSEG Stolle Road 345 kV Substation and East Stolle to NYSEG's Homer City 345 kV transmission line. Engineering, Design and Construction of these components will be coordinated with the interconnecting transmission owner under Attachment P of the NYISO Open Access Transmission Tariff.

Table 1 lists the specific design standards for the Proposed Line for the Preferred Design and Dysinger and East Stolle Tie-Ins.

**Table 1
General Line Data and System Requirements**

Criteria	Proposed Line	Niagara-Rochester-Dysinger Tie-Ins	Kintigh Dysinger Tie-Ins	East Stolle to Stolle Road Tie-In	East Stolle to Homer City Tie-In
Length	20.5 miles	0.30 miles	0.15 miles	0.2 miles	0.2 miles
Nominal Voltage	345 kV	345 kV	345 kV	345 kV	345 kV
Overvoltage Adder	10%	10%	10%	10%	10%
Conductor Design Operation Voltage	379.5 kV	379.5 kV	379.5 kV	379.5 kV	379.5 kV
Normal Rating (MVA)	1358	1358	1570	1358	1358
Long Term Emergency Rating (MVA)	1551	1551	1795	1551	1551
Number of Circuits	1	4	2	1	1
Circuit Configuration	Vertical	Vertical	Vertical/ Horizontal	Vertical	Vertical
Structure Type and Number					
Monopole – Tangent	136	2	0	0	0
Monopole – Medium Angle	4	0	0	0	0
Monopole – Dead-end	13	8	4	2	2
Riser	2	0	0	0	0
Total	155	10	4	2	2
Other Structure Design Standards					
Material	Steel	Steel	Steel	Steel	Steel
Typical Height Above Ground	110-120 feet	110-120 feet	115-120 feet	120-140 feet	120-140 feet

**Table 1
General Line Data and System Requirements**

Criteria	Proposed Line	Niagara-Rochester-Dysinger Tie-Ins	Kintigh Dysinger Tie-Ins	East Stolle to Stolle Road Tie-In	East Stolle to Homer City Tie-In
Preservative Treatment	Dull Galvanized	Dull Galvanized	Dull Galvanized	Dull Galvanized	Dull Galvanized
Color	Gray	Gray	Gray	Gray	Gray
Conductors					
Type, Material	Drake, Aluminum conductor, steel reinforced, non-specular	Drake, Aluminum conductor, steel reinforced, non-specular	Bunting, Aluminum conductor, steel reinforced, non-specular	Drake, Aluminum conductor, steel reinforced, non-specular	Ortolan, Aluminum conductor, steel reinforced, non-specular
Size	795 KCMIL	795 KCMIL	1192.5 KCMIL	795 KCMIL	1033.5 KCMIL
Quantity	2 per circuit	2 per circuit	2 per circuit	2 per circuit	2 per circuit
Overall Diameter	1.108 inches	1.108 inches	1.302 inches	1.108 inches	1.212 inches
Weight per Foot	1.093 pounds/foot	1.093 pounds/foot	1.344 pounds/foot	1.093 pounds/foot	1.163 pounds/foot
Rated Breaking Strength	31,500 pounds	31,500 pounds	32,000 pounds	31,500 pounds	27,700 pounds
Insulators					
Types	Suspension V String (Tangent Structures); Suspension I String (Angle Structures); Double String Strain (Dead-end Structures)	Suspension V String (Tangent Structures); Suspension I String (Angle Structures); Double String Strain (Dead-end Structures)	Suspension V String (Tangent Structures); Suspension I String (Angle Structures); Double String Strain (Dead-end Structures)	Double String Strain (Dead-end Structures)	Double String Strain (Dead-end Structures)

Table 1 General Line Data and System Requirements					
Criteria	Proposed Line	Niagara-Rochester-Dysinger Tie-Ins	Kintigh Dysinger Tie-Ins	East Stolle to Stolle Road Tie-In	East Stolle to Homer City Tie-In
Material	Silicon polymer	Silicon polymer	Silicon Polymer	Silicon polymer	Silicon polymer
Color	Gray	Gray	Gray	Gray	Gray

Dysinger 345 kV Switchyard

The new Dysinger Switchyard will occupy an approximately 7-acre site in the northern portion of a 49-acre parcel in the town of Royalton, Niagara County. The site is approximately 600 feet south of Akron Road and 900 feet east of Block Church Road. The new switchyard will be offset approximately 150 feet from the western edge of the NYSEG Utility Corridor, and approximately 1,500 feet north of the ROW utilized for the NYPA 345 kV Niagara lines. The site is currently used as a hayfield. The topography is nearly flat and will require minimal grading to provide a level development site.

The Dysinger Switchyard will be a four bay breaker and a half configuration with a 700 mega volt ampere (MVA) normal rated/875 MVA emergency rated phase angle regulator (PAR).

East Stolle Road 345 kV Switchyard

The new East Stolle Switchyard will occupy an approximately 6-acre site directly within the NYSEG Utility Corridor in the town of Elma, Erie County. The new switchyard will be located 500 feet north of the existing NYSEG Stolle Road Substation. The site is currently used as hayfield. The topography is nearly flat and will require minimal grading to provide a level development site.

The East Stolle Switchyard will initially be configured as a three breaker ring bus designed for future expansion into a two bay breaker and a half configuration. East Stolle Switchyard will include a 30MVAR shunt reactor.

Identified System Upgrades

NYISO has identified in its Facilities Study report for Q545A the following system upgrades:

- Niagara Station Protection Upgrades
- Kintigh Station Protection Upgrades
- Station 255 Protection Upgrades
- Stolle Road 345 kV Protection Upgrades
- Upgrade Thermal Rating at Erie Street
- Upgrade Thermal Rating at Stolle Road
- Station 80 Shunt Reactor
- Five Mile Station Upgrades
- Mountain & Lockport Station Upgrades
- Sonet Ring Integration

Engineering, Design and Construction of these components will be coordinated with the interconnecting/affected transmission owner under Attachment P of the NYISO Open Access Transmission Tariff. Additional details can be found in the NYISO Facilities Study Report for Q545A.

Property Rights

In order to construct, operate and maintain the project facilities, NEETNY is currently negotiating an easement agreement with NYSEG. NYSEG and NEETNY will file the easement agreement with the Commission pursuant to Section 70 of the Public Service Law. In order to construct, operate, and maintain the Project facilities, NEETNY will obtain the following property rights on the NYSEG ROW:

- a. An approximately 130-foot wide easement adjacent to the existing Line 65 230 kV line (Empire State Line Project [ESL] Easement) to construct, own, operate, and maintain the Proposed Line. Additionally, the Project will require two permanent aerial easements with two private landowners.

- b. An irregularly shaped easement just north of NYSEG's Stolle Road 345 kV switchyard to construct, own, operate and maintain the proposed East Stolle Switchyard.
- c. Danger Tree Rights on the east side of the proposed 130-foot easement for the Proposed Line, within the NYSEG Utility Corridor.
- d. Access road easement(s) within the NYSEG Utility Corridor in order to access the Proposed ROW to construct, maintain and operate the Project.

In addition to the NYSEG ROW, NEETNY has will require the following property rights for the project:

- a. Approximately 21 temporary construction easements with various entities in order to access the Proposed ROW to construct the Project.
- b. An option with a private landowner for the construction of the Dysinger 345 kV switchyard, which NEETNY has executed an agreement for.
- c. Danger tree rights with four private landowners
- d. Two aerial easements with private landowners

APPENDIX C
PROPOSED COMMISSION FINDINGS

1. Based upon the information provided in Exhibits 13, 19 and 22, supported by the testimony of Brian Duncan (adopted by Richard Allen), NEETNY was selected by the NYISO through its Public Policy Transmission Planning Process to construct the Project to relieve congestion of the current electric distribution system in Western New York (e.g., Western New York Public Policy Transmission Need). The Commission has held that significant environmental, economic, and reliability benefits could be achieved by relieving the transmission congestion identified in Western New York, including access to increased output from the NYPA Niagara hydroelectric facility, additional imports of renewable energy from Ontario, and system reliability benefits, specifically, increased operational flexibility, efficiency, and avoiding the need to maintain generation that would otherwise retire. NEETNY has also executed a development agreement with NYISO. The development agreement requires NEETNY to develop and construct the Project and provide updates to key milestones, and has a required in-service date of June 1, 2022. Without the proposed Project in place, greater utilization of renewable energy from the Niagara hydroelectric facility and additional imports of renewable energy from Ontario would not occur. Furthermore, the production cost benefits, congestion reduction, reduction in CO2 emissions, improved reliability and operational benefits, and local economic benefits resulting from construction and operation of the Project would not be realized.

2. Based upon the information provided in Exhibits 2, 3, 4, 14, 15, 16, 17, 18, 20, 21, 22, and 23, supported by the testimony of Brian Duncan (adopted by Richard Allen), Michael Lannon (adopted by John Hawkins, Jr.), and Daniel Mayers, the Project will be designed, constructed and operated in a manner that avoids or minimizes impacts to environmental resources. The nature of the probable environmental impacts resulting from the Project includes:
 - (a) temporary construction impacts on active agricultural lands, which will be minimized by the use of existing transmission corridors to the maximum extent practicable;
 - (b) minimal incremental visual impacts from the construction of the Proposed Line and the switchyards;
 - (c) construction impacts on certain regulated wetlands and protected streams and waterbodies;
 - (d) selective clearing of undesirable woody species or saplings on some segments of the Project's right-of-way, but because almost the entire Project will be built along existing electric transmission corridors, the amount of clearing is more limited than it would be if new corridors were being created;
 - (e) temporary disturbance and inconvenience, including noise and debris, associated with construction activities; and

- (f) maximum calculated electromagnetic fields at the edge of the Project's right-of-way that comply with the Commission's guidelines.
- 3. Based upon the information provided in Exhibits 2, 3, 4, 14, 15, 16, 17, 18, 20, 21, 22, 23, and 24, supported by the testimony of Brian Duncan (adopted by Richard Allen), Daniel Mayers, and Greg Netti, the Project represents the minimum adverse environmental impact, and minimum adverse impact on active farming operations, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. By utilizing existing transmission corridors to the maximum extent practicable, the effect of the Project on agricultural lands, wetlands, and river corridors traversed is minimized. The use of self-supporting structures will facilitate continued agricultural operations within the right-of-way.
- 4. With the exception of one crossing of the New York State Thruway, no portion of the Project will be located underground. Underground alternatives to the Project were examined; however, undergrounding the Project would have significantly increased: costs, environmental and construction impacts, and Project cost.
- 5. Based upon the information in Exhibits 13 and 19, supported by the testimony of Brian Duncan (adopted by Richard Allen), the Project conforms to the requirements and planning objectives of the New York Independent System Operator and is consistent with the Applicants' long-range plans for the expansion of their transmission facilities. The Project will serve the interests of electric system economy and reliability.
- 6. Based upon the information provided in Exhibit 7, sponsored by Aziz Brott (adopted by Daniel Mayers), Dan Mayers, and Greg Netti, the location of the Project conforms to the substantive provisions of the applicable local laws and regulations issued thereunder, except those local laws and regulations which the Commission refuses to apply because it finds, based on the justifications set forth in Exhibit 7, that as applied to the Project, such are unreasonably restrictive in view of the existing technology, or of factors of cost or economics, or of the needs of consumers whether located inside or outside of such municipality.
- 7. Based on the entire record as listed on Appendix A, the Project will serve the public interest, convenience and necessity.

APPENDIX D
PROPOSED CERTIFICATE CONDITIONS

CERTIFICATE CONDITIONS

A. Conditions of the Order

The Commission orders:

1. Subject to the conditions set forth in this Opinion and Order, NextEra Energy Transmission New York, Inc. (“NEETNY” or the “Certificate Holder”) is granted a Certificate of Environmental Compatibility and Public Need (“Certificate”) authorizing the construction and operation of the Empire State Line Project (the “Project”). The Project consists of an approximately 20-mile new overhead 345-kilovolt (kV) transmission line in the existing New York State Electric & Gas Corporation (“NYSEG”) right-of-way (“ROW”) and new associated switchyards at Dysinger and East Stolle Road, in the Town of Royalton, Niagara County, and the Towns of Alden, Newstead, Lancaster, and Elma in Erie County.
2. The Certificate Holder shall, within 30 days after the issuance of the Certificate, or within 30 days after the issuance of a final non-appealable Order by the Public Service Commission (“Commission”) in Case No. 18-E-0765 granting a Certificate of Public Convenience and Necessity to the Certificate Holder under Section 68 of the Public Service Law (“PSL”), whichever is later, file with the Secretary of the Commission (“Secretary”) either a petition for rehearing or a verified statement that it accepts and will comply with the Certificate. Failure to comply with this condition shall invalidate the Certificate.
3. The Certificate Holder shall notify the Secretary in writing should it decide not to complete construction of all or any portion of the Project within 30 days of reaching such a decision and shall serve a copy of such notice upon all parties.
4. The Certificate Holder shall construct the Project in accordance with this Certificate, with the approved Environmental Management and Construction Plan (“EM&CP”), and any subsequent Commission orders.

5. If construction of the Project hereby certified is not commenced within 18 months after the acceptance of the Certificate by the Certificate Holder, the Certificate may be vacated by the Commission with notice to the Certificate Holder and active parties.
6. The Certificate Holder may request for an extension of the 18-month commencement deadline. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least one day prior to the affected deadline.

B. Description and Location of Project

7. The proposed location of the Project is approved as set forth in the “Location of Facilities” in Exhibit B of the Joint Proposal.

C. Laws and Regulations

8. Each substantive Federal, State, and local law, regulation, code, and ordinance applicable to the Project shall apply, except to the extent that the Commission has expressly refused to apply any substantive local law or regulation as being unreasonably restrictive.
9. No State or local legal provision purporting to require any approval, consent, permit, certificate, or other condition for the construction or operation of the Project authorized by the Certificate shall apply, except: (i) those of the PSL and regulations and orders adopted thereunder; (ii) those provided by otherwise applicable State law for the protection of employees engaged in the construction and operation of the facilities; and (iii) those permits issued under a federally delegated or pursuant to federally approved environmental permitting program.
10. The Certificate Holder shall construct the Project in a manner that conforms to all standards of the American National Standards Institute (“ANSI”) including, without limitation, the National Electrical Safety Code (“NESC”) (including the most current version Institute of Electrical and Electronics Engineers (“IEEE”) Standard IEEE C2) and any stricter standards adopted by the Certificate Holder. Upon completion

of the Project, the Certificate Holder shall send a letter to the Secretary certifying that the Project was constructed in full conformance with the NESC.

