STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 21-T-0340 - Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York.

ORDER ADOPTING JOINT PROPOSAL

Issued and Effective: August 11, 2022

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At a session of the Public Service Commission held in the City of Albany on August 11, 2022

COMMISSIONERS PRESENT:

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

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BY THE COMMISSION:

I. INTRODUCTION

On June 15, 2021, the New York Power Authority (NYPA) and Niagara Mohawk Power Corporation d/b/a National Grid (National Grid) (collectively the Applicants) filed an application for a Certificate of Environmental Compatibility and

Public Need (Certificate) pursuant to Public Service Law Article VII for authority to construct the "Smart Path Connect" project (Project).[1] The Project would consist of rebuilding approximately 100 linear miles of existing 230 kilovolt (kV) transmission lines to either 230 kV or 345 kV along with associated substation construction and upgrades. The Project includes rebuilding all or parts of: NYPA's Moses-Willis 1 & 2 lines, NYPA's Willis-Patnode and Willis-Ryan lines; and National Grid's Adirondack to Porter line (Chases Lake-Porter Line 11, Adirondack-Porter Line 12, and Adirondack-Chases Lake Line 13), the extension of the existing 230 kV Rector Road to Chases Lake Line 10, as well as connecting to NYPA's Smart Path (also known as Moses-Adirondack 1 & 2 or MA 1 & 2) right-of-way (ROW). The Project is proposed to be built primarily within existing ROWs.

On May 19, 2022, a Joint Proposal, signed by the Applicants, Staff of the Department of Public Service (DPS Staff), the New York State Department of Environmental Conservation (DEC Staff), and the New York State Department of Agriculture & Markets (Ag & Markets Staff) (collectively the Signatory Parties) was filed in the above case. As explained below, the Joint Proposal addresses all of the statutory and regulatory issues pertaining to the Applicant's request for a Certificate to construct, maintain and operate the proposed facility, adequately discusses all probable environmental impacts, and addresses the steps needed to ensure that the facility represents the minimal adverse environmental impact

[1] The Project was previously referred to as the Northern New York Project. See Matter of the Application (filed June 16, 2021), p. 3. See also Case 20-E-0197, Proceeding to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, Order On Priority Transmission Projects (PTP Order) (issued October 15, 2020).

considering the state of available technology and the nature and economics of various alternatives and other pertinent considerations. The record in this case also supports a finding of public need. Therefore, in this Order, we adopt the Joint Proposal and associate Appendices with the minor exception of some terms that are self-executing agreements governing the relationships among the parties and unnecessary to our review. Accordingly, we grant to the Applicants, pursuant to Public Service Law (PSL) Article VII §121, a conditional Certificate.

II. BACKGROUND

The Accelerated Renewable Act requires the Commission to identify Priority Transmission Projects (PTPs), defined as bulk transmission projects needed expeditiously to meet the requirements of the Climate Leadership and Community Protection Act (CLCPA),[2] and directs the New York Power Authority to undertake the development of the PTPs.[3] In July 2020, DPS Staff proposed criteria for identifying and designating PTPs. As part of the same petition, NYPA proposed the Project for designation as a PTP.[4] In October 2020, the Commission identified the criteria for determining PTPs and so designated the Project, concluding that it is needed to timely meet the CLCPA requirements.[5]

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[2] Chapter 106 of the laws of 2019.

[3] Accelerated Renewable Act, §7.5

[4] Case 20-E-0197, Proceeding to Implement Transmission Planning Pursuant to the Accelerated Renewable Energy Growth and Community Benefit Act, Petition, filed July 2, 2020.

[5] Case 20-E-0197, supra, PTP Order, p. 2.

III. THE APPLICATION AND PROCEEDING

On June 15, 2021, the Applicants filed an application for a Certificate pursuant to Public Service Law Article VII for authority to construct the Smart Path Connect project.[6] The Application was determined complete in accordance with PSL §122 as of December 22, 2021.[7] On December 27, 2021, the Applicant filed a notice of impending settlement negotiations notifying parties and interested persons that settlement negations would begin on or about January 10, 2022.[8] The Towns of Massena, Boonville, Burke, and Brasher received intervenor funding to assist with their participation in the proceeding. Administrative Law Judge Anthony Belsito convened two virtual information sessions/public statement hearings on February 16, 2022.

