

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 20-T-0549 - Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities in the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County.

ORDER GRANTING CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED

Issued and Effective September 9, 2021

TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	BACKGROUND AND PROCEDURAL HISTORY.....	2
	A. Public Outreach	8
	B. Public Comments	9
	C. Affidavits in Support	10
	D. Description of the Proposed Project	10
	E. Water Quality Certification	13
III.	DISCUSSION	13
	A. Basis of the Need for the Facility	14
	B. Probable Environmental Impacts	16
	1. Land Use.....	17
	2. Agricultural Resources.....	18
	3. Visual Resources.....	19
	4. Cultural Resources.....	21
	5. Terrestrial Ecology and Wetlands.....	22
	6. Protected, Threatened and Endangered Species.....	23
	7. Topography and Soils.....	25
	8. Transportation.....	25
	9. Communications.....	27
	10. Noise.....	27
	11. Electric and Magnetic Fields.....	28
	12. Alternatives.....	29
	C. Active Farming Operations That Produce Crops, Livestock, and Livestock Products	30
	D. Undergrounding/Conformance to Long-Range Plan	31
	E. Conformance to State and Local Laws	32
	F. Provisions Not Adopted	35
	G. Conclusion/Public Interest Finding	35
	The Commission orders:	36

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service
Commission held in the City of
Albany on September 9, 2021

COMMISSIONERS PRESENT:

John B. Howard, Chair
Diane X. Burman
James S. Alesi
Tracey A. Edwards
David J. Valesky
John B. Maggiore
Rory M. Christian

CASE 20-T-0549 - Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities in the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County.

ORDER GRANTING CERTIFICATE OF ENVIRONMENTAL
COMPATIBILITY AND PUBLIC NEED

(Issued and Effective September 9, 2021)

BY THE COMMISSION:

I. INTRODUCTION

In this Order, we grant New York Transco LLC (NY Transco), a Certificate of Environmental Compatibility and Public Need (Certificate), pursuant to Public Service Law (PSL) Article VII. This Certificate authorizes NY Transco to construct, operate and maintain the Rock Tavern to Sugarloaf Project (RTS Project or Project).

II. BACKGROUND AND PROCEDURAL HISTORY

As with several other recent proceedings, the submission of the Article VII application here follows and results from the New York Independent System Operator's (NYISO) Public Policy Transmission Planning Process (PPTPP).¹ The NYISO's PPTPP was developed to comply with the Federal Energy Regulatory Commission's (FERC) Order No. 1000, requiring a planning process for the consideration of transmission need driven by Public Policy Requirements.²

Relative to this proceeding, in December of 2015, the New York State Public Service Commission (Commission) found a Public Policy Transmission Need (PPTN) for new 345 kilovolt (kV) major electric transmission facilities to cross the Central East and Upstate New York/Southeast New York (UPNY/SENY) interfaces to provide additional transmission capacity to move power from

¹ The NYISO's PPTPP Public Policy Transmission Planning Process is prescribed under its Open Access Transmission Tariff (OATT). See, OATT, Attachment Y, §31.4, et seq. See also Case 19-T-0684, New York Transco LLC - Article VII Siting, New York Energy Solution Project, Order Adopting Joint Proposal (issued February 11, 2021); Case 19-T-0549, LS Power Grid New York, LLC, LS Power Grid New York Corporation I, and the New York Power Authority - Article VII Siting, Edic/Marcy to New Scotland; Princetown to Rotterdam Project, Order Adopting Joint Proposal, issued January 21, 2021; and, Case 18-T-0499, NextEra Energy Transmission New York, Inc. - Article VII Siting, Empire State Line Project, Order Granting Certificate of Environmental Compatibility and Public Need (issued June 16, 2020).

² See FERC Docket No. RM10-23-000, Transmission Planning and Cost Allocation by Transmission Owning and Operating Public Utilities, Order No. 1000 (issued July 21, 2011). The NYISO OATT defines a Public Policy Requirement as: federal, New York State statute or regulation, including a Commission Order or local law that may relate to transmission planning on the Bulk Power Transmission System. Rehearing denied, Order No. 1000-A (issued May 17, 2012), rehearing denied, Order No. 1000-B (issued October 18, 2012).

upstate to downstate.³ As relevant here, prior to the Commission's determination, DPS Staff requested that the NYISO conduct a power flow analysis of the proposed solutions. The NYISO found that the proposed solutions to relieve congestion in the Central East and UPNY/SENY interfaces would trigger a contingency on the existing double-circuit 69 kV lines from the Shoemaker Substation to the Sugarloaf Substation in Orange County that would need to be addressed for any of the solutions to produce a maximum positive benefit.⁴ Without such upgrades, the proposed solutions to the PPTN would not operate at full capacity. The NYISO also found a need for upgrades to the Rock Tavern Substation so it could handle the higher line currents that would result from the upgrade projects in the Central East and UPNY/SENY interfaces.⁵ Together, the Shoemaker to Sugarloaf line upgrade and the Rock Tavern Substation upgrades became known as the "Segment B Additions" projects and were included in the broader definition of the "Segment B" portion of the PPTN.⁶

The Commission found that the 2015 State Energy Plan, and portions of State Energy Law "together constitute Public Policy Requirements driving transmission needs."⁷ It declared a public policy need to expand transmission capacity between upstate power generation sources and downstate consumers on the bulk transmission system. The Commission then directed the

³ See Case 12-T-0502 et al., Proceeding to Examine Alternating Current Transmission Upgrades, Order Finding Transmission Needs Driven by Public Policy Requirements (issued December 17, 2015).

⁴ Ibid., p. 61.

⁵ Id.

⁶ Ibid., Appendix A.

⁷ Ibid., p. 68.

NYISO to commence the solicitation and evaluation of proposed solutions to the identified PPTNs.⁸

The NYISO issued a solicitation for solutions to satisfy the PPTNs identified by the Commission.⁹ On October 28, 2016, the NYISO filed the results of its assessment of the proposed solutions with the Commission.¹⁰ In January 2017, the Commission found that PPTNs continued to exist and directed the NYISO evaluate and select the more efficient or cost-effective transmission solutions.¹¹

On April 8, 2019, the NYISO selected developers to build two transmission projects designed to meet the PPTNs.¹² As relevant to this proceeding, NY Transco's New York Energy Solution project (NYES Project) was ultimately selected as the more cost-effective or efficient solution to satisfy Segment B

⁸ Id., Ordering Clause 1.

⁹ New York Independent System Operator, Inc., AC Transmission Public Policy Transmission Needs Project Solicitation (February 29, 2016).

¹⁰ Case 12-T-0502, supra, NYISO AC Transmission PPTN VSA Report (October 28, 2016).

¹¹ Case 12-T-0502, supra, Order Addressing Public Policy Transmission Need for AC Transmission Upgrades (January 24, 2017), p. 3.

¹² See NYISO Board of Directors Decision on Approval of AC Transmission Public Policy Transmission Planning Report and Selection of Public Policy Transmission Projects (issued April 8, 2019), <https://www.nyiso.com/documents/20142/1390750/Board-DecisionAC-Transmission-2019-04-08.pdf/32323d32-f534-a790-1b03-2cb110033320>.

of the PPTN.¹³ In July 2019, the Commission directed the selected developers to file PSL Article VII Applications.¹⁴

NY Transco subsequently purchased the Shoemaker to Sugarloaf Segment B Addition project from Orange and Rockland Utilities, Inc. (O&R) and assumed responsibility to site and construct the project. After its purchase of the project, NY Transco concluded that the RTS Project addresses the contingency identified by the NYISO during the AC transmission planning proceeding at a "substantially lower cost and with fewer impacts than the Commission-defined Shoemaker to Sugarloaf Segment B Additions project."¹⁵ Transco submitted the RTS Project to the NYISO, which determined that the Project addresses the Commission-identified contingency and is a non-material change with regard to the larger NYES Project interconnection application. The NYISO presented the non-material determination at the Transmission Planning Advisory Subcommittee Meeting on August 7, 2020. The RTS Project is proposed in lieu of and in satisfaction of the Shoemaker to Sugarloaf portion of the Segment B Additions projects.

On November 5, 2020, NY Transco filed an application (Application) with the Commission, for a Certificate pursuant to Article VII of the PSL for authority to construct the RTS Project. The Project includes the replacement of an existing approximately 12-mile overhead 115 kV electric transmission line

¹³ Id. and Case 12-T-0502, supra, Order Denying Rehearing and Addressing Further Process for Examining Alternating Current Transmission Upgrades (issued July 16, 2019) (Process Order), p. 11. NY Transco was issued a Certificate for the NYES Project in Case 19-T-0684, supra, Order Adopting Joint Proposal (issued February 11, 2021).

¹⁴ Case 12-T-0502, supra, Order Denying Rehearing and Addressing Further Process for Examining Alternating Current Transmission Upgrades (issued July 16, 2019), p. 12.

¹⁵ Joint Proposal, ¶ 24.

and associated transmission towers spanning between the Rock Tavern Substation, located in the Town of New Windsor and the existing Sugarloaf switching station, located in the Town of Chester. The Project also includes the rebuild of the existing Sugarloaf switching station owned by Central Hudson Gas & Electric Corporation (Central Hudson) to convert it to a substation, construction of a new 138 kV tie line that would exit the rebuilt Central Hudson Sugarloaf Substation and terminate at the existing 138 kV Sugarloaf Switching Station owned by O&R, and replacement of the first structure outside the rebuilt Central Hudson Sugarloaf Substation. The Project is proposed to be located entirely within an existing utility-owned or controlled right-of-way and on existing utility-owned or controlled land.

With its Application, NY Transco filed a motion requesting waivers of certain Commission regulations governing the content of an application for a Certificate. Specifically, NY Transco sought waivers of 16 NYCRR §§ 86.3(a)(2), 86.3(a)(2)(iv), and 88.4(a)(4) related to the filing of certain maps and System Reliability Impact Study. Following notice and an opportunity to comment on the waiver requests, the Commission granted NY Transco's waiver motion on February 11, 2021.¹⁶

By letter dated February 25, 2021, the Secretary to the Commission informed NY Transco that its Application was compliant with PSL §122 as of February 11, 2021.

A prehearing conference was held before an Administrative Law Judge (ALJ) on March 15, 2021. In addition to the statutory parties actively participating in the proceeding, NY Transco, the Department of Environmental Conservation (DEC), the Department of Agriculture and Markets

¹⁶ Case 20-T-0549, Order on Waiver Requests (issued February 11, 2021).

(AGM), and trial staff of the Department of Public Service (DPS Staff),¹⁷ party status was conferred to O&R. The New York State Office of Parks, Recreation and Historic Preservation (OPRHP) later sought and was granted party status.

On April 2, 2021, NY Transco filed a Notice of Impending Settlement Negotiations. The ALJ directed NY Transco to serve the notice of settlement on all persons and entities on the service list appended to the Application. NY Transco filed an affidavit of service on those persons and entities on April 12, 2021.

On June 23, 2021, NY Transco filed a Joint Proposal, purporting to resolve all issues signed by it, DPS Staff, DEC, AGM, and OPRHP (together, the Signatory Parties). The Joint Proposal describes the RTS Project as proposed by the Signatory Parties with various appendices attached, including: proposed Commission findings; proposed 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; a Bog Turtle, Northern Cricket Frog, and Timber Rattlesnake Monitor and Handling Protocol; specifications for computer noise modeling and tonality assessment; and, a proposed Water Quality Certification.¹⁸ The Joint Proposal also includes general provisions that articulate the Signatory Parties' agreements and understandings.¹⁹ The Signatory Parties request that we fully adopt the terms and provisions of the Joint Proposal and grant a Certificate to NY Transco. No party opposes the Joint Proposal.

¹⁷ PSL §124(1) (a), (b), (e) and PSL §124(2), respectively.

¹⁸ See Joint Proposal Appendices C-J.

¹⁹ See Joint Proposal ¶¶ 1-10.

A. Public Outreach

As stated in the Joint Proposal, NY Transco's public outreach prior to the filing of its application included: meeting with key stakeholders, including State agency staff, State and federal legislators, County officials, and local leaders; presenting the RTS Project to the town boards in each town crossed by the Project; sending letters to abutting landowners, notifying them of the Project and opportunities to speak with members of the Project team; holding three pre-application open house information sessions; and, establishing a Project website, that is updated regularly, as well as a toll-free number and email address to receive questions about the Project.

Prior to filing its application, public notice was published for two consecutive weeks in The Orange County Post and Times Herald-Record. Property owners along the Project right-of-way were served notification letters regarding the filing of the Application. Copies of the application materials were provided to the Chester Public Library, Goshen Public Library & Historical Society, Moffat Library, Newburgh Free Library, and Wallkill Public Library.

NY Transco has also provided various Project updates to property owners along the Project right-of-way subsequent to the filing of its Application. It has also "created easy to access and use information for the public to learn about the Project such as a general fact sheet, town-by-town fact sheets, a summary of the PSL Article VII application based on stakeholder areas of interest, and interactive mapping to show current and preliminary future structure locations."²⁰

²⁰ Joint Proposal ¶ 115.

Pursuant to notices issued by the Secretary on April 13, 2021, public information forums were held in the afternoon and evening on April 29, 2021, and public statement hearings were held on the afternoon and evening of May 4, 2021. At the direction of the ALJ, NY Transco served copies of the notices on all persons or entities owning land identified in the Application as proposed or alternate sites for the proposed transmission facilities; persons or entities whose property abuts the right-of-way, either as proposed or as an alternate route; and those persons and entities identified on the service list of NY Transco's Application. NY Transco also published the Notice of Public Statement Hearings and Soliciting Comments in advance of the hearings in newspapers of general circulation in the affected areas and provided links to the notices on its website. The Commission issued a press release about the information forums on April 22, 2021, and public statement hearings on April 27, 2021. No members of the public provided public comment at the hearings.

B. Public Comments

Prior to the filing of the Joint Proposal five comments were received. Four comments favored the Project because it will replace and modernize aging electric infrastructure, relieve constraints, and support the flow of renewable energy resources thereby supporting the State's climate goals; provide economic benefits by supporting local union jobs during construction; increase tax revenues; and limit potential environmental or agricultural impacts by staying within existing utility rights-of-way. One commenter expressed concerns that many old trees may be cut down as a result of the Project and that work crews may leave garbage behind in wooded

areas and stated that all garbage and refuse should be properly disposed.

A Notice of Joint Proposal and Opportunity for Public Comments was issued on July 9, 2021, inviting submission of public comments by August 6, 2021. No comments were received.

C. Affidavits in Support

In furtherance of developing the evidentiary record in the proceeding, DPS Staff, DEC, AGM, and OPRHP filed witness affidavits in support of their positions between July 21 and July 23, 2021.²¹ The witnesses' stated their support of the Joint Proposal with respect to their agencies' respective areas of review and stated that the settlement resolved all issues raised by the respective party.

D. Description of the Proposed Project

The RTS Project is described above briefly, and a full description of the Project is included in Appendix A of the Joint Proposal, Evidentiary Exhibits 3, 11, and 12.

The Project involves the replacement of the existing transmission line with a new 115 kV electric line known as the Rock Tavern to Sugarloaf Line (RTS Line). The RTS Line extends approximately 11.8 miles from the Rock Tavern Substation to the Rebuilt Sugarloaf Substation. This portion of the RTS Line will be constructed as a single-circuit 115 kV line, predominantly using steel monopoles in a delta configuration. The new structures will typically be no more than ten feet taller than the existing towers. The existing transmission line shares a utility corridor for the majority of this segment with existing 345 kV double-circuit lines, known as Feeders 76 and 77. The RTS Line will cross beneath these lines five times. This

²¹ See Evidentiary Exhibits 19-26.

segment of the line will consist of 87 structures that will be installed within 40 feet of existing structure locations.

The second section of the RTS Line will consist of Line 30 that will begin at the Rebuilt Sugarloaf Substation and continue 0.14 mile to the 138 kV Sugarloaf Switching Station. The interconnection will include two steel H-frame structures and one steel monopole structure on drill-shaft foundations. The transmission line will cross one existing transmission line between the Rebuilt Sugarloaf Substation and the 138 kV Sugarloaf Switching Station.

The third section of the RTS Line, located within the Town of Chester, will include the installation of a new conductor between replaced structure 1241 on Central Hudson's SD and SJ lines and the Rebuilt Sugarloaf Substation. Structure 1241, an existing double-circuit steel lattice tower structure, will be replaced with a steel double-circuit two-pole structure on drilled-shaft foundations designed as a dead-end structure. The new conductor will be installed from the new Structure 1241 to the Rebuilt Sugarloaf Substation. The new conductor will cross with existing transmission lines twice.

As described briefly above, the Project also involves station work. The existing 115 kV Sugarloaf Switching Station owned by Central Hudson and located on land owned by O&R in the Town of Chester will be demolished and a new Rebuilt Sugarloaf Substation will be constructed. The Rebuilt Sugarloaf Substation will consist of an open air 115 kV 4-terminal, 4-breaker ring bus configuration. A 138/115 kV autotransformer with tertiary winding and a 138 kV line breaker will be installed to connect to the 138 kV Sugarloaf Switching Station. The Rebuilt Sugarloaf Substation will have a new control enclosure to house system protection and control panels, communication equipment, heating, ventilation and air

conditioning, battery systems and AC/DC system equipment. The equipment will be located in a seven-foot-tall perimeter fence with three barbed wire strands that bring the fencing to eight-feet in height. A full description of the equipment that will be installed is included in the Application materials but includes: 138 kV SF6-insulated dead-tank circuit breakers with bushing current transformers (CT); 3-phase 115 kV and 138 kV manual gang or motor operated air disconnect switches; autotransformers; coupling capacitor voltage transformers (CCVTs); surge arresters; station service voltage transformer (SSVT); equipment enclosure; foundations, support structures, new H-frame dead-end structure for connecting to transmission lines, grounding, conduit, control cable, and bus work for installation; primary and secondary protection systems; new circuit break relaying and controls; and a sound wall. The Rebuilt Sugarloaf Substation will also be equipped with emergency lighting systems.

The existing 138 kV Sugarloaf Switching Station is owned by and located on land owned by O&R in the Town of Chester. Work proposed at this station includes installation of a new overhead line position, within the existing station fence, that will connect both main bus sections to the existing station; installation of new system protection equipment within the existing control enclosure; installation of two 138 kV SF6-insulated, dead-tank circuit breakers with bushing CTs, five 3-phase 138 kV manual gang operated air disconnect switches and a 3-phase 138 kV motor operated air disconnect switch, CCVTs, surge arresters, a steel H-frame for connection to Line 30, foundations, grounding, conduit, control cable, and bus work, new primary and secondary protection systems, and new circuit breaker relaying and controls.

E. Water Quality Certification

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).²² The Joint Proposal includes a proposed water quality certificate and states that, as conditioned, the RTS Project will comply with applicable requirements of the Clean Water Act and will not violate any New York State water quality standards and requirements.

III. 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.²³ 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. 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 §126.²⁴

²² Joint Proposal ¶ 122 and Joint Proposal Appendix J.

²³ Cases 90-M-0255, et al., Procedures for Settlements and Stipulation Agreements, Opinion 92-2 (issued March 24, 1992) (Settlement Guidelines).

²⁴ PSL §126(1)(a), (b), (c), (d), (e), (g) and (h).

The Joint Proposal in this case is supported by five parties that have been active in this proceeding - NY Transco, DPS Staff, DEC, AGM, and OPRHP. It addresses the statutory and regulatory issues pertaining to NY Transco's Certificate request, adequately discusses all probable environmental impacts, and addresses the steps needed to ensure that the RTS 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. As described above, there were only five comments filed prior to the filing of the Joint Proposal, four of them supporting the RTS Project. No opposition to the Joint Proposal has been raised by the one party to the case who did not sign the Joint Proposal - O&R.

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.

A. Basis of the Need for the Facility²⁵

Based on the information provided in the record, we find that the RTS Project is needed to address the contingency created by the needed increased transmission capacity across the Central East (Segment A) and UPNY/SENY (Segment B) interface. As described briefly above and in Evidentiary Exhibits 4, 7 and 14, the Commission previously identified a public policy

²⁵ PSL §126(1)(a).

transmission need to expand transmission capacity between upstate power generation sources and downstate consumers on the AC bulk electric transmission system. NY Transco's NYES Project was selected as the Segment B project and, consequently, NY Transco was required to fund the Segment B Additions projects - upgrades to the double-circuit 69 kV lines from the Shoemaker Substation to the Sugarloaf Substation in Orange County (the Shoemaker to Sugarloaf Project) and upgrades to the Rock Tavern Substation. As discussed *supra*, this Project is proposed in lieu of and in satisfaction of the Shoemaker to Sugarloaf Project.

When the Commission identified the public policy need, it characterized benefits of such expanded transmission capacity as including: reduced transmission congestion; reduced production costs through congestion relief; reduced capacity resource costs; improved market competition and liquidity and enhanced system reliability; flexibility and efficiency; improved preparedness for and mitigation of impacts of generator retirements; enhanced reliability and storm hardening; avoided refurbishment costs of aging transmission; better use of existing fuel diversity; increased diversity in supply, including additional renewable resources; promotion of job growth and development of efficient generation resources Upstate; reduced environmental and health impacts through reductions in less efficient electric generation; reduced costs of meeting renewable resource standards; increased tax receipts from increased infrastructure investment; and, synergy with other future transmission projects.²⁶ We find that the RTS Project will facilitate the full benefits of the Central East

²⁶ Case 12-T-0502, *supra*, Order Finding Transmission Needs Driven by Public Policy Requirements (issued December 17, 2015), pp. 66-67.

and UPNY/SENY transmission facilities and will thereby support realizing all the benefits the Commission previously recognized.

B. Probable Environmental Impacts²⁷

The Joint Proposal summarizes the nature of the probable environmental impacts as they relate to the following areas: land use, agricultural resources, visual resources, cultural and historic resources, terrestrial ecology and wetlands, protected threatened and endangered species, topography and soils, transportation, communications, noise, and electric and magnetic fields.²⁸ As described below in more detail, the probable environmental impacts associated with the RTS Project include: temporary disturbance and inconvenience associated with construction activities; limited clearing on the existing right-of-way and utility-controlled property; temporary construction impacts to agricultural lands that are minimized by using existing utility corridors; temporary and nominal incremental permanent impacts to visual resources that will be avoided or minimized through the utilization of the utility-owned right-of-way and installation of monopoles rather than steel lattice towers; and temporary and permanent impacts to wetlands, which will be appropriately avoided, minimized, and mitigated.

Based on the record before us, we agree with the Signatory Parties that the RTS Project, as proposed under the Joint Proposal and by adopting the proposed Certificate Conditions, avoids or minimizes to the extent practicable any significant adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other pertinent considerations,

²⁷ PSL §126(1)(b) and (c).

²⁸ Joint Proposal, pp. 30-93.

including the effect on agricultural lands, wetlands, parklands and river corridors traversed.²⁹

1. Land Use

The Project area is characterized as a rural landscape consisting primarily of agricultural and forested lands and low-density residential development.³⁰ Within one mile of the RTS Project's centerline, prominent land uses include residential (38%), agricultural (15%), and wild, forested, conservation lands and public parks (14%). Other uses include public services (3%), commercial (2%), community services (1%), and unknown uses (1%).³¹

As described above, the RTS Project is proposed to be constructed and operated entirely within existing utility-owned right-of-way or utility-owned or controlled land at existing stations. As a result, minimal temporary and/or permanent impacts are expected as a result of the Project. Access to the Project right-of-way will be provided by existing roads to the maximum extent practicable. Only limited clearing activities are anticipated -- minor tree removal, approximately 2.84 acres of permanent tree clearing, will be necessary to expand the existing, cleared portion of the right-of-way, to existing boundaries, for construction and operation.

The Project's centerline includes land within 100-year and 500-year floodplains. Approximately 1.6 linear miles of the Project's centerline includes land that the Federal Emergency Management Agency (FEMA) has determined to be within the 100-year floodplain and 0.1 linear mile includes land within the

²⁹ Joint Proposal Appendix D, ¶¶ 2-4.

³⁰ Evidentiary Exhibit 5, p. 18.

³¹ Ibid., p. 20.

500-year floodplain.³² No significant change to the area susceptible to flood damage is anticipated by the construction of the Project. The Project may reduce impacts to the floodplains by placing fewer structures within the floodplains and having a reduced foundation footprint.

Evidentiary Exhibit 5 summarizes the applicable comprehensive and open space plans in the municipalities in which the Project is located. As a result of using existing right-of-way and utility property, the Project is compatible with existing land uses and comprehensive land use plans of the municipalities.

The Application also describes the 2016 New York State Open Space Conservation Plan and identified priority "Conservation Projects" that have the potential to be impacted by the Project. The Project will traverse through the southern portion of Goose Pond Mountain State Park in the Town of Chester, will traverse between Schunnemunk Connectivity Priority Project parcels, and two Statewide trails, Long Path Trail and Highlands Trail.³³ The RTS Project will not conflict with the continued use of the areas and trails.³⁴ The EM&CP prepared for the Project will detail measures to ensure continued access to the Statewide trails during construction activities.³⁵ No new facilities will be constructed in open space.

2. Agricultural Resources

As stated above, agricultural lands represent approximately 15 percent of the land use within one mile of the Project centerline. Approximately 23 percent of the right-of-

³² Evidentiary Exhibit 5, p. 28.

³³ Evidentiary Exhibit 5, pp. 30-34.

³⁴ See Evidentiary Exhibit 26.

³⁵ Evidentiary Exhibit 5, p. 3.

way is designated within an agricultural district with the predominant use being pasture and hay fields.

The Signatory Parties state that the Project will not have a detrimental effect on agricultural lands and that operation of the RTS Project will "allow for the co-existence of active farmland and transmission lines" within the utility corridor, including the Project's right-of-way. Impacts to farming include temporary disruption of agricultural operations. Impacts are minimized by utilizing existing transmission corridors, continuation of NY Transco's outreach program that includes regular communications with farmers and others with agricultural interests, the use of self-supporting structures, and compliance with proposed Certificate Conditions designed to minimize impacts to agricultural lands.³⁶ The Certificate Conditions are designed to further minimize impacts and require, among other things: NY Transco to employ an environmental monitor who will act as Environmental Inspector, Stormwater Protection Plan (SWPPP) Inspector, and Agricultural Inspector; adherence to the AGM guidelines "Electric Transmission Right-of-Way Projects"; access for the agricultural producers to maintain normal agricultural operations to the maximum extent practicable; restoration of agricultural fields where existing structures are removed to allow agricultural activities; and NY Transco to provide farm owners and operators with a toll-free or local telephone number to facilitate direct contact with the Certificate Holder and Agricultural Inspector throughout the various stages of the Project.

3. Visual Resources

NY Transco conducted a viewshed analysis, field evaluation and photographic simulations to evaluate the RTS

³⁶ Joint Proposal ¶ 40; Joint Proposal Appendix C, Proposed Certificate Conditions 83-107; and Evidentiary Exhibit 25.

Project's impacts on visual and aesthetic resources. As described above, the Project involves the replacement of an existing facility on an existing right-of-way with other existing facilities as well as substation upgrades.

Existing transmission structures are typically lattice structures with a height averaging 76.5 feet above ground level. The Project will primarily use monopole structures that are typically no more than 10 feet taller than the existing towers, resulting in nominal additional visibility. As the RTS Project is proposed on an existing right-of-way and will use monopole structures with a slimmer profile, the Project will not substantially change the overall aesthetic character and visual quality of the Project right-of-way. OPRHP advises that visual impacts have been minimized at the Goose Pond Mountain State Park by the proposed design and color of the monopoles.³⁷

With regard to the Rebuilt Sugarloaf Substation, there will be some visual impact with the installation of a sound wall at the southeast corner of the station with visibility along a short segment of Sugarloaf Mountain Road. The sound wall is expected to only have minimal impacts as there are limited opportunities to view it, and, where there are views, it would be seen amongst existing and proposed infrastructure and will be viewed as one component among many.³⁸

Temporary visual impacts include views of construction equipment, crews, and materials immediately adjacent to the Project right-of-way and along public roads crossing the right-of-way. Views of construction from areas not immediately adjacent to the right-of-way will be mostly screened by vegetation and topography and, where visible, is expected to be

³⁷ Evidentiary Exhibit 26, ¶ 8.

³⁸ Joint Proposal, Appendix B, Affidavit of John W. Guariglia.

minimal in consideration that there would be views of existing transmission facilities located within the same utility corridor. Construction activities will be longer in duration at the Rebuilt Sugarloaf Station; however, the effects from such construction will be temporary and best management practices will be utilized to maintain the area free of debris, trash, and waste during construction.

4. Cultural Resources

As described in Evidentiary Exhibit 5 and the Joint Proposal, there are 10 archeological sites recorded within a 0.5-mile radius of the Project right-of-way. Three are prehistoric sites, six are historic period sites, and one is a contact period site. None of them have been evaluated for inclusion on the National Register of Historic Places (NRHP).

There are 17 previously surveyed architectural resources located within a one-mile radius of the right-of-way - two are listed on the NRHP, three were determined to be NRHP-eligible, seven were determined not to be NRHP-eligible, one was not eligible because of demolition, and four have undetermined NRHP eligibility.

OPRHP requested the Applicant conduct a Phase IA Archaeological study to create a sensitivity assessment of the Project Area where significant ground disturbance is proposed. NY Transco has provided recommendations from the study to OPRHP for review and concurrence with the scope and methods for a Phase IB study, if necessary. NY Transco will consult with OPRHP regarding results of any surveys during its preparation of the EM&CP and will incorporate any site-specific mitigation recommendations and avoidance measures to address any effects on archaeological resources.

Impacts to cultural resources will also be minimized or avoided by the adherence to the Certificate Condition

provisions that restrict 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 NY Transco a continuing obligation to respond to complaints of negative archeological impacts and mitigate them if necessary.

5. Terrestrial Ecology and Wetlands

Central Hudson has maintained the existing right-of-way and vegetative land cover is generally herbaceous and shrub communities. In addition to the agricultural areas, described above, the right-of-way also contains the following communities: forest, brushy cleared land, mowed lawn, pastureland, paved roads and paths, rocky summits, railroad, shale cliff and talus, successional old field, successional shrubland, successional southern hardwoods, unpaved roadways and paths, urban structure, and vernal pools. Impacts to vegetation are minimized and avoided through the use of existing right-of-way thereby limiting the required clearing, the implementation of vegetation management techniques post-construction that are consistent with the vegetation management plan established for the NYES Project, and the right-of-way will also be maintained in accordance with Certificate Conditions.