11. The Certificate Holder shall file a vegetation management plan for the Project with the Secretary, for the Department of Public Service (“DPS”) Staff’s review and acceptance, prior to EM&CP submittal. The vegetation management plan shall substantially comply with 16 NYCRR Part 84, the final orders issued in Cases 04-E-0822 and 10-E-0155, and the applicable conditions of this Order.
12. Nothing herein shall preclude the Certificate Holder from voluntarily subjecting itself to applicable State or local approval, consent, permit, certificate, or other condition for the construction or operation of the Project, subject to the Commission’s ongoing jurisdiction.
13. The Certificate Holder shall coordinate all work on the Project that it performs during construction at State and municipal road and highway crossings with the appropriate State and municipal officials and shall obtain the required authorization for such work, subject to the Commission’s continuing jurisdiction as appropriate.
14. The Certificate Holder, with respect to all work it performs on the Project, shall coordinate with the appropriate municipal agencies and police departments for traffic management of roads under municipal jurisdiction.
15. A copy of each permit or approval required for construction or operation of the Project shall be provided to the Secretary by the Certificate Holder promptly after receipt by the Certificate Holder of such permit or approval and before commencement of construction across the affected area.
16. To the extent required in connection with the delivery of oversized components, supplies, or equipment for the Project, the Certificate Holder or its suppliers shall obtain any required permits from applicable state or local agencies.
17. To the extent a disagreement arises regarding the implementation of the Joint Proposal and any of its provisions which cannot be informally resolved by the

Signatory Parties: (a) the Signatory Parties shall promptly convene a telephone conference and in good faith attempt to resolve any such disagreement; and, (b) if any such disagreement cannot be resolved by the Signatory Parties, any Signatory Party may petition the Commission for resolution of the disputed matter.

18. The Certificate Holder shall secure and provide to the Secretary, prior to commencement of construction, evidence of a Federal Aviation Administration (“FAA”) determination that the final design of the structures proposed for the Project will have no impact (or will have impacts mitigated by FAA-directed modifications to such final design) on the public-use airports identified in Exhibit E-6 of the Application.

D. Public Health and Safety

19. The Certificate Holder shall design, engineer, and construct the Project such that its operation shall comply with the electric and magnetic field standards established by the Commission in Opinion No. 78-13, issued June 19, 1978, and the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities, issued September 11, 1990.
20. The Certificate Holder shall engineer and construct the Project to be fully compatible with the operation and maintenance of any nearby electric, gas, telecommunication, water, sewer, and related facilities; details of such other facilities and measures to protect the integrity, operation, and maintenance of those facilities shall be presented in the EM&CP. The Project shall be designed and constructed to avoid adverse effects on the cathodic protection system and physical conditions of existing structures and any fuel gas pipelines within the Project ROW and within 25 feet of the edge of the Project ROW. The Project ROW is the approximately 105-foot wide strip of land within the NYSEG ROW where the Certificate Holder proposes to construct and operate the Project.
21. The Certificate Holder shall evaluate the effects of the Project on NYSEG’s existing cathodic protection system for the gas facilities’ and Metering and Regulation (“M&R”) station to ensure compatibility with the electric facility design and that AC

interference imposed upon the existing gas facilities are mitigated to safe levels according to the National Association of Corrosion Engineers (“NACE”) guidelines. If further AC interference from the Project is detected after the Project is placed into service, the Certificate Holder shall implement AC interference testing procedures. As soon as is practical to do so, corrective action with respect to the gas facilities’ existing cathodic protection system, safety hazards and fault threats shall be taken by the Certificate Holder to ensure measured voltages on the natural gas pipeline and at the M&R station are not higher than safe levels stated in NACE guidelines.

22. The Certificate Holder shall develop a construction gas line safety plan and present the plan as part of the EM&CP. The gas line safety plan shall include, but not be limited to:
 - a. Crossing method;
 - b. Crossing location;
 - c. Emergency access procedures;
 - d. Survey marking;
 - e. What, how, and when construction activities will be limited;
 - f. Safety training requirements; and,
 - g. Notification procedures for local officials, emergency personnel and landowners/residents
23. At no time shall construction activities of any kind be conducted within fifteen (15) feet of any NYSEG gas pipeline or related facility or in violation of another gas pipeline owners’ standards/rules without prior notification to the owner(s) and without providing the owner or owner’s appointed representative the opportunity to be present.
24. The Certificate Holder shall ensure all proposed electric transmission grounding

structures do not interfere with the pipeline's cathodic protection system or are capable of conducting a fault current that would arc to the pipeline or gas facility. The Certificate Holder shall relocate any such grounding structures.

25. The Certificate Holder shall keep local fire department and emergency management teams apprised of the status of on-site hazardous chemicals and waste. All such regulated chemicals and waste shall be secured in a locked and controlled area.
26. The Certificate Holder shall comply with the requirements for the protection of underground facilities set forth in 16 NYCRR Part 753 "Protection of Underground Facilities".
27. The Certificate Holder shall have the right to require that any person seeking to access the Project first be appropriately trained in environmental protection and safety. The Certificate Holder may require site inspectors or visitors to supply their own personal protective equipment for any tours of construction sites. This shall include a properly fitted, currently valid, hardhat, safety glasses with side shields, high visibility vest and steel or ceramic-toed boots at any time while on site, unless the visitor is in a vehicle or in a construction trailer. The Certificate Holder may require site inspectors or visitors to comply with all safety and security requirements applicable to the construction site.

E. Environmental Management and Construction Plan

28. The Certificate Holder shall not commence construction, as defined by the New York State ("NYS") Department of Environmental Conservation ("NYSDEC") General Construction Permit, until the Commission has approved the EM&CP, nor shall the Certificate Holder commence any proceedings under the Eminent Domain Procedure Law to acquire Permanent ROW, temporary ROW, or off-ROW access until the Commission has approved the EM&CP. Activities such as surveying, soils testing, and such other related activities as are necessary to prepare the final design plans are not considered construction.
29. To calculate the three-year period for acquisition of property pursuant to the

Eminent Domain Procedure Law, the date of Commission approval of an EM&CP covering the affected parcel shall be regarded as the date on which this Article VII proceeding was completed.

30. The EM&CP shall be prepared in accordance with the terms of the Certificate for the construction, operation and maintenance of the Project. Provisions of the Certificate, EM&CP, and orders approving the proposed EM&CP, shall be incorporated in any design, construction, and maintenance associated with the Project.
31. The EM&CP shall be organized and developed in accordance with the Specifications for Development of EM&CP attached as Appendix E to the Joint Proposal (“EM&CP Specifications”).
32. During the preparation of the EM&CP, the Certificate Holder shall contact the NYSDEC Natural Resources Regional Supervisor, NYS Natural Heritage Program, and United States Fish and Wildlife Service to check for any updates or changes of known threatened or endangered (“T&E”) species or habitat, or Significant Natural Communities in the Project Area.
33. Deviations from the certified centerline, design height, location, number of structures, and structure types as described in Appendix B shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a different provision of the Certificate would be created. The Certificate Holder shall include in the EM&CP an explanation for the proposed deviation and supporting documentation.
34. The Certificate Holder shall include the Stormwater Pollution Prevention Plan (“SWPPP”), the municipal separate storm sewer systems approvals, and NYSDEC’s letter of acknowledgement authorized under NYSDEC’s State Pollutant Discharge Elimination System (“SPDES”) General Permit in the EM&CP.

F. EM&CP Process

35. The Certificate Holder shall file one electronic copy of the proposed EM&CP with the Secretary, an electronic copy to each of the Signatory Parties, and one electronic copy to the parties on the service list. Contemporaneously with the Certificate Holder filing the proposed EM&CP with the Secretary, the Certificate Holder shall provide four hard copies to DPS Staff, one hard copy to the NYSDEC Central Office Division of Environmental Permits, in Albany, New York and one hard copy to the Region 9 Supervisor of Natural Resources, NYSDEC Region 9 Headquarters. The Certificate Holder shall also place copies for inspection by the public on the project website and at the same public repositories listed on the Statutory Service List or other convenient location in each municipality in which construction will take place.
36. Contemporaneously with the filing and service of the proposed EM&CP, the Certificate Holder shall provide written notice, in the manner specified below, that the proposed EM&CP has been filed (“EM&CP Filing Notice”).
37. The Certificate Holder shall serve a copy of the EM&CP Filing Notice on all parties to this proceeding, the Project Service List, and on the landowners and/or residents along the Proposed Line. Further, the Certificate Holder shall contemporaneously publish the EM&CP Filing Notice in a newspaper of general circulation, including a free publication (if available), in the vicinity of the Project.
38. The written EM&CP Filing Notice and the newspaper notice(s) shall contain, at a minimum, the following:
 - a. a statement that the EM&CP has been filed;
 - b. a general description of the Project, the need for the Project, and of the proposed EM&CP;
 - c. a listing of the locations and website where the proposed EM&CP is available for public inspection;
 - d. a statement that any person desiring additional information about a specific geographical location or specific subject may request such information from

the Certificate Holder;

- e. the name, address, e-mail, and telephone numbers of the Certificate Holder's representative;
- f. the email and postal address of the Secretary; and
- g. a statement that any person may be heard by the Commission on any matter or objection regarding the proposed EM&CP by filing written comments with the Secretary and the Certificate Holder within 45 days of the EM&CP filing date or within 45 days of the date of the newspaper notice, whichever is later. Comments on subsequent revisions to the EM&CP, in response to the aforementioned written comments, shall be permitted within 15 days of service by electronic means of said revisions.

39. The Certificate Holder shall submit to the Secretary a certificate of service with supporting affidavit indicating upon whom all EM&CP documents and Filing Notices were served along with a copy of the EM&CP Filing Notice within three (3) business days after the proposed EM&CP is filed, and shall be a condition precedent to approval of the EM&CP. When available, the Certificate Holder shall file with the Secretary proof of newspaper publication of a copy of the EM&CP Filing Notice.

40. After the EM&CP has been approved by the Commission:

- a. The Certificate Holder shall report any proposed changes to the approved EM&CP to DPS Staff. DPS Staff will refer any proposed changes that will not result in any increase in adverse environmental impacts or are not directly related to contested issues decided by the Administrative Law Judge or the Commission during the proceeding to the Director of Facility Certification and Compliance of the Office of Electric, Gas and Water, or their designee, for approval. DPS Staff will refer all other proposed changes to the Commission for approval.
- b. Upon being advised that DPS Staff will refer a proposed change to the

Commission, the Certificate Holder shall provide notice of the proposed change to all parties to the proceeding, as well as property owners and lessees whose property is affected by the proposed change. The notice shall: (1) describe the original conditions and the requested change; (2) state that documents supporting the request are available for inspection at specified locations; and (3) state that persons may comment by writing or calling (followed by written confirmation) to the Commission within twenty-one (21) days of the notification date. Any delay in receipt of written confirmation will not delay Commission action on the proposed change.

- c. The Certificate Holder shall not execute any proposed change until the Certificate Holder has received oral or written approval, except in emergency situations threatening personal injury, property, or severe adverse environmental impact. Any oral approval from DPS Staff will be followed by written approval from the Director of Facility Certification and Compliance of the Office of Electric, Gas and Water, or their designee, or the Commission.

G. Notices and Public Complaints

- 41. The Certificate Holder shall notify all contractors that the Commission may seek to recover penalties for violation of the Certificate, not only from the Certificate Holder, but also from its contractors, and that contractors may also be liable for other fines, penalties, and environmental damage caused by their actions.
- 42. The Certificate Holder will facilitate the submission of complaints through the use of a dedicated contact person. The Certificate Holder shall make available to the public a toll-free or local phone number of an agent or employee who will, for the duration of construction of the Project, be available to receive complaints from the public about the construction of the Project, and such agent or employee must respond with acknowledgement of receipt to the complainant within one (1) business day. The toll-free or local phone number shall include a recorded outgoing message that will, when a call is not answered by a person, provide the caller with: (i) the number to be called at any time in case of emergency, (ii) the phone number and

email address of the Secretary, and (iii) the phone number of the Commission's Environmental Compliance Section.

43. The Certificate Holder's Project website shall provide a means for the public to communicate to the Certificate Holder about the Project (e.g., to register complaints or ask questions) through either a direct link to a complaint form or email or by providing the contact information (phone and/or email address) of a representative of the Certificate Holder who can respond to communications that include questions and concerns about the Project from members of the public. Certificate Holder shall post construction notices and other publicly relevant information to the Project website. The Project website shall allow users to subscribe (or unsubscribe) to an electronic mailing list for Project update notifications.
44. The Certificate Holder shall retain a record of complaints received for one-year after the completion of construction which shall be made available to DPS Staff, the NYSDEC and the Towns upon request. The Certificate Holder shall report to DPS Staff every complaint that cannot be resolved, and describe the actions taken to address the complaint, within ten (10) business days after receipt of the complaint.
45. The following notice requirements shall apply to the Certificate Holder:
 - a. No less than 14 days before commencing construction, the Certificate Holder shall:
 - i. Submit a Notice of Intent to Commence Work to the Region 9 Supervisor of Natural Resources, NYSDEC Region 9 Headquarters, 270 Michigan Ave., Buffalo, NY 14414-9519 and the, NYSDEC Bureau of Energy Project Management, Division of Environmental Permits, 625 Broadway, Albany, NY 12233-1750.
 - ii. Provide notice to the New York State Thruway Authority ("NYSTA"), 200 Southern Boulevard, Albany, New York 12209
Attn: Chief Engineer

- iii. provide notice to town and county officials, school districts, and emergency personnel;
 - iv. provide notice to NYSEG, New York Power Authority (“NYPA”), National Fuel Gas Company (“NFG”), Tennessee Gas Pipeline Company (“Tennessee Gas”), National Grid, and other affected utilities;
 - v. Provide such notice for dissemination to local media;
 - vi. Provide notice for display in the town halls and public places (including, but not limited to, general stores, post offices, community centers, libraries, and conspicuous community bulletin boards); and
 - vii. Provide notice to persons who own properties that are crossed by or abut the ROW, and persons who reside on such properties (if different from the owner).
- b. The notice shall be written in language reasonably understandable to the average person and shall contain:
- i. a map and a description of the Project;
 - ii. the anticipated date for start of construction;
 - iii. the name, address, local or toll-free telephone number of an employee or agent of the Certificate Holder, and e-mail address;
 - iv. a description of where to get more information about the Project including the Project website address and locations of document repositories; and,
 - v. a statement that construction of the Project is under the jurisdiction of the Commission, which is responsible for

enforcing compliance with environmental and construction conditions, and which may be contacted at an address and telephone number to be provided in the notice.