On May 19, 2022, the Signatory Parties filed a Joint Proposal.[9] The Joint Proposal purports to be in the public interest and consistent with the Commission's settlement

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[6] The Applicants filed supplements on September 3, 2021, and October 25, 2021.

[7] Secretary Letter, December 24, 2021.

[8] According to the Joint Proposal, settlement negotiations took place on January 10, 2022, January 25, 2022, February 8, 2022, February 25, 2022, March 8, 2022, March 22, 2022, April 5, 2022, April 19, 2022, May 3, 2022, and May 17, 2022.

[9] The Joint Proposal includes proposed a List of Testimony, Affidavits and Exhibits (Appendix A), a Description and Location of the Project (Appendix B), Proposed Commission Findings (Appendix C) and Proposed Certificate Conditions and Monitoring Requirements (Appendix D), specifications for: Development of Environmental Management and Construction Plan (EM&CP)(Appendix E), Wetlands and Waterbodies (Appendix F), Invasive Species Management Plan (Appendix G), Computer Noise Modeling and Tonality Assessment (Appendix H) and a Blanding's Turtle Avoidance and Minimization Plan (Appendix I).

guidelines.[10] A notice inviting comment on the Joint Proposal which included a summary of the Joint Proposal was issued on May 27, 2022, and letters transmitting the notice were sent to all landowners adjacent the Project ROW.

IV. JOINT PROPOSAL

The Joint Proposal and associated Appendices contain the terms, conditions, practices, and guidelines recommended by the Signatory Parties for inclusion in a Certificate for the Project. The Joint Proposal provides the most updated description of the Project.[11]

A. Need for the Project

The Joint Proposal notes that the Commission previously recognized that the Project is necessary to realize the potential for renewable energy development in Northern New York and to meet CLCPA requirements. The Joint Proposal also states that the Project will complement the previously certificated Smart Path[12] and AC Transmission projects.[13] The Joint Proposal also claims that the Project will reduce congestion and curtailments currently impacting renewable generation and reduce the costs of delivered power for customers.[14]

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10 Joint Proposal (May 19, 2022), pp. 3-4.

11 See Joint Proposal, Appendix B.

12 See Case 18-T-0207, New York Power Authority Smart Path Art. VII Application.

13 See Cases 19-T-0549, LS Power Grid Art. VII Edic/Marcy to New Scotland; Princetown to Rotterdam and 19-T-0684, New York Transco Art. VII New York Energy Solution Project.

14 Joint Proposal, Appendix A.

B. Project Costs

The Joint Proposal includes an estimate of the total capital costs of the Project, as well as costs associated with development and permitting of the Project under Article VII.[15] The Joint Proposal notes that the Applicants will provide a more definitive cost estimate considering all Certificate Conditions and requirements of the Environmental Management & Construction Plan (EM&CP) and associated monitoring plans. The Project is expected to have direct and indirect economic impacts primarily limited to the Project's construction-related employment including spending on local workers and goods and services.

C. Environmental Impacts

The Joint Proposal states that the nature of the probable environmental impacts of the Project are adequately described in the evidentiary record and includes a summary of the impacts. The Joint Proposal concludes that the Project represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. The Project avoids or minimizes the disturbance of natural habitat to the extent feasible, and minimizes potential disturbance to existing land uses, activities, and traffic by maximizing the use of existing ROW.

1. Land Use Impacts

The Joint Proposal notes that land uses along the Project route vary widely but that there will be virtually no change in land use conditions by using the exiting ROW. The Joint Proposal acknowledges that some land use change will result from substation construction. Specifically, the Haverstock Substation will change the land use of the site from

[15] Id.

rural/undeveloped to developed/utility and the Willis 345/230 kV Substation will change the existing land use from agricultural to developed/utility land. The ROW connection to the Willis 345/230 kV Substation will require 2.2 acres of forest clearing. Similar clearing will result at the proposed Adirondack Substation and Austin Road Substation. The Joint Proposal claims that the Project is consistent with the 2016 New York State Open Space Plan and various comprehensive land use plans adopted by the local municipalities along the ROW.