As described further in Evidentiary Exhibit 5, the RTS right-of-way contains wet meadows, marshes, scrub-shrub wetlands associated with rivers, perennial streams, intermittent and ephemeral streams. Fifty-two wetlands were identified in a field delineation of the Project right-of-way and adjacent lands, totaling approximately 53.28 acres. State-regulated delineated wetlands and adjacent areas are present on and along the right-of-way with 11 wetland crossings that involve 17 regulated areas, of which eight are Class II DEC wetlands and three are Class I wetlands. Permanent impacts to wetlands may

include the installation of new structures within field-delineated, DEC-regulated wetlands or mapped wetland buffers. Temporary impacts include temporary loss of wetland functions where avoidance is not practicable; installation of temporary bridges and culverts during construction; and limited dewatering of surface or subsurface waters in select areas. Impacts will be minimized or avoided by adherence to the Certificate Conditions, the Specifications for development of the EM&CP, and Joint Proposal Appendix F, the DEC Supplemental Specifications for Wetland and Waterbodies.

Streams are crossed by and adjacent to the Project and the Project will traverse 13 Class C streams. As Class C streams, none of them receive special protections. The right-of-way also crosses 13 perennial streams, ten intermittent streams and one ephemeral stream. Impacts to streams will be minimized by limiting the number of streams crossed by access roads; utilizing existing crossings to the extent feasible; and spanning streams to avoid structures within streams.

The RTS Project will minimize the spread of invasive species by preparation of an Invasive Species Management Plan pursuant to Joint Proposal Appendix G, DEC Invasive Species Management Plan Specifications. This document will become part of the EM&CP that will be filed for Commission approval.

6. Protected, Threatened and Endangered Species

Using the DEC Environmental Resource Mapper and New York Natural Heritage Program (NYNHP), NY Transco identified several State-protected and endangered species in the vicinity of the RTS Project, including the Indiana bat (*Myotis sodalist*), Northern long-eared bat (*Myotis septentrionalis*), Bog turtle (*Glyptemys muhlenbergii*), Timber rattlesnake (*Crotalus horridus*), Northern cricket frog (*Acris crepitans*), and Davis' sedge (*Carex davisii*). While NYNHP occurrence records identify

that these species have been documented in close proximity to the Project centerline, no threatened or endangered species were observed while NY Transco conducted field work.

The U.S. Fish and Wildlife Services (USFWS) has documented several federally listed threatened and endangered species in the Project area, including the Indiana bat (*Myotis sodalist*), Northern long-eared bat (*Myotis septentrionalis*), Bog turtle (*Glyptemys mühlenbergii*), and Small whorled pogonia (*Isotria medeoloides*).

NY Transco conducted a Bog turtle habitat survey that identified five wetlands with low to very low quality potential Bog turtle habitat on the right-of-way. A Phase 2 survey was conducted within the five wetlands identified as potential habitat -- no turtles were observed during the survey.

NY Transco is undertaking presence/absence surveys to determine whether the Northern cricket frog is found within the right-of-way for the RTS Project. If the right-of-way is deemed to be occupied by the frog, the NY Transco will implement an applicable take avoidance and minimization plan.

Certificate Conditions 54-60 include provisions for minimizing and avoiding impacts to threatened and endangered species. In addition, impacts will be avoided by implementing the protocols included as Appendix H of the Joint Proposal for monitoring and handling Bog turtle, Northern cricket frog, and Timber rattlesnake. NY Transco will also implement an applicable Take Avoidance and Minimization Plan to be incorporated into its EM&CP that will be filed for Commission approval. Finally, to the extent that DEC determines in consultation with DPS Staff that the Project will result in a take of relevant species or species habitat, NY Transco is required to develop a Net Conservation Benefit plan.

7. Topography and Soils

The RTS Project is located within the Hudson-Mohawk Lowlands and the Hudson Highlands. No unique geologic features are found along the right-of-way that would impact construction or operations and no significant adverse impacts to topographic features or geologic resources are associated with the Project. Conditions along the right-of-way that may affect structure placement and construction include low soil bearing capacities, high water tables, and shallow bedrock depths. Such conditions will be mitigated by applying best management practices for engineering, conducting geotechnical investigations to determine soil characteristics, and implementing foundation designs to work with the local soil, water table, and bedrock conditions. Facilities will be located away from steep slopes where practicable and changes to topography are expected to be minor and temporary, associated with grading in work areas and by the construction of access roads and some soil compaction is expected due to construction.

Use of best management practices will be used to mitigate soil compaction in agricultural areas and to control erosion. Because no permanent or significant changes in topography or surficial materials are anticipated, no significant increases in stormwater runoff volumes or erosion are expected. Culvert replacements and installation of permanent erosion and sediment controls will be incorporated into the SWPPP in the EM&CP to address erosion and will be filed for Commission approval.

8. Transportation

Within five miles of the RTS Project right-of-way there are three public airports, the Orange County Airport, Stewart International Airport, and Warwick Municipal Airport; one private airport; and five private heliports. It is not

anticipated that transmission structures will require lighting, but the NY Transco will work with the Federal Aviation Administration (FAA) to ensure compliance with all FAA regulations in advance of the filing of the EM&CP. Certificate Condition 16 requires NY Transco to submit evidence of a FAA determination that the final design of the structures proposed for the Project will have no substantial adverse impact on the public-use airports in its EM&CP.

The RTS Project crosses State roads in five locations, County roads in one location, town roads in ten locations and private roads in two locations. NY Transco has or will secure all necessary road use agreements and will submit a Utility Work Permit to install utilities within or adjacent to State roadway rights-of-way.³⁹ During construction, impacts will be minimized by adhering to Maintenance and Protection of Traffic Plans that will be prepared for each road crossing and construction access point in conformance with Certificate Condition 137. No traffic impacts are expected from the operation of the Project.

The RTS Project right-of-way will cross the Metropolitan Transit Authority's (MTA) Metro-North Railroad Port Jervis Line between Little Britain Road and State Route 208 in the Town of Hamptonburgh. NY Transco will coordinate the crossing span installation with the MTA and will detail its plans in the EM&CP that will be filed for Commission approval.

The RTS Project will cross over a trail where Long Path Trail runs congruent with Heritage Trail. The EM&CP will implement construction safety practices to avoid any potential conflicts with pedestrian traffic during construction. Due to the characteristics of the right-of-way, it is not anticipated

³⁹ See also Joint Proposal, Appendix C, Certificate Condition 153.

that the right-of-way is commonly visited or accessed by the public, other than the identified trails.

9. Communications

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

NY Transco will comply with applicable provisions of the National Electric Safety Code related to appropriate spacing between the proposed transmission lines and communication facilities.

10. Noise

Construction activities using heavy equipment will have temporary impacts on noise levels. In general, noise impacts will be temporary during construction due to the linear nature of the construction activities and will be mitigated by the effect of distance, presence of existing generation, routing construction equipment away from noise sensitive receptors to the extent practicable, turning off any idling equipment; and utilizing proper mufflers on construction equipment. Such measures will be addressed in the EM&CP.

Operation of the Proposed Line and substation will result in new sources of noise. Sound impacts of the transmission line are expected to be low-level including corona effect in certain conditions and from vegetation management activities. During wet and high humidity conditions ambient noise levels may rise due to corona noise but will not contribute to the existing sound levels and will comply with DEC guidelines. The Rebuilt Sugarloaf Substation is expected to

produce operational noise but is designed to minimize noise impacts. Proposed Certificate Condition 121 establishes sound limits and NY Transco must demonstrate compliance with those standards, using the Specifications for Computer Noise Modeling and Tonality Assessment document attached as Appendix I to the Joint Proposal.

11. 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).⁴⁰ The Commission established that the maximum electric field at the 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.⁴¹

NY Transco prepared an EMF Analysis included as Appendix H to Exhibit 4 of the Application.⁴² Under existing conditions, both magnetic and electric fields limits are exceeded in certain locations along the right-of-way where the existing 115 kV transmission facility is located on the utility corridor with existing double-circuit 345 kV transmission facilities.

⁴⁰ 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).

⁴¹ Case 26529 and 26559, supra, Power Authority of the State of New York and Health/Safety of Extra-High Voltage Lines, Opinion No. 78-13 (issued June 19, 1978).

⁴² See Evidentiary Exhibits 1, Appendix H and 16.

With regards to electric fields, the EMF Analysis concludes that general peak levels around the RTS Project transmission line will decrease with the proposed configuration and that levels remained similar or had minor increases at the edge of the right-of-way. The increases in electric field thresholds are de minimis and are in the same locations where the present conditions exceed electric field limits.

With regards to magnetic fields, the EMF Analysis indicates that there will be some de minimis increases in magnetic field levels at the edge of the right-of-way. As with electric fields, all such areas identified currently exceed the standards and these exceedances occur on the edge of the right-of-way where the Project is located next to a double-circuit 345 kV facility.

Certificate Condition 17 requires NY Transco to comply with our EMF standards to the maximum extent practicable. The EMF Analysis concludes that EMF levels will decrease below the respective limits within 10 to 15 feet of the right-of-way edge and that there are no structures located within 15 feet of the right-of-way edge where exceedances have been identified.

12. Alternatives

As described above, because NY Transco's NYES Project was selected to address the Segment B PPTN, it was also required to address the "Segment B Additions" projects. NY Transco evaluated the Shoemaker to Sugarloaf project and concluded that the RTS Project would address the contingency that the Shoemaker to Sugarloaf project was intended to address at a substantially lower cost and with fewer impacts. The NYISO concluded that construction of the RTS Project in lieu of and in satisfaction of the Shoemaker to Sugarloaf project would be a "non-material change" with regard to the NYES Project.

Evidentiary Exhibit 4 describes the four alternative transmission facilities that NY Transco considered. Ultimately, it found that the RTS Project has substantially lower costs with fewer environmental impacts. The Signatory Parties state that there is no alternative, non-transmission method to satisfy the contingency with comparable costs. Undergrounding was also considered but was not found to be preferable. A no-action alternative would not relieve the contingency identified by the NYISO and would not allow for all benefits associated with the NYES Project to be realized.

We concur that the RTS Project is superior to the alternatives described in the Application. The Signatory Parties submit that the route described in Appendix A of the Joint Proposal is preferred to alternative routes and should be adopted and based on the record, we agree.

C. Active Farming Operations That Produce Crops, Livestock, and Livestock Products⁴³

The Signatory Parties propose a Commission finding that the RTS Project avoids or minimizes to the extent practicable any significant adverse impact on agricultural lands considering the state of available technology and the nature and economics of various alternatives, and the ownership and easement rights of the impacted property.⁴⁴ Based on the record cited by the Signatory Parties, the Commission makes such a finding for the Project as it relates to active farming operations as defined in section 301 of the Agriculture and Markets Law. Impacts on agricultural lands are minimized to the maximum extent practicable by the use of existing utility transmission right-of-way and, as previously discussed above,

⁴³ PSL §126(1)(d).

⁴⁴ Joint Proposal Appendix D, ¶ 4.

use of self-supporting monopole structures that will facilitate continued agricultural operations within the right-of-way. The Certificate Conditions⁴⁵ contain numerous safeguards designed to protect agricultural lands that NY Transco must follow during and post-construction.

D. Undergrounding/Conformance to Long-Range Plan⁴⁶

As stated above, the RTS Project will not be located underground, which we find reasonable and appropriate in light of the above discussion.

Based on the record in this proceeding, including Evidentiary Exhibits 7 and 14, we find that the RTS 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. The System Impact Study for the Project concluded that the Project, with any necessary network upgrade facilities, will not adversely impact the State's transmission system.⁴⁷ Indeed, as described above, the RTS Project was selected by the NYISO Board in response to a Commission-identified public policy transmission need. NY Transco is required by the NYISO to have the RTS Project operational by December 31, 2023. As previously discussed, the RTS Project will improve the reliability of the transmission system, serve the interests of electric system economy and reliability, provide greater transmission capability, and accommodate future diversity of supply, including renewable resources.

⁴⁵ Joint Proposal Appendix C, Certificate Conditions 83-107.

⁴⁶ PSL §126(1)(e).

⁴⁷ Joint Proposal ¶ 100.

E. Conformance to State and Local Laws⁴⁸

PSL §126 requires conformance to the substantive provisions of applicable State laws and regulations issued thereunder. The Signatory Parties assert that the RTS Project, as proposed in the Joint Proposal, fully complies with the substantive provisions of all applicable State laws.⁴⁹ We agree and find that, with the terms of the Joint Proposal, the proposed Certificate Conditions and the EM&CP in place, the RTS Project would conform to all applicable State laws and regulations.⁵⁰

The RTS 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.”⁵¹ The RTS Project is proposed to be located in the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County.

The Signatory Parties state that Exhibit 7 to the Application⁵² identifies every substantive local law that is applicable or potentially applicable to the RTS Project, every local law for which NY Transco seeks a waiver, and provides an explanation as to why particular local laws should be waived as

⁴⁸ PSL §126(1)(g).

⁴⁹ Joint Proposal ¶ 133.

⁵⁰ 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.

⁵¹ PSL §126(1)(g).

⁵² Evidentiary Exhibit 8.

unreasonably restrictive.⁵³ The Joint Proposal provides that, with certain exceptions identified in Exhibit 7 to the Application, NY Transco would comply with all substantive local provisions applicable to the Project.⁵⁴

NY Transco requests that the Commission not apply various local law provisions including, for example, local laws (1) pertaining to noise and dust emissions because, while mitigation will be implemented to the extent practicable to minimize the temporary impacts of construction activities and equipment, it would be technically impossible or impracticable from a cost and economic perspective to limit to levels specified in the ordinances; (2) fence height and screening requirements, permitted use or use permit or approval standards or requirements, and limits on the location of structures or the preservation of particular land designations because, they say, there is no necessary nexus or relevance when considered in terms of the contiguous linear nature of the Project and/or are unreasonably restrictive in view of technology because the structure locations are a function of engineering considerations regarding span length, clearance, reliability, safety requirements and the configuration of the right-of-way will be based on required clearance and reliability criteria; (3) limiting maximum height requirements because compliance is technologically impossible and unsafe in consideration of engineering considerations including proper structure spans, clearance, reliability, and safety; and, (4) provisions restricting construction activities that could prevent or deter practices of farming to the extent they may negatively affect the construction activities on the basis that the provision are

⁵³ Joint Proposal ¶ 103.

⁵⁴ Joint Proposal ¶ 104.

unreasonably restrictive in view of existing technology and factors of cost or economics.⁵⁵ NY Transco further requests that we refuse to apply certain local law requirements to the extent that they conflict with the National Electric Safety Code, State Pollutant Discharge Elimination System General Permit for Stormwater Discharge from Construction Activity, the Stormwater Pollution and Prevention Plan or the proposed Certificate Conditions.⁵⁶ The Signatory Parties note that no municipality has sought party status in this case and no local jurisdiction has filed any objection to NY Transco's requests that we elect not to apply specified local laws. The Signatory Parties agree that the justifications provided by NY Transco are a sufficient basis for us to refuse to apply the identified local laws.

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 NY Transco's requests that the Commission not apply the specified local laws, and the Signatory Parties agree that the justifications set forth above and in Evidentiary Exhibit 8 provide sufficient grounds for the Commission to refuse to apply the identified local law provisions. We will not apply the local laws identified in Evidentiary Exhibit 8 because we find that, as applied to the RTS 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 further find that the location of the RTS Project conforms to applicable State and local laws and regulations issued thereunder, with the exception

⁵⁵ Joint Proposal ¶ 105; Evidentiary Exhibit 8.

⁵⁶ Joint Proposal ¶ 106.

of the local laws and regulations discussed above that we have refused to apply.

F. 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 paragraph 6 (relating to dispute resolution), we do not adopt the provisions in Joint Proposal Section I.

G. Conclusion/Public Interest Finding

The basis of the need for the RTS 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, and with the adoption of the Certificate Conditions proposed by the Signatory Parties, we find that the RTS Project avoids or minimizes to the extent practicable any significant adverse environmental impact, particularly considering the state of available technology and the nature and economics of the various alternatives and other considerations. The Project will avoid or minimize to the extent practicable any significant adverse impact on active farming operations considering the state of available technology, the nature and economics of various alternatives, and the ownership and easement rights of the impacted property owners. The RTS Project will not be located underground, and the 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.

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 Evidentiary Exhibit 8 and the Joint Proposal, that as applied to the RTS Project, those provisions 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 RTS Project will serve the public interest, convenience, and necessity.⁵⁷

The Commission orders:

1. As 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, New York Transco LLC, is granted a Certificate of Environmental Compatibility and Public Need (Certificate) authorizing it to construct and operate the Rock Tavern to Sugarloaf (RTS) Project as described in Appendix A of the Joint Proposal.

3. The Proposed Certificate Conditions included as Appendix C to the Joint Proposal are approved and incorporated into this Order.

4. The Water Quality Certification included as Appendix J 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.

⁵⁷ PSL §126(1)(h).

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.

6. This proceeding is continued.

By the Commission,

(SIGNED)

MICHELLE L. PHILLIPS
Secretary

CONFIDENTIAL

**SUBJECT TO PROTECTIVE ORDER IN
CASE 20-T-0549**

**CONFIDENTIAL INFORMATION HAS BEEN
REDACTED FROM THIS PDF**

CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER IN CASE 20-T-0549

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

Case 20-T-0549

JOINT PROPOSAL

By: New York Transco LLC
Staff of the Department of Public Service
Department of Environmental Conservation
Department of Agriculture and Markets
Office of Parks, Recreation & Historic Preservation

Dated: June 23, 2021

TABLE OF CONTENTS

	<u>Page</u>
LIST OF APPENDICES.....	iii
JOINT PROPOSAL.....	1
INTRODUCTION AND BACKGROUND	1
TERMS OF THE JOINT PROPOSAL.....	3
I. General Provisions	3
II. Evidentiary Record	5
III. Project Description.....	5
IV. Environmental Compatibility and Public Need	6
A. The Project’s Basis of Need.....	6
B. The Project’s Cost.....	11
C. The Project’s Environmental Impact	11
i. <i>Land Use</i>	12
ii. <i>Agricultural Resources</i>	14
iii. <i>Visual Resources</i>	15
iv. <i>Cultural and Historic Resources</i>	16
v. <i>Terrestrial Ecology and Wetlands</i>	17
1. Vegetation	17
2. Wetlands and Streams.....	18
3. Invasive Species.....	20
vi. <i>Impacts on Protected Threatened and Endangered Species</i>	20
vii. <i>Topography and Soils</i>	22
viii. <i>Transportation Impacts</i>	23
1. Airports and Heliports.....	24

2.	Roads.....	24
3.	Railroads	24
4.	Pedestrian Traffic.....	25
ix.	<i>Communication Impacts</i>	25
x.	<i>Noise Impacts</i>	26
xi.	<i>Electric & Magnetic Fields</i>	27
D.	Availability and Impact of Alternatives.....	28
E.	The Project’s Conformance to Long-Range Plans for Expanding the Electric Power Grid.....	30
F.	System Impact Study	30
G.	State and Local Laws	30
H.	Public Interest, Convenience, and Necessity	33
V.	Proposed Commission Findings	36
VI.	Proposed Certificate Conditions	36
VII.	Environmental Management and Construction Plan	36
VIII.	Water Quality Certification.....	36

LIST OF APPENDICES

- APPENDIX A PROJECT DESCRIPTION AND LOCATION
- APPENDIX B LIST OF TESTIMONY, AFFIDAVITS, AND EXHIBITS TO BE INCLUDED IN THE RECORD OF THE PROCEEDING
- APPENDIX C PROPOSED CERTIFICATE CONDITIONS
- APPENDIX D PROPOSED COMMISSION FINDINGS
- APPENDIX E SPECIFICATIONS FOR THE DEVELOPMENT OF AN ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN
- APPENDIX F NYSDEC SUPPLEMENTAL SPECIFICATIONS FOR WETLANDS AND WATERBODIES
- APPENDIX G INVASIVE SPECIES MANAGEMENT PLAN SPECIFICATIONS
- APPENDIX H BOG TURTLE, NORTHERN CRICKET FROG, AND TIMBER RATTLESNAKE MONITORING AND HANDLING PROTOCOL
- APPENDIX I SPECIFICATIONS FOR COMPUTER NOISE MODELING AND TONALITY ASSESSMENT
- APPENDIX J PROPOSED 401 WATER QUALITY CERTIFICATION

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

Case 20-T-0549

JOINT PROPOSAL

This Joint Proposal (the “Joint Proposal”), which includes Appendices A through J attached hereto and made a part hereof, is made as of June 23, 2021, by and between New York Transco LLC (“Transco” or the “Applicant”), Staff of the Department of Public Service (“DPS Staff”), Department of Environmental Conservation (“NYSDEC”), Department of Agriculture and Markets (“AGM”), and Office of Parks, Recreation and Historic Preservation (“OPRHP”) (individually, a “Signatory Party” and collectively, the “Signatory Parties”).

INTRODUCTION AND BACKGROUND

On November 5, 2020, Transco submitted an application to the New York Public Service Commission (the “Commission”) pursuant to Article VII of the Public Service Law (the “PSL”) and the Department of Public Service’s (the “Department”) rules and regulations promulgated thereunder for a Certificate of Environmental Compatibility and Public Need (the “Application”) to construct, operate, and maintain the Rock Tavern to Sugarloaf project, which includes the replacement of an existing, 12-mile overhead 115 kilovolt (“kV”) electric transmission line, with a new 115 kV electric transmission line, and, among other items, the removal of the existing 115 kV Sugarloaf Switching Station and rebuild of a new 115 kV Sugarloaf Substation, all is more particularly described below and in **Appendix A** attached hereto (the “RTS Project” or the

“Project”). The Application was accompanied by a motion seeking waivers of 16 NYCRR §§ 86.2 (a) (2), 86.2 (a) (2) (iv), and 88.4 (a) (4) governing the Application’s content.

On February 11, 2021, the Commission issued an Order granting the Applicant’s motion seeking waivers.¹ Thereafter, by letter dated February 25, 2021, the Secretary to the Commission informed the Applicant that the Application was in compliance with PSL § 122 as of February 11, 2021.² On February 22, 2021, and February 26, 2021, respectively, the Secretary issued a *Notice of Availability of Intervenor Funding and Schedule for Submitting Funding Requests* and a *Notice of Procedural Conference* to be held before Administrative Law Judge Ashley Moreno, the presiding administrative law judge in this proceeding (the “ALJ”). On March 22, 2021, the Secretary issued a second *Notice of Availability of Intervenor Funding and Schedule for Submitting Funding Requests*. No parties submitted an intervenor funding request.

Following the March 15, 2021 procedural conference, ALJ Moreno issued a *Ruling on Party Status, Schedule, and Adopting Protective Order* on March 19, 2021, accepting the following entities as parties to the proceeding: DPS Staff, NYSDEC, AGM, and Orange and Rockland Utilities, Inc. (“O&R”). On April 2, 2021, Transco filed a notice of impending settlement negotiations, noticing the first settlement meeting in this proceeding for April 14, 2021. On May 4, 2021, OPRHP requested party status, to which no party objected.

¹ Case 20-T-0549, *Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County*, Order on Waiver Requests (Issued Feb. 11, 2021).

² Case 20-T-0549, *supra*, Letter from Public Service Commission to K. Carrigan, Esq., J. McManus, Esq., and A. Ohanian, Esq. Regarding Compliance with PSL § 122 (Filed Feb. 25, 2021).

Before the filing of the Application and during the pendency of this proceeding, the Applicant's public outreach team has conducted a variety of outreach efforts to ensure the crossed communities, abutters, and other stakeholders are aware of the Project.³

After numerous full settlement meetings and various technical sessions, the Signatory Parties agreed to the terms of this Joint Proposal on June 23, 2021. As demonstrated below, the Joint Proposal gives fair and reasonable consideration to the interests of all parties and its approval by the Commission is in the public interest. Further, the Joint Proposal ensures an appropriate balance among the protection of the ratepayers, fairness to investors, and the long-term viability of the Applicant; is consistent with sound environmental, social, and economic policies of the Commission and the State; and produces an outcome that is within the range of reasonable results that would likely have arisen from a Commission decision in a litigated proceeding, as described in the settlement guidelines in Case 90-M-0255.⁴

TERMS OF THE JOINT PROPOSAL

I. General Provisions

1. The support of the Signatory Parties for this Joint Proposal is expressly conditioned upon the Commission's approval of all provisions thereof, including appendices, without material change or condition. If the Commission does not adopt the terms of this Joint Proposal, the Signatory Parties are free to pursue their respective positions in this proceeding without prejudice.

³ See Point IV (H), *infra*.

⁴ See Case 90-M-0255 et al., *Proceeding on Motion of Commission Concerning its Procedures for Settlement and Stipulation Agreements*, filed in C 11175, Opinion, Order and Resolution Adopting Settlement Procedures and Guidelines (Issued Mar. 24, 1992).

2. The terms and provisions of this Joint Proposal apply solely to, and are binding only in, the context of the present PSL Article VII proceeding and do not necessarily reflect the position any Signatory Party would take in a future adjudicatory proceeding. Each Signatory Party reserves the right in future PSL Article VII proceedings to propose or include such terms and conditions as it may deem appropriate.

3. The Project's construction and operation will comply with the Joint Proposal, the Proposed Certificate Conditions (set forth in Appendix C, *infra*), PSL Article VII, and with the substantive provisions of applicable State laws referenced in the Proposed Commission Findings (set forth in **Appendix D**, *infra*).

4. The discussions that produced this Joint Proposal have been conducted with the explicit understanding, pursuant to 16 NYCRR § 3.9 (d), that any discussions among the Signatory Parties with respect to this Joint Proposal prior to its execution and filing shall not be subject to discovery or admissible as evidence.

5. Except as expressly provided in Paragraph 9 of this Joint Proposal, nothing in this Joint Proposal or any attached appendices is intended to directly impose any obligations on or limit any pre-existing rights of any of the parties other than the Applicant.

6. Any disagreement over the interpretation of this Joint Proposal or implementation of any of its provisions that cannot be resolved informally among the Signatory Parties shall be resolved in the following manner:

- a. The Signatory Parties shall promptly convene a conference and make good-faith attempts to resolve any such disagreement; and
- b. If such disagreement cannot be resolved by the Signatory Parties, any Signatory Party may petition the Commission for resolution of the disputed matter.

7. This Joint Proposal is not a waiver of the Applicant's rights to apply for additional or modified permits, approvals, or certificates from the Commission or any other agency.

8. 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.

9. All Signatory Parties fully support approval of the Joint Proposal in its entirety. The Signatory Parties recognize this Joint Proposal may require future actions by various parties and agree to undertake, in good faith, these future actions.

10. This Joint Proposal is being executed in counterpart originals and shall be binding on each Signatory Party when the counterparts have been executed.

II. Evidentiary Record

11. **Appendix B** of this Joint Proposal lists the testimony, affidavits, and exhibits agreed upon by the Signatory Parties to be admitted as record evidence in this proceeding (collectively, the "Evidentiary Record"). The Evidentiary Record also includes responses to certain information requests produced in this proceeding.

III. Project Description

12. As described in Appendix A hereto, the Project includes the replacement of an existing, 12-mile overhead 115 kV electric transmission line (the "SL Line"), with a new 115 kV electric transmission line, which will be known as the Rock Tavern to Sugarloaf Line (the "RTS Line"). The RTS Line will begin at the existing 115 kV Rock Tavern Substation owned by Central Hudson Gas & Electric Corporation ("Central Hudson") and located in the Town of New Windsor, Orange County (the "115 kV Rock Tavern Substation") and terminate at Central Hudson's existing 115 kV Sugarloaf Switching Station (the "115 kV Sugarloaf Switching

Station”) located in the Town of Chester, Orange County. As part of the Project, the 115 kV Sugarloaf Switching Station will be rebuilt as a substation (the “Rebuilt Sugarloaf Substation”) to accept the RTS Line. A new 138 kV tie line (“Line 30”) will exit the Rebuilt Sugarloaf Substation and terminate at the existing 138 kV Sugarloaf Switching Station owned by O&R and located in the Town of Chester, Orange County. In addition to replacing the SL Line, the existing structures from the 115 kV Rock Tavern Substation to the 115 kV Sugarloaf Switching Station will be replaced. To accommodate the Rebuilt Sugarloaf Substation, the first structure outside that station (*i.e.*, Structure 1241)—which supports Central Hudson’s existing 115 kV SD and SJ Lines—will be replaced.

13. The Project will cross the following municipalities: the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County.

14. Appendix A accurately describes the Project’s location, configuration, and design, which the Signatory Parties recommend that the Commission approve.

IV. Environmental Compatibility and Public Need

15. The Commission must consider several factors in making its determination of environmental compatibility and public need pursuant to PSL § 126. These factors include the proposed facility’s basis of need; cost; environmental impacts; impacts on active farming operations; availability and impacts of alternatives and undergrounding considerations; conformance to the State’s long-range plans; impact on electric system reliability; conformance with State and local laws, and public interest, convenience, and necessity.

A. The Project’s Basis of Need

16. Exhibit E-4 of the Application (Evidentiary Record Exhibit 14, Appendix B), entitled Engineering Justification, explains in detail why the Project is needed.

17. In November 2012, following the release of Governor Andrew M. Cuomo’s 2012 *Energy Highway Blueprint*, which called for, among other things, the development of over 1,000 megawatts (“MW”) of new alternating current (“AC”) transmission upgrades to carry power from upstate to downstate, the Commission initiated the *Examine Alternating Current Transmission Upgrades* proceeding (the “AC Transmission Proceeding”). As part of the AC Transmission Proceeding, and in its December 17, 2015 Order Finding Transmission Needs Driven by Public Policy Requirements in Case 12-T-0502 (the “PPTN Order”), the Commission identified the AC transmission corridor traversing the Mohawk Valley Region, the Lower Hudson Valley Region, and the Capital Region as a source of persistent congestion and declared an AC Transmission Public Policy Transmission Need (the “AC Transmission PPTN”). These regions include facilities connected to Marcy, New Scotland, Leeds, and the Pleasant Valley substations, along with two minor electrical interfaces. The Commission referred to these two major electrical interfaces as Central East and Upstate New York/Southeast New York (“UPNY/SENY”).

18. Importantly to this Project, prior to declaring the AC Transmission PPTN and while studying various proposals submitted to the Commission to relieve the persistent congestion in the Central East and UPNY/SENY interfaces, DPS Staff requested that the New York Independent System Operator (the “NYISO”) conduct a power flow analysis of the proposed solutions. The NYISO determined that the proposed solutions to relieve congestion in the Central East and UPNY/SENY interfaces would trigger a contingency on the existing double circuit 69 kV lines from the Shoemaker Substation to the Sugarloaf Substation in Orange County that would need to be resolved for any of the solutions to produce maximum positive benefit. In other words, the NYISO concluded that if the double circuit 69 kV lines from Shoemaker to

Sugarloaf line were not upgraded, the proposed solutions to satisfy the AC Transmission PPTN would not operate at full capacity. Similarly, the NYISO found a need for upgrades to the Rock Tavern Substation, also in Orange County, so that it could handle the higher line currents that would result from the upgrade projects in the Central East and UPNY/SENY interfaces. The Shoemaker to Sugarloaf line upgrade and the Rock Tavern Substation upgrades became known as the “Segment B Additions” projects and were included in the broader definition of the “Segment B” component of the AC Transmission PPTN.