- c. Upon distribution, a copy of the form of the notice and the distribution list shall be filed with the Secretary.

46. The following pre-construction meeting requirements shall apply to the Certificate Holder:

- a. At least 14 days prior to the start of construction, the Certificate Holder shall hold a preconstruction meeting. An agenda, location, and invitation list shall be agreed upon between DPS Staff and the Certificate Holder. The Certificate Holder shall provide notice of the meeting to all invitees at least 10 days prior to the meeting date.
- b. The invitation list shall include at a minimum the contractors, DPS Staff, NYSDEC (Division of Environmental Permits, Albany, NY and NYSDEC Bureau of Ecosystem Health Manager, Buffalo, NY), NYS Department of Transportation (“NYSDOT”), NYSTA, Town supervisors and Town Highway superintendents, NYSEG, NYPA, National Grid, Tennessee Gas, NFG, and the New York Department of Agriculture & Markets (“NYSDAM”).
- c. The Certificate Holder shall supply draft minutes from this meeting to all attendees, the attendees may offer corrections or comments, which the Certificate Holder will consider in good faith, and the Certificate Holder shall issue the finalized meeting minutes to all attendees and invitees.
- d. The Certificate Holder shall provide contractors providing services for construction of the Project with complete copies of the Certificate, the EM&CP, the order(s) approving the EM&CP, any permit issued pursuant to Section 404 of the Federal Clean Water Act, and the Section 401 Water Quality Certification. If, for any reason, the construction contractor cannot

finish the construction of this Project, and a new construction contractor is needed, Certificate Holder shall hold another preconstruction meeting using the same format as outlined above.

47. At least 14 days (or as authorized by DPS Staff) before Project construction begins in any area, the Certificate Holder shall, in such area: (a) delineate both edges of the Project ROW, as certified; (b) stake and/or flag all on- and off-ROW access roads and all work pads and pulling pads; (c) mark all environmentally sensitive areas including wetlands and the 100-foot adjacent areas associated with state-regulated wetlands; (d) flag any known danger trees to be removed in such area for review and acceptance by DPS Staff; and (e) notify DPS Staff when the above-described field stake-out is complete in such area.
48. The Certificate Holder shall inform the Secretary, in writing, at least five days prior to commencing construction for the Project.
49. The Certificate Holder shall notify persons who own properties that abut the ROW, and persons who reside at such properties (if different from the owner), of the planned construction activities and schedule affecting their residences at fourteen days, but no more than thirty days, prior to the commencement of construction in those areas. The Certificate Holder may give such notices by affixing them to the doors of residences or by mailing the notices via United States Postal Service Mail. The Certificate Holder shall provide a copy of the generic form of such notice to the Secretary prior to the commencement of construction.
50. During construction, the Certificate Holder shall provide DPS Staff, NYSDAM, NYSDEC, and NYSEG with weekly status reports transmitted by electronic mail summarizing construction and indicating construction activities and locations scheduled for the following 14 days.
51. The Certificate Holder shall notify the Secretary in writing no later than ten days after the Project is placed in service.
52. Within ten days of the completion of final restoration of the Project, the Certificate

Holder shall notify the Secretary that all restoration has been completed in compliance with this Certificate and the EM&CP.

53. During construction, the Certificate Holder shall periodically consult with State and local highway transportation agencies regarding traffic conditions near the Project site and shall notify each such transportation agency of the approximate date work will begin using access points that take direct access from the highways under their respective jurisdictions.

H. Cultural Resources

54. The Certificate Holder shall not undertake construction in previously undisturbed areas where archeological surveys have not been completed until such time as the appropriate authorities, including NYS Office of Parks, Recreation and Historic Preservation (“OPRHP”) and DPS Staff, have reviewed the results of any historic properties and archeological surveys that are required.
55. Should archeological materials be encountered during construction, the Certificate Holder shall stabilize the area and cease all ground-disturbing activities in the immediate vicinity (50 feet) of the find and protect the find from further damage. Within twenty-four (24) hours of such discovery, the Certificate Holder shall notify and consult with DPS Staff and OPRHP Field Services Bureau to determine the best course of action. No construction activities shall be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated and the need for and scope of impact mitigation has been determined.
56. Should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the vicinity of the find shall be halted immediately for the remains to be protected from further disturbance. Within twenty-four (24) hours of any such discovery, the Certificate Holder shall notify and consult with DPS Staff and OPRHP Field Services Bureau. The Certificate Holder shall ensure that treatment of human remains is done in accordance with the OPRHP’s Human Remains Discovery Protocol, and that all archaeological or remains-related encounters and their

handling is reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections.

57. The Certificate Holder shall have a continuing obligation during construction to respond promptly to complaints of negative archeological impacts and, if necessary, to mitigate any actual impacts through on-site design modifications and off-site mitigation techniques developed in consultation with the OPRHP Field Services Bureau.

I. Terrestrial and Wildlife Resources

58. The Certificate Holder shall refer to 6 NYCRR Part 182 for lists of threatened and endangered (“T&E”) animal species and with 6 NYCRR Part 193 for T&E plant species. Prior to the commencement of construction, the Certificate Holder will provide all workers with pertinent information on T&E species in the Project area.
59. Tree and vegetation clearing shall be limited to the minimum necessary for Project construction. During construction in any area of the Project ROW, access roads, marshalling yards, and any other areas where Project activities are occurring between 0.25 miles and 5 miles of a hibernation site or within 1.5 miles of a summer occurrence for the Northern Long-Eared Bat, it is recommended that snag and cavity trees be left standing. If it is not possible to leave snag and cavity trees standing, those snag and cavity trees shall only be cut during the inactive period, from November 1 through March 31, unless their removal is necessary for protection of human life or property.
60. Except as otherwise specified in paragraph 61, if any T&E species, as defined in 6 NYCRR Part 182 or plant species identified under 6 NYCRR Part 193 are encountered on the Project ROW, access roads, marshalling yards, and any other areas where Project activities authorized in this Certificate are conducted:
 - a. The Certificate Holder shall notify NYSDEC and DPS Staff within 24 hours of the encounter.

- b. To protect such T&E species or its habitat from immediate harm, the Certificate Holder shall secure the immediate area where rights exist and safely cease construction in that area until DPS Staff, in consultation with NYSDEC, authorizes recommencement of activities. Prior to the recommencement of construction in the secured area, the Certificate Holder shall provide all workers with pertinent information on the species encountered and indicate measures to minimize risks to the T&E species during construction.
61. The following protocols regarding protection of T&E (bald eagle and grassland) bird species are to be implemented by the Certificate Holder until the protocols are superseded or supplanted by NYSDEC through promulgation of a regulation, or the publication of a guidance document, under the authority of the Environmental Conservation Law:
- a. At least 14 days prior to construction activities, the Certificate Holder shall conduct a visual inspection of the Project ROW, surrounding areas visible from the project ROW, access roads, marshalling yards, or any other area where Project activities are to be conducted to determine if any bald eagle nests are present.
 - b. If at any time during construction, operation, and maintenance of the Project, any bald eagle nest is discovered within 0.25 mile of the Project ROW, the Certificate Holder shall notify NYSDEC and DPS Staff within twenty-four (24) hours of discovery and the nest shall not be approached unless authorized by DPS, in consultation with NYSDEC. An area encompassing a 0.25 mile radius from the nest tree (“buffer area”) shall be marked, where the Certificate Holder has property rights to allow such marking, and this area shall be avoided until DPS Staff, in consultation with NYSDEC, authorizes activities in the buffer area. If there is a visual barrier present (e.g., topography, tree line) that buffers the nest from work activities, the setback requirement may be reduced to 660 feet.

- c. For T&E grassland birds, if at any time during construction, operation, and maintenance of the Project, an active nest of any federally or State-listed threatened or endangered bird species is discovered within the Project, NYSDEC and DPS Staff will be notified within twenty-four (24) hours of the discovery, and the nest site will be marked where the Certificate Holder has rights to allow such markings, and an area at least five hundred (500) feet in radius around the nest will be avoided until notice to continue activities at that site is granted by DPS Staff, in consultation with NYSDEC.
62. All reports of T&E species submitted pursuant to paragraphs 60 and 61 shall include the following information: species, observation date(s) and time(s); GPS coordinates of each individual observed (points shall be taken from where that individual was encountered, without approaching, and outside of the disturbance buffer if specified in Certificate Condition 61(b) and (c); if operations and maintenance staff do not have GPS technology available the report should include the nearest pole number and cross roads location); behavior(s) observed; identification and contact information of the observer(s); and the nature of and distance to any Project construction or maintenance activity.

J. Water Resources

63. The Certificate Holder shall perform all construction, operation, and maintenance in a manner that avoids or minimizes adverse impacts to streams, waterbodies, wetlands, and the one hundred (100) foot adjacent area associated with the State-regulated wetlands as specified in the EM&CP.
- a. The Certificate Holder shall notify DPS Staff within 2 hours of observing or being made aware of a discharge to a wetland or waterbody by the Certificate Holder or a contractor of the Certificate Holder which may result in a potential violation of NYS Water Quality Standards.
 - b. Unless otherwise specified in the EM&CP, the Certificate Holder shall not conduct in-stream work from October 1st through May 31st in cold water fisheries, and from March 1st through July 31st in warm water fisheries, if

applicable. The Certificate Holder shall consult with the NYSDEC Region 9 Bureau of Fisheries Office during development of the EM&CP to verify cold water and warm water fisheries that may be affected by the Project.

64. The Certificate Holder shall work with NYSDEC and NYSDAM to prepare a Wetland Mitigation Plan in accordance with the EM&CP specifications and the NYSDEC Supplemental Specifications for Wetlands and Waterbodies contained in Appendix F to the Joint Proposal. The Certificate Holder will submit the Plan for NYSDEC acceptance.
65. The Certificate Holder shall take all necessary precautions to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate, or any other environmentally deleterious materials associated with the Project.
66. To the maximum extent practicable, the Certificate Holder shall secure and safely contain all equipment and machinery more than 100 feet landward of any wetland or water body at the end of each work day.
67. Unless otherwise specified in the EM&CP, the Certificate Holder shall conduct trench construction through streams and wetlands to include excavating for installation purposes and backfilling in one continuous operation.
68. Dewatering operations shall discharge into an approved dewatering device (i.e., temporary straw bale/silt fence barrier or filter bag). The dewatering device shall not be placed on or near the top of the bank of streams and, unless demonstrated not practicable, shall not be placed within or adjacent to wetlands. When dewatering within or next to a wetland or stream, the return water shall not cause a substantial visual contrast to natural conditions.
69. There shall be no increase in turbidity downstream of the construction activity that will cause a visible contrast to natural conditions upstream of the construction activity.

70. Markers used to delineate/define the boundary of regulated freshwater wetlands and streams, and also the demarcated limits of disturbance for the Project, shall be left in place, or restored if disturbed, until completion of construction activities and restoration of the impacted area.
71. The Certificate Holder shall not propose a wetland mitigation site on the ROW without the express consent of the property owner, NYSEG.
72. In-stream work shall only occur in dry conditions or by trenchless methods or diversion measures (e.g., dam and pump or flume) must be used. If approved measures fail to divert all flow around the work area, in-stream work must immediately stop until diversion and dewatering measures are fully in place and properly functioning again.
73. Trees shall not be felled into any stream or onto the immediate stream bank. All stumps from trees and shrubs cut within the 50 feet of the stream shall not be grubbed unless they interfere with construction activities.
74. Clearing of natural vegetation shall be limited to noncompatible species according to the DPS Staff-accepted vegetation management plan and that vegetation that poses a hazard or hindrance to the construction activity and/or operation.
75. During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site.
76. The Certificate Holder shall inform the United States Army Corps of Engineers (“USACE”) of any changes in the design of the Project that have the potential to impact any USACE-issued permit or authorization and shall file a copy of such correspondence with the Secretary.
77. To the extent available, all erosion control fabric or netting used for slope or soil stabilization will be 100% biodegradable natural product (not photodegradable fabric), excluding geotextiles used for road construction and temporary erosion control devices such as silt fence and silt sock.

K. Oversight and Supervision

78. The Certificate Holder shall use at least five (5) individuals for Project oversight (or at least four (4) if the Certificate Holder elects to use the same qualified individual as both environmental monitor and agricultural inspector):
- a. One environmental monitor employed full-time on the Project;
 - b. One construction supervisor employed full-time on the Project;
 - c. One agricultural inspector employed part-time on the Project;
 - d. One safety inspector who will inspect the work site from time to time; and
 - e. One quality assurance inspector who will inspect the work site from time to time.
79. During periods of relative inactivity on the Project, after consultation with and acceptance from DPS Staff, the Certificate Holder may temporarily decrease the number of hours worked by Project oversight personnel and the extent of their presence at the Project site commensurate with the decline in Project activity. The Certificate Holder shall ensure that the frequency of inspections by the environmental monitor comply with the requirements of the SPDES General Permit.
80. The Environmental Monitor shall have stop work authority over aspects of the Project that could create an adverse impact to the environment.
81. The Certificate Holder shall provide to DPS Staff the cell phone numbers of the Certificate Holder's environmental monitor, agricultural inspector, and construction supervisor.
82. The environmental monitor(s), agricultural inspector, and construction supervisor(s) shall be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor contractor compliance with the provisions of this Certificate, applicable sections of the PSL, Environmental Conservation Law, the EM&CP, every order issued in this proceeding, and the §401 Water Quality

Certificate.