2. Agricultural Resource Impacts

The Signatory Parties claim that the facility represents a minimum adverse impact on active farming operations that produce crops, livestock, and livestock products. The Joint Proposal notes that the Project ROW crosses active agricultural lands and eight New York agricultural districts.[16] The Joint Proposal states that the Project generally allows for co-existence of active farmland and transmission lines within the Project ROW and will result in fewer total structures on the ROW. However, the Joint Proposal notes that during construction, some agricultural operations may be temporarily disrupted and that the Willis 345/230 kV Substation and Adirondack Substation will permanently impact agricultural lands. The Joint Proposal requires compliance with Ag & Market's "Guidelines for Electric Transmission Right-of-Way Projects" to minimize impacts to active agricultural land. The Joint Proposal also includes Proposed Certificate Conditions specific to protecting agricultural resources.[17]

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[16] Id.

[17] Joint Proposal, Appendix D.

3. Visual Resource Impacts

The Joint Proposal notes that visual analysis submitted in the Application indicates that visibility of the transmission structures will increase due to the increased height of new structures and in some areas the changes in structure placement. However, the Joint Proposal claims that any perceived change in land use/contrast with existing landscape character will be limited due to the use of existing ROW.

The Joint Proposal states that tree clearing, and the addition of the proposed transmission and substation structures will alter the character of the view near both the Haverstock Substation and Austin Road Substation. Impacts at Haverstock Substation will be limited because of the small number of travelers along Fregoe Road, and the presence of existing transmission infrastructure in the area. Forest surrounding the Austin Road Substation will screen views of the substation from most viewpoints. The Joint Proposal indicates that during construction, some increased visibility of construction equipment may occur, particularly at road crossings, nearby residential development, and open space areas, but that such impacts are temporary.

4. Cultural & Historic Resource Impacts

The Applicant developed a GIS-based predictive model, in consultation with the Office of Parks, Recreation, and Historic Preservation (OPRHP) and interested, federally recognized Native American Nations to identify areas with probability of containing archaeological sites. An archaeological survey of the proposed ROW did not identify any archaeological sites and the OPRHP concurred that no additional archaeological work is necessary for the proposed structure locations.

The State Historic Preservation Office (SHPO) notified the Applicant that the proposed Project will have no adverse impact to historic and cultural resources and that SHPO concurred with the findings of the Phase II reports. Details of the survey methodology and results of these studies are in Exhibit 4 of the Application.[18] The Joint Proposal states that the Applicant will adhere to the conditions contained in the Proposed Certificate Conditions,[19] as well as all other protective measures identified in the EM&CP, to avoid impacts to cultural and historic resources to the maximum extent practicable.

5. Terrestrial Ecology & Wetland Impacts

According to the Joint Proposal, impacts to vegetation will be minimized by primarily following an existing ROW and by using existing access roads where possible. The Project ROW will continue to be maintained in accordance with the applicable long-range ROW management plan and the requirements for avoidance and minimization of Blanding's turtles and upland sandpiper as set forth in the Proposed Certificate Conditions.[20]

The Joint Proposal notes that temporary and permanent impacts to identified vegetative community types will result from the construction of the Project including approximately 74.8 acres of tree clearing within the Adirondack-Porter Proposed ROW. The Joint Proposal also notes that tree clearing is required for work at Haverstock Substation (8.0 acres), Austin Road Substation (19.3 acres), Marcy Substation expansion (0.3 acres), and Adirondack Substation (1.6 acres). Additional clearing is required to extend the Rector Road to Chases Lake

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[18] Joint Proposal, Appendix A, Evidentiary Record Exhibit 13.

[19] Joint Proposal, Appendix D.

[20] Joint Proposal Appendix D

Line 10 to the proposed Austin Road Substation (8.4 acres), and for the interconnections into the Marcy Substation (0.9 acres), Haverstock Substation (1.6 acres), and Willis 345/230 kV Substation (2.2 acres). The Joint Proposal states that the proposed clearing is necessary to prevent interference with the proposed facility.