19. The Commission’s PPTN Order declared a public policy need to expand transmission capacity between upstate power generation sources and downstate consumers on New York’s AC bulk electric transmission system in accordance with Section 31.4.2.1 of Attachment Y of the NYISO’s Open Access Transmission Tariff (“OATT”).

20. In the PPTN Order, the Commission identified a number of important benefits that would flow from the transmission upgrades to be constructed in the Central East and UPNY/SENY interfaces pursuant to the identified AC Transmission PPTN. Specifically, the Commission identified that such upgrades would:

- Reduce transmission congestion so that large amounts of power can be transmitted to regions of New York where it is most needed;
- Reduce production costs through congestion relief;
- Reduce capacity resource costs;
- Improve market competition and liquidity and enhance system reliability, flexibility, and efficiency;
- Improve preparedness for and mitigation of impacts of generator retirements;

- Enhance resiliency/storm hardening;
- Avoid refurbishment costs of aging transmission;
- Increase diversity in supply, including additional renewable resources, and reduce costs of meeting renewable resource standards;
- Promote job growth and the development of new efficient generation resources in upstate New York;
- Reduce environmental and health impacts through reduction of less-efficient electric generation;
- Increase tax receipts from increased infrastructure investment; and
- Obtain synergies with other future transmission projects.

The Project furthers these benefits as it ensures the transmission upgrades in the Central East and UPNY/SENY interfaces will meet their full potential and run as efficiently as possible.

21. After the Commission declared the AC Transmission PPTN, including the construction of the Segment B Additions, the NYISO solicited proposals from qualified developers to satisfy Segment A and Segment B of the AC Transmission PPTN as required by Section 31.4.3 of the OATT. As part of the PPTN Order, the Commission required that the NYISO consider certain minimum criteria when considering proposed solutions, including, but not limited to: “[n]o transmission solution shall be selected for Segment B that does not incorporate certain specified add-ons that would be constructed (*i.e.*, upgrades to the Rock Tavern Substation; upgrades to the Shoemaker to Sugarloaf transmission lines), unless the NYISO determines that such add-ons, jointly or severally, are not material to the accomplishment of the purpose of the transmission solution for Segment B.”

22. On February 29, 2016, the NYISO issued a solicitation for solutions to satisfy both segments of the AC Transmission PPTN. During its evaluation of the 16 proposals submitted in response to the solicitation, the NYISO imposed a “global addition” cost to each Segment B proposal because whichever developer was selected to build the Segment B project would be required to fund the Segment B Additions projects. Ultimately, after an extensive evaluation, Transco’s New York Energy Solution project (the “NYES Project”) was selected as the more cost-effective or efficient solution to satisfy Segment B of the AC Transmission PPTN.

23. Subsequently, Transco purchased the Shoemaker to Sugarloaf Segment B Addition project from O&R and assumed responsibility to site and construct this element of the AC Transmission PPTN, which, consistent with the Development Agreement executed with the NYISO, must be operational by December 31, 2023.

24. As outlined in Exhibit 3 of the Application (Evidentiary Record Exhibit 4, Appendix B), following its purchase from O&R, Transco concluded that the Project addresses the contingency identified by the NYISO during the AC transmission proceeding at a substantially lower cost and with fewer impacts than the Commission-defined Shoemaker to Sugarloaf Segment B Additions project. Since Transco designed the Project and realized its benefits over the Shoemaker to Sugarloaf project, it submitted the Project to the NYISO, which concluded that the Project addresses the Commission-identified contingency and is a non-material change with regard to the larger NYES Project interconnection application. Specifically, the NYISO presented this non-material determination at the Transmission Planning Advisory Subcommittee Meeting on August 7, 2020. As a result, the Project is proposed *in lieu* and in satisfaction of the Shoemaker to Sugarloaf project.

25. As designed and applied for in this proceeding, the Project will address the contingency created by the needed increased transmission capacity across the Central and UPNY/SENY interface. Further, by assisting in moving power efficiently and cost effectively within the State, the Project will provide various economic and public policy benefits in not only Orange County, but New York State generally, as discussed in more detail in Exhibits 6 and E-4 of the Application (Evidentiary Record Exhibits 7 and 14, Appendix B).

B. The Project's Cost

26. The estimated capital cost of the Project is **BEGIN CONFIDENTIAL INFORMATION** < [REDACTED] > **END CONFIDENTIAL INFORMATION** (in 2020 dollars) as detailed in Exhibit 9 of the Application (Evidentiary Record Exhibit 10, Appendix B).

27. Actual Project costs will be based on the final design of the Project facilities and the price at the time of construction and are governed by the Applicant's tariff approved by the Federal Energy Regulatory Commission ("FERC").

28. Construction and operation of the Project is anticipated to provide a short-term stimulus to the local and regional economy by increasing employment and earnings in the construction industry, as detailed in Exhibit 6 of the Application (Evidentiary Record Exhibit 7, Appendix B).

29. In addition, both direct and indirect Project-related expenditures will have a positive impact on the local economy by increasing the demand for goods and services and related tax revenues.

C. The Project's Environmental Impact

30. The Evidentiary Record describes the nature of the Project's probable environmental impacts with respect to land uses, visual resources, cultural resources, terrestrial

ecology, wetlands and water resources, topography and soils, noise, transportation, communications, and electric and magnetic fields.

31. The Project and the known laydown yard, as proposed to be located and configured in this Joint Proposal and its accompanying appendices avoids or minimizes to the extent practicable significant adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations including, but not limited to, the effect on agricultural lands, wetlands, parklands, and river corridors traversed.

32. The Project will be constructed and operated entirely within an existing utility-owned right-of-way (“ROW”) or utility-owned or controlled land. Therefore, the Project’s environmental impacts are expected to be minimal and largely limited to temporary, construction-related activities. The Project design also avoids or minimizes potential disturbances to existing land uses, activities, and traffic.

i. Land Use

33. The Project will be constructed and operated entirely within existing, utility-owned ROW or utility-owned or controlled land, which will substantially reduce the Project’s impact on land use as compared to the development of new facilities that would require the development of a new utility ROW.

34. Impacts on land use from Project-related activities—during construction and operation—are expected to be temporary and minimal and will not conflict with local land use plans, comprehensive plans, or the Orange County Open Space Plan.

35. Although existing land uses in the areas surrounding the Project's ROW varies, the area surrounding the Project can be characterized generally as a rural landscape consisting primarily of agricultural and forested lands and low-density residential development.

36. Due to the use of the existing utility-owned ROW, the Project will not impede the goals of the *2016 New York State Open Space Plan* because no new facilities will be constructed in open space. As further explained in detail in Exhibit 4 of the Application, the Project is also consistent with various comprehensive land use plans adopted by the local municipalities along the ROW, including the *Orange County Open Space Plan*, and the Project is compatible with existing land uses in the region. Certain land use-related mitigation measures, such as methods to protect agricultural lands, will be implemented as detailed in the Project's ensuing Environmental Management & Construction Plan ("EM&CP").

37. Because the Project will be constructed within existing utility-owned ROW or utility-owned or controlled land, access to the Project's ROW will be provided by existing roads to the maximum extent practicable. The Project will improve existing access roads and construct new roads where sufficient access does not exist.

38. The Applicant does not need to acquire any permanent non-utility-owned property rights for station upgrades or Project-related construction work, all of which will occur within the existing, utility-owned or controlled parcels. The Applicant needs to, and is in the process of, acquiring all necessary property rights. In addition, the Applicant has or will secure the appropriate land rights for its necessary off-ROW access roads and for any identified danger tree access.

39. Approximately 1.6 linear miles of the Project's centerline includes land determined to be within 100-year floodplains, and approximately an additional 0.1 linear mile of

the Project's centerline includes land within 500-year floodplains (*see* Figure 4.3-2 of Exhibit 4 to the Application). None of the Project's station work will be in 100- or 500-year floodplains. There should be no significant adverse impacts to areas identified as 100-year or 500-year floodplains as a result of the Project. In fact, as described in more detail in Exhibits 5 and E-1 to the Application (Evidentiary Record Exhibits 6 and 11, Appendix B), the Project will likely result in either no change to the floodplains or a decrease in foundation footprint and/or reduction of structures within the floodplain areas.

ii. Agricultural Resources

40. As explained in Exhibit 4, agricultural land represents 15% of the land use within 1 mile of the Project's centerline. More specifically as it relates to the Project's ROW, 23% of the Project's ROW is designated as being within an agricultural district. Of that agricultural land, the predominant use is pasture/hay fields.

41. During the Project's construction phase, some agricultural operations may be temporarily disrupted. The Applicant will adhere to the conditions set forth in Section K, Agricultural Resources, of the Proposed Certificate Conditions (Appendix C). In addition, the Applicant will continue its comprehensive outreach program that includes open and regular communications with farmers and other persons with agricultural interests so that the Project can be better designed and built to accommodate agricultural practices to the maximum extent practicable. Further the Project will incorporate a designated environmental monitor, who will fill the roles of Environmental Inspector, SWPPP Inspector, and Agricultural Inspector (the "E&A Inspector") as required by the Proposed Certificate Conditions (Appendix C).

42. The Project's operation will allow for the co-existence of active farmland and transmission lines within the utility corridor that includes the Project's ROW.

43. Overall, the Project should not have detrimental impacts to agricultural land.

iii. Visual Resources

44. The Applicant conducted a viewshed analysis, a field evaluation, and photographic simulations to evaluate the Project's impact on visual and aesthetic resources. In general, the Project will not substantially alter the overall aesthetic character and visual quality of the Project's ROW, which is within a utility corridor that contains an electric transmission line and related facilities.

45. The results of the analysis, submitted with the Application (Exhibit 4 and Appendix E, which is also included in the Evidentiary Record as Exhibits 1 and 5), indicate that existing structures are typically lattice structures that have an average height of 76.5 feet above ground level ("AGL"). The Project's monopole structures are typically no more than 10 feet taller than the existing lattice towers. There will be some nominal increased visibility of transmission structures due to the slight increase in height of the proposed structures, but the Project is likely to result in no significant change in the overall visual impact of the existing transmission lines being upgraded.

46. The Project's potential visual impacts are minimized through the utilization of the utility-owned ROW and the installation of monopoles rather than steel lattice towers.

47. During construction, there may be temporary visual impacts experienced by those immediately adjacent to the Project's ROW and along public roads crossing the ROW where construction equipment, crews, and materials may be dominant in the foreground. Views of Project construction from areas not immediately adjacent to the existing transmission line ROW will be mostly screened by vegetation and topography. Further, where visibility occurs, it is

expected to be minimal, and it already currently contains views of the SL Line and/or 345 kV transmission line structures located within the same utility corridor.

48. Construction activities associated with the Rebuilt Sugarloaf Station will have a longer duration but similar temporary visual effects resulting from construction equipment and workers. Best Management Practices (“BMPs”) will be implemented to maintain the Project area free of debris, trash, and waste during construction.

49. The Project will not substantially alter the overall aesthetic character and visual quality of the Project’s ROW, which contains existing electric utility infrastructure. Because no significant visual impacts were identified for the Project, no mitigation measures are proposed. As may be required, mitigation measures will be developed during preparation of the EM&CP on a case-by-case basis in consultation with affected stakeholders to reduce impacts in specific locations.

iv. Cultural and Historic Resources

50. As explained in Exhibit 4 of the Application (Evidentiary Record, Exhibit 5, Appendix B), 10 archaeological sites have previously been recorded within a 0.5-mile radius of the Project’s ROW. This includes three prehistoric period sites, six historic period sites, and one contact period site. None of the sites have been evaluated for inclusion on the Register of Historic Places (“NRHP”). Exhibit 4 contains a complete list of these archaeological sites.

51. As explained in Exhibit 4 of the Application (Evidentiary Record, Exhibit 5, Appendix B), 17 previously surveyed architectural resources are located within a 1-mile radius of the Project’s ROW. Of those 17 sites within a 1-mile radius of the Project’s ROW, 2 are NRHP listed, 3 were previously determined NRHP-eligible, 7 were previously determined not eligible for NRHP listing, 1 was determined not eligible due to demolition, and 4 have an

undetermined NRHP eligibility status. Exhibit 4 contains a complete list of these architectural resources.

52. The OPRHP requested and the Applicant conducted a Phase IA Archaeological Study, which will utilize environmental, historical, and archaeological data to create a sensitivity assessment of the Project Area locations where significant ground disturbance is proposed. Recommendations from the Phase IA Archaeological Study Report have been presented to OPRHP for review and concurrence with the scope and methods for a Phase IB Survey, if necessary. The Applicant will consult with the OPRHP regarding the results of the archaeological surveys during the preparation of the EM&CP. Site-specific mitigation recommendations and/or avoidance measures will be developed at that time to address the OPRHP's determinations of Project effects on archaeological resources.

53. The Project EM&CP will identify mitigation measures with respect to cultural and historic resource impacts, including steps to be taken when archaeological materials are encountered during Project construction. To avoid impacts to cultural and historic resources to the maximum extent practicable, Applicant will adhere to the conditions in the Proposed Certificate Conditions attached as Appendix C and all other protective measures identified in the EM&CP.

v. Terrestrial Ecology and Wetlands

1. Vegetation

54. Central Hudson has long maintained the Project's ROW, which has well-established herbaceous and shrub communities. Aside from agricultural areas, the Project's ROW contains the following terrestrial communities consistent with what would be expected to be encountered in an existing, maintained utility ROW: Oak-tulip tree forest, Appalachian oak-

hickory forest, brushy cleared land, cropland/field crops, mowed lawn, mowed lawn with trees, mowed roadside/path, pastureland, paved road/path, pitch pine-oak-heath rocky summit, railroad, shale cliff and talus community, successional old field, successional shrubland, successional southern hardwoods, unpaved road/path, urban structure exterior, and vernal pool.

55. Following construction, operational vegetation management techniques within the Project ROW are expected to be consistent with the vegetation management plan established for the NYES Project, and the Applicant will ensure vegetation management techniques are consistent with the existing, approved practices. Further, the Project's ROW will be maintained in accordance with the vegetation management conditions set forth in the Proposed Certificate Conditions, attached hereto as Appendix C.

56. Due to its siting within an existing utility-owned ROW that is already cleared and maintained by incumbent transmission owners, the Project reduces ROW clearing as compared to, for example, a new transmission line constructed within a greenfield corridor.

57. The amount of ROW clearing required for the Project represents the required clearing necessary to prevent interference of vegetation with the proposed facilities, subject to design considerations such as structure height and span length in accordance with good utility practice.

2. Wetlands and Streams

58. As outlined in detail in Exhibit 4 to the Application, the Project's ROW contains a mixture of wet meadows, marshes, and scrub-shrub wetlands associated with rivers, perennial streams, intermittent streams, and ephemeral streams. Wetland field delineations identified a total of approximately 52 wetlands crossed by the Project's Ecological Survey Boundary (*i.e.*, the Project's ROW and surrounding adjacent land), totaling approximately 53.28 acres.

59. State-regulated delineated wetlands (including regulated adjacent areas) and the associated acreages within the Project's Ecological Survey Boundary are identified in the Wetland Delineation Report, provided as Appendix F to Exhibit 4 of the Application (Evidentiary Record Exhibit 1, Appendix B). This report documents 11 wetland crossings in the Project's Ecological Survey Boundary that involve 17 NYSDEC-regulated wetlands and adjacent areas. Of the 17 NYSDEC wetlands and adjacent areas crossed, 8 are Class II NYSDEC wetlands, and 3 are Class III NYSDEC wetlands. Any necessary updates to these and other wetland numbers will be addressed in the EM&CP as appropriate.

60. Impacts to wetlands cannot be entirely avoided because of the Project's size, linear nature, and use of an existing utility corridor. Permanent impacts associated with the Project may include the installation of new structures within field-delineated wetlands and NYSDEC-regulated wetlands or mapped wetland buffers. Temporary impacts associated with Project construction may include: (i) temporary loss of wetland functions for construction access routes and structure construction workspace locations where wetland avoidance is not practicable; (ii) installation of temporary bridges and culverts to provide construction access across waterways; (iii) limited dewatering of surface or subsurface waters in select work areas.

61. The Applicant will avoid and minimize impacts to the identified wetlands, to the maximum extent practicable, by adhering to the measures contained in: (i) the Proposed Certificate Conditions set forth in Appendix C hereto; (ii) the Specifications for the Development of the EM&CP set forth in **Appendix E** hereto (*see infra*); and (iii) the NYSDEC Supplemental Specifications for Wetland and Waterbodies set forth in **Appendix F** hereto (*see infra*) when developing the Project's EM&CP.

62. Streams located along the Project's Ecological Survey Boundary and their associated NYSDEC water quality classifications are identified in Exhibit 4 of the Application. The Project traverses 13 Class C streams. None of the delineated streams are identified as "protected" under Environmental Conservation Law Article 15, because the streams are all Class C streams. The Project's ROW also crosses 13 perennial streams, 10 intermittent streams, and 1 ephemeral stream.

63. The Applicant will minimize impacts to protected streams by minimizing the number of streams crossed by access roads; by utilizing existing crossings to the maximum extent feasible; and, to the maximum extent practicable, streams will be spanned to avoid placement of structures in streams. In addition, the Applicant will adhere to all other measures identified in the Proposed Certificate Conditions.

3. Invasive Species

64. The Applicant will prepare an Invasive Species Management Plan pursuant to the NYSDEC Invasive Species Management Plan Specifications as set forth in **Appendix G**, which will be made part of the approved EM&CP.

vi. Impacts on Protected Threatened and Endangered Species

65. The NYSDEC's Environmental Resource Mapper, as well as New York Natural Heritage Program ("NYNHP"), identified several State-protected threatened and endangered species as potentially occurring within the Project's centerline, including: the Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), Bog turtle (*Glyptemys muhlenbergii*), Timber rattlesnake (*Crotalus horridus*), Northern cricket frog (*Acris crepitans*), and Davis' sedge (*Carex davisii*). Based on NYNHP records, Northern cricket frogs have been documented within 0.25 mile of the Project's centerline, and Bog turtle have been documented within 1 mile

of the Project's centerline. Timber rattlesnakes have been documented within one mile of the Project's centerline under NYNHP occurrence records. In addition, under NYNHP occurrence records, an Indiana bat, Northern long-eared bat, and Eastern small-footed bat hibernaculum has been documented within 0.4 mile of the Project's centerline. Another Northern long-eared bat hibernaculum has been documented within 4.5 miles of the Project's centerline, and an Indiana bat maternity colony has been documented within 1 mile of the Project's centerline under NYNHP occurrence records. Davis' sedge have been documented within 0.5 mile west of the Project's centerline, but were not identified within the Project's ROW during the wetland delineation. No threatened or endangered species were observed while completing this field work.

66. In addition, the federally-listed threatened and endangered species that have been documented by the U.S. Fish and Wildlife Services ("USFWS") as being in the range of the Project Area are the Indiana bat (*Myotis sodalis*), Northern long-eared bat (*Myotis septentrionalis*), Bog turtle (*Glyptemys muhlenbergii*), and Small whorled pogonia (*Isotria medeoloides*).

67. The Applicant conducted a Bog turtle habitat survey (Phase 1) to determine the presence of potential Bog turtle habitat within the Project's ROW. Five wetlands with low to very low quality potential Bog turtle habitat were identified. The Applicant conducted a Phase 2 Bog turtle survey within the five wetlands identified as potential Bog turtle habitat. No Bog turtles were observed during the Phase 2 survey.

68. The Applicant is undertaking presence/absence surveys to determine the occupied status of the Northern cricket frog within the Project's ROW. If the ROW is deemed occupied by

Northern cricket frog, the Applicant will implement an applicable take avoidance and minimization plan.

69. In accordance with the Proposed Certificate Conditions set forth in Appendix C of this Joint Proposal:

- a. The Applicant will implement the Bog turtle, Northern cricket frog, and Timber rattlesnake Monitoring and Handling Protocol, attached hereto as **Appendix H**;
- b. The Applicant will implement an applicable Take Avoidance and Minimization Plan (“Avoidance and Minimization Plan”) that will be incorporated into the approved EM&CP; and
- c. If, following the Applicant’s performance of the quantification and assessment of impacts pursuant to the Avoidance and Minimization Plan, NYSDEC determines, in consultation with DPS Staff, that the Project will result in a take of relevant species or species habitat, the Applicant will develop a Net Conservation Benefit Plan that will be filed with the Secretary prior to commencement of construction.

vii. Topography and Soils

70. As described in Exhibit 4 of the Application, there are no identified geologic resources that will have an adverse effect on the installation and operation of the Project’s facilities. However, conditions potentially affecting structure placement and construction include, but are not limited to, low soil bearing capacities, high water tables, and shallow bedrock depths. If encountered, these conditions will be mitigated through engineering BMPs; detailed geotechnical investigations to determine the local soil characteristics; and implementing a foundation design that accounts for the local soil, water table, and bedrock conditions. In short, the Project’s construction will not result in any permanent or significant temporary changes in

topography or surficial materials. Likewise, there are no anticipated adverse impacts to soil and topography associated with the Project's ensuing operation.

71. The Project's ROW traverses two physiographic provinces: the Hudson-Mohawk Lowlands and the Hudson Highlands. No unique geologic features are found along the ROW in these provinces that will affect the Project's construction or operation, including the integrity of the proposed structures, nor will there be significant adverse impacts to topographic features associated with the Project's installation. Further, the Project's construction and operation will not have an adverse effect on geologic resources.

72. The Project's facilities will, where practicable, be located away from areas of steep slope. Minor, temporary changes to topography will occur due to grading in work areas and construction of access roads. Additionally, equipment movement along the access roads and at the structure sites also has the potential to result in soil compaction. During construction, BMPs will be used for erosion control and to mitigate soil compaction in agricultural areas. These BMPs will be detailed in the Project's EM&CP.

73. The Project's construction will not result in any permanent or significant temporary changes in topography or surficial materials. Therefore, there will be no significant increases in stormwater runoff volumes or erosion potential. As part of the Project, culvert replacements and installation of permanent erosion and sediment controls will be incorporated into the SWPPP in the EM&CP to prevent and correct any erosion problems along the ROW.

viii. Transportation Impacts

74. The anticipated effects of Project construction and operation on airports, railroads, roadways, and pedestrian ways are described below. In short, the Project will have no discernible permanent impacts on these transportation systems.

1. Airports and Heliports

75. There are three public airports, one private airport, and five private heliports within five miles of the Project's ROW.

76. At the time the Application was filed, it was not anticipated that any of the Project's transmission structures would require lighting, but the Applicant noted that some marking may be required by the Federal Aviation Administration ("FAA") (Evidentiary Record, Exhibit 16, Appendix B). The Applicant will work with the FAA to ensure compliance with all FAA regulations in advance of the filing of the applicable post-Phase I EM&CP.

2. Roads

77. The Project crosses State roads in 5 locations, County roads in 1 location, town roads in 10 locations, and private roads in 2 locations. The Applicant has or will secure all necessary road use agreements.

78. The Applicant will submit a Utility Work Permit to install utilities within or adjacent to State roadway ROW. Maintenance and Protection of Traffic ("MPT") Plans will be prepared for each road crossing and construction access point in accordance with the Proposed Certificate Conditions in Appendix C of this Joint Proposal. There are no anticipated discernible impact to traffic because of the Project's operation.

3. Railroads

79. The Project's ROW crosses the Port Jervis Line of the Metropolitan Transit Authority's ("MTA") Metro-North Railroad, an active railroad line, between Little Britain Road and State Route 208 in the Town of Hamptonburgh. The specific method as to how the crossing span will be installed will be coordinated with the railroad company and detailed in the final design drawings and described in the EM&CP.

4. Pedestrian Traffic

80. The Project's facilities are primarily located in rural areas characterized by low-density residential development, vacant land, and plots of agricultural and forested land not commonly visited or accessed by the public. A portion of the RTS Line will be suspended over a trail between structures 1214 and 1215, immediately north of Trestle Tree Lane, where the Long Path Trail runs congruent with the Heritage Trail. The Applicant will develop in the EM&CP and implement appropriate construction safety practices, such as public outreach/notifications for temporary trail closures, temporary barricades, and temporary fencing to prevent pedestrians and other users from entering construction work zones and avoid potential conflicts with pedestrian traffic during construction.

ix. Communication Impacts

81. The Applicant's review of Federal Communication Commission databases identified the location of existing aboveground communications facilities within one mile of the Project's facilities. Underground communication facilities (*e.g.*, fiber optic cables) are located within the Project's ROW and will be identified and mapped on the Plan and Profile Drawings to be provided as part of the Project's EM&CP. As more fully described in Exhibit E-5 of the Application (Evidentiary Record Exhibit 15, Appendix B), the Project is not expected to have adverse effects on communications (*i.e.*, television, radio, mobile phone, cable, fiber optic, etc.) during construction or operation. In the event that interference with communications is reported in the Project Area, the Applicant will take appropriate action to address such interference. Any complaints of suspected interference from the Project will be investigated and resolved consistent with Proposed Certificate Conditions in Appendix C.

82. The Applicant will comply with applicable provisions of the National Electrical Safety Code (“NESC”) related to appropriate spacing between the proposed transmission lines and communication facilities and has designed the transmission lines to minimize interference effects.

x. Noise Impacts

83. The Applicant’s Sound Level Impact Assessment Report, submitted as Appendix G to the Application, examined potential noise impacts resulting from the Project’s construction and operation.

84. The Project’s construction will require the use of heavy equipment that will be periodically audible along and immediately outside the Project’s ROW and its associated access roads, station sites, and laydown yards. Noise resulting from the operation of heavy equipment or other construction activities will be temporary.

85. Construction noise will be mitigated by the attenuating effect of distance, the presence of existing vegetation, the intermittent and short-lived character of the noise, the routing of construction equipment away from noise sensitive receptors to the extent practicable, turning off idling equipment when not in use, and utilizing construction equipment with proper mufflers. These measures will be addressed in the EM&CP. No adverse permanent impacts with respect to construction noise are anticipated.

86. Noise generated during the Project’s operation will include sound sources associated with both transmission line and substation operation.

87. Transmission line sound sources will consist primarily of corona noise and noise associated with maintenance and vegetation management activities. Operation of the transmission lines is not expected to cause any significant impact to the ambient noise

environment. The degree of audible corona noise is affected by air conditions such as humidity, air density, wind, and water droplets in the form of rain, drizzle, and fog. Ambient noise levels due to corona may rise during times of poor weather but are predicted to be at or below the threshold of audibility at the edge of the Project ROW, will not contribute to the existing ambient sound levels, and the transmission line will comply with the applicable NYSDEC guideline.

88. The proposed station work is not expected to cause appreciable changes to the ambient noise environment.

89. The Rebuilt Sugarloaf Substation is expected to produce operational noise as a result of the Project but has been designed and sited to minimize noise impacts. In the final configuration, the Rebuilt Sugarloaf Substation will include one 280 MVA autotransformer, 2 control building HVAC units, a 150 kVA station service voltage transformer (“SSVT”), and one 150 kVA station light and power (“SL&P”) transformer, resulting in a maximum operational noise levels as set forth in the Proposed Certificate Conditions (Appendix C). This design is expected to prevent the occurrence of adverse noise impacts from the Rebuilt Sugarloaf Substation’s operation.

90. Final computer noise modeling and tonal evaluation shall be conducted in accordance with the Specifications for Computer Noise Modeling and Tonality Assessment, attached as **Appendix I**. No post-construction noise testing will be required.

xi. Electric & Magnetic Fields

91. The Applicant performed a study through the use of calculated computer models that assessed the expected electric and magnetic field (“EMF”) levels resulting from the Project using winter normal conductor ratings and clearances consistent with the Commission’s Opinion No. 78-13, issued June 19, 1978, and Statement of Interim Policy on Magnetic Fields of Major

Electric Transmission Facilities, issued September 11, 1990 (Evidentiary Records, Exhibits 1 and 5, Appendix B).

92. The EMF study details that the electric field levels remain similar (with some minor increase in certain cross-sections) at the edge of the existing transmission line corridor. The Project does not cause any new EMF exceedances within the transmission line corridor.

93. The Applicant has committed to design, engineer, construct, and operate the Project such that its operation shall comply, to the maximum extent practicable, with the EMF 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.

D. Availability and Impact of Alternatives

94. The Evidentiary Record describes the availability and impact of Project alternatives and are briefly summarized below.

95. In the PPTN Order, the Commission described the needed transmission system improvements as comprising two segments: Segment A, involving new transmission lines from Edic or Marcy to New Scotland and Princetown to Rotterdam on existing ROW and related station work; and Segment B, involving new transmission lines from Knickerbocker to Churchtown and Churchtown to Pleasant Valley on existing ROW and related station and line work. The PPTN Order is described in more detail in Exhibit 3 and Exhibit E-4 of the Application (Evidentiary Record Exhibits 4 and 14, Appendix B).

96. As described above in more detail, prior to declaring the AC Transmission PPTN, the NYISO determined the “Segment B Additions” projects were necessary to produce the maximum positive benefit from the Segment A and Segment B projects and the Commission

included those projects in the broader definition of the “Segment B” component of the AC Transmission PPTN.

97. Before filing the Application, the Applicant extensively evaluated and studied the Shoemaker to Sugarloaf project and concluded that the Project satisfies the contingency identified by the NYISO, and subsequently declared by the Commission, during the AC Transmission proceeding on the double circuit 69 kV lines between the Shoemaker and Sugarloaf Substations at a substantially lower cost and with fewer impacts than actually constructing a new double circuit 138 kV line from Shoemaker to Sugarloaf on the existing Shoemaker to Sugarloaf ROW and then decommissioning the existing double circuit 69 kV lines in that corridor and performing related switching or substation work at Shoemaker, Hartley Road, South Goshen, Chester, and Sugarloaf. Importantly, after evaluating the Project compared to the Commission-ordered replacement of the existing double circuit 69 kV lines, the NYISO similarly concluded that the Project is a “non-material change” with regard to the larger NYES Project and its interconnection request as the Project satisfies the identified contingency.

98. There is no alternative, non-transmission method to satisfy the contingency identified by the NYISO during the AC Transmission proceeding with comparable costs. As discussed above, following its acquisition of this Segment B Additions project from O&R, Transco considered several alternatives to attempt to satisfy the Commission-declared need for the Shoemaker to Sugarloaf Segment B Additions project while still curing the NYISO-identified contingency on Lines 24/241 and 25. This alternatives assessment, and the four alternatives given the most consideration during that process, are described fully in Exhibit 3 of the Application.

E. The Project's Conformance to Long-Range Plans for Expanding the Electric Power Grid

99. The Project conforms to the NYISO's requirements and planning objectives and is consistent with New York's long-range plans as required by PSL § 126.1 (e) (2) to expand its bulk electric system and address the public policy transmission needs identified in the PPTN Order. As the Commission has previously held in relation to Segment B and the Segment B Additions projects, completion of the Project, with any necessary network upgrade facilities, will improve the reliability of the transmission system, serve the interests of electric system economy and reliability, provide greater transmission capability, and accommodate future expansion.