83. The Certificate Holder shall submit the name and qualifications of the construction supervisor(s), inspector(s), and environmental monitor(s) to DPS Staff at least 14 days prior to the start of construction. The Certificate Holder shall ensure that the environmental monitor's qualifications satisfy those of a "Qualified Inspector" pursuant to the SPDES General Permit.
84. The Certificate Holder's employees, contractors, and subcontractors assigned to the construction of the Project and inspection of such construction work shall be properly trained in their respective responsibilities.
85. Subject to the requirements of Certificate Condition 27, NYSDEC staff field representatives shall be permitted on the Project site. NYSDEC staff field representatives will notify the DPS Staff representative and the Certificate Holder's appropriate representative of any activities that violate or may violate either the terms of the Certificate and/or the Environmental Conservation Law.
86. The authority granted in the Certificate and any subsequent order(s) in this proceeding is subject to the following conditions necessary to ensure compliance with such order(s):
 - a. The Certificate Holder shall regard DPS Staff representatives (authorized pursuant to PSL § 8) as the Commission's designated representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate or may violate the terms of the Certificate or any other order in this proceeding, such DPS Staff representatives may issue a stop-work order for that location or activity.
 - b. A stop-work order shall expire in 24 hours unless confirmed by a single Commissioner. If a stop-work order is confirmed, the Certificate Holder may seek reconsideration from the confirming Commissioner or all Commissioners. If the emergency prompting the issuance of a stop-work order is resolved to the satisfaction of the Commissioner or the Commission,

the stop-work order will be lifted. If the emergency has not been satisfactorily resolved, the stop-work order will remain in effect.

- c. Stop-work authority will be exercised sparingly and with due regard to environmental impacts, economic costs involved and possible impact on construction activities, and whether an applicable statute or regulation is violated. Before exercising such authority, DPS Staff representatives will, wherever practicable, consult with the Certificate Holder representatives possessing comparable authority. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be immediately brought to the attention of the Certificate Holder, the Project Manager, and the Director of Facility Certification and Compliance of the Office of Electric, Gas and Water, or their designee. In the event that a DPS Staff representative issues a stop-work order, neither the Certificate Holder nor the contractor will be prevented from undertaking any such safety-related activities as they deem necessary and appropriate under the circumstances. The issuance of a stop-work order or implementation of measures, as described below, may be directed at the sole discretion of the DPS Staff representative during these discussions.
- d. If a DPS Staff representative discovers that a specific activity is a significant environmental threat that is, or may immediately become, a violation of the Certificate or any other order in this proceeding, the DPS Staff representative may—in the absence of responsible Certificate Holder supervisory personnel or the presence of such personnel who, after consultation with the DPS Staff representative, refuse to take appropriate action—direct the field crews to stop the specific environmentally harmful activity immediately. If responsible Certificate Holder personnel are not on site, the DPS Staff representative will immediately thereafter inform the supervisor and/or environmental monitor of the action taken. The DPS Staff representative may lift the stop-work directive if the situation prompting its issuance is resolved.
- e. If the DPS Staff representative determines that a significant threat exists such

that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, the DPS Staff representative may, in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with the Staff representative, refuse to take appropriate action, direct the Certificate Holder or its contractors to implement the corrective measures identified in the EM&CP. The field crews shall comply with the DPS Staff representative directive immediately. The DPS Staff representative will immediately thereafter inform the Certificate Holder's supervisor or environmental monitor of the action taken.

87. Certificate Holder shall organize and conduct site compliance audit inspections for DPS Staff as needed, but not less frequently than once per month during the construction and restoration phases of the Project. Inspections shall conclude upon the final sign-off of the SWPPP by the SWPPP inspector.

a. The monthly inspection shall include a review of the status of compliance with all certification conditions, requirements, and commitments, as well as a field review of the project site, if necessary. The inspection shall also include:

- i. review of all complaints received, and their proposed or actual resolutions;
- ii. review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies;
- iii. review of the status of the Project in relation to the overall schedule established prior to the commencement of construction; and
- iv. other items the Certificate Holder or DPS Staff consider appropriate.

b. The Certificate Holder shall provide draft minutes of the inspection audit and/or meeting, including resolution of issues and additional measures to be

taken, to all attendees for corrections or comments, and thereafter the Certificate Holder shall issue the finalized meeting minutes to all attendees and invitees, NYSEG, and NYPA.

L. Agricultural Resources

88. The Certificate Holder shall retain a qualified Agricultural and Soil Conservation Specialist/inspector ("Agricultural Inspector") for each phase of Project development, including design, construction, initial restoration, post-construction monitoring, and follow-up restoration. The Agricultural Inspector shall be available to provide site specific agricultural information as necessary for the Certificate Holder's EM&CP development through field review as well as to have direct contact with affected farm operators, County Soil Water and Conservation Districts ("SWCDs"), NYSDAM, and others. The Agricultural Inspector shall maintain regular contact with the environmental monitor(s) and/or the construction inspectors throughout the construction and restoration phases. The Agricultural Inspector shall also maintain regular contact with farmers, farm operators and local county SWCD's concerning farm resources and management matters pertinent to the agricultural operations and the site specific implementation of the EM&CP. Whenever the Certificate Holder submits a request for an EM&CP change concerning agriculture, the Certificate Holder shall consult with NYSDAM.
89. The Certificate Holder shall identify Black Cherry trees located in the Project area near active livestock use areas during preparation of the EM&CP. During the clearing phase, such vegetation shall be disposed of in a manner which prevents access by livestock.
90. In agricultural areas, logs, stumps, brush, or chips shall not be piled or buried in agricultural fields or improved pasture.
91. The Certificate Holder shall design the Project to the extent possible to avoid or limit the placement of structures on crop fields or on other agricultural land where the structures may significantly interfere with normal agricultural operations or activities. Where the location of a structure on such agricultural land is unavoidable,

the Certificate Holder shall attempt to site the structure in a location that minimizes impact to normal farming operations.

92. During preparation of the EM&CP, a detailed drainage line repair procedure shall be developed, in consultation with the local SWCD, for the repair of crushed/severed clay tile and plastic drain lines. Drawings showing the generic technique to be implemented for drain line repairs shall be provided by the Certificate Holder. All new plastic drain tubing shall meet or exceed the American Association of State Highway and Transportation M252 specifications. The plan for the replacement of functional stone drainage systems severed during construction shall be prepared during the restoration phase, in consultation with NYSDAM and the local SWCD.
93. Where construction entrances are required from public roadways to the Project in agricultural fields, an underlayment of durable, geotextile fabric shall be placed over the exposed subsoil surface prior to the use of temporary gravel access fill material. In locations where underground utilities are located within 10 feet of the shoulder of the roadway, the Certificate Holder may elect, in order to minimize disturbance and protect the underground utilities, to place the geotextile fabric directly over the surface without stripping topsoil. In locations where underground utilities are located 10 feet or more from the shoulder of the roadway but still within the limits of the construction entrance, the Certificate Holder may elect to mat over the underground utilities instead of placing geotextile fabric and gravel access fill material. Complete removal of the construction entrance upon completion of the Project and restoration of the affected site is required prior to topsoil replacement, except where retention of the construction entrance would be more conducive to the existing land use than removal.
94. Segments of farm roads utilized for access shall be improved and/or maintained as required following consultation with the farm operator and/or property owner and NYSDAM prior to use. Such improvements may include the installation of geotextile fabric and crushed stone.
95. The Certificate Holder shall rebuild to as-good or better condition, at or prior to

completion of construction, any of the following that is damaged by construction: (i) fences and gates on the Certificate Holder's ROW that are not incompatible with the Project; (ii) fences and gates off of the Certificate Holder's ROW; and (iii) any drainage features including drain tiles. The base of all new posts shall be secured to a reasonable depth below the surface to prevent frost heave.

96. Mats are the preferred method for topsoil resource protection in agricultural areas. Where temporary access is necessary across agricultural portions of the Project, and the installation of mats is not practicable, topsoil shall be removed, including the "A" entire horizon down to the beginning of the subsoil "B" horizon, generally not to exceed a maximum of 12 inches. Topsoil removal up to a depth of 16 inches may be required in specially-designated soils encountered along the route. All topsoil shall be stockpiled directly adjacent to the travel way on the Project and separated from other excavated materials. The Agricultural Inspector shall determine depth of topsoil stripping on each affected farm by means of the County Soil Survey and on-site soil augering, if necessary. All topsoil material shall be stripped, stockpiled, and uniformly returned to restore the original soil profile. During the clearing/construction phase, site-specific depths of topsoil stripping shall be monitored by the Agricultural Inspector.
97. When mats are utilized, the mats shall be layered where necessary to provide a level access surface. Once access is no longer required across agricultural areas, the mats shall be removed and the Agricultural Inspector shall use a soil penetrometer to determine if soil compaction has occurred as a result of construction activities. All compacted areas shall be decompacted as specified below.
98. In agricultural areas of till over bedrock where blasting is required, the Certificate Holder shall use matting or controlled blasting to limit the dispersion of blast rock fragments. All blasted rock not used as backfill shall be removed from croplands, hay lands and improved pastures. The till and topsoil shall be returned in natural sequence to restore the soil profile. Farm owners/operators shall be given timely notice prior to blasting on farm property.

99. Temporary work space in agricultural areas shall be of sufficient size to allow for positioning of conductor reels, tensioners, pullers, wire spools and other mechanized equipment required during pulling activities.
100. In all agricultural sections of the Project disturbed during construction, the Certificate Holder shall break up the subsoil compaction to a depth of 18 inches (unless bedrock is encountered at a depth less than 18 inches) with deep tillage by such devices as a deep-ripper (subsoiler). Final soil compaction results shall not be more than 250 pounds per square inch as measured with a soil penetrometer. Following the deep ripping, all stone and rock material 4 inches and larger in size which has been lifted to the surface shall be collected and taken off site for disposal. The topsoil that has been temporarily removed for the period of construction shall then be replaced. Finally, deep subsoil shattering shall be performed with a subsoiler tool having angled legs. Stone removal shall be completed, as necessary, to eliminate any additional rocks and stones brought to the surface as a result of the final subsoil shattering process. Should subsequent construction and/or restoration activities result in compaction, then restoration activities shall include additional deep tillage.
101. All structures and guy anchors removed from agricultural areas as part of the construction activities shall be removed to a minimum depth of 48 inches below the soil surface. All holes or cavities created by the removal of the old facilities shall be filled to the same level as the adjacent area, plus 6 to 12 inches of additional soil to allow for settling. All material used for fill shall be similar to native soil. All fill material shall be compacted.
102. Wherever existing structures are removed from agricultural fields, the area shall be restored to allow agricultural activities. Such restoration shall include the removal of all vegetation from the structure area and grading of the ground surface to match the adjacent field. All rocks four (4) inches and greater in size shall be removed from the surface.
103. Excavated subsoil material and stockpiled topsoil shall be used to restore the original soil profile at new structure locations. All holes or cavities created by structure

installation shall be filled to the same level as the adjacent area, plus six (6) to twelve (12) inches of additional soil to allow for settling. Excess substratum material not used for backfill shall be removed from agricultural areas.

104. The Certificate Holder shall be solely responsible for providing monitoring and remediation for a period of no less than two growing seasons following completion of the Project restoration in agricultural areas. The Certificate Holder shall be solely responsible for retaining the services of an Agricultural Inspector on at least a part-time basis through this period. The monitoring and remediation phase shall be used to identify any remaining agricultural impacts associated with Project construction that are in need of mitigation and to implement the follow-up restoration.

105. During the monitoring and remediation period, on-site monitoring shall be conducted at least three times during each growing season and shall include a comparison of growth and yield for crops on and off the Project. When the subsequent crop productivity within the affected area is less than that of the adjacent unaffected agricultural land, the Agricultural Inspector, in conjunction with the Certificate Holder and NYSDAM, shall help to determine the appropriate rehabilitation measures for the Certificate Holder to implement (soil de-compaction, topsoil replacement, etc.). The Certificate Holder shall be solely responsible for implementing such measures. During the various stages of the Project, all affected farm operators shall be periodically apprised of the duration of remediation by the Agricultural Inspector. Because conditions which require remediation may not be noticeable at or shortly after the completion of construction, the signing of a release form prior to the end of the remediation period shall not obviate the Certificate Holder's responsibility to fully redress all Project impacts. After completion of the specific remediation period, the Certificate Holder shall continue to respond to the reasonable requests of the farmland owner/operators to correct Project-related effects on the impacted agricultural resources. A specific Agricultural Mitigation and Restoration Plan will be included in the EM&CP.

106. The Certificate Holder shall provide all farm owners/operators with a toll-free or

local telephone number to facilitate direct contact with the Certificate Holder and the Agricultural Inspector through all of the stages of the Project. The farm owner/operators shall also be provided with a toll-free or local telephone number to facilitate direct contact with the Certificate Holder's Project Manager for the Project during operation and maintenance of the transmission line.

107. The Agricultural Inspector shall work with farm operators during the planning phase to develop a plan to delay grazing within the Project area following construction until pasture areas are adequately re-vegetated. The Certificate Holder shall be responsible for maintaining the temporary fencing on the Project until the Agricultural Inspector determines that the vegetation in that area is established and able to accommodate grazing. At such time, the Certificate Holder shall be responsible for removal of the fences.

108. The Certificate Holder shall ensure that: on affected farmland, restoration practices are postponed until favorable (workable, relatively dry) topsoil/subsoil conditions exist; restoration is not conducted while soils are in a wet or plastic state; stockpiled topsoil is not regraded until plasticity, as determined by the Atterberg field test, or a similar soil moisture test, is significantly reduced; and no Project restoration activities occur in agricultural fields between the months of October through May unless favorable soil moisture conditions exist. The Certificate Holder shall monitor and advise NYSDAM and DPS Staff regarding tentative restoration planning for the Project. Potential schedules will be determined by conducting the Atterberg field test, or a similar soil moisture test, at appropriate depths into topsoil stockpiles and below the traffic zone for a mutual determination of adequate field conditions for the restoration phase of the Project.

109. Following restoration of all disturbed areas, excess topsoil shall be distributed in agricultural areas of the Project site, provided this is practicable and can be accomplished without having any adverse impact on site drainage. All such activity shall be as directed by the Agricultural Inspector, based on guidance provided by the landowner.

110. After the moisture of the soil profile on the affected portion of the Project has returned to equilibrium with the adjacent land, subsoil compaction shall be tested using an appropriate soil penetrometer or other soil-compaction measuring device.
111. Topsoil stockpiles on agricultural areas left in place prior to October 31 shall be seeded with Aroostook Winter Rye or equivalent at an application rate of 3 bushels (168 #) per acre and mulched with straw mulch (or another material acceptable to the Agricultural Inspector) at a rate of 2 to 3 bales per 1000 square foot. Topsoil stockpiles left in place between October 31 and May 31 shall be mulched with straw mulch (or another material acceptable to the Agricultural Inspector) at a rate of 2 to 3 bales per 1000 square foot. Straw mulch (or another material acceptable to the Agricultural Inspector) shall be used to prevent soil loss on stockpiled topsoil from October through May.
112. After topsoil replacement, seedbed preparation (final tillage, fertilizing, liming) and seeding shall follow either NYSDAM recommendations as contained in the most current *Fertilizing, Lime and Seeding Recommendations for Restoration of Construction Projects on Farmlands in New York State* or landowner specifications.