The Joint Proposal identifies State-regulated delineated wetlands including regulated adjacent areas and the associated acreages within the Project and notes that temporary and permanent impacts to wetlands are unavoidable due to the size and nature of the Project. [21] However, the Applicant will avoid and minimize impacts, to the maximum extent practicable, by adhering to the measures contained in the Proposed Certificate Conditions and the measures identified in the Project's EM&CP. The Joint Proposal also calls for filing of a wetland mitigation plan in accordance with the Proposed Certificate Conditions and the NYSDEC Supplemental Specifications for Wetlands and Waterbodies. Further, the Joint Proposal excludes placement of transmission structures, access roads, staging areas, and other facilities within the 100-foot adjacent areas around State-regulated wetlands and within 50 feet of state protected streams, where feasible, to minimize ground disturbance in these areas.

The Joint Proposal notes that impacts to streams will be minimized by limiting the number of streams crossed by access roads, by utilizing existing crossings as much as possible, not placing structures in streams, spanning across streams, and adhering to all other measures identified in the Proposed

[21] Joint Proposal, Appendix A, Evidentiary Exhibit XX.

Certificate Conditions and the NYSDEC Supplemental Specifications for Wetlands and Waterbodies.

By routing the Project primarily within an existing ROW, most of the Project's potential impacts to wildlife and wildlife habitat will be temporary and occur during construction. Some permanent habitat impacts, will occur from construction of the new substations.[22]

The Joint Proposal includes the results of the Applicants' invasive species survey[23] and requires the Applicant to prepare an Invasive Species Plan in accordance with the Proposed Certificate Conditions and the Invasive Species Management Plan Specifications.[24] The plan will ensure compliance with 6 NYCRR Part 575.

6. Impacts on Protected Wildlife and Plants

The Joint Proposal states several federal and state protected threatened and endangered species are identified as potentially in the vicinity of the Project including: bald eagle (*Haliaeetus leucocephalus*) (state threatened), Blanding's turtle (state threatened), eastern sand darter (state threatened), mooneye (state threatened), upland sandpiper (state threatened), northern long-eared bat, and loggerhead shrike (state endangered). Also, Indiana bat has been identified as being federally endangered. The Joint Proposal states that the Project is not anticipated to have any impact on the northern long-eared bat, Indiana bat, bald eagle, loggerhead shrike, or their habitats. The Joint Proposal requires snag and cavity trees be left standing in some circumstances to minimize

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[22] Joint Proposal, Appendix A, Evidentiary Exhibit 22 (Exhibit 4 of the Application and associated supplemental filings.

[23] Joint Proposal, Appendix A, Evidentiary Record Exhibit 4 (Exhibit 4 of the Application).

[24] Joint Proposal, Appendix G.

potential impacts to bat habitat.[25] One area was identified as having one or more characteristics of suitable habitat for upland sandpiper and the Joint Proposal includes related protections. The Joint Proposal also states that impacts to the eastern sand darter and mooneye will be avoided through soil erosion and sediment controls, the specifics of which are to be included in the EM&CP.

The Joint Proposal notes that during field review two areas were identified as having one or more characteristics of suitable Blanding's turtle wetland habitat. The Joint Proposal includes Proposed Certificate Conditions related to such habitat and a *Blanding's Turtle Avoidance and Minimization Plan*,[26] to ensure that impacts to the species and its habitat are avoided. The Joint Proposal notes that correspondence with NYNHP and online consultation with the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), indicate that no Rare, Threatened, and Endangered plants have been documented in the Project area and therefore, no impacts to threatened or endangered plant species are anticipated during construction of the Project.

7. Impacts on Topography & Soils

The Joint Proposal states that the Project is in four physiographic provinces: the St. Lawrence Lowlands, the Adirondack Mountains, the Tug Hill Plateau, and the Hudson-Mohawk Lowlands. The Joint Proposal notes that the Project area includes some challenging topographical features including isolated areas of steep slopes associated with stream and/or river valleys that will influence structure placement and foundation design but that will not ultimately affect the long-

[25] Generally, DEC recommends that all snag and cavity trees be left standing anywhere in the State.