F. System Impact Study

100. Although 16 NYCRR § 88.4 (a) (4) requires a System Reliability Impact Study for all PSL Article VII projects, the Commission's order on Transco's waiver requests determined that the appropriate NYISO study for the Project is a System Impact Study ("SIS"). The SIS for the Project, which was approved by the NYISO's Operating Committee on October 11, 2018, concluded that the Project, with any necessary network upgrade facilities, will not adversely impact the State's transmission system.

G. State and Local Laws

101. 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 Environmental Conservation Law, and the Agriculture and Markets Law.

102. Due to the preemptive effect of PSL § 130, procedural requirements to obtain any State or local approval, official review, consent, permit, certificate, or other condition for the Project's construction or operation do not apply except for permits or approvals issued or required by the NYSDEC pursuant to regulations implementing federally-delegated

environmental programs, those provided by otherwise applicable State law for the protection of employees engaged in construction and operation of the Project, and those approvals expressly authorized in the Certificate Conditions.

103. Exhibit 7 of the Application (Evidentiary Record Exhibit 8, Appendix B) 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 Applicant requests 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.

104. Except for those provisions the Applicant specifically requested that the Commission refuse to apply in Exhibit 7, the Applicant will comply with, and the location of the Project as proposed conforms to, all substantive local legal provisions that are applicable to the Project.

105. The following are examples of local laws that the Applicant requests the Commission not apply as well as the corresponding justifications for such requests:

- a. Requirements concerning noise and dust emissions because, although mitigation measures will be implemented to the extent practicable to minimize the temporary impacts from construction activities and equipment, these impacts are technologically impossible or would be impracticable from a cost and economics perspective to limit to levels specified in the ordinances;
- b. Fence height and screening requirements, permitted use or use permit or approval standards or requirements, and limits on the location of structures or the preservation of particular land designations (*e.g.*, 100-year floodplain) because

these requirements (a) have no necessary nexus or relevance when considered in light of the Applicant's contiguous linear ROW lots; and/or (b) are unreasonably restrictive in view of existing technology because the proposed structure locations are a function of the appropriate span length between transmission structures as well as clearance, reliability, and safety requirements, and the size and configuration of the ROW is based on required clearance and reliability criteria rather than local height and lot restrictions;

- c. Maximum structure height requirements because compliance is technologically impossible and unsafe given that heights are a function of the appropriate span length between transmission structures as well as clearance, reliability, and safety requirements; and
- d. Provisions restricting the construction activities that may prevent or deter the practices of farming to the extent that these restrictions negatively affect the construction activities on the basis that these provisions are unreasonably restrictive in view of existing technology and factors of cost and economics.

106. The Applicant also requests that the Commission refuse to apply the following local law requirements to the extent that they conflict with the NESC, SPDES General Permit for Stormwater Discharge from Construction Activity, the Stormwater Pollution and Prevention Plan, or the PSL Article VII Certificate:

- a. Requirements concerning flooding and erosion control and the drainage and the disposal of solid and liquid waste and recyclables;
- b. Provisions governing construction materials and methods in areas of special flood hazard and the discharge of polluted waters into any natural outlet;

- c. Provisions requiring local approval of work sites;
- d. Provisions regarding the placement of fill material or construction on steep slopes;
- e. Limitations on hours of construction operations;
- f. Construction standards for structures and improvements;
- g. Regulations or prohibitions on the location of facilities in or near residential, open space, or other specified areas;
- h. Provisions governing temporary storage containers and bulk waste containers;
- i. Provisions regulating the disposal of hazardous waste;
- j. Provisions governing zoning and land use control; and
- k. Provisions establishing standards for traffic and vehicle access on private roads.

107. No local jurisdiction has filed any objection to the Applicant's requests, set forth in Exhibit 7, 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 local ordinances.

H. Public Interest, Convenience, and Necessity

108. The Applicant conducted public outreach regarding the Application prior to filing in order to inform the public about the Project, including:

- a. Met with key stakeholders, including State agency staff (including from the NYSDEC and AGM), State and federal legislators representing the Project area, officials from Orange County, and local elected leaders, among other parties, informing them of the Project;

- b. Presented the Project to the town boards in the four towns that will be traversed by the Project during regularly-scheduled town board meetings;
- c. Sent letters to the landowners who will abut the Project, notifying them of the Project and informing them of ongoing survey work and opportunities to engage with the Project team (*e.g.*, community meetings, the Project website, etc.);
- d. Held three pre-application public open house information sessions. Two in-person sessions, practicing Covid-19 guidelines, were conducted in Chester on October 7, 2020, as to be convenient to route communities. One virtual session was held on October 15, 2020, to provide access for all to attend due to Covid-19 concerns;
- e. Established a website at www.RTSUpgrade.com, which has been, and will continue to be, updated regularly with current RTS Project information; and
- f. Established a toll-free hotline number (800.314.4236) and an email address (questions@RTSUpgrade.com) to receive inquiries regarding the Project.

109. A public notice (print and digital) was published in *The Orange County Post* and the *Times Herald-Record*, for two consecutive weeks prior to filing the Application. In addition, copies of the Application were provided to the following libraries for public inspection: Chester Public Library, Goshen Public Library & Historical Society, Moffat Library, Newburgh Free Library, and Wallkill Public Library.

110. On November 5, 2020, property owners along the Project's ROW were sent notification letters regarding the Project's Application filing.

111. Between August 4, 2020 and October 22, 2020, the Applicant briefed all federal and State legislators representing the Project's route communities.

112. Between August 4, 2020 and September 23, 2020, the Applicant presented a post-filing Project update to the town boards in all four towns that will be traversed by the Project during regularly-scheduled town board meetings.

113. Between July 20, 2020 and April 16, 2021, property owners along the Project's ROW were mailed nine separate Project updates.

114. Two virtual Public Information Forums were held on April 29, 2021. Two Public Statement Hearings were held on May 4, 2021.

115. The Applicant has also created easy to access and use information for the public to learn about the Project such as a general fact sheet, town-by-town fact sheets, a summary of the PSL Article VII application based on stakeholder areas of interest, and interactive mapping to show current and preliminary future structure locations.

116. In response to the Applicant's public outreach efforts, six public comments have been filed as of the date of this Joint Proposal. Five comments, filed by entities such as the Construction Contractors Association, the International Brotherhood of Electrical Workers Local 1249, Orange County Partnership, and elected officials representing route communities, including Assemblymember Colin J. Schmitt and State Senator Mike Martucci, support the Project.

117. In addition, the Project has received three emails and nine calls to the Project email and hotline, respectively. The Project website has received 594 visits from unique visitors and 2,419-page views since its launch on July 28, 2020.

118. The Signatory Parties agree that the Applicant has conducted a robust public outreach effort.

V. Proposed Commission Findings

119. The record in this proceeding supports all of the Commission findings required by PSL § 126 and as set out in Appendix D to this Joint Proposal.

VI. Proposed Certificate Conditions

120. The Proposed Certificate Conditions set forth in Appendix C to this Joint Proposal are acceptable and appropriate for inclusion in a Certificate of Environmental Compatibility and Public Need authorizing the Project's construction and operation as described therein and in this Joint Proposal.

VII. Environmental Management and Construction Plan

121. The specifications for development of the EM&CP set forth in Appendix E of this Joint Proposal are acceptable for use while preparing the Project's EM&CP, and any deviation therefrom will be described in the EM&CP. Similarly, the supplemental specifications with respect to wetland and waterbodies set forth in Appendix F of this Joint Proposal will be followed while preparing the Project's EM&CP.

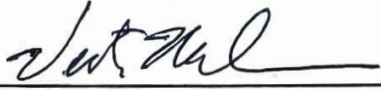
VIII. Water Quality Certification

122. The record in this proceeding supports the water quality certification substantially in the form of Proposed 401 Water Quality Certification set forth in **Appendix J** to this Joint Proposal.

Remainder of page intentionally left blank.

IN WITNESS WHEREOF, the Signatory Parties execute this Joint Proposal as of the day and year first set forth above.

NEW YORK TRANSCO LLC

By: 
Name: Victor Mullin
Title: President, New York Transco LLC

STAFF OF THE DEPARTMENT OF PUBLIC SERVICE

By: _____
Name:
Title:

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By: _____
Name:
Title:

DEPARTMENT OF AGRICULTURE AND MARKETS

By: _____
Name:
Title:

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION


By: _____
Name:
Title:

IN WITNESS WHEREOF, the Signatory Parties execute this Joint Proposal as of the day and year first set forth above.

NEW YORK TRANSCO LLC

By: _____
Name:
Title:

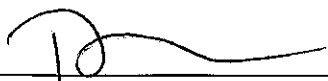
STAFF OF THE DEPARTMENT OF PUBLIC SERVICE

By: 
Name: Heather P. Behnke
Title: Assistant Counsel

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By: _____
Name:
Title:

DEPARTMENT OF AGRICULTURE AND MARKETS

By: 
Name: Tara B. Wells
Title: Senior Attorney

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

By: _____
Name:
Title:

IN WITNESS WHEREOF, the Signatory Parties execute this Joint Proposal as of the
day and year first set forth above.

NEW YORK TRANSCO LLC

By: _____
Name:
Title:

**STAFF OF THE DEPARTMENT OF PUBLIC
SERVICE**

By: _____
Name:
Title:

**DEPARTMENT OF ENVIRONMENTAL
CONSERVATION**

By: Mark D. Sanjea
Name: Mark D. Sanjea
Title: Deputy Counsel

**DEPARTMENT OF AGRICULTURE AND
MARKETS**

By: _____
Name:
Title:

**OFFICE OF PARKS, RECREATION AND
HISTORIC PRESERVATION**

By: _____
Name:
Title:

IN WITNESS WHEREOF, the Signatory Parties execute this Joint Proposal as of the day and year first set forth above.

NEW YORK TRANSCO LLC

By: _____
Name:
Title:

STAFF OF THE DEPARTMENT OF PUBLIC SERVICE

By: _____
Name:
Title:

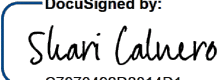
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

By: _____
Name:
Title:

DEPARTMENT OF AGRICULTURE AND MARKETS

By: _____
Name:
Title:

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

By:  _____
Name: Shari Calnero
Title: Associate Counsel

APPENDIX A

PROJECT DESCRIPTION AND LOCATION

PROJECT DESCRIPTION AND LOCATION

GENERAL PROJECT DESCRIPTION

New York Transco LLC’s (the “Applicant” or the “Certificate Holder”) Rock Tavern to Sugarloaf project (the “RTS Project” or “Project”) will involve: (1) the replacement of an existing, 12-mile overhead 115 kilovolt (“kV”) electric transmission line (the “SL Line”), with a new 115 kV electric transmission line, which will be known as the Rock Tavern to Sugarloaf Line (the “RTS Line”)¹ between Central Hudson Gas & Electric Corporation’s (“Central Hudson”) existing 115 kV Rock Tavern Substation located in the Town of New Windsor, Orange County (the “115 kV Rock Tavern Substation”) and Central Hudson’s existing 115 kV Sugarloaf Switching Station located in the Town of Chester, Orange County (the “115 kV Sugarloaf Switching Station”); (2) the rebuild² of the 115 kV Sugarloaf Switching Station as a substation (the “Rebuilt Sugarloaf Substation”) to be owned by the Applicant and located in the Town of Chester, Orange County to accept the RTS Line; (3) a new 138 kV tie line (“Line 30”) from the Rebuilt Sugarloaf Substation to Orange and Rockland Utilities, Inc.’s (“O&R”) existing 138 kV Sugarloaf Switching Station located in the Town of Chester, Orange County (the “138 kV Sugarloaf Switching Station”); (4) the replacement of existing structures from the 115 kV Rock Tavern Substation to the 115 kV Sugarloaf Switching Station; and (5) the replacement of the first structure outside of the Rebuilt Sugarloaf Substation (“Structure 1241”), which supports Central Hudson’s existing 115 kV SD and SJ lines, to accommodate the Rebuilt Sugarloaf Substation.

The Project is described in further detail below and outlined in Exhibits 2, E-1, and E-2 of the Application. All Project work, excluding off-right-of-way (“ROW”) access roads and laydown yards, will be conducted within existing utility ROW or on existing utility-owned land (together, the “Project’s ROW”).

SPECIFIC PROJECT DESCRIPTIONS BY TRANSMISSION LINE SECTION

¹ Note that this naming convention is being used for descriptive purposes in this proceeding. In contrast, the Applicant currently understands that the operational name of the RTS Line will remain the SL Line.

² Unless otherwise noted, all references to the rebuild of an existing station include the demolition of the existing station.

Section 1: 115 kV Rock Tavern Substation to Rebuilt Sugarloaf Substation

Section 1 of the RTS Line will extend approximately 11.8 miles from the 115 kV Rock Tavern Substation to the Rebuilt Sugarloaf Substation. In this section, the SL Line will be rebuilt as the new, single-circuit 115 kV RTS Line. The RTS Line will predominately be supported by steel monopoles, typically in a delta configuration.

This section of the SL Line, with the exception of an 8-span section from existing structure 1193 to existing structure 1201, shares a utility corridor with existing 345 kV double-circuit lines (“Feeders 76 & 77”). In Section 1, the RTS Line will cross beneath Feeders 76 & 77 5 times. Feeders 76 and 77 will remain after the RTS Project is energized and are not impacted by the Project.

The SL Line currently consists of 88 structures whereas the RTS Line will consist of 87 structures. The RTS structures will typically be installed within 40 feet of the existing structure locations. Existing structures are typically lattice structures that have an average height of 76.5 feet. The Project’s structures are typically no more than 10 feet taller than the existing lattice towers they replace.

Section 2: Line 30

Section 2 will consist of Line 30, which will begin at the Rebuilt Sugarloaf Substation and continue 0.14 mile to the 138 kV Sugarloaf Switching Station. This interconnection will include two custom steel H-frame structures and one custom steel monopole structure, all on drilled-shaft foundations. Line 30 will cross one existing transmission line between the Rebuilt Sugarloaf Substation and the 138 kV Sugarloaf Switching Station.

Section 3: Structure 1241 to Rebuilt Sugarloaf Substation

Section 3 will include the new conductor that will be installed between replaced Structure 1241 on Central Hudson’s SD and SJ lines and the Rebuilt Sugarloaf Substation. Structure 1241 is an existing double circuit steel lattice tower structure and is the last structure before the SD and SJ lines enter the Rebuilt Sugarloaf Substation. Due to the existing structure’s design as a suspension

lattice tower, this tower will need to be replaced with a custom steel double circuit two-pole structure on drilled-shaft foundations that will be designed as a dead-end structure. New conductor will be installed from the new dead-end structure to the Rebuilt Sugarloaf Substation. Given the existing route of the SD and SJ lines, the new conductor have two crossings with existing transmission lines. Section 3 will be located entirely within the Town of Chester.

SPECIFIC PROJECT DESCRIPTIONS BY STATION

115 kV Rock Tavern Substation

The 115 kV Rock Tavern Substation is owned by Central Hudson and located on land owned by Central Hudson south of Forrester Road in the Town of New Windsor, Orange County.

The 115 kV Rock Tavern Substation consists of two open air main buses with a tie breaker. Within the existing fence line there are 8 terminals and a 40'-0" x 20'-0" control enclosure containing system protection, communications, metering, and alternating current/direct current ("AC/DC") system equipment. These replacements will take place within the existing substation fence.

Rebuilt Sugarloaf Substation

The 115 kV Sugarloaf Switching Station is owned by Central Hudson and located on land owned by O&R north of Sugarloaf Mountain Road in the Town of Chester, Orange County.

The 115 kV Sugarloaf Switching Station consists of an open air 115 kV 4-terminal, 2-bus configuration and an approximately 20'-0" x 31'-0" control enclosure containing system protection, communications, metering, and alternating current ("AC") system equipment. The fenced area for the 115 kV Sugarloaf Switching Station is approximately 148'-0" x 146'-3".

The Project requires a complete demolition of the 115 kV Sugarloaf Switching Station and construction of the Rebuilt Sugarloaf Substation. This will require certain equipment to be removed, including, but not limited to:

- Two 115 kV line termination dead-end lattice structures (3 terminals);

- 115 kV 3-phase manual gang operated air disconnect switches (mounted on the dead-end lattice structures);
- Control enclosure and foundation; and
- Foundations, fencing, grounding, conduit, and a control cable.

The Rebuilt Sugarloaf Substation will consist of an open air 115 kV 4-terminal, 4-breaker, ring bus configuration. A 138/115 kV autotransformer with tertiary winding and a 138 kV line breaker will be installed to provide the connection to the 138 kV Sugarloaf Switching Station. A new control enclosure will be installed to house the system protection and control panels, communication equipment, heating, ventilation, and air conditioning (“HVAC”), battery systems, and AC/DC system equipment. This enclosure will be to house equipment only and will not be occupied on any regular basis. Substation equipment, including the control enclosure, will be located inside a seven-foot-tall perimeter fence with three additional barbed wire strands, accounting for an overall height of eight feet. The fenced area for the Rebuilt Sugarloaf Station will be approximately 200’-10” x 264’-6”. A layer of two feet of crushed rock material will be installed within the station area and extend approximately three feet beyond the perimeter fence.

The equipment installation required at the Rebuilt Sugarloaf Substation will include, but is not limited to:

- 138 kV SF6-insulated, dead-tank circuit breakers with bushing current transformers (“CT”);
- 3-phase 115 kV and 138 kV manual gang or motor operated air disconnect switches;
- 138/115 kV autotransformer with 13.8 kV tertiary;
- Coupling capacitor voltage transformers (“CCVTs”);
- Surge arresters;
- Station service voltage transformer (“SSVT”);
- Equipment enclosure;
- Foundations; steel support structures; and dead-end H-frames for connection to the transmission lines, grounding, conduit, control cable, and bus work necessary for a complete installation;

- All new primary and secondary protection systems;
- All new circuit break relaying and controls; and
- A sound wall.

The Rebuilt Sugarloaf Substation will be equipped with an emergency lighting system.

138 kV Sugarloaf Switching Station

The 138 kV Sugarloaf Switching Station is owned by and located on land owned by O&R south of Sugarloaf Mountain Road in the Town of Chester, Orange County, New York.

The 138 kV Sugarloaf Switching Station consists of open air 138 kV, 6-terminal, 3-bay breaker-and-a-half configuration and a 14'-3" x 60'-0" control enclosure containing system protection, communication, and AC/DC system equipment.

Proposed work at the 138 kV Sugarloaf Switching Station includes installation of 1 new overhead line position, within the existing station fence, that will connect to both main bus sections of the existing station. New system protection equipment required for this work will be installed within the existing control enclosure.

The equipment installation required at the 138 kV Sugarloaf Switching Station will include, but is not limited to:

- Two 138 kV SF6-insulated, dead-tank circuit breakers with bushing CTs;
- Five 3-phase 138 kV manual gang operated air disconnect switches and 1 3-phase 138 kV motor operated air disconnect switch;
- CCVTs;
- Surge arresters;
- Steel H-frame for connection to Line 30;
- Foundations, grounding, conduit, control cable, and bus work necessary for a complete installation;
- All new primary and secondary protection systems; and

- All new circuit breaker relaying and controls.

APPENDIX B

**LIST OF TESTIMONY, AFFIDAVITS,
AND EXHIBITS TO BE INCLUDED IN THE
RECORD OF THE PROCEEDING**

LIST OF TESTIMONY, AFFIDAVITS, AND EXHIBITS TO BE INCLUDED IN THE RECORD OF THE PROCEEDING

Pre-Filed Direct Testimony:

Direct Testimony of Victor Mullin; James Mooney; Stephen Cole-Hatchard, Jr.; Andrew Shalhoub; Heather Vaillant; Andrew Ruth; Ian Wolstenholme; John W. Guariglia; Timothy Sara; Mathew G. Hyland; Ph.D.; Kevin Martin; Robert O’Neal, CCM; Diane Reilly; and John Mannix (co-sponsoring or sponsoring Evidentiary Record Exhibits 1-16).¹

Affidavits:

Victor Mullin; James Mooney; Stephen Cole-Hatchard, Jr.; Andrew Shalhoub; Heather Vaillant; Andrew Ruth; Ian Wolstenholme; John W. Guariglia; Timothy Sara; Mathew G. Hyland, Ph.D.; Kevin Martin; Robert O’Neal, CCM; Diane Reilly; and John Mannix, which are enclosed herewith.

Evidentiary Record Exhibits:²

- Exhibit 1: The Cover Letter filing the Application with enclosures, the Application, and Appendices A-I filed therewith
- Exhibit 2: General Information (Exhibit 1 of the Application)
- Exhibit 3: Location of Facilities (Exhibit 2 of the Application)
- Exhibit 4: Alternatives (Exhibit 3 of the Application)
- Exhibit 5: Environmental Impacts (Exhibit 4 of the Application)
- Exhibit 6: Design Drawings (Exhibit 5 of the Application)
- Exhibit 7: Economic Effects of Proposed Facility (Exhibit 6 of the Application)
- Exhibit 8: Local Ordinances (Exhibit 7 of the Application)
- Exhibit 9: Other Pending Filings (Exhibit 8 of the Application)
- Exhibit 10: Cost of Proposed Facilities (Exhibit 9 of the Application)

¹ The listed pre-filed direct testimony is available electronically on the Public Service Commission’s (“Commission”) Document and Matter Management (“DMM”) site as Appendix A to New York Transco LLC’s (“Transco”) Article VII application (the “Application”).

² Certain Evidentiary Record Exhibits were filed in redacted form on DMM. The confidential versions of those exhibits were provided to the Commission’s Records Access Officer or the presiding Administrative Law Judge. All Evidentiary Record Exhibits are available on DMM in full or redacted form.

Exhibit 11: Description of Proposed Transmission Facilities (Exhibit E-1 of the Application)

Exhibit 12: Other Facilities (Exhibit E-2 of the Application)

Exhibit 13: Underground Construction (Exhibit E-3 of the Application)

Exhibit 14: Engineering Justification (Exhibit E-4 of the Application)

Exhibit 15: Effect on Communications (Exhibit E-5 of the Application)

Exhibit 16: Effect on Transportation (Exhibit E-6 of the Application)

Exhibit 17: Supplement to the Application Regarding the Rebuilt Sugarloaf Substation Design

Exhibit 18: Rock Tavern to Sugarloaf Project – Service List (Revised April 2021)

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

Case 20-T-0549

AFFIDAVIT OF
STEPHEN COLE-
HATCHARD, JR.

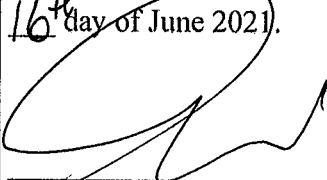
STATE OF NEW YORK)
)
) ss.:
COUNTY OF ALBANY)

I, STEPHEN COLE-HATCHARD, JR., being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 ("Direct Testimony") in the above-captioned proceeding by New York Transco LLC.
2. I have reviewed my Direct Testimony and affirm that it is complete and accurate.
3. I have no changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, as if given orally.
4. If I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.


STEPHEN COLE-HATCHARD, JR.

Sworn to before me this
16th day of June 2021.


Notary Public
AUBREY OHANIAN
NOTARY PUBLIC-STATE OF NEW YORK
No. 02OH6379170
Qualified in Rensselaer County
Commission Expires August, 2022

Notarization was made remotely pursuant to Executive order 202.7.
Notary was located in Albany County and signatory was located in Albany County.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 20-T-0549

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

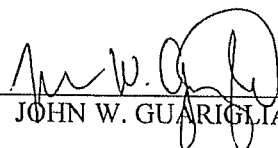
**AFFIDAVIT OF
JOHN W. GUARIGLIA**

STATE OF NEW YORK)
) ss.:
COUNTY OF ONONDAGA)

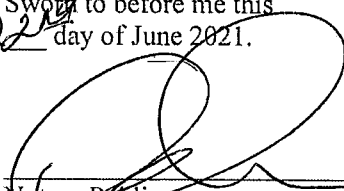
I, JOHN W. GUARIGLIA, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 (“Direct Testimony”) in the above-captioned proceeding by New York Transco LLC.
2. I have reviewed my Direct Testimony and affirm that, aside from the updates reflected in Paragraph 3 below, it is complete and accurate.
3. The following information has been updated since the filing of my Direct Testimony due to the passage of time:
 - a. I am no longer employed by Saratoga Associates Landscape Architects, Architects, Engineers, and Planners, P.C. (“Saratoga Associates”). My current employer and address is TRC Companies, Inc. (“TRC”), 215 Greenfield Parkway, Suite 102, Liverpool, NY 13088.
 - b. I am employed at TRC as the Visualization Services Manager.
 - c. While at Saratoga Associates I served as Principal-in-Charge for the visual assessment of the Project. At TRC, I continue to provide visual assessment services to the Project team.
 - d. Since the filing of my Direct Testimony and the filing of the Project’s original Visual Impact Assessment, there have been design updates to the Rebuilt Sugarloaf Substation. The visual impact of those design changes are addressed below.

- i. From a visual impact perspective, the noteworthy design update is the installation of a sound wall at the southeast corner of the Rebuilt Sugarloaf Substation. The sound wall will be a gray colored concrete and will follow the interior curve of the access road adjacent to the 138/115 kV transformer and 138 kV SA dead-end structure. The longest dimensions of the sound wall will be 84'-2" long by 30'-0" in height.
 - ii. The sound wall will be positioned amongst the existing and proposed structures at the Rebuilt Sugarloaf Substation. It is anticipated that the highest probability to view the sound wall will be along a short segment of Sugarloaf Mountain Road. There are residential dwellings in the area of the Sugarloaf Substation, but if the sound wall is visible to those residences the individuals residing at those residences already have a view of the existing structures.
 - iii. There will be a limited opportunity to view the newly-proposed sound wall, but in those instances, it will be seen amongst the existing and proposed electrical infrastructure and thus it will be seen as one component of many.
4. I have no other changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, with the updates noted in Paragraph 3 above, as if given orally.
 5. If I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein aside from the updates noted in Paragraph 3 above.



 JOHN W. GUARIGLIA

Sworn to before me this 22nd day of June 2021.


 Notary Public
AUBREY OHANIAN
NOTARY PUBLIC-STATE OF NEW YORK
 No. 02OH6379170
 Qualified in Rensselaer County
 Commission Expires August, 2022

Notarization was made remotely pursuant to Executive Order 202.7. Notary was located in Albany County and Signatory was located in Onondaga County.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

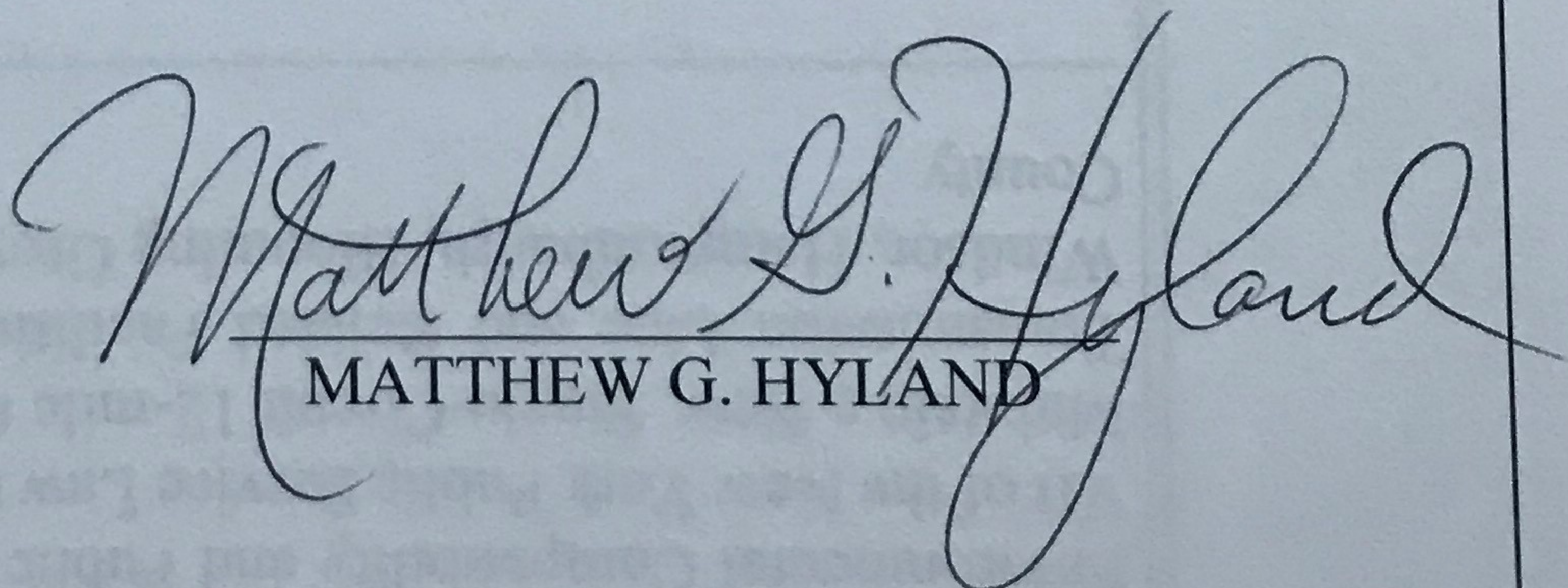
Case 20-T-0549

AFFIDAVIT OF
MATTHEW G. HYLAND

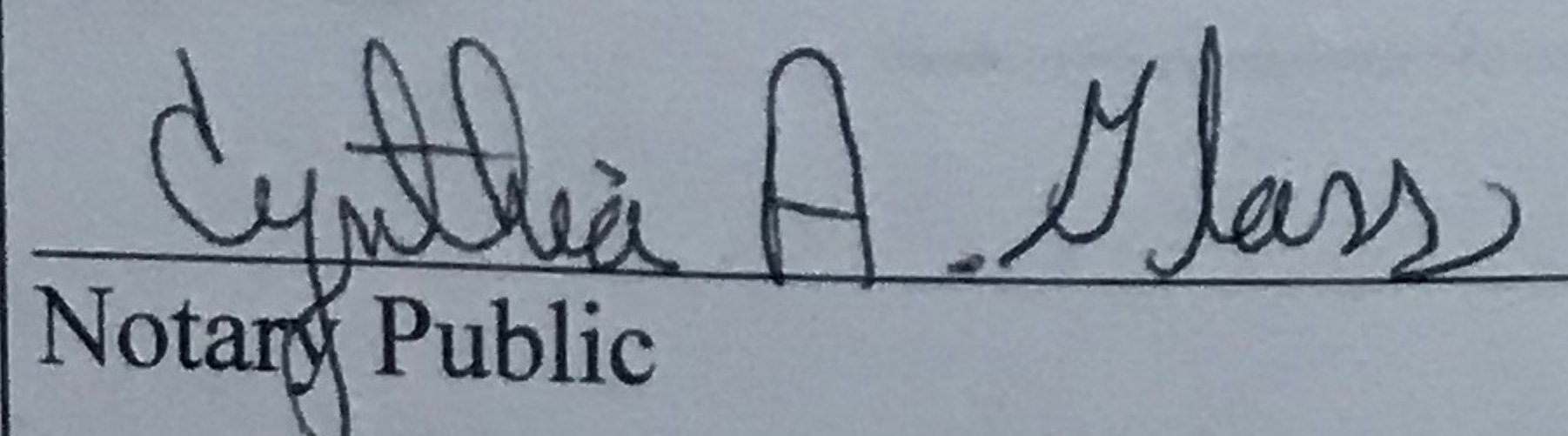
STATE OF Pennsylvania)
) ss.:
COUNTY OF Allegheny)

I, MATTHEW G. HYLAND, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020, ("Direct Testimony") in the above-captioned proceeding by New York Transco, LLC.
2. I have reviewed my Direct Testimony and affirm that it is complete and accurate.
3. I have no changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, as if given orally.
4. If I were asked the questions stated in by Direct Testimony today, my answers would be the same as stated therein.