M. Construction, Restoration, Operation, and Maintenance

113. Certificate Holder shall design, engineer, and construct the Project in accordance with the applicable and published planning and design standards and engineering practices of NYISO, New York State Reliability Council, the Northeast Power Coordinating Council, the North American Electric Reliability Corporation, and successor organizations.
114. To the maximum extent practicable, during the construction of the Project, splices shall be minimized. All splices shall be noted in the EM&CP.
115. Certificate Holder shall design, engineer, and construct Network Upgrade Facilities as defined in Attachment P of the NYISO's Open Access Transmission Tariff in accordance with the Project's Interconnection Agreement(s) and all then applicable planning and design standards and engineering practices of the Connecting

Transmission Owners.

116. Certificate Holder shall acquire all danger tree rights within three years of EM&CP approval or within that time period commence condemnation proceedings.
117. The construction schedule shall be coordinated so as to minimize outages of the existing circuits adjacent to the Project, outages of the substations, and interconnected transmission facilities.
118. The Certificate Holder shall coordinate with NYSEG and NYPA as to clearing during construction of the Project in the vicinity of the existing gas pipelines and related M&R station facilities, transmission and distribution lines, and substations.
119. The Certificate Holder shall install temporary erosion control devices as soon as practicable and appropriate as indicated in the EM&CP, but in any event no later than the end of the work day in which site disturbance occurs.
120. The Certificate Holder shall be responsible for checking all culverts within the Project limits of disturbance as identified in the EM&CP and assuring that they are not crushed or blocked during construction and/or restoration of the Project. If a culvert is blocked, crushed, or otherwise damaged during construction and/or restoration, the Certificate Holder shall repair the culvert or replace it with alternative measures appropriate to maintaining proper aquatic connectivity and stream flow. Culvert repairs must not result in reduced opening width or height.
121. The Certificate Holder shall thoroughly clear the areas of the ROW and work areas where construction occurred of debris related to electric line construction.
122. Construction work hours shall be limited to 7:00 a.m. to 7:00 p.m. Monday through Saturday. If, due to safety or continuous operation requirements, such construction activities are required to occur on a Sunday or after 7:00 p.m., the Certificate Holder shall notify DPS Staff and the affected municipality. Such notice shall be given at least 24 hours in advance unless the Sunday or after 7:00 p.m. construction activities are required for safety reasons that arise less than 24 hours in advance. The

Certificate Holder shall implement noise mitigation measures set forth in Section 4.11 of Exhibit 4 of the Application.

123. Following construction, all Project areas shall be restored to pre-construction contours, unless the EM&CP specifies otherwise. Erosion controls and permanent re-vegetation shall be restored as appropriate for those locations. Disturbed pavement, curbs, and sidewalks shall be restored to their original preconstruction condition or improved.

124. The Certificate Holder shall file with the Secretary as-built drawings of the Project certified by a Professional Engineer that is licensed and currently registered in New York State within 120 days of completion of Project construction.

125. The Certificate Holder shall file with the NYSTA Right of Way, 200 Southern Blvd, Albany NY 12209 Attn: Chief Engineer, as-built drawings provided in Horizontal Datum NAD 83 in the proper New York State Plane Coordinates System NYSPCS (Proper State Plane System) Vertical Datum NAVD 88. Data collection shall be by use of Kinematic GPS. Identification of the specific NAD83 datum realization shall be noted, as well as a description of the specific method by which the data was collected. The as-built drawings shall be furnished as Computer Aided Design files in one of the following formats: Autodesk's drawing (DWG), or Drawing eXchange (DXF) , or Intergraph/Microstation's DGN.

126. In connection with vegetation management for the Project, and as defined and required in the final access agreement with NYSEG, the Certificate Holder shall:

- a. Negotiate in good faith with each landowner appropriate compensation for the merchantable logs (timber over six (6) inches in diameter at the small end and eight (8) feet or longer).
- b. Comply with the provisions of 6 NYCRR Part 192, "Forest Insect and Disease Control," and Environmental Conservation Law § 9-1303 and any quarantine orders issued thereunder.

- c. Ensure crews are trained to identify insects that are identified as a prohibited or regulated invasive species in accordance with 6 NYCRR Part 575, “Prohibited and Regulated Invasive Species.” Certificate Holder shall report the discovery of such insects to the NYSDEC Region 9 Supervisor of Natural Resources.
- d. Note the clearing and disposal techniques for the Project in the EM&CP.
- e. Not create a maximum wood chip depth greater than three (3) inches, except for wood chip roads or for invasive species control; these areas will be specified in the EM&CP.
- f. Not store wood chips in wetlands, agricultural fields, or within 50 feet of streams.

127. Unless described otherwise in the EM&CP, all trees over four (4) inches in diameter (measured four feet above ground) or shrubs over four feet in height damaged or destroyed by the Certificate Holder’s activities during construction, operation, or maintenance, regardless of where located, shall be replaced by the Certificate Holder with the equivalent type trees or shrubs, subject to the provisions of 6 NYCRR Part 575, Prohibited and Regulated Invasive Species, except where:

- a. equivalent-type replacement trees or shrubs would interfere with the proper clearing, construction, operation, or maintenance of the Project;
- b. replacement would be contrary to sound ROW management practices or to any approved vegetation management plan applicable to the Project; or
- c. a property owner on whose land the damaged or destroyed trees or shrubs were located declines replacement (or other recorded easement or license holder with the right to control replacement declines replacement).

128. The Certificate Holder shall confine construction and subsequent maintenance activities to access routes, work pads and marshaling yards detailed in the EM&CP.

129. The Certificate Holder shall conduct pre- and post-construction meetings with the owners/residents of the residences adjacent to and east of Transmission Structures 35 through 41 and 46 to 47 (“Downey Residences”), 117 (“Westwood Residence”), 139 through 144 (“Fernott Residences”), and 146 through 153 (“Townline Residences” collectively the Downey Residences, Westwood Residence, Fernotte Residences, and Townline Residences are the “Adjacent Residences”). The pre- and post-construction meetings shall address the need for landscape restoration as described in Certificate Condition 129.

130. Certificate Holder shall, upon completion of the Project:

- a. Conduct an assessment of the need for landscape restoration consistent with safe and reliable operation of the Project, including vegetation planting, earthwork or installed features to landscape the Project with respect to road crossings, residential areas, switchyards, and substations.
- b. Prepare plans for any visual mitigation found necessary, and, in connection therewith, removal, rearrangement and supplementation of existing landscape improvements or plantings should be considered, as appropriate Any mitigation and/or restoration proposed on NYSEG property shall be subject to the prior written approval of NYSEG, which approval may be granted or withheld by NYSEG, in NYSEG’s sole discretion.
- c. Consult with and obtain acceptance from DPS Staff on the content and execution of its assessment, resultant landscaping restoration plan specifications and materials list; and,
- d. Present draft assessments and plans to DPS Staff for review, and file a final plan with the Secretary within one year after the date the Project is placed in service.

131. The EM&CP shall include plans to prevent unauthorized access to and along the Project ROW. Plans shall include the following:

- a. Posting signs at the ROW edges in those locations where the ROW intersects public roads.
- b. Performing outreach to educate and inform the public concerning the risks and impacts of unauthorized access.
- c. Working with local law enforcement officials in an effort to prevent future trespassing.
- d. Identifying construction and material details of gates and berms.
- e. Identifying existing and proposed gate locations on the Plan and Profile drawings. Final determination of locations of gates and berms shall be made during post-construction assessment of the Facility, in consultation with and acceptance by DPS Staff, NYSEG and, where applicable, NYPA.
- f. Coordination with NYSEG defining applicable individual and shared responsibilities for ROW access as defined in the approved Easement Agreement.

N. Contractors and Contractor Supplies/Materials

132. At least 14 days prior to construction, the Certificate Holder shall file a report with the Secretary confirming that all required construction materials are available. For purposes of this paragraph, an item of construction material is available (i) if it is located at a marshalling yard, (ii) if it is in a Certificate Holder warehouse or other routine Certificate Holder inventory stocking location, or (iii) if it is on order from a vendor with a scheduled delivery date prior to the time scheduled for its use in the Project.

133. All equipment shall be located at the marshalling yard(s), laydown area or on the Project ROW, provided, however, that if a local contractor is used for the work, the local contractor's facility shall be considered as a marshalling yard or laydown area.

134. If an accident occurs in connection with work on the Project, the Certificate Holder

shall report any such accident to DPS Staff as soon as possible, but no later than 24 hours. A copy of the accident report, if any, shall be provided to DPS Staff after it has been finalized.

135.If a Contractor installs materials, structures, or components that do not conform to the specifications for the same described in the EM&CP, the Certificate Holder shall, within thirty (30) days after becoming aware of such incident, prepare and deliver to DPS Staff a summary report detailing the incident, the steps to be taken to rectify the non-conformance, the material and labor costs associated with addressing the issue, and the manner in which such costs will be accounted for separately from the Certificate Holder's other Project costs.

136.The Certificate Holder shall develop a quality control plan ("Quality Control Plan") for inclusion in the EM&CP describing how it will ensure that the transmission line structures and components it purchases for the Project conform to the specification for structures and components described in the approved EM&CP. At a minimum, the Quality Control Plan shall include: (i) the name(s) and qualifications of the individual(s) who will conduct audits under the Quality Control Plan ("Quality Control Audits"); and (ii) the frequency with which the Quality Control Audits will be performed.

137.Within ten (10) business days following completion of each Quality Control Audit, the Certificate Holder shall provide to DPS Staff a report of such audit that includes: (i) a description of the results of the audit, particularly with respect to results that identify that one or more structures or components the Certificate Holder purchased for installation in the Project did not conform to the specifications for structures or components described in the approved EM&CP; and (ii) any notes pertinent to the subject matter of such audit which were made at audit meetings by Certificate Holder personnel and/or contractors who performed the audit.

138.If any Quality Control Audit conducted by the Certificate Holder confirms that one or more structures or components the Certificate Holder purchased for installation in the Project did not conform to the specification for structures and components

described in the approved EM&CP, the Certificate Holder shall: (i) provide written notification to the Secretary within not more than seventy-two (72) hours of the Certificate Holder's discovery of such non-conformity; and (ii) describe the steps the Certificate Holder will take to correct the non-conformity, including whether any components must be dismantled and returned to the manufacturer, as well as a detailed estimate of all costs and expected delays in construction resulting from such non-conformity.

139. The Certificate Holder shall require its contractors or subcontractors to give an on-site tailboard safety briefing to site inspectors/visitors.

140. Within six (6) months following Project completion, the Certificate Holder shall provide to the DPS Staff Representative a full accounting of all Project costs, including an explanation of variances, if any, between projected and actual costs. Such accounting may be filed on a confidential basis. The accounting shall separately detail all costs incurred by the Certificate Holder as a result of its purchase of a structure or component for installation in the Project that did not conform to the specification for structures and components described in the EM&CP. The analysis contained within this accounting shall be divided into the following sections:

- a. Cost Estimate Provided with Application Exhibit 9;
- b. Summary of Project Cost Accounts;
- c. Expenditures Breakdown per Cost Account;
- d. Comparison of Estimated Versus Actual Expenditures;
- e. Conclusion and Explanation of Significant variances; and
- f. Accounting of Non-Conforming Structures or Components.

O. Transportation, Roads, and Highways

141. Neither the Certificate Holder nor any contractors in its employ shall construct, improve, or use any access roads not described in the EM&CP except in the case of

an emergency situation.

142. The Certificate Holder shall consult periodically with municipal highway transportation agencies about traffic conditions near the Project site and shall notify each such transportation agency of the approximate date work will begin in its jurisdiction, using access points that take direct access from the highways in that jurisdiction.

143. NYSDOT and NYSTA shall have authority to place inspectors on site to monitor and observe the Certificate Holder's activities on State Highways, or to request the presence of state or local police to ensure the safety of highway travelers, at such times and for such periods as NYSDOT and NYSTA deem appropriate. All costs thereof shall be borne by the Certificate Holder.

144. The Certificate Holder shall coordinate with NYSDOT and NYSTA for all work to be performed in the State Highway or NYSTA ROW, as applicable and provide an anticipated schedule for construction, which shall be updated and provided at regular intervals as requested by NYSTA. All work within NYSDOT and NYSTA property shall be designed and performed according to 17 NYCRR Part 131, "Accommodation of Utilities Within State Highway ROW" and in accordance with requirements and applicable policies as they may be changed from time to time including NYSTA TAP-401 "Occupancy and Work Permit Accommodation Guidelines" and TAP-401-U "Utility Occupancy Supplement". Prior to submitting its construction plan for any State Highway ROW segment, the Certificate Holder shall provide to NYSDOT and NYSTA a preliminary design marked to avoid conflict with potential future transportation projects that NYSDOT and NYSTA may seek to undertake in the future and shall offer to consult with NYSDOT and NYSTA concerning any comments they may offer and shall use reasonable efforts to accommodate any NYSDOT and NYSTA concerns.

145. The Certificate Holder shall avoid direct disturbance to properties by accessing the Project from existing roadways or off-ROW access roads as identified in the EM&CP. Work permits and insurance will be required for all contractors working

on NYSTA property. With respect to NYSTA property, project plans, stamped by a Professional Engineer licensed in the State of New York, shall be reviewed and approved by NYSTA before work and occupancy permits will be issued for construction on NYSTA property. Parking for Project construction workers shall be in designated areas which do not interfere with normal traffic, cause a safety hazard, or interfere with existing land uses; these areas shall be designated in the EM&CP.

146. For each road crossing and location where construction vehicles will access the Project from roadways, the Certificate Holder shall implement a Maintenance and Protection of Traffic (“MPT”) plan that identifies procedures to be used to maintain traffic and provide a safe construction zone for activities occurring within the roadway ROW. The MPT plan shall address temporary signage, lane closures, placement of temporary barriers, and traffic diversion.

a. All signage utilized shall comply with the NYSDOT Manual of Uniform Traffic Control Devices. Placement of signs shall be determined in consultation with the jurisdictional agency. At a minimum, signs shall be placed at the following distances:

i. Signs announcing construction at 500 feet and 1,000 feet;

ii. Signs depicting workers at 300 feet; and

iii. Where blasting is to take place within 50 feet of a road, a blast warning sign at 1,000 feet.

b. The MPT plan shall include the requirements for Work Zone Traffic Control and all applicable standards contained in NYSTA’s Traffic Safety Manual TAP-403, revised June 2019.