[26] Joint Proposal, Appendix I.

term integrity of the proposed structures. No significant cumulative effects to topographic and soil conditions within the Project area are anticipated during construction and operation due to use of the existing ROW. To the extent that minor grading and soil disturbances are required, the Applicant will specify measures to minimize such disturbances in the EM&CP.

8. Transportation Impacts

The Joint Proposal states that the Project will have no discernible permanent impact on transportation systems. The Joint Proposal notes two public airports, two private airports, and two private heliports within five miles of the Project ROW and states that appropriate impact evaluations will be completed pursuant to the Federal Aviation Administration criteria. The Applicants will submit the results of the evaluations to the Secretary prior to commencement of construction in the relevant areas. The Joint Proposal also notes four railroad crossings and states that final design of the Project will incorporate appropriate safety clearances and other required design criteria.

The Joint Proposal states that although the Project ROW crosses Robinsons Bay and the Wiley Dondero Power Canal, both located on the St. Lawrence River, construction in these locations is limited to the installation of optical ground wire and will have no impact on marine traffic. The Joint Proposal states that no in-stream construction will take place within the eight navigable waterways crossed by the Project and therefore, no adverse effects on marine traffic in these waters are anticipated.

The Joint Proposal notes that the Project perpendicularly crosses approximately 117 state, county, and local roadways in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties and that the Applicants will submit for

appropriate work permits for road crossings following final design of the Project. The Applicants will prepare a Maintenance and Protection of Traffic Plan as part of the EM&CP in accordance with the Proposed Certificate Conditions. No discernable impacts to traffic are expected.

9. Noise Impacts

The Joint Proposal states that changes to noise-levels related to construction activity will be minimal. Similarly, noise from operation of the Project is not expected to significantly impact ambient noise levels. The Joint Proposal states that except for limited instances specific to the Massena and Adirondack substations the Project will meet the NYSDEC guidance of no more than a 6 dBA increase over existing sound levels and the DPS design goals of 35 dBA at noise sensitive receivers near the substation and 45 dBA across all properties and boundary lines. Properties where these design limitations may be exceeded involve delineated wetlands and utility and transportation ROWs or where an enforceable agreement with the property owner waiving these limits is obtained by the Certificate Holder.[27] The Joint Proposal also states that construction and operation of the Project will comply with identified local ordinances related to noise except for ordinances in the Town of Massena and Marcy for which the Applicants requested waiver related to temporary construction noise.[28]

10. Communications Impacts

The Joint Proposal states that the Project is not expected to result in any significant interference with radio, television, cellular phone reception, railway signaling and

[27] Joint Proposal, Appendix D, Proposed Certificate Condition 68(a)(v).

[28] Application Exhibit 7.

communications, or microwave transmissions. The Applicants are required to take appropriate action to address any interference reported along the Project and will comply with applicable provisions of the National Electrical Safety Code regarding spacing between the proposed transmission lines and communication facilities. The Project has been designed to minimize corona effects. Further, the Applicants will follow the "Call Before You Dig" protocol and contact potential third-party cable operators to confirm the locations of any underground communication facilities that will be within or crossed by the Project ROW.

11. Electric & Magnetic Fields

The Project is not expected to cause an exceedance of the electric field maximum standard of 1.6 kV/m at the edge of the ROW, one (1) meter above ground level, with the line at rated voltage and 7 kV/m, 11 kV/m, and 11.8 kV/m measured at one (1) meter above ground over public roads, private roads, and other terrain, respectively, as established by the Commission in Opinion No. 78-13, issued June 19, 1978. Similarly, the Project will not cause an exceedance of the 200 milligauss (mG) standard for magnetic fields established by the Commission in its Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities issued September 11, 1990, although, two sections of the existing line currently exceed the 200 mG standard. In these locations, the Project minimally alters the magnetic field values at the edge of ROW, with one cross-section increasing in value <1% and the other cross-section decreasing in value by approximately 5%.