MATTHEW G. HYLAND

Sworn to before me this
21st day of June 2021.


Notary Public

Commonwealth of Pennsylvania - Notary Seal
Cynthia A. Glass, Notary Public
Allegheny County
My commission expires June 1, 2024
Commission number 1367706


Member, Pennsylvania Association of Notaries

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 20-T-0549

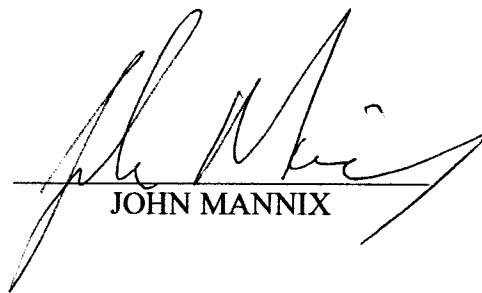
Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

**AFFIDAVIT OF
JOHN MANNIX**

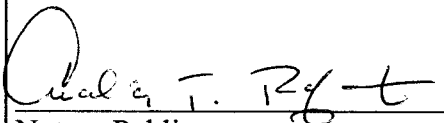
Massachusetts
STATE OF NEW YORK)
Branstable) ss.: 
COUNTY OF ~~ALBANY~~)

I, JOHN MANNIX, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 ("Direct Testimony") in the above-captioned proceeding by New York Transco LLC.
2. I have reviewed my Direct Testimony and affirm that it is complete and accurate.
3. I have no changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, as if given orally.
4. If I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.


JOHN MANNIX

Sworn to before me this
15 day of June 2021.


Notary Public



AMALIA T. RAFTELIS
Notary Public
Commonwealth of Massachusetts
My Commission Expires December 26, 2025

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 20-T-0549

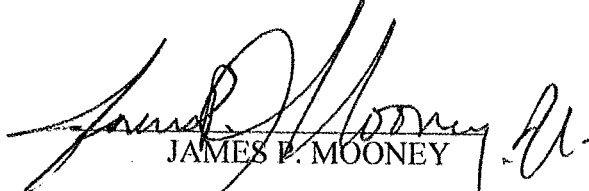
Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

**AFFIDAVIT OF
JAMES P. MOONEY**

STATE OF NEW YORK)
) ss.:
COUNTY OF ALBANY)

I, JAMES P. MOONEY, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 ("Direct Testimony") in the above-captioned proceeding by New York Transco LLC.
2. I have reviewed my Direct Testimony and affirm that it is complete and accurate.
3. I have no changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, as if given orally.
4. If I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.


JAMES P. MOONEY

Sworn to before me this
17th day of June 2021.


Notary Public

AUBREY OHANIAN
NOTARY PUBLIC-STATE OF NEW YORK
No. 02OH6379170
Qualified in Rensselaer County
Commission Expires August, 2022

Notarization was made remotely
Pursuant to executive order 202.7.
Notary was located in Albany County
and signatory was located in
Albany County.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 20-T-0549

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

**AFFIDAVIT OF
VICTOR MULLIN**

STATE OF NEW YORK)
) ss.:
COUNTY OF DUTHCRESS)

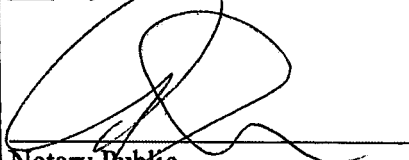
I, VICTOR MULLIN, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 (“Direct Testimony”) in the above-captioned proceeding by New York Transco LLC (“Transco”).
2. I have reviewed my Direct Testimony and affirm that, aside from the updates reflected in Paragraph 3 below, it is complete and accurate.
3. The following statements from my Direct Testimony need to be updated due to the passage of time:
 - a. Page 6, Lines 10-12: This answer should now read: “The New York Energy Solution project (the “NYES Project”), which at the time I filed my Direct Testimony was pending before the Public Service Commission (the “Commission”), has since been approved. Transco was issued a Certificate of Environmental Compatibility and Public Need to construct, operate, and maintain the NYES Project on February 11, 2021, and construction has since begun.”
 - b. Page 17, Lines 10-11: This answer should now read: “Either the asset owner or Transco pursuant to an Engineering, Procurement and Construction Agreement with the asset owner will construct the Rock Tavern Upgrades Segment B addition project.” Note that the scope of work associated with the Rock Tavern Upgrades Segment B addition project has been revised and reduced from the Commission’s definition of the project in the December 15, 2015 order in Case 12-T-0502. Further, the New York State Independent System Operator, Inc. has since approved this reduced scope.

4. I have no other changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, with the updates noted in Paragraph 3 above, as if given orally.
5. If I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein aside from the updates noted in Paragraph 3 above.


VICTOR MULLIN

Sworn to before me this
21st day of June 2021.


Notary Public

AUBREY OHANIAN
NOTARY PUBLIC-STATE OF NEW YORK
No. 02OH6379170
Qualified in Rensselaer County
Commission Expires August, 2022

Notarization was made remotely
Pursuant to Executive Order 202.7,
Notary was located in Albany County
and Signatory was located in
Dutchess County.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

Case 20-T-0549

**AFFIDAVIT OF
TIMOTHY SARA**

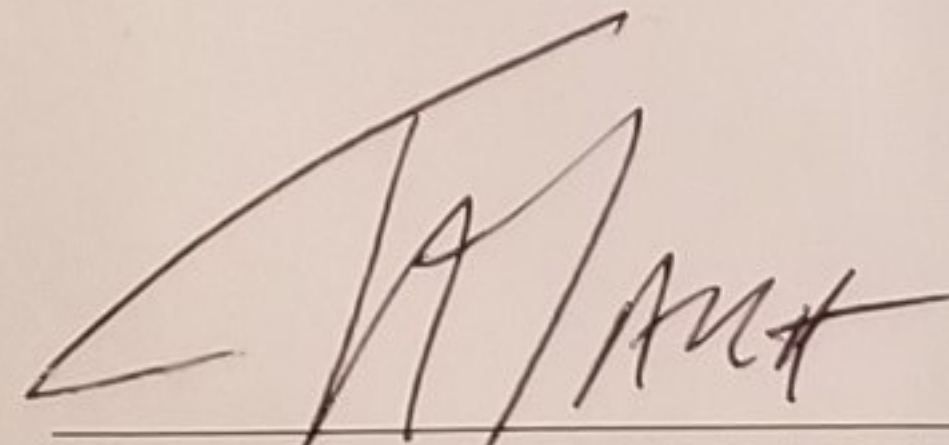
STATE OF MARYLAND

) ss.:

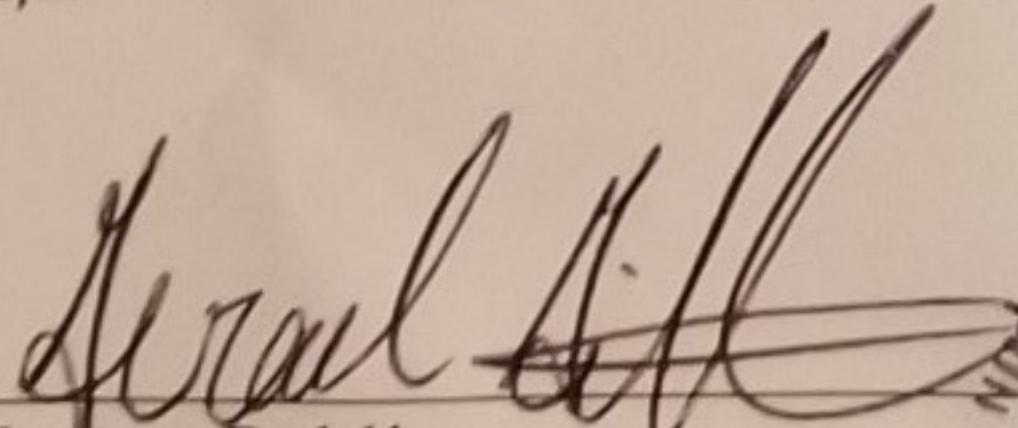
COUNTY OF PRINCE GEORGES

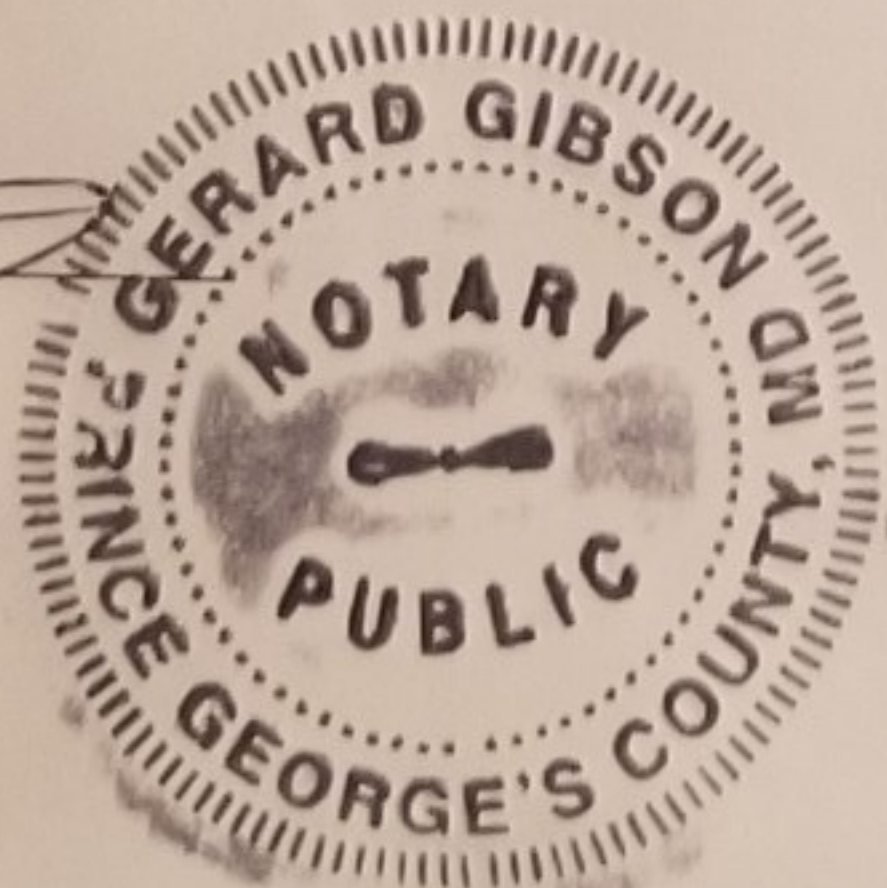
I, TIMOTHY SARA, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 ("Direct Testimony") in the above-captioned proceeding by New York Transco LLC.
2. I have reviewed my Direct Testimony and affirm that it is complete and accurate.
3. I have no changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, as if given orally.
4. If I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.


TIMOTHY SARA

Sworn to before me this
21 day of June 2021.


Notary Public



GERARD GIBSON
Notary Public
Prince George's County
Maryland

My Commission Expires April 15, 2023

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 20-T-0549

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

**AFFIDAVIT OF
HEATHER VAILLANT**

STATE OF NEW YORK)
) ss.:
COUNTY OF SARATOGA)

I, HEATHER VAILLANT, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 ("Direct Testimony") in the above-captioned proceeding by New York Transco LLC.
2. I have reviewed my Direct Testimony and affirm that it is complete and accurate.
3. I have no changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, as if given orally.
4. If I were asked the questions stated in ^{my} ~~by~~ Direct Testimony today, my answers would be the same as stated therein. _{HW}


HEATHER VAILLANT

Sworn to before me this
15th day of June 2021.


Notary Public **ANDREW M JOHNSON**
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 02JO6017113
Qualified in Saratoga County
Commission Expires 12 / 7 / 2022

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 20-T-0549

Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New, Single-Circuit 12-mile Overhead 115 kV Electric Transmission Line and Related Facilities In the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County

**AFFIDAVIT OF
IAN WOLSTENHOLME**

Imw
Missouri
STATE OF ~~NEW YORK~~)
JACKSON) ss.:
COUNTY OF ~~ALBANY~~)
Imw

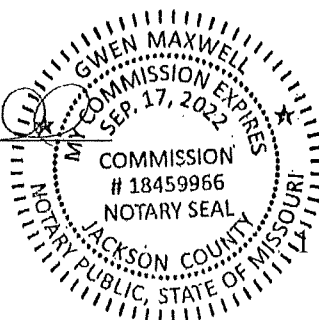
I, IAN WOLSTENHOLME, being duly sworn, depose and say:

1. My direct testimony was pre-filed on October 5, 2020 ("Direct Testimony") in the above-captioned proceeding by New York Transco LLC.
2. I have reviewed my Direct Testimony and affirm that, aside from the update in Paragraph 3 below, it is complete and accurate.
3. The following statement from my Direct Testimony needs to be updated due to the passage of time:
 - a. Page 1, Line 13: This answer should now read: "I am a substation engineer for the Rock Tavern to Sugarloaf Project."
4. I have no other changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, with the update noted in Paragraph 3 above, as if given orally.
5. If I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein aside from the update noted in Paragraph 3 above.

Ian Wolstenholme
IAN WOLSTENHOLME

Sworn to before me this
22nd day of June 2021.

Gwen Maxwell
Notary Public



APPENDIX C

PROPOSED CERTIFICATE CONDITIONS

PROPOSED CERTIFICATE CONDITIONS

A. CONDITIONS OF THE ORDER

1. Subject to the conditions set forth in this Opinion and Order, New York Transco LLC (“Transco” or the “Certificate Holder”) is granted a Certificate of Environmental Compatibility and Public Need (“Certificate”) pursuant to Article VII of the Public Service Law (“PSL”) authorizing the construction and operation of the Rock Tavern to Sugarloaf project (the “Project”). The Project includes: (1) the replacement of an existing, 12-mile overhead 115 kilovolt (“kV”) electric transmission line (the “SL Line”), with a new 115 kV electric transmission line, which will be known as the Rock Tavern to Sugarloaf Line (the “RTS Line”) which will begin at the existing 115 kV Rock Tavern Substation owned by Central Hudson Gas & Electric Corporation (“Central Hudson”) and located in the Town of New Windsor, Orange County (the “115 kV Rock Tavern Substation”) and terminate at Central Hudson’s existing 115 kV Sugarloaf Switching Station (the “115 kV Sugarloaf Switching Station”) located in the Town of Chester, Orange County; (2) the rebuild of the 115 kV Sugarloaf Switching Station to a substation (the “Rebuilt Sugarloaf Substation”) to accept the RTS Line; (3) the installation of a new 138 kV tie line (“Line 30”) which will exit the Rebuilt Sugarloaf Substation and terminate at the existing 138 kV Sugarloaf Switching Station (the “138 kV Sugarloaf Switching Station”) owned by Orange and Rockland Utilities, Inc. (“O&R”) located in the Town of Chester, Orange County; and (4) the replacement of Structure 1241, the first structure outside the Rebuilt Sugarloaf Substation, which supports Central Hudson’s existing 115 kV SD and SJ Lines. The 115 kV Sugarloaf Switching Station and the 138 kV Sugarloaf Switching Station are located on O&R property. The Rebuilt Sugarloaf Substation will be located on the same parcel as 115 kV Sugarloaf Switching Station.
2. The Certificate Holder shall, within 30 calendar days after the issuance of the Certificate, 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 calendar days of reaching such a decision and shall serve a copy of such notice upon all parties to this proceeding (*i.e.*, Case 20-T-0549) (the “Proceeding”).

4. The Certificate Holder shall construct the Project in accordance with this Certificate; with the approved Environmental Management and Construction Plan (“EM&CP”), which may be approved in phases; and any subsequent Commission orders. The Certificate Holder intends to file two phases of the EM&CP (referred to herein as “Phase I” and “Phase II”).
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 to the Proceeding.
6. The Certificate Holder may request 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 description and location of the Project is approved as set forth in the “Location of Facilities” in Appendix A of the Joint Proposal to which this Appendix is attached (the “Joint Proposal”).

C. LAWS, REGULATIONS, AND DISPUTE RESOLUTION

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 subject facilities; and (iii) those permits issued under a federally-delegated, or pursuant to a federally-approved, environmental permitting program.
10. Nothing herein shall preclude the Certificate Holder from voluntarily subjecting itself to the procedural requirements of 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.
11. The Certificate Holder shall design, engineer, and construct the Project in a manner that conforms to all: (1) applicable standards of the American National Standards Institute (“ANSI”) including, without limitation, the

National Electrical Safety Code (“NESC”) (including the 2017 version Institute of Electrical and Electronics Engineers [“IEEE”] Standard IEEE C2); (2) applicable and published planning and design standards and engineering practices of the New York State Independent System Operator, Inc. (the “NYISO”), New York State Reliability Council, the Northeast Power Coordinating Council, the North American Electric Reliability Corporation, and successor organizations; (3) the construction standards of O&R for the portion of any construction within the O&R 138 kV Sugarloaf Switching Station; and (4) 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.

12. The Certificate Holder’s maintenance of the Project will be in accordance with the Certificate Holder’s Long-Range Right-Of-Way Management Plan For The New York Transco LLC Electric Transmission System (“ROWMP”), as it may be amended from time to time.
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 any 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 any permit or approval required for construction or operation of the Project, as outlined in Condition 9 above, 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. The Certificate Holder shall include in the appropriate, post-Phase I EM&CP, evidence of a Federal Aviation Administration (“FAA”) determination that the final design of the structures proposed for the Project, for those that require notice to the FAA, will have no substantial adverse 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

17. The Certificate Holder shall design, engineer, construct, and operate the Project such that its operation shall comply, to the maximum extent

practicable, 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.

18. The Certificate Holder shall engineer and construct the Project to be 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 applicable, post-Phase IE M&CP.
19. The Certificate Holder shall develop a construction gas line safety section for incorporation into its Phase II EM&CP. This section will address gas line safety for transmission and distribution pipelines, as applicable. 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. Safety training requirements; and
 - f. Notification procedures for local officials, emergency personnel, and landowners/residents.
20. At no time shall construction activities of any kind be conducted within 25 feet of any gas pipeline without first calling New York's Dig Safely line.
21. The Certificate Holder shall keep local fire department and emergency management teams apprised of the status of on-site regulated chemicals and hazardous waste. All such regulated chemicals and hazardous waste shall be secured in a locked and controlled area.
22. 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."
23. The Certificate Holder shall have the right to require that any person seeking to access the Project or station sites first be appropriately trained in environmental protection and safety. The Certificate Holder may require site inspectors or visitors to comply with all safety and security requirements applicable to the construction site, including supplying their own safety equipment.

E. ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN & PROCESS

24. The Certificate Holder shall not commence construction, as defined by the New York State (“NYS”) Department of Environmental Conservation (“NYSDEC”) General Permit for Stormwater Discharges from Construction Activity, until the Commission has approved the EM&CP, nor, shall the Certificate Holder commence any proceedings under the Eminent Domain Procedure Law (“EDPL”), if applicable, to acquire permanent ROW, temporary ROW, or off-ROW access until the Commission has approved the appropriate phase of, or the full, 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. In addition to the foregoing provisions of this paragraph, Certificate Holder is hereby authorized upon approval of these Certificate Conditions by the Commission to prepare the laydown yard described in Exhibit 1 as set forth in Appendix B to the Joint Proposal and to use them for such purpose in accordance with the details provided to Department of Public Service (“DPS”) Staff for review and acceptance.
25. To calculate any three-year period for acquisition of property pursuant to the EDPL, the date of Commission approval of an EM&CP covering the affected parcel shall be regarded as the date on which the Proceeding was completed.
26. 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 into any design, construction, and maintenance documents associated with the Project.
27. Any phase of the EM&CP filing 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”).
28. Before the preparation of any phase of the EM&CP, the Certificate Holder shall contact the Region 3 NYSDEC Natural Resources 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 occupied habitat, or Significant Natural Communities in the project area and include the responses in the relevant EM&CP.
29. Deviations from the certified centerline, design height, location, number of structures, and structure types as described in Appendix E shall be allowed during the EM&CP process 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.

30. The Certificate Holder shall obtain coverage under the then-current State Pollutant Discharge Elimination System General Permit for Construction Activities (currently, GP-0-20-001) and will prepare one or more final NYSDEC-acknowledged Storm Water Pollution Prevention Plans (“SWPPP”) and, as appropriate, the municipal separate storm sewer system approval, in accordance with the current NYS Standards and Specifications for Erosion and Sediment Control (“NYSSESC”). In addition to the general requirements set forth in the NYSSESC, the SWPPP shall include the following protocols:
 - a. To minimize the risk of introducing invasive species, use of hay bales is strictly prohibited; and
 - b. To the extent available, all erosion control fabric or netting must be 100% biodegradable natural product (but not including photodegradable materials), excluding geotextiles used for road construction and temporary erosion control devices such as silt fence and silt sock.

31. The following stormwater, erosion, and sedimentation conditions shall be applicable to the Project:
 - a. The Certificate Holder shall include a SWPPP and, if possible, the municipal separate storm sewer system approval, and the NYSDEC’s State Pollutant Discharge Elimination System (“SPDES”) General Permit applicable to Phase I work, which will be appended to the Phase I EM&CP. If not included in the Phase I EM&CP, the Certificate Holder shall file the municipal separate storm sewer systems approvals and the NYSDEC’s letter of acknowledgment with the Commission prior to approval of the Phase I EM&CP.
 - b. The Certificate Holder shall include a SWPPP, and, if possible, the municipal separate storm sewer systems approvals, and NYSDEC’s letter of acknowledgement authorized under NYSDEC’s SPDES General Permit applicable to Phase II work, in the applicable, post-Phase I EM&CP. If not included in the applicable, post-Phase I EM&CP, the Certificate Holder shall file the municipal separate storm sewer systems approvals and the NYSDEC’s letter of acknowledgment with the Commission prior to approval of the relevant EM&CP.
 - c. The Certificate Holder shall install temporary erosion control devices (*e.g.*, silt fence, straw bales, and structural diversions) as soon as

practicable and appropriate or by the end of the work day for newly disturbed areas, as indicated in the EM&CP.

32. The Certificate Holder shall file one electronic copy of the proposed EM&CP, including all phases thereof, with the Secretary, an electronic copy to each of the Signatory Parties, and one electronic copy to the parties on the service list. Within two business days of 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; one hard copy to: the Region 3 Supervisor of Natural Resources, at the NYSDEC Region 3 Headquarters; one hard copy to the New York Department of Agriculture and Markets (“AGM”); and one electronic copy on any other New York State agency (and its relevant regional offices) that requests the document. The Certificate Holder shall also make copies of all EM&CP filings available for inspection by the public on the Project’s website by either direct PDF download(s) or web link to the DPS website page where the EM&CP is available and, within 5 business days of filing the proposed EM&CP with the Secretary, provide copies (in electronic or paper format) at the same public repositories listed on the Statutory Service List or other convenient location in each municipality in which construction will take place. All electronic copies shall be searchable.
33. Contemporaneously with the filing and service of any 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”).
34. The Certificate Holder shall serve a copy of the EM&CP Filing Notice on all parties to the Proceeding, the Project Service List, and on the landowners and/or residents of property crossed by or abutting the Project ROW. In the case of a phased EM&CP filing, the Certificate Holder shall serve a copy of the phased EM&CP Filing Notice on all parties to the Proceeding and the landowners and/or residents of property crossed by or abutting the impacted portion of the Project ROW. 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 relevant vicinity of the Project.
35. The written EM&CP Filing Notice and the newspaper notice(s) shall contain, at a minimum, the following information:
 - 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, email, and local or toll-free 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 30 calendar days of the EM&CP filing date or within calendar 30 days of the date of the newspaper notice, whichever is later. Should the Certificate Holder revise its EM&CP in response to any such written comments filed with the Secretary, comments on the revised EM&CP shall be permitted within 15 calendar days of service by electronic means of said revisions.
36. The Certificate Holder shall submit to the Secretary a certificate of service with a 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 five business days after the proposed EM&CP is filed. This submission 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.
37. 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. Any proposed changes to the approved EM&CP that will not result in an increase in adverse environmental impacts or are not directly related to contested issues decided by the presiding Administrative Law Judge or the Commission during the proceeding ("minor change") may, at the option of the DPS Compliance Inspector, be approved in the field by such DPS Compliance Inspector pending written approval by Director of Facility Certification and Compliance of the Office of Electric, Gas and Water, or their designee. DPS Staff will refer all proposed changes that will result in an increase in adverse environmental impacts or are directly related to contested issues decided by the presiding Administrative Law Judge or the

Commission during the proceeding (“major change”) 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 any property owners and identified residents, if different than the owner, 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 21 calendar days of the notification date.
- c. The Certificate Holder shall not execute any proposed change until the Certificate Holder has received the appropriate oral or written approval, except in emergency situations threatening personal injury, property, or severe adverse environmental impact. Any oral approval received 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.

F. NOTICES AND PUBLIC COMMENTS

38. 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.
39. The Certificate Holder will make available to the public a toll-free or local phone number for the duration of construction of the Project for the purposes of answering questions and receiving complaints and feedback from the public about the construction of the Project. All inquiries or complaints shall receive a response with an acknowledgement of receipt to the complainant within 24 hours or the next 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 the name of the Certificate Holder’s representative as well as: (i) the number to be called at any time in case of emergency, (ii) when the caller can expect a return call, and (iii) where the caller can find contact information for the Secretary and the Commission’s Environmental Compliance Section.
40. 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 comments, complaints, or ask questions) through a comment form, 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. The Certificate Holder shall post construction notices and other publicly relevant information (*e.g.*, night-time work, traffic information) to the Project website. The Project website shall allow users to subscribe (or unsubscribe) to a mailing list for Project updates and/or notifications.

41. The Certificate Holder shall retain a record of complaints that it has received for one-year after the completion of restoration, which shall be provided to DPS Staff and the NYSDEC upon receipt by the Certificate Holder. The Certificate Holder shall report to DPS Staff with a copy of the report for every complaint that cannot be resolved, and describe the actions taken to address the complaint, within 10 business days after receipt of the complaint.
42. The following notice requirements shall apply to the Certificate Holder:
 - a. No less than 14 calendar days, but no more than 30 calendar days, prior to the initial commencement of construction the Certificate Holder shall:
 - (i) notify persons who own properties on or that abut the ROW, and persons who reside at such properties or utilized for agricultural purposes (if different from the owner), of the planned construction activities and schedule affecting their properties.
 - (ii) The Certificate Holder will mail the notices via United States Postal Service Mail or may use door-hangers to provide notice to residences.
 - (iii) The Certificate Holder shall provide a copy of the generic form of such notice to the Secretary prior to the commencement of construction.
 - b. No less than 14 calendar days before commencing construction pursuant to an approved EM&CP, the Certificate Holder shall:
 - (i) Submit a Notice of Intent to Commence Work to the NYSDEC Region 3 Natural Resources Supervisor at the following addresses: NYSDEC Region 3 Headquarters, 21 South Putt Corners Road, New Paltz, NY 12561-1696; and the NYSDEC Bureau of Energy Project Management, Division of Environmental Permits, 625 Broadway, Albany, NY 12233-1750.

- (ii) Provide the Notice of Intent to Commence Work to all parties to this proceeding, the appropriate town and county officials, school districts, and emergency personnel;
 - (iii) Provide Notice of Intent to Commence Work to local media for dissemination, including the local newspapers of general circulation and at least one free newspaper; and
 - (iv) Provide the Notice of Intent to Commence Work for display in the relevant town halls; at least one post office or library in or near each municipality along the applicable Project segment where available; the Project website; document repositories; the Project construction site location (if there is an office or trailer), as well as other public places, such as community centers and conspicuous bulletin boards.
 - c. The Notice of Intent to Commence Work 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, email address, and local or toll-free telephone number to reach Certificate Holder representatives who will for the duration of construction of the Project, be available to receive complaints, if any, from the public about the construction of the Project;
 - (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 of Intent to Commence Work.
 - d. Upon distribution, a copy of the Notice of Intent to Commence Work and the distribution list shall be filed with the Secretary.
- 43. The following pre-construction meeting requirements shall apply to the Certificate Holder:

- a. At least 14 calendar days prior to the initial start of construction pursuant to an approved EM&CP, the Certificate Holder shall hold a pre-construction meeting. An agenda, attendee list, and meeting location, 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 calendar days prior to the meeting date.
 - (i) The invitation list shall include, but is not limited to, all parties to the proceeding and affected county and town supervisors and town highway superintendents.
 - b. 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.
 - c. 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.
44. At least 14 calendar days (or less as authorized by DPS Staff) before Project construction begins in any specific Project 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 delineated wetlands and the 100-foot adjacent areas associated with State-regulated wetlands; (d) mark occupied T&E habitat and archaeological resource areas as environmentally sensitive areas; and (e) flag any known danger trees to be removed for review and acceptance by DPS Staff, and DPS Staff shall be notified when flagging is complete in such area.
 45. The Certificate Holder shall inform the Secretary, in writing, at least five days prior to the initial commencement of construction for the Project.
 46. During construction, the Certificate Holder shall periodically consult with State, county, 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.

47. During construction, the Certificate Holder shall provide DPS Staff, AGM, and NYSDEC with monthly status reports transmitted by electronic mail summarizing construction and indicating construction activities and locations scheduled for the following month (in weekly increments). During the construction of any Transco facility that impacts O&R, Transco and O&R shall have weekly or biweekly meetings. Updates will be provided via electronic mail on a weekly basis as necessary to account for changes to the construction plan.
48. The Certificate Holder shall notify the Secretary in writing no later than 10 calendar days after the Project is placed in service.
49. Within 10 calendar 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.

G. CULTURAL RESOURCES

50. 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.
51. Should archeological materials be encountered during construction, the Certificate Holder shall stabilize the area and cease all ground-disturbing activities in the immediate vicinity (specifically, 50 feet) of the find and protect the find from further damage. Within 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.
52. 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 immediate vicinity (specifically, 50 feet) of the find shall be halted immediately for the remains to be protected from further disturbance. Within 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.

53. If the Certificate Holder receives a complaint of negative archeological impacts, it will respond in accordance with Condition 39, investigate the validity of the complaint and, if necessary, mitigate any actual impacts through on-site design modifications and off-site mitigation techniques developed in consultation with the OPRHP Field Services Bureau.