P. Petroleum & Hazardous Substances

147. Stationary fuel tanks and hazardous chemical storage shall be a minimum of 300 feet from streams, waterbodies and wetlands, unless: (i) the EM&CP provides justification, including that impacts have been avoided or minimized to the

maximum extent practicable; or (ii) adequate secondary containment (containing at least 110% of the volume stored) is otherwise provided, in which case storage can occur within 100 feet of such resources.

148. In general, to the extent practicable, chemicals and petroleum products will not be stored, mixed, or loaded, nor will equipment be refueled, within one hundred (100) feet of any watercourse or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under certain circumstances as identified below.

- a. Refueling of hand equipment will be allowed within one hundred (100) feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of hand held equipment will be initially filled in an upland location greater than one hundred (100) feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.
- b. Refueling of equipment will be allowed within one hundred (100) feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than one hundred (100) feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. All refueling of equipment within one hundred (100) feet of wetlands or streams will be conducted under the direct supervision of the environmental monitor. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the

equipment to be refueled. All equipment operating within one hundred (100) feet of a wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release.

149. A Spill Prevention, Control, and Countermeasure (“SPCC”) Plan to minimize the potential for unintended releases of petroleum and other hazardous chemicals during Project construction and operation shall be included in the EM&CP. The Certificate Holder shall immediately notify DPS Staff of any spill and report spills in accordance with State and/or federal regulations and provide a copy of such notification contemporaneously to NYSEG if the spill is located on NYSEG property.

Q. Herbicide Use During Construction

150. Only herbicides specified in the EM&CP shall be applied during construction of the Project. If the Certificate Holder desires a change to the herbicides specified in the EM&CP for use during construction of the Project, including mix proportions, additives (with the exception of dyes), or method of application, the Certificate Holder shall submit the proposed change for approval pursuant to Certificate Conditions 40 of this Certificate. No change inconsistent with the labeling for such herbicides shall be approved.

151. The supervising certified applicator shall be familiar with and understand the applicable provisions of this Certificate and the most recent version of the Certificate Holder’s vegetation management plan.

152. Herbicide application within state regulated wetlands and regulated 100-foot adjacent areas shall be performed via low volume foliar spray from backpack sprayer, cut stem and/or stump treatment, or basal bark treatment methods consistent with approved treatment methods in the most recent version of the Certificate Holder’s vegetation management plan.

R. Invasive Species

153. The Certificate Holder shall prepare an Invasive Species Management Plan in

accordance with the Invasive Species Management Plan Specifications in Appendix G to the Joint Proposal for DPS Staff review and acceptance in consultation with NYSDEC and NYSDAM.

S. Water Quality Certification

154. Concurrent with Commission approval of the EM&CP for this Project, the Director of Facility Certification and Compliance of the Office of Electric, Gas and Water, pursuant to §401 of the Federal Water Pollution Control Act (“Clean Water Act”), as amended, 33 U.S.C. §1341, and PSL Article VII, will execute an appropriate certification that the Project will comply with the applicable requirements of §§301, 302, 303, 306, and 307 of the Clean Water Act, as amended, and will assure compliance with applicable NYS water quality standards, limitations, criteria and other requirements set forth in 6 NYCRR §608.9(a), Parts 701 through 704, and Part 750.

APPENDIX E
ENVIRONMENTAL MANAGEMENT & CONSTRUCTION PLAN SPECIFICATIONS

Appendix E
SPECIFICATIONS FOR THE DEVELOPMENT OF
ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN

Section A of the Specifications for the Development of Environmental Management and Construction Plan (Specifications) addresses the development of the plan and profile drawings, and maps portion of the Environmental Management and Construction Plan (EM&CP).

Section B addresses the description and statement of objectives, techniques, procedures, and requirements, i.e. the textual portion of the EM&CP. A table of contents will be included for the EM&CP and each section, appendix or exhibit containing ten or more pages.

If any particular requirement of the Specifications is not applicable, so indicate and briefly explain.

A. EM&CP Plan and Profile Drawings and Maps

The EM&CP maps, charts, photostrip maps, and illustrations shall include, but need not be limited to, the following information:

1. Plan and Profile Details

A Line¹ Profile (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet)² showing:

- a. The boundaries of any new, existing, and/or expanded right-of-way (ROW)³ or road boundaries, and where cables are to be constructed overhead or underground; plus,

¹ The lowest conductor of an overhead design shall be shown in relation to ground at the maximum permissible conductor temperature for which the line is designed to operate, i.e., normally the short-time emergency loading temperature. If a lesser conductor temperature is used for the line profile, the maximum sag increase between the conductor temperature and the maximum conductor temperature shall be indicated for each ruling span. For underground project design, show relation of project to final surface grade, indicating design depth-of-cover.

² Contour lines (preferably at 5-foot intervals) are desirable on the photostrip map if they can be added without obscuring the required information.

³ The term "right-of-way" in these *Specifications* includes property, whether owned in fee or easement, to be used for substations, disposal sites, underground terminals, storage yards, and other associated facilities. Where such properties cannot reasonably be shown on the same plan or photo-strip, maps, or plan drawings used for the transmission line, additional maps or drawings at convenient scales should be used.

- areas contiguous to the ROW or street within which the Certificate Holders will obtain additional rights.
- b. The location of each Facility structure (showing its height, material, finish and color, and type), structural foundation type (e.g., concrete, direct bury), fence, gate, down-guy anchor, and any counterpoise required for the Facility (typical counterpoise drawings will suffice recognizing that before field testing of installed structures the Certificate Holder may be unable to determine the specific location of all required counterpoise), conductors, insulators, mid-span splices, and static wires and other components attached to Facility structures.
 - c. Existing utility or non-utility structures on the ROW, and indicate those to be removed or relocated (include circuit arrangements where new structures will accommodate existing circuits, indicate methods of removal of existing facilities, and show the new locations, types and configurations of relocated facilities).
 - d. Any underground utility or non-utility structure.
 - e. The relationship of the Facility to nearby fence lines; roads; trails; railways; airfields; property lines; hedgerows; surface waters; wetlands; other water bodies; significant habitats; associated facilities; flowing water springs; nearby buildings or structures; major antennas; oil or gas wells, and blowdown valves.
 - f. The location of any proposed new or expanded switching station, substation, or other terminal or associated utility or non-utility structure (attach plan⁴ - plot, grading, drainage, and electrical - and elevation views with architectural details at appropriate scales). Indicate the type of outdoor lighting, including design features to avoid off-site illumination and minimize glare; the color and finish of all structures; the locations of temporary or permanent access roads, parking areas, construction contract limit lines, property lines, designated floodways and flood-hazard area limits, buildings, sheds, relocated structures, and any plans for water service and sewage and waste disposal.

⁴ Preferably 1" = 50' scale with 2-foot contour lines.

- g. The location and boundaries of any areas whether located on- or off- ROW proposed to be used for fabrication, designated equipment parking, staging, access, lay-down, and conductor pulling. Indicate any planned fencing, surface improvements, and screening of storage and staging areas.
- h. The locations for ready-mix concrete chute washout and any other cleaning activities (e.g., control of invasive species).

2. Stormwater Pollution Prevention

- a. Include on the plan and profile drawings the acknowledged Storm Water Pollution Prevention Plan (SWPPP) details. Include the locations of soil erosion and sediment control measures developed in accordance with the latest version of the New York Standards and Specifications for Erosion and Sediment Control (e.g., stabilized construction entrances, silt fences, check dams, and sediment traps).
- b. Include on the plan and profile drawings the approved SWPPP locations of all permanent stormwater management controls that are required based on site-specific conditions or conditions of the Certificate.

3. Vegetation Clearing and Disposal Methods

Identify on the plan and profile drawings:

- a. the locations of sites requiring trimming or clearing of vegetation and the geographic limits of such trimming or clearing;
- b. the specific methods for the type and manner of cutting and disposition or disposal method for cut vegetation (e.g., chip; cut and pile; salvage merchantable timber, etc.);
- c. the methods for management of vegetation to be cut or removed at each site;
- d. any geographical area bounded by distinctly different cover types requiring different cut-vegetation management methods;
- e. any geographical area bounded at each end by areas requiring distinctly different cut-vegetation methods due to site conditions such as land use differences, population density, habitat or site protection, soil or terrain conditions, fire hazards, or other factors;

- f. different property-owners requesting specific vegetation treatment or disposal methods;
- h. areas requiring (off-ROW) danger tree removal; and,
- i. the location of any areas where specific vegetation protection measures will be employed and the details of those measures to avoid damage to specimen tree stands of desirable species, important screening trees, or hedgerows.

4. Building and Structure Removal

Indicate the locations of any buildings or structures to be acquired, demolished, moved, or removed.

5. Waterbodies

- a. Indicate the name, water quality classification and location of all rivers and streams, (whether perennial and intermittent) and drainages crossed by, the proposed ROW or any off-ROW access road constructed, improved, or maintained for the Facility. On the plan and profile drawings, indicate:
 - i. stream crossing method and delineate any designated streamside "protective or buffer zone" in which construction activities will be restricted to the extent necessary to minimize impacts on rivers and streams;
 - ii. the activities to be restricted in such zones; and,
 - iii. identify any designated floodways or flood hazard areas to be traversed by the Facility or access roads, or otherwise used for Facility construction or the site of associated facilities.
- b. Show the location of all potable water sources, including springs and wells on the ROW or within 100 feet of the ROW or access roads, indicating, on a site-by-site basis, precautionary measures to be taken to protect each water source.

6. Wetlands

- a. All wetlands and wetland 100-foot adjacent areas (adjacent areas) located within the ROW or crossed by the ROW or any off-ROW access road constructed, improved, or maintained for the Facility shall be depicted on EM&CP drawings. The plan and profile drawings shall delineate the wetland "protective or buffer zone" in which

- construction activities will be restricted to the extent necessary to minimize impacts on wetlands.
- b. Indicate the location and type (i.e., identification code for regulated town, state, or federal wetlands) of any wetland (e.g., marsh, meadow, bog, or scrub-shrub or forested swamp) within or adjoining the ROW or any access road, as determined by site investigation and delineation.
 - c. Indicate type and location of precautionary measures (e.g., mats) to be taken to protect all wetlands, associated drainage patterns, and wetland functions.

7. Land Uses

a. Agricultural Areas

- i. Indicate the locations of sites under cultivation or in active agricultural use including rotational pasture, pasture, hayland, and cropland.
- ii. Indicate the location of any unique agricultural lands including maple sugarbushes, organic muckland and permanent irrigation systems, as well as areas used to produce specialty crops such as vegetables, berries, apples, and grapes.
- iii. Indicate the location of vulnerable soils in agricultural areas that are more sensitive than other agricultural soils to construction disturbance due to slope, soil wetness, and shallow depth to bedrock.
- iv. Indicate the location of all land and water management features including subsurface drainage, surface drainage, diversion terraces, buried water lines, and water supplies.
- v. Designate the site-specific techniques to be implemented to minimize or avoid construction-related impacts to agricultural resources.

b. Sensitive Land Uses and Resources

Indicate the location and identification of sensitive land uses and resources that may be affected by construction of the Facility or by construction-related traffic (e.g., hospitals, emergency services, sanctuaries, schools, and residential areas).

c. Geologic, Historic, and Scenic or Park Resources
Indicate the locations of geologic, historic, and existing or planned scenic or park resources and specify measures to minimize impacts to these resources (e.g., fencing, signs).

d. Recreational
Indicate the locations where existing or planned recreational use areas, would affect or be affected by the Facility location, construction or other ROW preparation.

8. **Access Roads, Lay-down Areas and Workpads**

Indicate the locations of temporary and permanent on- and off-ROW access roads, lay-down areas and workpads. Provide construction type, material, and dimensions. Indicate provisions for upgrading any existing access roads.

9. **Noise Sensitive Sites**

Show the locations of noise-sensitive areas along the proposed ROW.

10. **Ecologically and Environmentally Sensitive Areas**

Indicate the general locations of any known ecologically and environmentally sensitive sites (e.g., archaeological sites; fish and wildlife habitat; rare, threatened, and endangered species or habitats; forest and vegetation; open space; areas of important aesthetic or scenic quality; deer winter yards, etc.), within or nearby the proposed or existing ROW or along the general alignment of any access roads to be constructed, improved or maintained for the Facility. Specify the measures that will be taken to protect these resources (e.g., fencing, flagging, signs "Sensitive Environmental Areas, No Access").

11. **Invasive Species of Special Concern**

Identify the location(s) of invasive species of special concern and the prescribed method to control the spread and/or eradicate the identified species.

12. **Herbicide**

On the plan and profile drawing notes, indicate areas where herbicides will not be used.

B. Description and statement of objectives, techniques, procedures and requirements

The textual portion of the EM&CP for the Facility shall include, but need not be limited to, all of the following information:

1. Facility Location and Description

Describe the location and limits of the site or ROW and explain the need for any additional rights. For each structure type, indicate the GSA-595A Federal standard color designation or manufacturer's color specification to be used for painted structures. State any objections raised by Federal, State, or local transportation (highways, waterways, or aviation) officials to the final location or manner of installation of, or access to, the certified Facility. Provide a rationale for the inclusion of any mid-span splice locations proposed.

2. Stormwater Pollution Prevention

- a. The information included in the acknowledged SWPPP.
- b. In areas of coastal erosion hazard, include plans to demonstrate compliance with the standards for coastal erosion hazard protection as required by 6 NYCRR Part 505 -Coastal Erosion Management.

3. Vegetation Clearing and Disposal Methods

- a. Describe the specific methods and rationale for the type and manner of cutting and disposition or disposal methods for cut vegetation.
- b. Detail specific measures employed to avoid damage to specimen tree stands of desirable vegetation, rare, threatened and endangered species, important screening trees, and hedgerows.
- c. Identify the factors such as the attributes of the site, outcome of landowner negotiations, and attributes of the logs, upon which Certificate Holder's removal of the merchantable logs resulting from clearing the ROW for the Facility will be based.
- d. Describe methods of compliance with 6 NYCRR Part 192 - Forest Insect and Disease Control, applicable New York State Department of Environmental Conservation (NYSDEC)

quarantine orders, and New York State Department of Agriculture and Markets (NYSDAM) regulations.