D. Availability and Impact of Alternatives Routes

1. Alternative Routes

The Joint Proposal notes that the Project was developed to avoid the need to acquire new permanent transmission ROWs, except for de minimis acquisitions that cannot be avoided due to unique circumstances. New transmission line ROW is limited to small segments for interfaces with the proposed Haverstock, Adirondack, Willis 345/230 kV, and Austin Road substations. The Joint Proposal states that underground construction is not a viable alternative due to construction challenges, environmental impacts, technical considerations, additional cost, and the challenges involved with long underground AC transmission lines.[29]

2. Expansion of Existing Rights-of-Way

The Joint Proposal notes that there will be four instances of ROW expansion. First, a new approximately 2000-foot ROW will be established to interface with the Haverstock Substation. Second, ROWs of approximately 3000 feet will be established around the existing 230 kV Willis Substation and the new 230/345 kV Willis Substation. Third, an existing ROW at the Ryan Substation will be expanded approximately 0.5 acres, just north of the Substation. Fourth, there will be a new 1800-foot ROW connecting the existing Moses-Adirondack 1&2 transmission lines to the new Adirondack Substation. A fifth expansion location along the Project ROW at one parcel that overlaps the north and south sides of the Moose River was avoided through design modifications.

3. Alternative Methods to Fulfill Energy Requirements

The Joint Proposal states that the Applicants evaluated energy efficiency, demand-side management, and

[29] Joint Proposal, Appendix A, Evidentiary Record Exhibit 3.

distributed generation as alternatives for fulfilling energy requirements but that these methods do not eliminate the existing 230 kV systems function to transmit existing generation from northern New York to load. The Joint Proposal also states that taking no action is not a viable option because the existing 230 kV transmission system is inadequate to deliver the required renewable energy and the State's mandates under the CLCPA may not be achieved.

4. Alternative Technologies

The Joint Proposal states that direct current (DC) lines are not a viable option because of the costs and additional impacts associated with the converter stations that would be required at the terminal ends of the Project, and those required along the Project route for resources to connect to the system.

5. Alternative Overhead Configurations

The Joint Proposal notes that alternative structure designs were considered. However, the Applicants selected the 345 kV single circuit monopoles with delta phase configurations for the new 345 kV lines between Haverstock and Willis, Haverstock and Adirondack, Adirondack and Austin Road, and Austin Road to Edic because of quicker installation and smaller surface disturbance. The Joint Proposal also states that the chosen delta configuration generally results in the lowest practical electric and magnetic field values at the edge of the ROW. For the new 230 kV lines between Willis to Ryan and Patnode, the Applicants selected double-circuit transmission structures as its preferred structure to construct within the ROW and meet reliability requirements.

6. Alternative Substation Locations

Alternative substation location and/or configurations were also considered for the substation facilities proposed for

construction, alteration, or expansion.[30] The Joint Proposal states that the location and design for the Haverstock Substation was changed from what was originally proposed. The Joint Proposal recommends Alternative Site 5[31] for the Haverstock Substation because it is a natural point of interconnection for all the transmission circuits impacted by the Project, and it will result in the least amount of additional ROW acquisition. It will also reduce wetland impacts relative to other alternatives.

The Applicant considered two alternatives for the proposed Willis 345/230 kV Substation. Both were rejected because of unamenable landowners, environmental impacts, and/or other technical constraints. The existing Willis substation will be modified to connect to the new Willis 345/230 kV Substation. The Applicant considered connecting to an existing position on the west side of the Marcy Substation for the expansion of that substation but rejected this alternative because it would require extensive construction near energized conductors or require outages of these facilities. The Joint Proposal states that the proposed design can be constructed safely and efficiently with limited outages.

A parcel of land approximately one mile south of existing Chases Lake Substation was chosen over two alternatives for the location of the Austin Road Substation. The chosen location provides easy access to the ROW from the adjacent public road. According to the Joint Proposal, the preferred location will also allow the station to be built in parallel with the transmission line, support the project schedule, limit

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[30] Evidentiary Record Exhibit 22, Revised Application Exhibit 3, Table 3.3.

[31] Evidentiary Record Exhibit 3.

impact on existing wind generation facilities, and support expansion for additional renewable resources.