H. TERRESTRIAL AND WILDLIFE RESOURCES

54. The Certificate Holder shall refer to 6 NYCRR Part 182 for lists of T&E animal species and Part 193 for T&E plant species, as well as any additional species identified per Condition 28. Prior to the commencement of construction, the Certificate Holder shall provide all personnel with information on any T&E plant species or animal species and their associated occupied habitat identified within or contiguous to the Project limit of disturbance and indicate measures to minimize risks to said species during construction.
55. In order to ensure that the Project complies with the requirements of Part 182 for Indiana bats and Northern long eared bats:
 - a. Tree and vegetation clearing shall be limited to the requirements necessary for Project construction, operation, and maintenance. Snags and cavity trees will be left standing unless their removal is necessary for protection of human life or property, or otherwise approved through consultation with NYSDEC and DPS Staff.
 - b. All tree clearing activities occurring within 2.5 miles of an Indiana bat maternity roost site or 5 miles of an Indiana bat or a Northern long eared bat hibernaculum shall be conducted between November 1 and March 31, unless exception is granted in limited case(s) through consultation with NYSDEC and DPS Staff.
 - c. If the consultation outlined in Condition 28 results in the determination that it is necessary to cut a known Indiana bat or Northern long eared bat roost tree, the Certificate Holder will develop a Net Conservation Benefit Plan in consultation with and accepted by NYSDEC and DPS Staff that meets the requirements of Part 182. The Net Conservation Benefit Plan, if necessary, shall be filed with the Secretary prior to commencement of construction.
56. The Certificate Holder will avoid, minimize and mitigate impacts to Northern cricket frogs, Bog turtles, and/or Timber rattlesnakes by:
 - a. Employing a dedicated Northern cricket frog, Bog turtle, and/or Timber rattlesnake monitor(s) as described in the Certificate Holder's Bog Turtle, Northern Cricket Frog and Timber Rattlesnake

Monitoring and Handling Protocol (the “Monitoring and Handling Protocol” attached as Appendix H to the Joint Proposal).

- b. Avoiding construction activities within occupied Northern cricket frog, Bog turtle, and/or Timber rattlesnake habitats to the maximum extent practicable. Where avoidance is not possible for any of the above-referenced T&E species, the Certificate Holder will implement an applicable T&E species Take Avoidance and Minimization Plan (the “Avoidance and Minimization Plan,” which will be filed with the Commission in advance of a decision on the applicable, post-Phase I EM&CP) that meets the requirements of Part 182. As part of the Avoidance and Minimization Plan, a quantification and assessment of impacts to the subject species and habitat will be submitted for NYSDEC review and acceptance prior to the filing with the Commission. This assessment of impacts will help inform (1) whether a taking of species or species habitat is anticipated to occur, and (2) whether restoration measures addressing temporary impacts have met their goals.
 - c. If necessary, developing a Net Conservation Benefit Plan in consultation with and accepted by NYSDEC and DPS that meets the requirements of Part 182. The Net Conservation Benefit Plan, if necessary, shall be filed with the Secretary prior to commencement of construction.
 - d. If a Northern cricket frog, Bog turtle, or Timber rattlesnake is observed on or from the Project’s ROW, access roads, laydown yards, and any other areas where Project activities are authorized in this Certificate are conducted, the Certificate Holder shall notify NYSDEC and DPS Staff, via telephone or email, within 24 hours.
57. Except as otherwise specified in Conditions 54, 55, and 56 if any T&E animal species, as defined in 6 NYCRR Part 182, or T&E plant species, identified under 6 NYCRR Part 193, is incidentally observed on or from the Project’s ROW, access roads, laydown 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; and
 - b. Unless continued operations are necessary for protection of human life or property the Certificate Holder shall secure the immediate area where rights exist and safely cease activities in that area until DPS Staff, in consultation with NYSDEC, authorizes recommencement of activities. For grassland bird species, the Certificate Holder shall record the location of the nest or roost and then shall post and avoid

- an area of five hundred (500) feet, or the maximum accessible distance where rights exist, whichever is greater, in radius from the nest or roost unless continued operations are necessary for protection of human life or property.
- c. Prior to the recommencement of activities 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.
58. If at any time during construction, operation, and maintenance of the Project, any bald eagle nest is discovered within 0.25 miles of the Project ROW, the Certificate Holder shall notify NYSDEC and DPS Staff within 24 hours of discovery and the nest shall not be approached. An area encompassing an estimated 0.25 mile radius from the nest tree based on aerial imagery (“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 obstructs the view from the nest and shields it from work activities, the setback requirement may be reduced to 660 feet.
59. The Certificate Holder shall maintain a record of all observations of State threatened or endangered species during construction, operation, and maintenance of the Project, including any dead, injured, and damaged T&E species, their eggs, or nest (“T&E Observations”). All reports of T&E Observations shall include the following information: species; number of individuals; age and sex of individuals (if known); observation date(s) and time(s); GPS coordinates (as property rights allow) of each individual observed (if a GPS is not available, the report should include the nearest pole number and cross road location); behavior(s) observed; identification and contact number of the observer(s); the nature of and distance to any Project construction, maintenance, or restoration activity; and whether the death, injury, or damage to the T&E species, their eggs, or nest was caused by the Project. The Certificate Holder shall provide these reports to NYSDEC on a monthly basis during construction. During operation and maintenance of the Project, the Certificate Holder shall provide reports to NYSDEC no later than 30 calendar days following any T&E Observation.
60. Except as otherwise specified in Conditions 55 or 56, if it is determined to be necessary to take occupied habitat or individuals of a species listed in Part 182, the Certificate Holder will develop a Net Conservation Benefit Plan in consultation with and accepted by NYSDEC and DPS that meets the requirements of Part 182.

I. WATER RESOURCES

61. The Certificate Holder shall perform all construction, operation, and maintenance in a manner that avoids, then minimizes to the extent practicable, any significant adverse environmental impacts to streams, waterbodies, wetlands, and the 100-foot adjacent area associated with the State-regulated wetlands as specified in the applicable, post-Phase I EM&CP(s). The applicable, post-Phase I EM&CP(s) will be drafted to satisfy the NYSDEC Supplemental Specifications For Wetlands And Waterbodies attached as Appendix F. The Certificate Holder shall ensure the following provisions to protect wetlands, waterbodies, and adjacent areas are followed as specified in the applicable, post-Phase I EM&CP(s):
- a. Wetland locations and adjacent areas located within the ROW or crossed by the ROW or any off-ROW access road constructed, improved, or maintained for the Project, shall be delineated in the field at least two weeks prior to construction in those areas and indicated on the approved post-Phase I EM&CP(s).
 - b. Unless otherwise specified in a post-Phase I EM&CP, all work in streams is prohibited from October 1 through May 31 in cold water fisheries, and from March 1 through July 31 in warm water fisheries. The Certificate Holder shall consult with the NYSDEC Region 3 Bureau of Ecosystem Health Office during the development of any relevant post-Phase I EM&CP(s) to verify cold water and warm water fisheries that may be affected by the Project.
 - c. Concrete washout areas shall be located a minimum of 300 feet away from any wetland or waterbody. If the minimum setback cannot be achieved, the applicable post-Phase I EM&CP shall provide justification and demonstrate that impacts to wetlands and waterbodies from concrete washout areas shall be avoided or minimized to the maximum extent practicable.
 - d. Temporary bridges and culverts should be at least 1.25 times the width of the stream and installed without causing damage to the stream bed or banks. Culverts or bridges that will remain in place for more than 180 calendar days shall be installed in accordance with Appendix F of the Joint Proposal.
 - e. Notification shall be provided to the NYSDEC Regional Natural Resources Supervisor and DPS once 80% cover with restorative, ROW-compatible plants of appropriate indicator status has been achieved.
62. The Certificate Holder shall work with NYSDEC to develop a Wetland Mitigation Plan in accordance with Appendix F of the Joint Proposal. The Certificate Holder will submit the Plan no later than six months after the start

of construction for NYSDEC Staff acceptance, if determined to be necessary by NYSDEC. If mitigation affects agricultural lands, AGM will be consulted.

63. 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.
64. 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.
65. Unless otherwise specified in the EM&CP, the Certificate Holder shall conduct trenchless construction through streams and wetlands. If trenchless methods are not suitable, plans for trenched crossings should be submitted to NYSDEC and DPS staff for review and approval.
66. 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.
67. There shall be no substantial increase in visible contrast in water clarity due to discharges from construction activities between upstream reaches of work areas and downstream reaches of work areas.
68. 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.
69. Water resulting from dewatering operations, equipment washing, or other construction related activities shall not be directly discharged into any wetland or waterbody. In-stream work shall only occur during dry conditions or in “the dry.” 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.
70. Trees shall not be felled into any stream or onto the immediate stream bank. All stumps and root systems from trees and shrubs cut within 50 feet of any NYSDEC-regulated stream or NYSDEC-regulated wetland shall be left in place unless they interfere with construction activities.

71. Clearing of natural vegetation shall be limited to: (i) non-compatible species according to the ROWMP, and (ii) any vegetation that poses a hazard or hindrance to the construction activity and/or operation.
72. During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site.
73. 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.

J. OVERSIGHT AND SUPERVISION

74. At a minimum, the Certificate Holder shall employ the following personnel for Project oversight:
 - a. At least one environmental monitor, who will fill the roles of Environmental Inspector, SWPPP Inspector and Agricultural Inspector, employed full-time on the Project (the “E&A Inspector”). The Certificate Holder will employ an additional monitor(s) if workload requires and upon consultation with DPS Staff and AGM;
 - b. One construction supervisor employed full-time on the Project;
 - c. One safety inspector who will inspect the work site from time to time; and
 - d. One quality assurance inspector who will inspect the work site from time to time.
75. 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 the above 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.
76. The environmental monitor shall have stop work authority over aspects of the Project that could create an adverse impact to the environment.
77. The Certificate Holder shall provide to DPS Staff, AGM, and NYSDEC the cell phone numbers of the Certificate Holder’s environmental monitor/agricultural inspector and construction supervisor.

78. The environmental monitor/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 the Proceeding, and the Section 401 Water Quality Certificate.
79. The Certificate Holder shall submit the name and qualifications of the construction supervisor(s) and inspector(s), including the E&A Inspector, to DPS Staff, AGM, and NYSDEC at least 14 calendar 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.
80. 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.
81. 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 only when an applicable statute or regulation is violated. Before exercising such authority, DPS Staff representatives will 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 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 Staff representative shall 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 DPS 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 shall immediately thereafter inform the Certificate Holder’s supervisor or environmental monitor of the action taken.
 - f. The Certificate Holder will promptly notify DPS Staff of any activity that involves a violation of the Certificate.
82. Certificate Holder shall organize and conduct site compliance audit inspections for DPS Staff, NYSDEC, and AGM as needed, but not less frequently than once per month during the construction and restoration

phases of the Project. Such 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 DPS Staff, O&R, and all attendees for corrections or comments, and thereafter the Certificate Holder shall issue the finalized meeting minutes to all attendees and invitees.

K. AGRICULTURAL RESOURCES

83. The Certificate Holder shall adhere to the AGM guidelines entitled *Electric Transmission Right-of-Way Projects*, unless otherwise directed by these conditions or the approved EM&CP.
84. Whenever the Certificate Holder submits a request for an EM&CP change concerning agriculture, the Certificate Holder shall consult with AGM.
85. The Certificate Holder shall not expose livestock to cleared vegetation, including disposal, that may be potentially toxic to animals (*e.g.*, Black Cherry leaves).
86. In agricultural areas, logs, stumps, brush, or chips shall not be piled or buried in agricultural fields or improved pasture.
87. The Certificate Holder shall design the Project to the extent reasonably practicable to avoid or limit the placement of pole structures on crop fields or on other agricultural land where the structures may significantly interfere with normal agricultural operations or activities. When locating a pole

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.

88. Where stone construction entrances are required from public roadways to the Project in agricultural fields, topsoil will be stripped, stockpiled, and stabilized adjacent to the access, and 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.
89. 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 AGM prior to use. Such improvements may include, but not be limited to, the installation of geotextile fabric and crushed stone.
90. 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:
 - a. Fences and gates on the Certificate Holder's ROW that are compatible with the Project;
 - (i) The base of all new posts shall be secured to a reasonable depth below the surface to prevent frost heave.
 - b. Fences and gates off of the Project ROW; and
 - (i) The base of all new posts shall be secured to a reasonable depth below the surface to prevent frost heave.
 - c. Any drainage features, including drain tiles.
 - (i) During preparation of the Phase 2 EM&CP, a detailed drainage line repair procedure shall be developed, in consultation with AGM, for the repair of clay tiles and plastic

drain lines that are crushed/severed as a result of Project activities. 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 existing material in consultation with AGM. The plan for the replacement of functional stone drainage systems severed during construction shall be prepared during the restoration phase, in consultation with AGM.

91. Solid inflexible timber 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. All topsoil shall be stockpiled directly adjacent to the travel way on the Project and separated from other excavated materials. The Certificate Holder shall determine depth of topsoil stripping on each affected farm by means of the County Soil Survey and the agricultural inspector’s observation from on-site soil augering. 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.
92. The Certificate Holders shall provide access for the agricultural producer to maintain normal agricultural operations to the maximum extent practicable. Where agriculture access is required to cross construction access, alterations to construction access shall be made to offer safe crossing considering agriculture equipment clearances, turning radius, and other operation concerns. Where the Project bisects agricultural areas and limits agricultural equipment operation to perform normal agricultural operations outside of the Project ROW during construction, the Certificate Holders shall compensate the agricultural producer for the loss of the applicable commodity; otherwise, scheduled construction shall avoid such impacts.
93. In agricultural areas where mats are utilized, the mats shall be layered where necessary to provide a generally level access surface. Once access is no longer required across agricultural areas, the mats shall be removed and the Agricultural Inspector shall determine appropriate activities to return the area to agricultural use. These activities may include decompaction, rock removal, and revegetation. Soil compaction should be tested in the affected areas and the affected area’s adjacent undisturbed areas using an appropriate soil penetrometer as soon as soils achieve moisture equilibrium with adjacent unaffected areas. Compaction tests will be made at regular intervals of distance throughout the affected areas, including each soil type identified within the affected areas. Soil compaction results shall be measured with a

soil penetrometer not exceeding more than 250 pounds per square inch (PSI), by comparing probing depths of both the affected and unaffected areas. Where representative soil density of the affected area's collective depth measurements present compaction restrictions exceeding an acceptable deviation of no more than 20% from the adjacent undisturbed area's mean soil density, additional decompaction may be required to a depth of 18-inches with a tractor mounted deep ripper or heavy-duty chisel plow. Following decompaction, remove all rocks unearthed from decompaction activities 4 inches and larger in size from the surface unless such removal is objected to by an impacted farming operation, in which case AGM will be consulted on the relevant removal plan.

94. In agricultural areas of till over bedrock where blasting is required, the Certificate Holder shall use blasting mats or controlled blasting to limit the dispersion of blast rock fragments. Any blasting in areas near any O&R facilities would need to have the blasting plan reviewed and approved by O&R. 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 two-week's notice prior to blasting on farm property.
95. Temporary work-space required for wire pulling activities located 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.
96. In all agricultural sections of the Project disturbed by construction traffic and work pads resulting in compaction or other necessary soil remediation, 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) unless such break up is objected to by an impacted farming operation, in which case AGM will be consulted. 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. Should subsequent construction and/or restoration activities result in compaction, then restoration activities shall include additional deep tillage.
97. 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 additional

soil to allow for settling. All material used for fill shall be similar to native soil. All fill material shall be compacted.

98. 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 inches and greater in size shall be removed from the surface.
99. 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 additional soil to allow for settling. Excess substratum material not used for backfill shall be removed from agricultural areas.
100. 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 contact with the Certificate Holder during operation and maintenance of the transmission line.
101. The E&A Inspector shall work with farm operators during the planning phase to develop a plan to delay grazing within the Project Area during and following construction until pasture areas are adequately re-vegetated. If livestock has no option for relocation, the Certificate Holder shall be responsible for maintaining the livestock appropriate temporary fencing on the Project until the E&A 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.
102. 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 liquid or plastic state, which can be confirmed by the Atterberg field test, or a similar soil moisture test (however, soil drying operations may be conducted in limited areas to promote drying of soils); and no Project restoration activities occur in agricultural fields between the months of November through March unless favorable soil moisture conditions exist. The Certificate Holder shall monitor and advise AGM and DPS Staff regarding tentative restoration planning for the Project.
103. 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 E&A Inspector, based on guidance provided by the landowner.

104. 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 acceptable material) 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 acceptable material) 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.
105. After topsoil replacement, seedbed preparation (final tillage, fertilizing, liming) and seeding shall follow either AGM 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.
106. The E&A Inspector shall also maintain a list of invasive species observed on such portion of the Project's ROW in agricultural areas, adjoining ROW areas, and other areas utilized by the current field operator. In agricultural areas where invasive species are documented along such portion of the Project's ROW, the Certificate Holder, in consultation with the E&A Inspector, DPS Staff, NYSDEC, and AGM, shall determine whether such species were pre-existing or whether such species were introduced by its work on the Project in accordance with the Invasive Species Plan. If it is determined at the end of the Certificate Holder's work, the Project was directly responsible for the introduction of invasive species to the agricultural areas, the Certificate Holder shall consult with the agricultural producer, DPS Staff, NYSDEC, and AGM to determine the appropriate control measures to implement.
107. The Certificate Holders shall retain the services of a qualified agricultural inspector on at least a part-time basis through a two-year monitoring and remediation period. On-site monitoring shall be conducted at least three times (spring, summer and fall) during each growing season and shall include a comparison of growth and yield for crops on and off of the Project ROW. When the subsequent crop productivity within the affected ROW is less than that of the adjacent unaffected agricultural land, the agricultural inspector, in conjunction with the Certificate Holder and other appropriate organizations, shall help to determine the appropriate rehabilitation measures for the Certificate Holder to implement further mitigation (e.g. soil de-compaction, topsoil replacement, soil amendments, etc.). The Certificate Holder shall

ensure that, during the various stages of the Project, all affected farm operators are 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 the impacts of the Project. 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 effects related to the Project on the impacted agricultural resources.

L. CONSTRUCTION, RESTORATION, OPERATION, AND MAINTENANCE

108. In the event that the Certificate Holder does not receive a Notice to Proceed on its Phase I EM&CP to clear the trees around the Rebuilt Sugarloaf Substation on or before January 22, 2022, the Certificate Holder may request a limited Notice to Proceed to use non-mechanized, lop and drop techniques to remove those trees between January 23, 2022 and March 31, 2022.
109. To the maximum extent practicable, during the construction of the Project overhead conductor, splices shall be minimized. All overhead conductor splices shall be noted in the appropriate, post-Phase I EM&CP(s). To the maximum extent practicable, the Certificate Holder will avoid mid-span splices at road crossings and wetlands during initial construction.
110. Certificate Holder shall acquire all danger tree rights within three years of EM&CP approval or within that time period commence condemnation proceedings.
111. 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.
112. The Certificate Holder shall be responsible for checking all culverts as identified in each appropriate, post-Phase I EM&CP for utilization during construction of the Project prior to construction. The Certificate Holder shall include a table in each appropriate, post-Phase I EM&CP Plan & Profile Notes indicating all such culverts, their condition, crossing method, and replacement method if applicable. If, during the pre-construction review, a culvert is determined to be crushed or blocked, the Certificate Holder will replace or repair that culvert as appropriate during construction. In turn, if a culvert is blocked, crushed, or otherwise damaged by construction and/or restoration activities, the Certificate Holder shall repair the culvert or replace it with alternative measures appropriate to maintaining proper aquatic connectivity and stream flow. Culvert repairs or replacements must not result

in reduced opening width or height and shall follow specifications in each relevant, post-Phase I EM&CP.

113. The Certificate Holder shall thoroughly clear the areas of the ROW and work areas where construction occurred of debris related to electric line construction.
114. 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.
115. The Certificate Holder shall restore disturbed construction areas to original grades and conditions with permanent re-vegetation and erosion controls appropriate for those locations unless the EM&CP specifies otherwise. Disturbed pavement, curbs, and sidewalks shall be restored to their original preconstruction condition or improved.
116. The Certificate Holder shall file with the Secretary as-built drawings of the Project within 120 calendar days of completion of Project construction.
117. In connection with vegetation management for the Project, the Certificate Holder shall:
 - a. Comply with the provisions of 6 NYCRR Part 192, “Forest Insect and Disease Control,” and Environmental Conservation Law § 9-1303, with any quarantine orders issued thereunder.
 - b. 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 3 Supervisor of Natural Resources.
 - c. Not create a maximum wood chip depth greater than three inches, except for wood chip roads or for invasive species control; these areas will be specified in the appropriate, post-Phase I EM&CP(s).
 - d. Not store or dispose of wood chips in wetlands, floodways, agricultural fields, or within 50 feet of streams.
 - e. Limit clearing of natural vegetation to material that poses a hazard or hindrance to the construction activity or operation of the facility.

118. Unless described otherwise in the EM&CP, all trees over four 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, 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 the ROWMP 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).
119. The Certificate Holder shall confine construction activities and subsequent maintenance activities to access routes, work pads, and laydown yards, and all work areas detailed in the EM&CP.
120. 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 switchyards, and substations owned by the Certificate Holder (*i.e.* Rebuilt Sugarloaf Substation);
 - b. Prepare plans for any visual mitigation found necessary on abutting properties, and, in connection therewith, removal, rearrangement and supplementation of existing landscape improvements or plantings should be considered, as appropriate;
 - 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.

121. The Certificate Holder shall present to the Commission by filing with the Secretary at a minimum of 60 days prior to the start of construction the following:
- a. Final drawings for the stations, incorporating any changes to the design, including:
 - (i) Location of all noise sources and receptors identified with Geographic Information Systems (“GIS”) coordinates and GIS files;
 - (ii) Proposed grading and noise source heights and ground elevations; Site plan and elevation details of station components as related to the location of all relevant noise sources (e.g., capacitors, reactors, HVAC equipment, transformers, emergency generators).
 - (iii) Identified mitigations, specifications, and appropriate clearances (e.g., for sound walls, barriers, enclosures).
 - (iv) Sound information from the manufacturers for all noise sources (e.g., capacitors, reactors, HVAC equipment, transformers, emergency generators).
 - b. Revised sound modeling with the final specifications of equipment selected for construction to demonstrate that the Project is modeled to meet the following sound goals for residences and boundary lines existing as of the date the Order is issued as noted:
 - (i) 35 dBA Leq-1-hour maximum equivalent continuous average sound level from the station, outside any residence within the 35 dBA noise contour from any tonal noise sources, (e.g., capacitors, transformers), on the presumption that a 5 dBA prominent tone penalty applies to a basic design goal of 40 dBA.
 - (ii) 40 dBA Leq-1-hour maximum equivalent continuous average sound level from the station outside any residence from any other operational sound sources not included in (b) (i) associated with the Stations. If the sound emissions from these sources are found to contain a prominent discrete tone at any residence whether through modeling, calculation, or pre-construction field testing, then the sound levels at the receptors

shall be subject to a 5 dBA penalty; thus, a reduction in the permissible sound level to 35 dBA Leq-1-hour. If no manufacturers information or pre-construction field tests are available, sounds will be assumed to be tonal for those noise sources.

- (iii) 45 dBA Leq-1-hour maximum equivalent continuous average sound level from the station across all properties, except for delineated wetlands and utility rights of way. This shall be demonstrated with modeled sound contours and discrete sound levels at worst-case locations. No penalties for prominent tones will be added in this assessment.
 - c. Final computer noise modeling and tonal evaluation shall be conducted in accordance with the Specifications for Computer Noise Modeling and Tonality Assessment, Appendix I. No post-construction noise testing will be required.
122. The EM&CP shall include plans to prevent unauthorized access to and along the Project ROW during construction. 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. Post-construction, final determination of locations of gates and berms shall be made during post-construction assessment of the Facility. Prior to installing any gate, Transco will notify relevant the property owner(s).
123. The Certificate Holder and O&R intend to enter into one or more agreements that will govern the Certificate Holder's use of O&R property for the Project, including the property upon which the Rebuilt Sugarloaf Substation will be sited. The Certificate Holder will comply with the terms of those agreements in addition to all conditions approved by the Commission in this proceeding.

124. This Certificate does not impose and shall not be interpreted to impose obligations on utility rights-of-way that abut, adjoin, or intersect the Project ROW.

M. CONTRACTORS AND CONTRACTOR SUPPLIES/MATERIALS

125. The Certificate Holder shall, within six months following completion of restoration of the Project ROW, provide to the DPS Staff Representative a full accounting of all costs incurred to date for the Project, including an explanation of variances, if any, between the Certificate Holder's capital cost bid and actual costs. Such accounting may be filed on a confidential basis.
126. At least 14 calendar days prior to the initial commencement of construction, the Certificate Holder shall file a report with the Secretary confirming that all required construction materials are available. For purposes of this Condition, an item of construction material is available (i) if it is located at a laydown 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.
127. All materials shall be located at the laydown yard(s), staging 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 laydown yard or staging area. Only material associated with the construction associated with the 138 kV Sugarloaf Switching Station may be staged within the O&R yard.
128. If a reportable accident (*i.e.*, OSHA reportable) occurs, 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.
129. If a Contractor installs materials, structures, or components that do not conform to the specifications for the same described in the post-Phase I EM&CP(s), the Certificate Holder shall, within 30 calendar 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.
130. The Certificate Holder shall develop a quality control plan ("Quality Control Plan") for inclusion as part of a post-Phase I 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, post-Phase I 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.

131. Within 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 any approved, post-Phase I EM&CP; and (ii) any non-privileged notes pertinent to the subject matter of such audit that were made at audit meetings by Certificate Holder personnel and/or contractors who performed the audit.
132. 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 applicable, approved EM&CP, the Certificate Holder shall: (i) provide written notification to the Secretary within not more than 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.
133. The Certificate Holder shall require its contractors or subcontractors to give an on-site tailboard safety briefing to site inspectors/visitors.

N. TRANSPORTATION, ROADS, AND HIGHWAYS

134. Neither the Certificate Holder nor any contractors in its employ shall construct or improve any access road not delineated on EM&CP drawings except in the case of an emergency situation.
135. The Certificate Holder shall coordinate with the NYSDOT for all work to be performed on the State Highway as applicable and provide an anticipated schedule for construction, which shall be updated and provided at regular intervals as requested by NYSDOT.
136. 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. Parking for Project construction workers shall be in designated areas that 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.

137. 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 relevant 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) If applicable, 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.

O. PETROLEUM & HAZARDOUS SUBSTANCES

138. The EM&CP shall include a Spill Prevention and Control Plan (“SPCP”) for responding to and remediating the effects of any spill of petroleum and hazardous substances in accordance with applicable law and regulations. The Certificate Holder shall notify DPS Staff and NYSDEC, in accordance with applicable State and/or federal regulations and guidance, if it learns of any fuel or chemical spill.
139. Stationary fuel tanks and hazardous chemicals shall be appropriately contained and located 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.
140. In general, to the extent practicable, chemicals and petroleum products will not be mixed, or loaded, nor will equipment be refueled, within 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 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 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 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 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. All refueling of equipment within 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 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.
- c. Refueling of equipment shall be completed outside of occupied Northern cricket frog or occupied Bog turtle habitat to the extent practicable. If refueling must be conducted within these areas to maintain continuous operations, refueling operations will be completed consistent with the above conditions, and with the best management practices for impact minimization contained in the Avoidance and Minimization Plan, if required.

P. HERBICIDE USE DURING CONSTRUCTION

141. 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 Condition 37 of this Certificate. No change inconsistent with the labeling for such herbicides shall be approved.

142. The supervising certified applicator shall be familiar with and understand the provisions of this Certificate and the Certificate Holder's ROWMP.
143. 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, consistent with approved treatment methods in the most recent version of the Certificate Holder's ROWMP.
144. If herbicide application must be conducted within occupied Northern cricket frog habitat or occupied Bog turtle habitat, herbicide application will be completed consistent with the above conditions, and with the best management practices for impact minimization contained in the Avoidance and Minimization Plan, which will be attached to the applicable, post-Phase I EM&CP.
145. If the Certificate Holder applies herbicides on the Project during or in preparation of construction on agricultural land, it will maintain temporary fencing (as approved by the agriculture producer) for the duration of the applicable herbicide label's grazing restrictions for the applicable type of livestock. Likewise, the applicable herbicide label's crop restrictions should be clearly communicated with the agriculture producer for their knowledge of when to harvest the applicable crop.
 - a. If the Certificate Holder proposes to apply herbicides during or in preparation of construction on agricultural lands certified under or in pursuit of the National Organic Program according to 7 CFR Part 205, the Certificate Holder shall determine the location of such organic producers, and determine the Certificate Holder's rights to apply herbicides on such lands, and provide notification of the intended application providing ample time for the organic producer's preparation required defined boundaries and buffer zones as describe in 7 CFR Part 205.

Q. INVASIVE SPECIES

146. 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 AGM. The Certificate Holder shall include

the Invasive Species Management Plan in the applicable, post-Phase I EM&CP.

R. WATER QUALITY CERTIFICATION

147. Concurrent with or after Commission issuance of the Project’s CECPN and after the Certificate Holder’s submission to DPS Staff of a pre-filing meeting request and a certification request pursuant to 40 CFR §§ 121.4 and 121.5 (b) (1)-(9), the Director of Facility Certification and Compliance of the Office of Electric, Gas and Water, or their designee, pursuant to § 401 of the Federal Water Pollution Control Act (“Clean Water Act”), as amended, 33 USC § 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 D

PROPOSED COMMISSION FINDINGS

PROPOSED COMMISSION FINDINGS

1. Based on the information provided in the Evidentiary Record Exhibits 1, 3, 4, 8, and 14, which are co-sponsored by Victor Mullin (New York Transco LLC [“Transco”]); James Mooney (Transco); Stephen Cole-Hatchard, Jr. (Transco); Andrew Shalhoub (Burns & McDonnell [“BMcD”]); Heather Valliant (TRC Companies, Inc. [“TRC”]); Andrew Ruth (BMcD), the Direct Testimony of Victor Mullin (Transco) filed in this proceeding, and the Public Service Commission’s (the “Commission”) determinations in Case 12-T-0502 (the “AC Transmission Proceeding”), there is a need for Transco’s proposed Rock Tavern to Sugarloaf Project (the “RTS Project” or the “Project”). Specifically, the Commission previously declared a transmission need driven by Public Policy Requirements for new 345 kV major electric transmission facilities to cross the Central East (“Segment A”) and UPNY/SENY (“Segment B”) interfaces to provide additional transmission capacity to move power from upstate to downstate (the “AC Transmission PPTN”) and ordered the New York Independent System Operator, Inc. (“NYISO”) to solicit solutions to satisfy both segments of the AC Transmission PPTN. Following a NYISO-conducted power flow analysis, the Commission further defined the Segment B project to include the following two additional projects (the “Segment B Additions”) to resolve a contingency that would result from the energization of the Segment A and Segment B projects and accommodate their higher line currents: (i) upgrades to the double circuit 69 kV lines from the Shoemaker Substation to the Sugarloaf Substation in Orange County (the “Shoemaker to Sugarloaf Project”), and (ii) upgrades to the Rock Tavern Substation in Orange County. After an extensive evaluation, the NYISO selected Transco’s New York Energy Solution project (the “NYES Project”) as the more cost-effective or efficient solution to satisfy Segment B of the AC Transmission PPTN. Subsequently, Transco assumed responsibility to site and construct the Shoemaker to Sugarloaf Project, which, consistent with the Development Agreement that Transco executed with the NYISO, must be operational by December 31, 2023. After extensive studies and evaluation, Transco concluded that the RTS Project, which is the subject of this proceeding, addresses the contingency that the NYISO identified during the AC Transmission Proceeding at a substantially lower cost and with fewer impacts than the Commission-defined Shoemaker to Sugarloaf Project. After concluding its evaluation and realizing the RTS Project’s benefits, Transco submitted the RTS Project to the NYISO, which concluded that the RTS Project addresses the Commission-identified contingency and constitutes a non-material change with regard to the larger NYES Project interconnection application.