4. Building and Structure Removal

Indicate the locations of any buildings or structures to be acquired, demolished, moved, or removed. Provide the rationale for the acquisition and removal of buildings or structures.

5. Waterbodies

- a. Describe the measures to be taken to protect stream bank stability, stream habitat, and water quality including, but not limited to: crossing technique; crossing structure type; timing restrictions for in-stream work; stream bed and bank restoration measures; vegetation restoration measures; and other site-specific measures to minimize impacts, protect resources, and manage Facility construction.
- b. Indicate the procedures that were followed to inventory such resources and provide copies of any resulting data sheets and summary reports.
- c. Develop a table of waterbodies crossed by the Facility and include: Town (location), Existing Structure Span (mileposts), Stream Name, Field/Map Identification Name, Perennial or Intermittent, New York Stream Classification, Water Index Number, Crossing Method and Length, Fishery Type, GPS coordinates.

6. Wetlands

- a. For each State-regulated wetland, indicate the following: town (location); existing Structure Span (milepost); wetland field designation; NYSDEC classification code; wetland type; proposed structure located within wetland; total area of temporary disturbance/impact; dead end structures in NYSDEC wetlands; tangent structures in NYSDEC wetlands; total area of permanent disturbance in NYSDEC wetlands (sq. ft.); area crossed by Facility (sq. ft.); conversion of State-regulated forested wetlands (sq. ft.).
- b. Describe all activities that will occur within State-regulated wetlands or adjacent areas (e.g., construction, filling, grading, vegetation clearing, and excavation) and assure that the activity is consistent

with the weighing standards set forth in 6 NYCRR 663.5(e) and (f). Describe how impacts to wetlands, adjacent areas, associated drainage patterns, and wetland functions will be avoided, and how impacts will be minimized.

- c. Describe the precautions or measures to be taken to protect all other wetlands (e.g., town, federal wetlands) associated drainage patterns, and wetland functions.

7. Land Uses

a. Agricultural Areas

- i. Describe programs, policies, and procedures to mitigate agricultural impacts such as soil compaction. Explain how construction plans either avoid or minimize crop production losses and impacts to vulnerable soils.
- ii. Indicate specific techniques and references to appropriate agricultural protection measures recommended by NYS DAM.

b. Sensitive Land Uses

Describe the sensitive land uses (e.g., hospitals, emergency services, sanctuaries, schools, residential areas) that may be affected by construction of the Facility or by construction-related traffic and specify measures to minimize the impacts on these land uses.

c. Geologic, Historic and Scenic or Park Resources

Describe the geologic, historic, and scenic or park resources that may be affected by construction of the Facility or by construction-related traffic and specify measures to minimize impacts on these resources.

Indicate the procedures that were followed to identify such resources and specify the measures that will be taken to protect or preserve these resources. Reports prepared to identify and analyze such sites shall be made available to Department of Public Service (DPS) Staff upon request.

d. Recreation Areas

Explain how proposed or existing recreation areas will be avoided or accommodated during construction, operation, and maintenance of the Facility.

8. Access Roads, Lay-down Areas and Workpads

- a. Discuss the necessity for access to the ROW, including the areas where temporary or permanent access is required; and the nature of access improvements based on natural features, equipment constraints, and vehicles to be used for construction and maintenance, and the duration of access needs through restoration and the maintenance of the Facility.
- b. Discuss the types of access which will be used and the rationale for employing that type of access including consideration of:
 - i. temporary installations (e.g., corduroy, mat, fill, earthen road, geotextile underlayment, gravel surface, etc.);
 - ii. permanent installations (e.g., cut and fill earthen road, geotextile under-layment, gravel surface, paved surface, etc.);
 - iii. use of roads, driveways, farm lanes, rail beds, etc.; and,
 - iv. other access, e.g. helicopter or barge placement. For each temporary and permanent access type, provide a figure or diagram showing a typical installation (include top view, cross section, and side view with appropriate distances and dimension). Where existing access ways will be used, indicate provisions for upgrading to meet appropriate standards.
- c. Indicate the associated drainage and erosion control features to be used for access road construction and maintenance. Provide diagrams and specifications (include plan and side views with appropriate typical dimensions) for each erosion control feature to be used, such as:
 - i. staked straw bale or check dam (for ditches or stabilization of topsoil);
 - ii. broad-based dip or berm (for water diversion across the access road);
 - iii. roadside ditch with turnout and sediment trap;
 - iv. French drain;
 - v. diversion ditch (water bar);
 - vi. culvert (including headwalls, aprons, etc.);
 - vii. sediment retention basin (for diverting out-fall of culvert or side ditch); and,

- viii. silt fencing.
- d. Indicate the type(s) of stream crossing method to be used in conjunction with temporary and permanent access road construction. Provide diagrams and specifications (include plan and side view with appropriate dimensions) for each crossing device and rationale for their use. Stream crossing devices may include but not be limited to:
 - i. timber mat;
 - ii. culverts including headwalls;
 - iii. bridges (either temporary or permanent); and,
 - iv. fords.
- e. All diagrams and specifications should include material type and size to be placed in streams and on stream approaches.
- f. If access and workpad areas cannot be limited to upland areas, provide justification for any access and workpad areas which are proposed to be located in a wetland or stream or waterbody.

9. Noise Sensitive Sites

Specify procedures to be followed to minimize noise impacts related to ROW clearing, and construction and operation of the Facility. Indicate the types of major equipment to be used in construction or Facility operation; sound levels at which that equipment operates; days of the week and hours of the day during which that equipment will normally be operated; any exceptions to these schedules; and any measures to be taken to reduce audible noise levels caused by either construction equipment or Facility operation.

10. Ecological and Environmentally Sensitive Sites

Indicate the procedures that were followed to identify ecological and environmental resources (e.g., archaeological sites; fish and wildlife habitat; rare, threatened, and endangered species or habitats; forest and vegetation; open space; areas of important aesthetic or scenic quality; deer winter yards) and specify the measures that will be taken to protect or preserve these resources. Reports prepared to identify and analyze such sites shall be identified, and made available upon request.

11. Invasive Species of Special Concern

- a. Provide an invasive species prevention and management plan for invasive species of special concern, prepared in consultation with DPS Staff, NYSDEC, and NYSDAM, based on the pre-construction invasive species survey of invasive species within the ROW.
- b. The plan shall include measures that will be implemented to minimize the introduction of invasive species of special concern and the spread of existing invasive species of special concern during construction (e.g., soil disturbance, vegetation clearing, transportation of materials and equipment, and landscaping/revegetation).

12. Herbicides

- a. Specify the locations where herbicides are to be applied. Provide a general discussion of the site conditions (e.g., land use, target and non-target vegetation species composition, height, and density) and the choice of herbicide, formulation, application method, and timing.
- b. Describe the procedures that will be followed during application to protect non-target vegetation, streams, wetlands, potable waters and other water bodies, and residential areas and recreational users on or near the ROW.

13. Fugitive Dust Control

Specify appropriate measures that will be used to minimize fugitive dust and airborne debris from construction activity.

14. Petroleum and Chemical Handling Procedures

- a. Include a plan for the storage, handling, transportation, and disposal of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances which may be used during, or in connection with, the construction, operation, or maintenance of the Facility. Address how to avoid spills and improper storage or application in the vicinity of any wetland, river, creek, stream, lake, reservoir, spring, well, or other ecologically sensitive site, or existing recreational area along the ROW and access roads.
- b. Include a plan for responding to and remediating the effects of any spill of petroleum, fuels, oil, chemicals,

hazardous substances, and other potentially harmful substances in accordance with applicable State and Federal laws, regulations, and guidance, and include proposed methods of handling spills of petroleum, fuels, oil, chemicals, hazardous substances, and other potentially harmful substances which may be stored or utilized during the construction and site restoration, operation, and maintenance of the Facility.

15. Environmental Supervision

- a. Describe protocols for supervising demolition, vegetation clearing, use of herbicides, construction, and site restoration activities to ensure minimization of environmental impact and compliance with the environmental protection provisions specified by the Certificate.
- b. Specify the titles and qualifications of personnel proposed to be responsible for ensuring minimization of environmental impact throughout the demolition, clearing, construction, and restoration phases, and for enforcing compliance with environmental protection provisions of the Certificate and the EM&CP. Indicate the amount of time each supervisor is expected to devote to the project.
- c. Specify responsibilities for personnel monitoring all construction activities, such as clearing, sensitive resource protection, site compliance, EM&CP change notices, etc.
- d. Explain how all environmental protection provisions will be incorporated into contractual specifications, and communicated to those employees or contractors engaged in demolition, clearing, construction, and restoration.
- e. Describe the procedures to "stop work" in the event of a Certificate violation.
- f. Identify the company's designated contact including 24/7 emergency phone number, for assuring overall compliance with Certificate conditions.

16. Clean-up and Restoration

Describe the Certificate Holder's program for ROW clean-up and restoration, including:

- a. the removal of any temporary roads; restoration of lay-down or staging areas; the finish grading of any

- scarified or rutted areas; the removal of waste (e.g. excess concrete), scrap metals, surplus or extraneous materials or equipment used;
- b. plans, standards and a schedule for the restoration of vegetative cover; including, but not limited to, specifications to address:
- i. design standards for ground cover:
 - 1. species mixes and application rates by site;
 - 2. site preparation requirements (soil amendments, stone removal, subsoil treatment, or drainage measures);
 - 3. acceptable final cover % by cover type;
 - ii. planting installation specifications and follow-up responsibilities;
 - iii. a schedule or projected dates of any seeding and/or planting; and,
 - iv. plans to prevent unauthorized access to and along the ROW.

17. Visual Impact Mitigation

Provide details of screening or landscape plans prescribed at road crossings and for adjacent property owners. Discuss existing or proposed landscape planting, earthwork, or installed features to screen or landscape substations and other Facility components.

18. ROW Encroachment Plan

Provide detailed plans for identifying and resolving potential encroachments to the existing and proposed ROW.

19. Wetland Mitigation Plan

Provide a proposal to address wetlands mitigation, for all permanent impacts to State-regulated wetlands and Federally- regulated wetlands, if prescribed by the Army Corps of Engineers, including, but not limited to, the permanent conversion of forested wetland to scrub-shrub wetland. If such proposal is to prepare a detailed mitigation plan for State regulated wetlands, it shall separately address impacts to each of the wetlands benefits described in ECL § 24-0105(7). Plans shall provide for wetland mitigation in the same watershed to the maximum extent possible.

APPENDIX F
**NYSDEC SUPPLEMENTAL SPECIFICATIONS FOR WETLANDS AND
WATERBODIES**

APPENDIX F

NYSDEC SUPPLEMENTAL SPECIFICATIONS FOR WETLANDS AND WATERBODIES

The Specifications set forth below are in addition to, or refinements of, the elements required in the Specifications for the Development of Environmental Management and Construction Plan (“EM&CP Specifications”) contained in Appendix ___ of the Joint Proposal. The applicant must incorporate in the EM&CP all the information specifically described in this Appendix.

Wetland and Waterbody Construction Specifications

- 1) Show the extent of clearing and ground disturbance in each wetland, state-regulated wetland adjacent area, and waterbody on the construction drawings.
- 2) The wetland and waterbodies summary tables required under section (B)(5)(c) of the EM&CP Specifications must include the following information for each wetland and waterbody located within the Project ROW and along access roads: proposed structure/disturbance type; NYSDEC classification code (e.g. , C(T) stream standards, and Class I, II, III, and IV state-regulated wetlands); wetland cover type; wetland functions and values; total area of temporary disturbance (sq. ft.); total area of permanent impact (sq. ft.); conversion of forested and scrub-shrub wetlands (sq. ft.); and stream flow designation (perennial, intermittent, or ephemeral).
- 3) Provide a narrative description of construction activities within regulated wetlands, state regulated 100-foot wetland adjacent areas, and waterbodies that shows compliance with the following requirements:
 - a. Where new permanent access roads are to be constructed through wetlands, a layer

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of geotextile fabric or equivalent underlayment must be used;

- b. In the event that construction results in an alteration to wetland hydrology, the breach must be immediately sealed, and no further activity may take place until DPS and NYSDEC staff are notified and a remediation plan to restore the wetland and prevent future dewatering of the wetland has been accepted by DPS and NYSDEC;
- c. Measures to minimize soil compaction in wetlands and waterbodies, including the use of temporary matting, low weight to surface area equipment or constructing when soils are frozen;
- d. Measures and details demonstrating how work areas will be isolated from flowing streams and standing water in wetlands, including the use of water handling methods such as sandbags, cofferdam, piping or pumping. The details shall include a discussion of:
 - (i) the management of waters accumulated in the isolated work area to ensure settling and filtering of solids and sediments before water is returned to a wetland or waterbody;
 - (ii) restoration measures for the isolated work area in streams including the complete removal of the temporary measures, reestablishment of pre-construction contours, and stabilization and seeding immediately following the completion of work;
 - (iii) the manner by which low flow conditions will be maintained and water depths and velocities similar to undisturbed upstream and downstream reaches will be preserved so that the movement of native aquatic organisms is sustained;

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- e. Measures to minimize impacts to fish and wildlife during wetland and waterbody construction, including actions to prevent entrapment of fish and wildlife in the work area and, if entrapment occurs, actions to timely and safely move the animals to appropriate undisturbed locations outside the work area; and
- f. Procedures to remove all excess fill materials to upland areas at least 50 feet from waterbodies and outside of the state-regulated 100-foot adjacent area.

Wetland and Waterbody Restoration Specifications

Include the following measures and details:

- 1) Restoration of pre-construction site conditions and stabilization of disturbed wetlands and waterbodies within 48 hours or as soon as practicable after completion of construction;
- 2) Restoration of disturbed streams as follows:
 - a. Stabilization of stream banks above ordinary high-water elevation with natural fiber matting, seeded with an appropriate perennial native conservation seed mix, and mulched with straw within two (2) days of final grading;
 - b. Streams must be equal in width, depth, gradient, length, and character as the pre-existing conditions and tie in smoothly to the profile of the stream channel upstream and downstream of the project area. The planform of any stream must not be changed; and
 - c. Woody stream bank vegetation must be replaced with ROW compatible native plantings as site conditions and facility design allow;
- 3) Revegetation of disturbed state-regulated wetlands and 100-foot adjacent areas with native plants. Appropriate native wetland species mixes must be described (e.g., Ernst Wetland Mix (OBL-FACW Perennial Wetland Mix, OBL Wetland Mix, Specialized Wetland Mix

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for Shaded OBL-FACW; ROW compatible native plantings; and/or crop seed mixes consistent with existing, continued agricultural use);

- 4) Monitoring of restoration areas until an 80% cover of native plant species with the appropriate wetland indicator status has been reestablished over all portions of the restored area;
- 5) If, after two years, monitoring demonstrates that the criteria for restoration (80% native species cover) is not met, the Certificate Holder must submit a Wetland Planting Remedial Plan (WPRP). The WPRP must include an evaluation of the likely reasons for the results, including an analysis of poor survival; a description of corrective actions to ensure a successful restoration; and a schedule for conducting the remedial work. Once accepted by DPS and NYSDEC, the WPRP must be implemented according to an approved schedule.