2. Based on the information provided in the Evidentiary Record Exhibits 1, 3, 4, 5, 6, 7, 11, 12, 14, 15, and 16, which are co-sponsored by Victor Mullin (Transco); James Mooney (Transco); Stephen Cole-Hatchard, Jr. (Transco); Andrew Shalhoub (BMcD); Heather Valliant (TRC); Andrew Ruth (BMcD); Ian Wolstenholme (BMcD); John W. Guariglia (Saratoga Associates Landscape Architects, Architects, Engineers & Planners [“Saratoga

Associates”]); Timothy Sara (TRC); Mathew G. Hyland, Ph.D. (TRC); Kevin Martin (TRC); Robert O’Neal, CCM (Epsilon Associates, Inc. [“Epsilon”]); Diane Reilly (TRC); and John Mannix (TRC), the nature of the Project’s probable environmental impacts include:

- a. Temporary disturbance and inconvenience, including noise and traffic, associated with construction activities;
 - b. A limited amount of clearing due to the use of existing utility transmission rights-of-way (“ROW”) and utility-controlled property;
 - c. Temporary construction impacts on agricultural lands, which will be minimized by the use of existing transmission corridor to the maximum extent practicable;
 - d. Temporary and nominal incremental permanent impacts to visual resources that will be avoided or minimized through the utilization of the utility-owned ROW and the installation of monopoles rather than steel lattice towers; and
 - e. Temporary and permanent impacts to wetlands, which will be appropriately avoided, minimized, and mitigated.
3. Based on the information provided in the Evidentiary Record Exhibits 1, 3, 4, 5, 6, 7, 11, 12, 14, 15, and 16, which are co-sponsored by Victor Mullin (Transco); James Mooney (Transco); Stephen Cole-Hatchard, Jr. (Transco); Andrew Shalhoub (BMcD); Heather Valliant (TRC); Andrew Ruth (BMcD); Ian Wolstenholme (BMcD); John W. Guariglia (Saratoga Associates); Timothy Sara (TRC); Mathew G. Hyland, Ph.D. (TRC); Kevin Martin (TRC); Robert O’Neal, CCM (Epsilon); Diane Reilly (TRC); and John Mannix (TRC), the Project avoids or minimizes to the extent practicable any significant adverse environmental impact, particularly considering the state of available technology and the nature and economics of the various alternatives and other considerations. Specifically, the Project will maximize the use of approximately 12 miles of existing utility-owned ROW and, as a result, will avoid or minimize the disturbance of natural habitat to the extent practicable and minimize potential disturbance to existing land uses, visual, cultural, terrestrial and wildlife resources, wetlands and water resources, topography and soils, noise, transportation, communications, and electric and magnetic fields.
4. Based on the information provided in the Evidentiary Record Exhibit 5, which is co-sponsored by James Mooney (Transco); Heather Valliant (TRC); Andrew Ruth (BMcD); John W. Guariglia (Saratoga Associates); Timothy Sara (TRC); Mathew G. Hyland, Ph.D. (TRC); Kevin Martin (TRC); and Robert O’Neal, CCM (Epsilon), the Project avoids or minimizes to the extent practicable any significant adverse impact on agricultural lands considering the state of available technology, the nature and economics of various alternatives, and the ownership and easement rights of the impacted property.

5. Based on the information provided in the Evidentiary Record Exhibits 4 and 13, which are co-sponsored by Victor Mullin (Transco), Stephen Cole-Hatchard, Jr. (Transco), and Andrew Shalhoub (BMcD), the Project will not be constructed underground.
6. Based on the information provided in the Evidentiary Record Exhibits 7 and 14, which are co-sponsored by Victor Mullin (Transco), Stephen Cole-Hatchard, Jr. (Transco), Andrew Ruth (BMcD), and Diane Reilly (TRC), the 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. For example, the Project conforms to the NYISO's requirements and planning objectives and is consistent with State's long-range plans for the enhancement of transmission facilities.
7. Based on the information provided in the Evidentiary Record Exhibit 8, which is co-sponsored by James Mooney (Transco) and Andrew Ruth (BMcD), the Project's location, as proposed, conforms to the substantive provisions of applicable State and local laws and regulations issued thereunder, except for those local laws and regulations that the Commission refuses to apply because it finds, based on the justifications set forth by the Applicant in Evidentiary Record Exhibit 8 that, as applied to the Project, those provisions are unreasonably restrictive in view of existing technology, or factors of cost or economics, or the needs of consumers, whether located inside or outside of a respective municipality.
8. Based on the entirety of the Evidentiary Record as listed in Appendix B of the Joint Proposal, the Project will serve the public interest, convenience, and necessity.

APPENDIX E

**SPECIFICATIONS FOR THE DEVELOPMENT OF AN ENVIRONMENTAL
MANAGEMENT AND CONSTRUCTION PLAN**

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, 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

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.

- 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.
 - 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.

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

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;
- g. areas requiring (off-ROW) danger tree removal; and,
- h. 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 NYSDAM.

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 underlayment, 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**

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 E 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 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;

- 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 as site conditions and facility design allow 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 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 appropriate ratios;
- 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;

- 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

- 1) 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 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

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 “restrict the sale, purchase, possession, propagation, introduction, importation, and transport of invasive species in New York”. The purpose of this Invasive Species Management Plan (ISMP) is to describe the procedures that will be used to help prevent the introduction of new and spread of existing regulated and prohibited invasive plant species as listed in part 575 within the limits of disturbance (LOD) due to construction of the Project.

Purpose and Goals of the Plan

An Invasive Species Management Plan (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 ISMP 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. This survey shall serve as a baseline for the preparation of the draft invasive Species Management Plan. If preconstruction surveys are completed at different times or as part of different phases, the results of the surveys will be incorporated into one ISMP. As the ISMP is revised to include surveys or survey updates the Certificate Holder shall evaluate, in consultation with NYSDEC, DPS, and AGM, whether the results of the surveys also require revisions to the Adaptive Management Plan and the special and high concern species list.
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 qualitative observations for IS spread potential from adjacent properties and land use (i.e., IS dominated adjoining property, private off-site access roads that cross the ROW) shall be documented.
4. The preferred survey protocol is for data to be collected 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:

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.

- 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.

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 by trained staff;
3. Minimizing Ground Disturbance in IS dominated areas;
4. Proper Clearing and Disposal Practices (*i.e., cut and leave in dominated 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 dominated 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 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;

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.

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, AGM 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 IS of Special Concern (ISSC) or High Concern (ISHC) as a result of construction are present, as defined in the Adaptive Management Strategy (AMS) discussed below. If the post construction monitoring report shows the aerial extent of ISSC or ISHC has expanded as defined in the AMS as a result of construction of the Project, the final report shall include a Final Adaptive Management Strategy for achieving the goals of the ISMP. DPS, AGM and NYSDEC 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 prepared in consultation with and accepted by NYSDEC, DPS and AGM 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 NYSDEC in consultation with DPS and AGM):
 - a. Invasive Species of Special Concern (ISSC), being comprised of *Prohibited* IS³ known to be present in the project area and for which NYSDEC 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, (e.g. PRISM Tier rankings).
 - b. Inclusion of a project specific list of Invasive Species of High Concern⁴ (ISHC), 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, e.g. 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, described as follows:

iMapInvasives size categories:

- New and distinct occurrence
- Up to 10 sq. ft.

³ See 6 NYCRR Part 575.3.

⁴ To be defined by NYSDEC in consultation with the Certificate Holder, DPS and AGM. The list would be selected from the 6 NYCRR 575 species list.

- Up to 0.5 acre
 - Up to 1.0 acre
 - More than 1.0 acre
3. In consultation with NYSDEC, DPS and AGM, a discussion of possible adaptive management strategies and control measures (e.g., 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 Adaptive Management Strategy as a result of construction of the Project, then DPS, AGM and NYSDEC will review the final report and DPS, in consultation with NYSDEC and AGM, will determine whether the goals of the post construction monitoring have been achieved or, if applicable, whether a Final Adaptive Management Strategy Plan must be implemented.

CONFIDENTIAL

**SUBJECT TO PROTECTIVE ORDER IN
CASE 20-T-0549**

**CONFIDENTIAL INFORMATION HAS BEEN
REDACTED FROM THIS PDF**

**CONFIDENTIAL SUBJECT TO PROTECTIVE ORDER IN
CASE 20-T-0549**

APPENDIX H

**TIMBER RATTLESNAKE, BOG TURTLE, AND NORTHERN CRICKET FROG
MONITORING AND HANDLING PROTOCOL**

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	TIMBER RATTLESNAKE	1
2.1	Timber Rattlesnake Habitat and Movement Patterns	1
2.2	Timber Rattlesnake Occupied Habitat in Transco Project.....	1
2.3	Timber Rattlesnake Take Avoidance and Minimization Measures.....	2
2.3.1	Pre-Construction Measures.....	2
2.3.2	Timber Rattlesnake Monitor	2
2.3.3	Timber Rattlesnake Monitoring and Handling Protocol.....	8
2.4	Timber Rattlesnake Exclusion Fencing Specifications.....	10
3.0	BOG TURTLES.....	12
3.1	Bog Turtle Habitat and Movement Patterns	12
3.2	Bog Turtle Occupied Habitat in Transco Project.....	12
3.3	Bog Turtle Take Avoidance and Minimization Measures	12
3.3.1	Pre-Construction Measures.....	13
3.3.2	Bog Turtle Monitor	13
3.3.3	Bog Turtle Monitoring and Handling Protocol.....	14
3.4	Bog Turtle Exclusion Fencing Specifications.....	15
4.0	NORTHERN CRICKET FROGS.....	18
4.1	Northern Cricket Frog Habitat and Movement Patterns	18
4.2	Northern Cricket Frog Occupied Habitat in Transco Project	18
4.3	Northern Cricket Frog Take Avoidance and Minimization Measures.....	18
4.3.1	Pre-Construction Measures.....	18
4.3.2	NCF Monitor.....	19
4.3.3	NCF Monitoring and Handling Protocol	19
4.4	Northern Cricket Frog Exclusion Fencing Specifications	21
5.0	REFERENCES	24

Figures



Figure 2. Northern Cricket Frog Exclusion Fencing Specifications

1.0 Introduction

This Monitoring and Handling Protocol (the “Plan”) outlines measures to be implemented to avoid or mitigate the take of certain protected species. The Plan addresses three separate New York State-classified threatened and endangered species and is largely drafted with the assumption that each of the three species occupies the Rock Tavern to Sugarloaf project’s (the “Project”) right-of-way or other areas that will be utilized in support of the Project (the “ROW”). However, as outlined below, New York Transco LLC (“Transco”) is currently conducting, in consultation with the Department of Environmental Conservation (“NYSDEC”), certain surveys, the results of which will be used to determine the status of these species within the Project’s ROW. If, in consultation with NYSDEC and Department of Public Service Staff (“DPS Staff”), it is determined that any of the three species does *not* occupy the Project’s ROW, that section(s) of the Plan will be rendered inapplicable and Transco will not need to comply with those section(s) of the Plan.

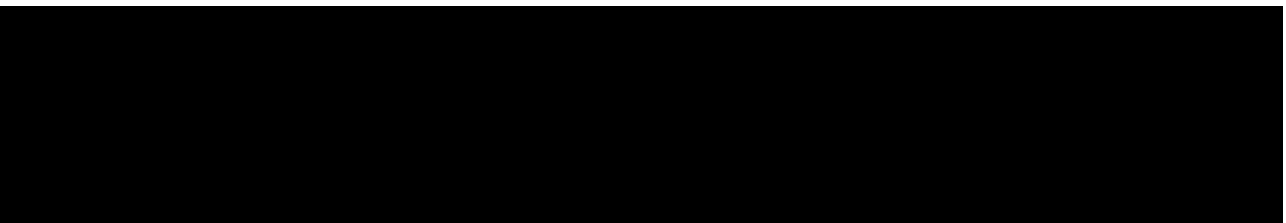
2.0 Timber Rattlesnake

The timber rattlesnake (*Crotalus horridus*) is the largest venomous snake in New York and measures from 3 to 4 feet or more in length. This species varies in color from yellow to shades of brown or black, with chevrons or dark crossbands and generally can be separated into two color phases, light and dark. They have broad, triangular heads and as pit-vipers have paired temperature-sensitive openings below and in between the eye and nostril. The scales have a keel or center ridge creating the rough-skinned appearance. As their name suggests, these snakes have rattles on the end of their tails made up of loosely attached segments of keratin which when vibrated create a buzzing noise.

2.1 Timber Rattlesnake Habitat and Movement Patterns

Timber rattlesnakes use and/or move through various habitats throughout the seasons. In the winter they hibernate in dens, in talus slopes or crevices in rocky faces with westerly to easterly southern exposure. They are active from late April until mid-October and upon emergence from hibernation they move out across the landscape. They are found in deciduous or mixed forests and in areas of rocky terrain with steep slopes. During the summer gravid (pregnant) females prefer rocky openings/ledges, with higher temperatures. Males and non-gravid females prefer cooler, thicker woods where the forest canopy is less open but they can also be found using basking and gestating habitat. Movement rates peak during summer and early autumn as the snakes migrate to their essential summer habitats and back to the den in the fall. Their migration routes may also pass through wetlands, lowlands, or areas of intensive land use, such as residential developments, increasing the chance of human-rattlesnake interactions.

2.2 Timber Rattlesnake Occupied Habitat in Transco Project



Occupied habitat for off-ROW access roads and laydown area locations will be determined in consultation with NYSDEC, and DPS Staff prior to the development of the applicable post-Phase 1 Environmental Management and Construction Plan (“EM&CP”).

2.3 Timber Rattlesnake Take Avoidance and Minimization Measures

To minimize any potential impacts to timber rattlesnakes and/or their occupied habitat the following measures/procedures will be implemented:

2.3.1 Pre-Construction Measures

- 1) Display environmental sensitive area signage along the Right of Way (ROW) and off-ROW access roads or laydown yards in areas identified as a sensitive environmental resource area, including all timber rattlesnake occupied habitat identified in Section 1.2.
- 2) Utilize a dedicated Timber Rattlesnake Monitor or install timber rattlesnake exclusion fencing along the laydown areas, access roads, grading areas, pull pads, and perimeters of work pads in all timber rattlesnake occupied habitat identified in Section 1.2. Timeframes and methodologies shall be determined during the development of the applicable post-Phase 1 EM&CP in consultation with NYSDEC and DPS Staff.
- 3) Develop a comprehensive educational program in the applicable post-Phase 1 EM&CP to be delivered to the construction contractors and any applicable field personnel, including state and/or federal agency representatives, that will enable them to identify the timber rattlesnakes, instruct them on the procedures to be followed if a timber rattlesnake is encountered in the Project area (including who to contact if a snake is sighted), and provide additional measures designed to minimize potential impacts (e.g., look under vehicles routinely).

2.3.2 Timber Rattlesnake Monitor

At all times during construction activities, the Project’s Environmental Monitor and other Project personnel will be watchful for timber rattlesnakes and other threatened and endangered species on the Project ROW.

A dedicated Timber Rattlesnake Monitor and/or Designated Agent(s) will be present for all work within timber rattlesnake habitat identified in Section 1.2, subject to the following conditions:

- 1) Subject to the continuing oversight of the Commission, qualifications of the Timber Rattlesnake Monitor will be submitted to NYSDEC for acceptance, prior to the start of construction in any timber rattlesnake areas. The monitor will have a timber rattlesnake Endangered/Threatened Species License obtained from NYSDEC’s Special License Unit or be listed as a Designated Agent on such a license (license application is available at:

<http://www.dec.ny.gov/permits/25012.html>). The Timber Rattlesnake Monitor and Designated Agents will follow all conditions of the Special License.

- 2) The number of Timber Rattlesnake Monitor(s) and Designated Agent(s) will be determined in consultation with NYSDEC and DPS Staff.
- 3) Subject to NYSDEC and DPS Staff approval, if the Timber Rattlesnake Monitor meets the qualifications of Bog Turtle Monitor as described in Section 2.3.2, and/or Northern Cricket Frog Monitor as described in Section 3.3.2, below, the same individuals may monitor for multiple species.
- 4) A Timber Rattlesnake Monitor will only be required from April 1 – October 31 in the occupied habitat areas identified in Section 1.2.
- 5) The Timber Rattlesnake Monitor will sweep work areas for snakes before any movement of large equipment or large vehicles, ground-disturbing activities, or placement of construction matting.
- 6) The Timber Rattlesnake Monitor, and Designated Agent(s) if necessary, will be present to inspect work areas ahead of daily construction activities and will continue to inspect periodically until construction activities stop for the workday. The Timber Rattlesnake Monitor will document survey activities in field notes or a monitoring log including start and end times, locations monitored, all snake species observed/collected, and any other pertinent information. The daily inspection log must be provided to NYSDEC and DPS Staff if requested.
- 7) The Timber Rattlesnake Monitor will handle snakes consistent with the conditions set forth in the Timber Rattlesnake Monitoring and Handling Protocol as outlined below.

2.3.3 *Timber Rattlesnake Monitoring and Handling Protocol*

- 1) Within work areas located within occupied habitat areas identified in Section 1.2, the Timber Rattlesnake Monitor and/or Designated Agent(s) will make the following visual observations:
 - a. Scan the area with the naked eye and with binoculars prior to work commencing and periodically until construction activities stop for the workday each day for the presence of timber rattlesnakes.
 - b. Walk along silt fencing or other potential snake barriers and scan upland areas for presence of timber rattlesnakes prior to commencement of construction activities each day.
 - c. Look under construction vehicles, all mobile equipment, and supply piles at the work site before the start of construction activities, including after break periods.
- 2) Prior to installation of construction mats and work pads in timber rattlesnake occupied habitat areas identified in Section 1.2, the Timber Rattlesnake Monitor and/or Designated Agent(s) will verify the absence of Timber Rattlesnakes using the following procedures:
 - a. For any mats installed from April 1 to October 31, the procedures herein are required just prior to (i.e., same day as) the mats being installed.
 - b. The entire area to be covered by construction mats will be checked for snakes prior to mat installation. The Timber Rattlesnake Monitor will visually clear the area prior to installation.
- 3) Snake Encounter Procedures: If a snake is encountered within the limits of disturbance (LOD):
 - a. Construction and associated movement of vehicles and other equipment in the subject area must stop. Workers should observe the snake from a safe distance (minimum 10 feet) and appoint a person to keep their eyes on the snake until the Timber Rattlesnake Monitor takes over.
 - b. The Timber Rattlesnake Monitor will identify the species of snake.
 - c. If the snake is not a timber rattlesnake nor another venomous snake (i.e., Copperhead), the Timber Rattlesnake Monitor will move the snake into the nearest appropriate habitat area outside the LOD, and construction may resume.
 - d. If the snake is a timber rattlesnake (or other venomous snake), the following steps must be taken:
 - i. The Timber Rattlesnake Monitor will document the date, time, and UTM location (Zone 18N), and take high resolution photographs of the snake with the documented information visible in each photo.
 - ii. If the timber rattlesnake is actively moving away from the work area and out of harm's way, allow it to continue, watching until it is a safe distance from the work area. If the timber rattlesnake is not actively moving safely from the work area, the Timber Rattlesnake Monitor will safely capture the snake. Timber rattlesnakes will be captured using a hook stick which minimizes the

risk of injury to the snake and the risk of bite to the handler. The snake will be placed in a clean snake bag or container that prevents escape or physical injury. Bags must be checked (stitching, ties, etc.) prior to use. Bags must be double tied and double bagged (or single bagged and placed in a secure container). The bag and container should be clearly labeled with an appropriate warning (e.g., DANGER – VENOMOUS SNAKE). If it cannot be released immediately the snake will be kept in a climate-controlled setting out of direct sun until it can be released. Once the Timber Rattlesnake Monitor has collected the snake, construction activities may resume.

- iii. If possible, the snake will be immediately returned to similar habitat outside of the LOD or construction area (edge of Project ROW). If the entire suitable habitat is within the LOD, the snake will be released in habitat no more than 500 feet from the location of capture by the end of the workday. Suitable habitats should be located on the same side of the road as where the snake was found. The Timber Rattlesnake Monitor will document the date, time, and UTM location (Zone 18N) of the release location. If there is a question regarding the suitability of a release site, the Timber Rattlesnake Monitor will continue to hold the collected snake and contact the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist for further instructions.
- iv. The Certificate Holder, the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist will be contacted within 24 hours of encountering the timber rattlesnake and provided the information outlined in items (i) through (iii) above.
- v. Any equipment, containers, etc. that come into direct contact with snakes will be thoroughly cleaned with a 10% bleach solution and rinsed with clean water prior to being used again to avoid cross contamination. If practicable, cleaning will occur off site; at a minimum cleaning will occur 150 feet from any wetland or waterbody. Equipment will be rinsed well enough to remove all bleach residue.
- vi. If the timber rattlesnake is in a location where it cannot be captured, record the information in item (i) above and take photographs of the snake to the maximum extent practicable. Report the timber rattlesnake encounter to the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist within 24 hours. Work may not resume at the site until the timber rattlesnake is captured and removed from the LOD, is observed exiting the LOD, or until notice to continue construction at that site is granted by DPS Staff in consultation with NYSDEC.
- vii. If a timber rattlesnake den is observed within the LOD, construction and associated movement of vehicles in the subject area must stop. The Timber Rattlesnake Monitor will then consult with the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist to determine the appropriate action to be taken, which may include placing safety fencing around the den opening, placing signage restricting access to the den, shifting

access roads or work pads, etc. Work may not resume at the site until notice to continue construction is granted by DPS Staff in consultation with NYSDEC.

- 4) Reporting of Snake Observations: If the timber rattlesnake is observed outside the LOD, record the information in item (3.d.i.) above and take photographs of the snake to the maximum extent practicable. Report the timber rattlesnake encounter to the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist within 24 hours.

2.4 Timber Rattlesnake Exclusion Fencing Specifications

If it is determined after consultation with DPS Staff and NYSDEC that timber rattlesnake exclusion fencing shall be installed consistent with Section 1.3.1 item (2) for disturbance to timber rattlesnake occupied habitats (see Section 1.2), the temporary exclusion barrier will be installed around the perimeter of the LOD to prevent snakes from entering the area. The barrier will enclose these above specified work areas completely and meet the following specifications:

- 1) The barrier should be installed before the active season (April 1 – October 31), if construction activities are occurring within occupied timber rattlesnake habitat and maintained until construction activities are completed in such areas.
- 2) If the temporary barrier must be installed during the active season installation will be completed under the on-site supervision of the Timber Rattlesnake Monitor prior to the start of construction.
- 3) The exclusion barrier will be constructed in accordance with the following design specifications:
 - a. Made of ¼ inch square hardware cloth or wire mesh or other NYSDEC approved material.
 - b. A minimum of 48” high above ground.
 - c. Anchored into the ground with reinforcement bars placed on the “disturbance side” of the barrier and spaced between 6 – 8 feet apart.
 - d. Secured at the base (barrier/ground interface) with at least 6” of fence material covered with soil backfill.
 - e. Ensure soil is level with grade and pressed against the inside and outside of the fence, so there is no potential for snakes to approach the fence and fall into a trench on either side of the fence.
 - f. Any disturbed soil remaining on the outside of installed fence (post installation) must be stabilized immediately.
- 4) The Timber Rattlesnake Monitor shall inspect the barrier fences each morning prior to the start of work to ensure there are no breaches in the fence or debris along the barrier. The effectiveness of the barrier will be diminished, and snakes may be able to gain access to the disturbance area, if debris (e.g., tree limbs, soil) is allowed to overtop or pile up alongside of the barrier. If a breach in the fence is identified during the active season, the Timber Rattlesnake Monitor shall first repair the breach, then conduct a pre-construction

survey within the fenced work area. Breach repairs, surveys, and debris removal shall be completed prior to the start of construction each day. The Timber Rattlesnake Monitor shall keep an inspection and maintenance log that can be provided to NYSDEC and DPS Staff upon request.

- 5) After barrier fences are installed, vegetation clearing or grubbing required during the active season shall be completed under the on-site supervision of the Timber Rattlesnake Monitor.
- 6) Under the supervision of the Timber Rattlesnake Monitor all barrier fencing will be removed when construction is complete and the site is stabilized. Any remaining trenches or furrows will be backfilled to match the existing grade.
- 7) The barrier fence is intended to keep snakes from entering a work area, thus avoiding direct mortality and take. Other modifications including the use of gates and underpasses may be needed for some work areas or crossing locations. Gates or moveable barriers will only be opened while vehicles or equipment are passing through and will not allow snakes of any size to pass beneath or around the gate or barrier. Steps will be taken to avoid impacts to other species movements and prevent unintended entrapment. Any such modifications will be made in consultation with NYSDEC and DPS Staff.

3.0 Bog Turtles

The bog turtle is New York's smallest turtle, reaching a maximum length of 4.5 inches. A bright yellow or orange blotch on each side of its head and neck are a distinctive feature of this species. The body color is dark with an orange-red wash on the inside of the legs of some individuals. The carapace (upper shell) is domed and somewhat rectangular, often with prominent rings on the shell plates (scutes). In some older individuals, or those that burrow frequently in coarse substrates, the shell may become quite smooth and polished. Although generally black, the carapace is sometimes highlighted by a chestnut sunburst pattern in each scute. The plastron (lower shell) is hingeless, with a pattern of cream and black blotches.

3.1 Bog Turtle Habitat and Movement Patterns

Bog turtles usually occur in small, discrete populations, generally occupying open-canopy, herbaceous sedge meadows and fens bordered by wooded areas. These wetlands are a mosaic of micro-habitats that include dry pockets, saturated areas, and areas that are periodically flooded. Bog turtles depend upon this diversity of micro-habitats for foraging, nesting, basking, hibernating, and sheltering. Unfragmented riparian (river) systems that are sufficiently dynamic to allow the natural creation of open habitat are needed to compensate for ecological succession. Beaver, deer, and cattle may be instrumental in maintaining the open-canopy wetlands essential for this species' survival.

Bog turtles inhabit open, unpolluted emergent and scrub/shrub wetlands such as shallow spring-fed fens, sphagnum bogs, swamps, marshy meadows, and wet pastures. These habitats are characterized by soft muddy bottoms, interspersed wet and dry pockets, vegetation dominated by low grasses and sedges, and a low volume of standing or slow-moving water which often forms a network of willow pools and rivulets. Bog turtles prefer areas with ample sunlight, high evaporation rates, high humidity in the near-ground microclimate, and perennial saturation of portions of the ground, but can be found in suboptimal habitats that have invasive species or some canopy cover. Eggs are often laid in elevated areas, such as the tops of tussocks. Bog turtles generally retreat into more densely vegetated shrubby areas to hibernate from mid-September through mid-April.

3.2 Bog Turtle Occupied Habitat in Transco Project

Occupied habitat will be determined in consultation with USFWS, NYSDEC, and DPS Staff prior to the development of the applicable post-Phase 1 EM&CP. In the event it is determined that Bog turtles do not occupy the Project's ROW, the remainder of this section will be rendered inapplicable.

3.3 Bog Turtle Take Avoidance and Minimization Measures

To minimize any potential impacts to bog turtles and/or occupied habitat the following measures/procedures will be implemented:

3.3.1 *Pre-Construction Measures*

- 1) Display environmental sensitive area signage along the ROW and off-ROW access roads or laydown yards in areas identified as a sensitive environmental resource area.
- 2) Install bog turtle exclusion fencing (per specifications in Section 2.4) and utilize a dedicated Bog Turtle Monitor along the laydown areas, access roads, grading areas, pull pads, and perimeters of work pads in all bog turtle occupied habitat identified through the consultation described in Section 2.2. Timeframes and methodologies shall be determined during the development of the applicable post-Phase 1 EM&CP in consultation with NYSDEC and DPS Staff.
- 3) Develop a comprehensive educational program in the applicable post-Phase 1 EM&CP to be delivered to the construction contractors and any applicable field personnel, including state and/or federal agency representatives, that will enable them to identify the bog turtles, instruct them on the procedures to be followed if a bog turtle is encountered in the Project area (including who to contact if a turtle is sighted), and provide additional measures designed to minimize potential impacts (i.e. look under vehicles routinely etc.).

3.3.2 *Bog Turtle Monitor*

A dedicated Bog Turtle Monitor and/or Designated Agent(s) will be present year-round for all work within the 300-foot buffer surrounding wetlands identified as occupied bog turtle habitat through the consultation described in Section 2.2, subject to the following conditions:

- 1) Subject to the continuing oversight of the Commission, qualifications of the Bog Turtle Monitor will be submitted to NYSDEC for acceptance, prior to the start of construction in any bog turtle areas. The Monitor will have a bog turtle Endangered/Threatened Species License obtained from NYSDEC's Special License Unit or be listed as a Designated Agent on such a license (license application is available at: <http://www.dec.ny.gov/permits/25012.html>). The Bog Turtle Monitor and Designated Agents will follow all conditions of the Special License.
- 2) The number of Bog Turtle Monitor(s) and Designated Agent(s) will be determined in consultation with NYSDEC and DPS Staff.
- 3) Subject to NYSDEC and DPS Staff approval, if the Bog Turtle Monitor meets the qualifications of Timber Rattlesnake Monitor as described in Section 1.3.2, above, and/or Northern Cricket Frog Monitor as described in Section 3.3.2, below, the same individual(s) may monitor for multiple species.
- 4) The Bog Turtle Monitor and Designated Agent(s) will sweep work areas for turtles before any movement of large equipment or large vehicles, ground-disturbing activities, or placement of construction matting.
- 5) The Bog Turtle Monitor, and Designated Agent(s) as necessary, will be present to inspect work areas ahead of daily construction activities and will continue to inspect periodically until construction activities stop for the workday. The Bog Turtle Monitor will document survey activities in field notes or a monitoring log including start and end times, locations

monitored, all turtle species observed/collected, and any other pertinent information. The daily inspection log must be provided to NYSDEC and DPS Staff if requested.

- 6) The Bog Turtle Monitor will handle turtles consistent with the conditions set forth in the Bog Turtle Monitoring and Handling Protocol as outlined below.

3.3.3 Bog Turtle Monitoring and Handling Protocol

- 1) In work areas within the 300-foot buffer surrounding wetlands identified as occupied bog turtle habitat through the consultation described in Section 2.2, the Bog Turtle Monitor will make the following visual observations:
 - a. Scan the wetland edge, water surface, and hummocks prior to work commencing and periodically until construction activities stop for the workday each day for the presence of bog turtles.
 - b. Walk along silt fencing or other potential turtle barriers and scan nesting areas for presence of bog turtles prior to commencement of construction activities each day and at the end of each workday.
 - c. Look under construction vehicles, all mobile equipment, and supply piles at the work site before the start of construction activities, including after break periods.
- 2) The Bog Turtle Monitor will verify the absence of bog turtles, using both visual and tactile survey techniques, as appropriate, just prior to (i.e., same day as) installation of construction mats and work pads within the 300-foot buffer surrounding wetlands identified as occupied bog turtle habitat through the consultation described in Section 2.2.
- 3) Turtle Encounter Procedures: If a turtle is encountered within the LOD:
 - a. Construction and associated movement of vehicles in the subject area must stop.
 - b. The Bog Turtle Monitor will identify the species of turtle.
 - c. If the turtle is not a bog turtle, the Bog Turtle Monitor will move the turtle into the nearest appropriate habitat area outside the LOD, and construction may resume.
 - d. If the turtle is a bog turtle, the following steps must be taken:
 - i. The Bog Turtle Monitor will document the date, time, and UTM location (Zone 18N), and take high resolution photographs of the top and bottom of the turtle with the documented information visible in each photo. Photos should be of sufficient quality that patterns on the shell are readily identifiable. If possible, the age of the turtle will be recorded.
 - ii. Any bog turtle observed will be collected by hand and placed individually in a clean bucket or cooler filled with one inch of water from the native wetland. The turtle will be kept in a climate-controlled setting out of direct sun until it can be released. Once the Bog Turtle Monitor has collected the turtle, construction activities may resume.

- iii. If possible, the turtle will be immediately returned to the native wetland outside of the LOD or construction area (edge of Project ROW). The Bog Turtle Monitor will document the date, time, and UTM location (Zone 18N) of the release location. If the entire native wetland is within the LOD, or if there is a question regarding the suitability of a release site, the Bog Turtle Monitor will continue to hold the collected turtle and contact the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist for further instructions.
 - iv. The NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist will be contacted within 24 hours of encountering the bog turtle and provided the information outlined in items (i) through (iii) above.
 - v. Buckets or coolers will be cleaned after use with a 10% bleach solution and rinsed with clean water prior to being used again. If practicable, cleaning will occur off site; or at a minimum, cleaning will occur 150 feet from any wetland or waterbody. Ensure that they are rinsed well enough to remove all bleach residue.
 - vi. If the bog turtle is in a location where it cannot be captured, record the information in item (i) above and take photographs of the turtle to the maximum extent practicable. Report the bog turtle encounter to the DEC Regional Wildlife Manager, NYSDEC Regional Wildlife Biologist, and US Fish and Wildlife Service within 24 hours. Work may not resume at the site until the bog turtle is captured and removed from the LOD, is observed exiting the LOD, or until notice to continue construction at that site is granted by DPS Staff in consultation with NYSDEC.
 - vii. If a turtle nest is observed within the work area, construction and associated movement of vehicles in the subject area must stop. The Bog Turtle Monitor will attempt to identify the species. The Monitor will then consult with the NYSDEC Regional Wildlife Manager, NYSDEC Regional Wildlife Biologist, and Fish and Wildlife Service to determine the appropriate action to be taken, which may include placing safety fencing around the nest, placing signage restricting access to the nest, etc. Work may not resume at the site until notice to continue construction is granted by DPS Staff in consultation with NYSDEC.
- 4) Reporting of Turtle Observations: If the bog turtle is observed outside the LOD, record the information in item (3.d.i.) above and take photographs of the turtle to the maximum extent practicable. Report the bog turtle encounter to the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist within 24 hours.

3.4 Bog Turtle Exclusion Fencing Specifications

An exclusion barrier will be employed around construction/soil disturbance locations within wetlands that have been identified as occupied Bog turtle habitat through the consultation described in Section 2.2, and the 300-foot buffer surrounding those wetlands within property under

the Certificate Holder's control for the Project. The barrier will enclose these specified work areas completely and will meet the following specifications:

- 1) The barrier will be installed between April 1 and June 15 if construction activities are occurring within occupied bog turtle habitat and maintained until construction activities are completed in such areas.
- 2) The Bog Turtle Monitor will oversee and monitor the installation of barrier fencing and search these areas for the presence of bog turtles, using both visual and tactile survey techniques, prior to fence installation.
- 3) The exclusion fencing will be constructed in accordance with the following design specifications:
 - a. Made of standard silt fence or materials approved by NYSDEC and DPS Staff.
 - b. Fencing will be in two parallel rows adequately spaced apart from each other (at least 1' minimum, 2' desired)
 - c. A minimum of 30" tall (above ground).
 - d. Anchored into the ground with reinforcement bars placed on the "disturbance side" of the barrier and spaced between 6-8 feet apart.
 - e. Secured at the base (barrier/ground interface) with at least 6" of fence material covered with soil backfill.
 - f. Ensure soil is level with grade and pressed against the inside and outside of the silt fences, so there is no potential for turtles to approach the fence and fall into a trench on either side of the fence.
 - g. Any disturbed soil remaining on the outside of installed silt fence (post installation) must be stabilized immediately.
- 4) The Bog Turtle Monitor shall inspect the barrier fences each morning prior to the start of work to ensure there are no breaches in the fence or debris along the barrier. The effectiveness of the barrier will be diminished, and turtles may be able to gain access to the disturbance area, if debris (e.g., tree limbs, soil) are allowed to overtop or pile up alongside of the barrier. If a breach in the silt fence is identified during the active season (April 1 – September 30), the Bog Turtle Monitor shall first repair the breach, then conduct a pre-construction survey within the fenced work area each day. Breach repairs, surveys, and debris removal shall be completed prior to the start of construction. The Bog Turtle Monitor shall keep an inspection and maintenance log that can be provided to NYSDEC and DPS Staff upon request.
- 5) After barrier fences are installed, any vegetation clearing or grubbing required shall be completed under the on-site supervision of the Bog Turtle Monitor.
- 6) Under the supervision of the Bog Turtle Monitor, all barrier fencing will be removed from the wetland when construction is complete and the site is stabilized. Any remaining trenches or furrows will be backfilled to match the existing grade.
- 7) The barrier fence is intended to keep turtles from entering a work area, thus avoiding direct mortality and take. Other modifications including the use of gates and underpasses may be

needed for some work areas or crossing locations. Gates or moveable barriers will only be opened while vehicles or equipment are passing through and will not allow turtles of any size to pass beneath or around the gate or barrier. Steps will be taken to avoid impacts to other species movements and prevent unintended entrapment. Any such modifications will be made in consultation with NYSDEC and DPS Staff.

4.0 Northern Cricket Frogs

The northern cricket frog (NCF) is one of New York State's smallest vertebrates. Adults average only 1 inch (2.5 cm) in length; the male is usually smaller than the female. NCFs exhibit a myriad of patterns and combinations of black, yellow, orange or red on a base of brown or green. Distinguishing characteristics are small size, dorsal warts, a blunt snout, a dark triangular-shaped spot between the eyes, and a ragged, longitudinal stripe on the thigh. The webbing on the hind foot is extensive, reaching the tip of the first toe and the next to last joint of the longest toe. This frog is an aquatic species and can jump long distances (5-6 feet).

4.1 Northern Cricket Frog Habitat and Movement Patterns

NCFs are terrestrial and aquatic and, although the species potentially may occupy any freshwater habitat, during the summer NCF are most often found along the margins of open wetlands, shallow ponds, ponds with floating peat masses or water-lily beds, and slow-moving streams. Male NCF often use emergent and floating vegetation as calling platforms during the breeding season. Submerged aquatic plants function as egg deposition sites, as well as protective cover for NCF tadpoles. Although they have a preference for sunny, open-canopy fresh water habitats, NCF are also known to occur in habitats with thick vegetative cover including cattail marshes and red maple swamps. In the fall, NCF seek over-wintering sites (hibernacula) that provide protection from freezing temperatures; peak fall migration is typically from late-September through late-October. Over-wintering may occur near or adjacent to summer habitat in riparian sites (e.g., crayfish burrows or deep cracks in the soil along the shoreline) or at terrestrial sites (e.g., beneath logs or matted vegetation in upland forests) that may require long migrations from their summer habitat.

4.2 Northern Cricket Frog Occupied Habitat in Transco Project

Occupied habitat will be determined in consultation with NYSDEC and DPS Staff prior to the development of the applicable post-Phase 1 EM&CP. In the event it is determined that NCF do not occupy the Project's ROW, or that they only occupy a certain portion thereof (e.g., overwintering areas), the remainder of this section or certain subsections will be rendered inapplicable.

4.3 Northern Cricket Frog Take Avoidance and Minimization Measures

To minimize any potential impacts to NCF and/or their habitat the following measures/procedures will be implemented:

4.3.1 Pre-Construction Measures

- 1) Display environmental sensitive area signage along the ROW and off-ROW access roads or laydown yards in areas identified as a sensitive environmental resource area.
- 2) Install NCF exclusion fencing (per specifications in Section 3.4) and utilize a dedicated NCF Monitor and Designated Agent(s) along the laydown areas, access roads, grading areas, pull pads, and perimeters of work pads in all NCF occupied habitat (upland and wetland) identified through the consultation described in Section 3.2. Timeframes and

methodologies shall be determined during the development of the applicable post-Phase 1 EM&CP in consultation with NYSDEC and DPS Staff.

- 3) Develop a comprehensive educational program in the applicable post-Phase 1 EM&CP to be delivered to the construction contractors and any applicable field personnel, including state and/or federal agency representatives, that will enable them to identify the NCFs, instruct them on the procedures to be followed if a NCF is encountered in the Project area (including who to contact if a frog is sighted), and provide additional measures designed to minimize potential impacts (i.e. look under vehicles routinely etc.).

4.3.2 NCF Monitor

A dedicated NCF Monitor and/or Designated Agent(s) will be present year-round for all work within NCF occupied habitat identified through the consultation described in Section 3.2 subject to the following conditions:

- 1) Subject to the continuing oversight of the Commission, qualifications of the NCF Monitor will be submitted to NYSDEC for acceptance, prior to the start of construction in any NCF areas. The Monitor will have a NCF Endangered/Threatened Species License obtained from NYSDEC's Special License Unit or be listed as a Designated Agent on such a license (license application is available at: <http://www.dec.ny.gov/permits/25012.html>). NCF Monitor and Designated Agent(s) will follow all conditions of the Special License.
- 2) The number of NCF Monitor(s) and Designated Agent(s) will be determined in consultation with NYSDEC and DPS Staff.
- 3) Subject to NYSDEC and DPS Staff approval, if the NCF Monitor meets the qualifications of Timber Rattlesnake Monitor as described in Section 1.3.2, above, and/or Bog Turtle Monitor as described in Section 2.3.2, above, the same individuals may monitor for multiple species.
- 4) The NCF Monitor, and Designated Agent(s) if necessary, will sweep work areas for NCF before any movement of large equipment or large vehicles, ground-disturbing activities, or placement of construction matting.
- 5) The NCF Monitor will handle frogs consistent with the conditions set forth in the NCF Monitoring and Handling Protocol as outlined below.

4.3.3 NCF Monitoring and Handling Protocol

- 1) The NCF Monitor will be present to inspect work areas located within occupied habitat areas identified through the consultation described in Section 3.2 ahead of daily construction activities and will continue to inspect periodically until construction activities stop for the workday. The NCF Monitor will document survey activities in field notes or a monitoring log including start and end times, locations monitored, all frog species observed/collected, and any other pertinent information. The daily inspection log must be provided to NYSDEC and DPS Staff if requested.

- 2) The NCF Monitor will verify the absence of NCFs just prior to (i.e., same day as) installation of construction mats and work pads.
- 3) Frog Encounter Procedures: If a frog is encountered within the LOD:
 - a. Construction and associated movement of vehicles in the subject area must stop.
 - b. The NCF Monitor will identify the species of frog.
 - c. If the frog is not a NCF, the NCF Monitor will move the frog into the nearest appropriate habitat area outside the LOD, and construction may resume.
 - d. If the frog is a NCF, the following steps must be taken:
 - i. The NCF Monitor will document the date, time, and UTM location (Zone 18N), and take high resolution photographs of the frog.
 - ii. Any NCF observed will be collected by hand and placed in an enclosed container with appropriate venting and measures to maintain frog hydration (e.g., wet moss). The frog will be kept in a climate-controlled setting out of direct sun until it can be released. Once the NCF Monitor has collected the frog, construction activities may resume.
 - iii. If possible, the frog will be immediately returned to suitable habitat outside of the LOD or construction area (edge of Project ROW). The NCF Monitor will document the date, time, and UTM location (Zone 18N) of the release location. If there is a question regarding the suitability of a release site, the NCF Monitor will continue to hold the collected frog and contact the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist for further instructions.
 - iv. The NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist will be contacted within 24 hours of encountering the NCF and provided the information outlined in items (i) through (iii) above.
 - v. Containers will be cleaned after use with a 10% bleach solution and rinsed with clean water prior to being used again. If practicable, cleaning will occur off site; at a minimum, cleaning will occur 150 feet from any wetland or waterbody. Ensure that they are rinsed well enough to remove all bleach residue.
 - vi. If the NCF is in a location where it cannot be captured, record the information in item (i) above and take photographs of the frog to the maximum extent practicable. Report the NCF encounter to the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist within 24 hours. Work may not resume at the site until the NCF is captured and removed from the LOD, is observed exiting the LOD, or until notice to continue construction at that site is granted by DPS Staff in consultation with NYSDEC.
 - vii. If frogs are observed in a possible hibernaculum within the work area, construction and associated movement of vehicles in the subject area must stop. The NCF Monitor will attempt to identify the species. If the frog is identified as a NCF, the Monitor will then consult with the NYSDEC Regional Wildlife

Manager, NYSDEC Regional Wildlife Biologist, and Fish and Wildlife Service to determine the appropriate action to be taken, which may include placing safety fencing around the hibernaculum, placing signage restricting access to the hibernaculum, etc. Work may not resume at the site until notice to continue construction is granted by DPS Staff in consultation with NYSDEC.

- 4) Reporting of Frog Observations: If the NCF is observed outside the LOD, record the information in item (3.d.i.) above and take photographs of the frog to the maximum extent practicable. Report the NCF encounter to the NYSDEC Regional Wildlife Manager and NYSDEC Regional Wildlife Biologist within 24 hours.

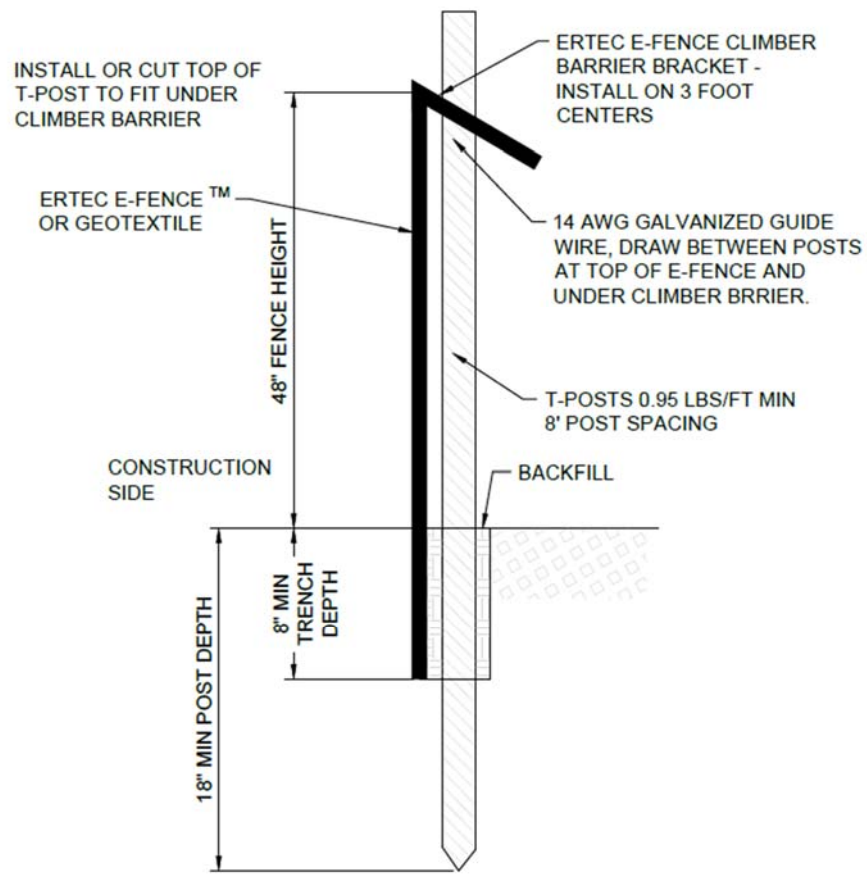
4.4 Northern Cricket Frog Exclusion Fencing Specifications

NCF exclusion fencing shall be installed consistent with Section 3.3.1 item (2) for disturbance to NCF occupied upland habitats (see Section 3.2) in whole or in part outside of the acceptable work periods as defined in NYSDEC's Guidelines for Reviewing Projects for Potential Impacts to Northern Cricket Frog. An exclusion barrier will also be employed around construction/soil disturbance locations for work occurring during the active season (March 16 – November 30) within wetlands identified as occupied NCF habitat through the consultation described in Section 2.2. The temporary exclusion barrier will be installed around the perimeter of the work area to prevent frogs from entering the area. The barrier will enclose that specified work area completely and meet the following specifications:

- 1) The barrier will be installed during the relevant acceptable work period, unless otherwise agreed upon by NYSDEC, DPS Staff, and the Applicant, if construction activities are occurring within occupied NCF habitat and maintained until construction activities are completed in such areas. Once the barrier is in place, construction activities within the barrier may then continue beyond the relevant acceptable work period.
- 2) The NCF Monitor will oversee and monitor the installation of barrier fencing and search these areas for the presence of NCFs prior to fence installation.
- 3) The exclusion barrier will be constructed in accordance with the following design specifications:
 - a. Made of standard filter-fabric silt fencing or other NYSDEC approved material (e.g., ERTEC E-Fence).
 - b. A minimum of 48" high.
 - c. Anchored into the ground and kept taut using wooden posts or spikes.
 - d. Installed to allow the top 12" of fence material to drape down to form a climbing barrier, and for the entire fence to form a vertical barrier secured at the base (barrier/ground interface) with at least 8" of fence material covered with soil backfill (see Figure 2 below).
 - e. Ensure soil is level with grade and pressed against the inside and outside of the silt fence, so there is no potential for frogs to approach the fence and fall into a trench on either side of the fence.

- f. Any disturbed soil remaining on the outside of installed silt fence (post installation) must be stabilized immediately.
- 4) The NCF Monitor shall inspect the barrier fences each morning prior to the start of work to ensure there are no breaches in the fence or debris along the barrier. The effectiveness of the barrier will be diminished, and frogs may be able to gain access to the disturbance area, if debris (e.g., tree limbs, soil) is allowed to overtop or pile up alongside of the barrier. If a breach in the silt fence is identified during the active season, the NCF Monitor shall first repair the breach, then conduct a pre-construction survey within the fenced work area. Breach repairs, surveys, and debris removal shall be completed prior to the start of construction each day. The NCF Monitor shall keep an inspection and maintenance log that can be provided to NYSDEC and DPS Staff upon request.
- 5) After barrier fences are installed, any vegetation clearing or grubbing required shall be completed under the on-site supervision of the NCF Monitor.
- 6) Under the supervision of the NCF Monitor, all barrier fencing will be removed when construction is complete and the site is stabilized. Any remaining trenches or furrows will be backfilled to match the existing grade.
- 7) The barrier fence is intended to keep NCFs from entering a work area, thus avoiding direct mortality and take. Other modifications including the use of gates and underpasses may be needed for some work areas or crossing locations. Gates or moveable barriers will only be opened while vehicles or equipment are passing through and will be designed to prevent frogs from passing underneath. Steps will be taken to avoid impacts to other species movements and prevent unintended entrapment. Any such modifications will be made in consultation with NYSDEC and DPS Staff.

Figure 2. Northern Cricket Frog Exclusion Fencing Specifications



5.0 References

- NYSDEC 2009. Guidelines for Reviewing Projects for Potential Impacts to the Timber Rattlesnake, revised July 31, 2009.
- NYSDEC 2010. Guidelines for Reviewing Projects for Potential Impacts to the Northern Cricket Frog, revised September 29, 2010.
- NYSDEC 2015. Recovery Plan for New York State Populations of the Northern Cricket Frog, https://www.dec.ny.gov/docs/wildlife_pdf/crickfrogrecplan15.pdf, accessed May 7, 2021.
- NYSDEC 2021. Bog Turtle Fact Sheet, <https://www.dec.ny.gov/animals/7164.html>, accessed May 7, 2021.
- NYSDEC 2021. Northern Cricket Frog Fact Sheet, <https://www.dec.ny.gov/animals/7120.html>, accessed May 7, 2021.
- NYSDEC 2021. Timber Rattlesnake Fact Sheet, <https://www.dec.ny.gov/animals/7147.html>, accessed May 7, 2021.

APPENDIX I

**SPECIFICATIONS FOR COMPUTER NOISE MODELING
AND TONALITY ASSESSMENT**

Appendix I
SPECIFICATIONS FOR COMPUTER NOISE MODELING AND TONALITY
ASSESSMENT

Sound Modeling and Tonal Analysis

- a. Final computer noise modeling shall be conducted by using:
 - i. The ISO-9613-2 Sound Propagation Standard with no meteorological correction (Cmet);
 - ii. All noise sources operating at maximum sound power levels;
 - iii. A maximum ground factor of $G=0.5$;
 - iv. A factor of $G=0$ for waterbodies, if any;
 - v. A height evaluation of 1.5 meters above the estimated first-floor elevation for single-story residences and above the estimated second-floor elevation for two-story residences;
 - vi. A temperature of 10 degrees Celsius and 70% Relative Humidity; and
 - vii. At a minimum, the sound results (Broadband, dBA, and at the full-octave frequency bands from 31.5 Hz up to 8,000 Hz (dB will be reported)).
- b. Sound modeling results shall conform to the following:
 - i. Results shall be included in a report that shall include among others, sound results in tabular and graphical format.
 - ii. Sound contours shall be legible and rendered above a map that shall include all sensitive sound receptors and boundary lines; noise sources within the Stations (including capacitors, reactors, HVAC equipment, transformer(s), and other noise sources, if any);
 - iii. Sound contours shall be rendered at a minimum, until the 30 dBA noise contour is reached, in 1 dBA steps.
 - iv. Full-size, hard copy maps (22"x34") in 1:12,000 scale, or a scale that is easily readable, shall be submitted to DPS Staff.
 - v. GIS files used for the final computer noise modeling, including noise source and receptor locations and heights, topography, final grading, boundary lines, and participating status shall be forwarded to DPS Staff in digital media.
 - vi. Plan view, sections and elevation drawings of proposed sound barriers indicating top of barrier elevation(s).
 - vii. Final computer noise modeling files shall be delivered to DPS Staff by digital means.
- c. For noise sources, other than capacitors and substation transformer(s), if any, and for non-participating receptors exceeding a sound level of 35 dBA Leq as modeled above, a prominent tone analysis will be presented subject to the following requirements:
 - i. The "prominent discrete tone" constant level differences (Kt) in ANSI S12.9-2013/Part 3 Annex B, section B.1, will be used as follows; 15 dB in low-frequency one-third-octave bands (from 25 up to 125 Hz); 8 dB in middle-frequency one-third-octave bands (from 160 up to 400 Hz); and, 5 dB in high-frequency one-third-octave bands (from 500 up to 10,000 Hz).
 - ii. The analysis will use one-third octave band information from the manufacturers (from 20 Hz up to 10,000 Hz, if available). If no

manufacturers information is available, sound information can be based on field test(s). The field test(s) will report at a minimum sound pressure and sound power levels and clear explanations about how the test was conducted and Sound Power Levels were obtained. The analysis will be performed for a single noise source (e.g., a capacitor) or a group of noise sources (e.g., a group of capacitors), depending on available sound power level information.

- iii. For the purposes of tonality assessment, calculations will include the following Attenuations as specified in ANSI/ASA S12.62/ISO 9613-2: 1996 (MOD). Acoustics – Attenuation of Sound During Propagation Outdoors-Part 2: General Method of Calculation:
 - a. Attenuation due to geometrical divergence (A_{div}),¹
 - b. Atmospheric absorption for a temperature of 10 degrees Celsius and 70% Relative Humidity (A_{atm}),²
 - c. Attenuation due to the ground effect (A_{gr}),^{3,4}
 - d. Attenuation due to a barrier (A_{bar}) if any,⁵
 - e. No miscellaneous attenuations (A_{misc}) will be included.
- iv. If no manufacturers information or pre-construction field tests are available, sounds will be assumed to be tonal and the broadband overall (dBA) noise level at the evaluated position as determined with computer noise modeling shall be increased by 5 dBA for evaluation of compliance with applicable Conditions of the Order.

¹ A_{div} can be assumed to be the same at all 1/3 octave bands and/or be omitted from analysis.

² The same full-octave band atmospheric attenuation coefficients indicated in Table 2 of ANSI S12.62, can be used for the three adjacent one-third octave bands corresponding to each full-octave band.

³ The same full-octave band attenuations as indicated in Table 3 of ANSI S12.62, can be used for the three adjacent one-third octave bands corresponding to each full-octave band.

⁴ Calculations will use the maximum height of the equipment as the height of the noise source.

⁵ Should the analysis show that a barrier will be needed, the barrier will be implemented before the start date of operations.

APPENDIX J

PROPOSED 401 WATER QUALITY CERTIFICATION

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

Pursuant To: Section 401 of the Federal Water Pollution Control Act, 33 USC § 1341, and Article VII of the New York Public Service Law (“PSL”)

Certification Issued To: New York Transco LLC (“Transco”)
One Hudson City Centre
Suite 300
Hudson, New York 12534

Project Description and Location

Transco submitted an application (the “Application”) to the New York State Public Service Commission (the “Commission”), in accordance with Article VII of the PSL, for a Certificate of Environmental Compatibility and Public Need (“CECPN”) to construct, operate, and maintain the Rock Tavern to Sugarloaf project (the “Project”), a new, single-circuit 12-mile overhead 115 kilovolt (“kV”) electric transmission line and related facilities in the Towns of New Windsor, Hamptonburgh, Blooming Grove, and Chester in Orange County. The Project maximizes the use of existing utility-owned and controlled electric transmission line corridors and property.

In summary, the Project will involve: (1) the replacement of an existing, 12-mile overhead 115 kV electric transmission line (the “SL Line”), with a new 115 kV electric transmission line, which will be known as the Rock Tavern to Sugarloaf line (the “RTS Line”) and will begin at the existing 115 kV Rock Tavern Substation owned by Central Hudson Gas & Electric Corporation (“Central Hudson”) and located in the Town of New Windsor, Orange County (the “115 kV Rock Tavern Substation”) and terminate at Central Hudson’s existing 115kV Sugarloaf Switching Station (the “115 kV Sugarloaf Switching Station”) located in the Town of Chester, Orange County; (2) the rebuild of the 115 kV Sugarloaf Switching Station as a substation (the “Rebuilt Sugarloaf Substation”) to accept the RTS Line; (3) the construction of a new 138 kV tie line (“Line 30”) that will exit the Rebuilt Sugarloaf Substation and terminate at the existing 138 kV Sugarloaf Switching Station owned by Orange and Rockland Utilities, Inc. (“O&R”) and located in the Town of Chester, Orange County; (4) the replacement of the existing structures from the 115 kV Rock Tavern Substation to the 115 kV Sugarloaf Switching Station; and (5) the replacement of the first structure outside of the Rebuilt Sugarloaf Substation (*i.e.*, Structure 1241), which supports Central Hudson’s existing 115 kV SD and SJ Lines.

There are delineated wetlands and associated acreages within the Project. Impacts to those delineated wetlands cannot be entirely avoided because of the size and nature of the Project. Permanent impacts associated with the Project could include the installation of new structures within field-delineated wetlands. Temporary impacts associated with Project construction could include: (i) temporary loss of wetland functions for construction access routes

and structure construction workspace locations where wetland avoidance is not practicable; (ii) installation of temporary bridges and culverts to provide construction access across waterways; or (iii) limited dewatering of surface or subsurface waters in select work areas. Transco will avoid and minimize impacts to wetlands, to the maximum extent practicable, by adhering to the measures contained in the CECPN, the Environmental Management and Construction Plan (“EM&CP”), and a Commission-approved Vegetation Management Plan and Program.

Certification

The Commission hereby certifies, pursuant to Section 401 of the Federal Water Pollution Control Act (33 USC § 1341) and Article VII of the PSL that the Project, as conditioned herein, complies with the applicable requirements of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended; applicable New York State water quality standards, limitations, and criteria; and other requirements that are set forth in 6 NYCRR § 608.9 (a) and Parts 701 through 704, provided that all of the conditions listed herein are met. In addition, the Application, as and if amended or supplemented, meets the requirements of 40 CFR §§ 121.4 and 121.5 (c) (1)-(7). This certification (“Certification”) is issued in conjunction with the CECPN sought by Transco in, and based on the administrative record of, Case 20-T-0549.

Conditions

1. No in-water work shall commence until all pre-construction conditions relating to such work contained in the CECPN 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 20-T-0549, to the degree not superseded by the CECPN; (b) all conditions of approval contained in the CECPN; (c) the approved EM&CP; and (d) all conditions incorporated in any order approving the EM&CP in Case 20-T-0549, to the extent such documents referenced in (c) and (d) above pertain to Transco’s compliance with New York State Water Quality Standards necessary and appropriate for issuance of, and compliance with, this Certification.
3. Transco shall provide a copy of this Certification to the U.S. Army Corps of Engineers, along with a copy of the Application, Joint Proposal, CECPN, approved EM&CP, and order(s) approving the EM&CP in Case 20-T-0549 so that the U.S. Army Corps of Engineers will have a complete record of the conditions that apply hereto.
4. Transco shall provide to all construction contractors performing work on the Project complete copies of this Certification, the CECPN, the approved EM&CP, and order(s) approving the EM&CP.

Certified by:

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

Date: _____