Wetland Mitigation Plan for State-regulated Wetlands

The Wetland Mitigation Plan, intended to compensate for unavoidable loss of wetland functions and values, must include the following:

- 1) The creation of compensatory wetlands at the following ratios: emergent marsh 1:1, scrub-shrub wetland 1.5:1, and forested wetlands 2:1;
- 2) A construction timeline for the mitigation activities;
- 3) Construction details for meeting all requirements contained in the proposed certificate conditions;
- 4) Agreed-upon performance standards for determining wetland mitigation success;
- 5) Provisions for post-construction monitoring for a period of five years after completion of the wetland mitigation;

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- 6) After each agreed-upon monitoring period, the Certificate Holder must take corrective action for any areas that do not meet the above-referenced performance standards to increase the likelihood of meeting the performance standards after five years; and
- 7) If, after five years, monitoring demonstrates that the wetland mitigation is still not meeting the established performance standards, the Certificate Holder must submit a Wetland Mitigation Remedial Plan (WMRP). The remedial plan must include an evaluation of the likely reasons for not achieving performance standards, a description of corrective actions to ensure a successful mitigation, and a schedule for conducting the remedial work. Once accepted by DPS and NYSDEC, the WMRP must be implemented according to an approved schedule.

Stream Crossings Specifications

For each new permanent stream crossing in a “protected stream” (C(T) or higher) and/or “navigable waters of the state” as those terms are defined at 6 NYCRR Part 608, the following must be provided:

- a. Detailed plan, profile, and cross-sectional view plans;
 - b. Drainage area and flow calculations to ensure that the design will safely pass the 1% annual (100-year return) chance storm event; and
 - c. Location, quantity, and type of fill.
- 2) Bridges shall be utilized for each new permanent stream crossing and shall span the stream bed and banks. If a bridge is not practicable, an alternatives analysis must be provided, including written justification for why a bridge is not practicable. If a bridge is deemed not practicable then the following options, in order, shall be considered and evaluated: an open bottom arch culvert; three-sided box culvert and round/elliptical

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culvert. NOTE: For stream channels with slopes greater than 3% an open bottom culvert must be used. All culverts shall be designed to:

- a. Contain native streambed substrate or equivalent
- b. Be a minimum width of 1.25 times the width of the stream bed. The stream bed is measured bank to bank at the ordinary high-water level or edges of terrestrial, rooted vegetation;
- c. Include a slope that remains consistent with the slope of the upstream and downstream channel; and
- d. Facilitate downstream and upstream passage of aquatic organisms.

APPENDIX G
INVASIVE SPECIES MANAGEMENT PLAN SPECIFICATIONS

APPENDIX G

Invasive Species Management Plan (ISMP) Specifications

An "Invasive Species" (IS) is a species that is non-native to the ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. 6 NYCRR Part 575, *Prohibited and Regulated Invasive Species*, was adopted in July 2014, to help control invasive species by reducing new infestations and the spread of existing populations.

Purpose and Goals of the Plan

An ISMP shall at a minimum, identify invasive species known or found on the project site, describe the methods which will be used to minimize the spread and expansion of invasive species found on site, and describe the methods which will be used to prevent introduction of new invasive species. The ISCP shall include baseline surveys, construction best management practices, post-construction monitoring and an adaptive management strategy plan.

Baseline Invasive Species (IS) Survey

1. During the development of the EM&CP, a pre-construction baseline survey shall be conducted during the growing season, but no more than 12 months prior to the commencement of construction. Should construction not start within 12 months, an updated survey may be required. This survey shall serve as a baseline for the preparation of the draft ISMP.
2. The entire Limits of Disturbance (LOD) including permanent and temporary off-ROW access roads shall be surveyed for IS plants as identified in 6 NYCRR Part 575.
3. The survey shall include documented qualitative observations for IS spread potential from adjacent properties and land use (for example, IS infested adjoining property or private off-site access roads that cross the ROW).
4. The preferred survey protocol is to collect data that is in a format which can be uploaded into the statewide database *iMapInvasives*¹.
 - a. An existing mobile application is available to facilitate data collection.
 - b. Alternately, a custom ArcGIS collector application can be developed by NYSDEC or an alternative protocol may be proposed for acceptance by NYSDEC.
 - c. The data collection protocol shall allow for:
 - Point data collected in the field on GPS-enabled devices.
 - Confidentiality controls to restrict information distribution. This coding hides the data from public view and is only visible to key state agency staff and PRISM² coordinators focused on IS work with funding from the state. Those with access to this data have signed a non-disclosure agreement.

¹ iMapInvasives is New York State's on-line, all-taxa invasive species GIS based data management system used to assist in the protection of the state's natural resources from the threat of invasive species. It is managed by the New York State Natural Heritage Program (NYNHP) in partnership with the New York State Department of Environmental Conservation.

² (PRISM) Partnerships for Regional Invasive Species Management. PRISMs coordinate invasive species management functions and the NYSDEC has contracted with eight PRISMs across the State.

Construction Best Management Practices (BMPs)

Construction BMPs shall be implemented for all IS in all LOD (not just jurisdictional areas) and, at a minimum, shall include:

1. Contractor/subcontractor/employee training on cleaning and other IS management procedures;
2. Inspection of construction materials and equipment;
3. Minimizing ground disturbance in IS infested areas;
4. Proper clearing and disposal practices (*such as, cut and leave in infested area or dispose off-site in landfill-incinerator or approved disposal site*);
5. Equipment Cleaning; and
6. Restoration.

IS Propagation

IS Propagation shall be prevented by, among other stated techniques, the following:

1. Preparing ROW travel routes to prevent IS spread through contact with equipment/vehicles by any practical combination of matting, IS burial, clean fill cover or IS eradication; and/or
2. Providing cleaning stations for equipment/vehicles whenever leaving IS infested areas along ROW; and/or
3. Other mutually agreeable practices.

Post-Construction Monitoring

1. Post-construction surveys shall be conducted in all LOD, both within the ROW and off-ROW areas and access roads;
2. A post-construction survey of IS shall be conducted in all temporary off-ROW access road areas during the final Stormwater Pollution Prevention Plan (SWPPP) inspections;
3. A post-construction survey of IS shall be conducted in all ROW LOD areas, including permanent access roads, after the second full growing season from final SWPPP signoff;
4. All post-construction surveys shall use the same IS Survey Protocols used during the baseline pre-construction IS survey;
5. Upon completion of the post-construction surveys, a final report shall be prepared and submitted to the NYSDEC, DAM and DPS. The final report shall discuss whether the goals of the ISMP have been achieved and whether any additional post-construction monitoring may be warranted based on whether an expansion of identified Invasive Species of Special Concern (ISSC) or Invasive Species of High Concern (ISHC) as a result of construction are present, as defined in the Adaptive Management Strategy Plan (AMSP) discussed below. If the post-construction monitoring report shows the aerial extent of ISSC or ISHC has expanded as defined in the AMSP as a result of construction of the Project, the final report shall include a Final AMSP for achieving the goals of the ISMP. DPS, DAM and DEC will review the final report and DPS, in consultation with the other agencies, will determine whether the

goals of the post construction monitoring have been achieved or, if applicable, whether the Final Adaptive Management Strategy must be implemented.

Adaptive Management Strategy Plan

The initial ISMP will include an Adaptive Management Strategy Plan (AMSP) prepared in consultation with and accepted by DEC, DPS and DAM and, at a minimum must include the following elements:

1. A project specific list of Prohibited Invasive Species pursuant to 6 NYCRR Part 575 divided into two sub-lists for which management and control will be required (these lists to be generated by DEC in consultation with DPS and DAM):
 - a. ISSC, being composed of Prohibited IS³ known to be present in the project area and for which DEC has deemed control is necessary such that there is no expansion as defined below. This list will be generated following results of pre-construction surveys and an analysis of regional threat, (for example, PRISM Tier rankings).
 - b. Inclusion of a project specific list of ISHC⁴, being those IS not present in the project area, but which if newly identified in post-construction monitoring, eradication is required. This list will include *Prohibited* IS with the highest management concern (for example, Giant Hogweed).
2. Management of “expansion”:
 - a. ISSC that have expanded under the following terms must be controlled.
 - b. ISHC that have been newly identified must be eradicated.
 - c. In comparing progressive monitoring data of ISSC, expansion may be defined in terms of categorical jump in *iMapInvasives* size categories as follows:
 - New and distinct occurrence
 - Up to 10 sq. ft.
 - Up to 0.5 acre
 - Up to 1.0 acre
 - More than 1.0 acre
3. In consultation with DEC, DPS and DAM, a discussion of possible adaptive management strategies and control measures (such as, eradication) and where and when they may be required if the post-construction survey identifies an expansion of ISSC or ISHC in LOD areas caused by construction. This should include consideration of IS phenology, control methodology (mechanical techniques, pesticide use, etc.) and control objectives.
4. Discussion of conditions that may necessitate additional post-construction monitoring and the extent and duration of such extended monitoring considering ongoing long-range vegetative management plan practices.

Upon completion of the post-construction monitoring surveys, if the post-construction monitoring report shows the aerial extent of ISSC or ISHC has expanded as defined in the AMSP as a result of construction of the Project, then DPS, DAM and DEC will review the final report and DPS, in consultation with DEC and DAM, will determine whether the goals of the post-construction monitoring have been achieved or, if applicable, whether a Final AMSP must be implemented.

³ See 6 NYCRR Part 575.3

⁴ To be defined by DEC in consultation with the Certificate Holder, DPS and DAM.

APPENDIX H
PROPOSED WATER QUALITY CERTIFICATION

**PROPOSED 401 WATER QUALITY CERTIFICATION
NEW YORK PUBLIC SERVICE COMMISSION
WATER QUALITY CERTIFICATION**

Pursuant to: §401 of the Federal Water Pollution Control Act, 33 U.S.C. §1341, and Article VII of the New York Public Service Law

Certification Issued to: **NextEra Energy Transmission New York, Inc.**
700 Universe Boulevard
Juno Beach, Florida 33408

Project Description and Location

NextEra Energy Transmission New York, Inc. (“NEETNY”), has proposed to construct, operate and maintain the Empire State Line Project (“Project”). The Project includes an approximately 20-mile 345-kilovolt (“kV”) transmission line and associated switchyards, in the town of Royalton in Niagara County, New York, and the towns of Alden, Newstead, Lancaster, and Elma in Erie County, New York. Specifically, the Project includes a new 345 kV switchyard (“Dysinger Switchyard”) in Niagara County, which will become the new 345 kV hub in Western New York where seven 345 kV lines will connect. It also includes a second new switchyard (“East Stolle Switchyard”) in Erie County to be connected to the existing New York State Electric & Gas Corporation (“NYSEG”) Stolle Road Substation. The approximately 20-mile 345 kV transmission line will connect the Dysinger and East Stolle Switchyards. In turn, the Dysinger Switchyard will be connected to the Power Authority of the State of New York 345 kV Niagara lines via two double circuit structures approximately 0.30 miles in length and the NYSEG 345 kV Kintigh lines via two single circuit structures approximately 0.15 miles in length. Likewise, the East Stolle Switchyard will be connected to the NYSEG Stolle Road Substation via single circuit structures approximately 0.2 miles in length and NYSEG 345 kV Stolle Road to Homer City transmission line via single circuit structures approximately 0.2 miles in length. The Proposed Line will primarily be built within the existing NYSEG Utility Corridor. The Project is described in detail in the administrative record of Case 18-T-0499. This record includes a detailed description of the Project’s location and the surface water bodies traversed by the Project ROW.

Construction, operation and maintenance of the Project will be in accordance with the Certificate of Environmental Compatibility and Public Need (“Certificate”), the Environmental Management and Construction Plan (“EM&CP”), and the Long-Range Right-of-Way Management Plan approved by the Commission.

Certification

The New York State Public Service Commission hereby certifies, pursuant to §401 of the Water Pollution Control Act (33 U.S.C. §1341) and Article VII of the New York Public Service Law that the Project, as conditioned herein, complies with applicable requirements of §§ 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act, as amended, and applicable New York State water quality standards, limitations, criteria and other requirements set forth in 6NYCRR §608.9(a)

and Parts 701 through 704, provided that all of the conditions listed herein are met. This certification (“Certification”) is issued in conjunction with the Article VII Certificate sought by NEETNY in, and based on the record of, Case 18-T-0499.

Conditions

1. No in-water work shall commence until all pre-construction conditions relating to such work contained in the Certificate and any Order approving the EM&CP have been met to the satisfaction of the Department of Public Service.
2. Construction and operation of the Project shall at all times be in conformance with: (a) the Application and Joint Proposal in Case 18-T-0499, to the degree not superseded by the Certificate, (b) all conditions of approval contained in the Certificate, (c) the EM&CP, and (d) all conditions incorporated in any order approving the EM&CP in Case 18-T-0499, to the extent such documents referenced in (c) and (d) above pertain to NEETNY’s compliance with New York State Water Quality Standards necessary and appropriate for issuance of, and compliance with, this Certification.
3. NEETNY shall provide a copy of this Certification to the U.S. Army Corps of Engineers, along with a copy of the Application, Joint Proposal, Article VII Certificate, EM&CP, and order(s) approving the EM&CP in Case 18-T-0499 so that the U.S. Army Corps of Engineers will have a complete record of the conditions that apply hereto.
4. NEETNY shall provide to all construction contractors performing work on the Project complete copies of this Certification, the Article VII Certificate, the approved EM&CP, and order(s) approving the EM&CP.

Certified by:

Date

Houtan Moaveni
Director of Facility Certification & Compliance
Office of Electric, Gas and Water
New York State Department of Public Service
Three Empire State Plaza
Albany, New York 12223