Two alternatives were also considered for the Edic Substation. The first alternative included a new breaker and half bay to the northeast of the existing station but would require extensive civil work, grading, a large fence expansion, additional property acquisition and potential wetland impacts. The second, preferred alternative which includes using an existing spare position in the existing Edic Substation. This alternative is preferred because it would disturb less land and would meet all the Project requirements at a lower cost than the first alternative.

The Applicants considered an alternative for the Adirondack Substation that included building at the existing site. However, there is insufficient space to convert the station to 345 kV and rebuilding the existing site would force long-term outages on the 230 kV system and the 115 kV generator directly connected to the substation. The Applicants considered constructing a 345 kV station directly adjacent to the existing Adirondack Substation but there is not enough space on the parcel. The proposed location of the new Adirondack Substation is just south of the existing site, is currently owned by National Grid and offers adequate space for the substation.

E. Conformance of the Project to Long-Range Plans for Expanding

The Joint Proposal states that the Project conforms to the requirements and planning objectives of the New York Independent System Operator (NYISO) and is consistent with New York's long-range plans to expand its Bulk Electric System. The Joint Proposal further states that the Project will improve reliability, serve the interests of electric system economy and reliability, and provide increased transmission capability

generally and specifically for renewable resources. The Joint Proposal adds that the Project will eliminate 7.5 terawatt-hour (TWh) of curtailments and provide congestion cost savings approaching $450 million. The Joint Proposal notes that Project is designed to reinforce and upgrade the transmission backbone system of New York and is expected to provide reliability benefits throughout the State. The Joint Proposal also notes that the Commission has previously identified the Project as a PTP (Priority Transmission Project) under the Accelerated Renewable Energy Growth & Community Benefit Act.[32]

F. System Impact Study

The System Impact Study (SIS), submitted in place of a System Reliability Impact Study[33] was approved by the NYISO's Operating Committee on October 14, 2021, and concluded that the Project will not adversely impact the New York State Transmission System.

G. State and Local Laws

The Joint Proposal states that the Project complies with the substantive provisions of all applicable state laws, including the PSL, the Environmental Conservation Law, and the Agriculture and Markets Law. The Joint Proposal notes that Exhibit 7 of the Application[34] identifies, for each local jurisdiction, every substantive local legal provision potentially applicable to the Project, as well as the local legal provisions that the Applicant requests that the Commission

[32] Case 20-T-0197, supra, PTP Order.

[33] Order On Waiver Requests (issued October 18, 2021).

[34] Evidentiary Record Exhibit 7.

not apply because, as applied to the Project, such is unreasonably restrictive in view of the existing technology, factors of costs or economics, or the needs of consumers. No local jurisdiction has filed any objection to the Applicant's requests that the Commission not apply specified local laws, as set forth in Exhibit 7.

The Joint Proposal concludes that except for the provisions listed in Exhibit 7 the Applicant requested that the Commission refuse to apply, 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.

H. Public Interest, Convenience and Necessity

The Applicant conducted public outreach related to the Application, including letters to and meetings with local officials, letters to property owners abutting the Project ROW, meetings with groups interested in the Project, and multiple virtual public open house meetings. Notices were also published in various local newspapers for two consecutive weeks prior to filing the Application. Further, the Applicant provided copies of the Application to local libraries. In addition, property owners along the Project ROW were sent notification letters regarding filing of the Application and notification letters regarding the public information sessions and public statement hearings held in the proceeding. Two public statement hearings for the public to provide comments on the Project were held. The public statement hearings were held virtually, and preceded by an informational forum, at which the Applicant presented information regarding the Project.

I. Proposed Commission Findings

The Signatory Parties agree that the record in this proceeding supports all the findings required by PSL §126. The Joint Proposal includes a list of those findings in Appendix C.

J. Proposed Certificate Conditions

The Joint Proposal also includes Proposed Certificate Conditions set forth in Appendix D that the Signatory Parties agree are acceptable and appropriate for inclusion in a Certificate of Environmental Compatibility and Public Need authorizing construction and operation of the Project as described there and in the Joint Proposal.

K. Environmental Management and Construction Plan Guidelines

The Joint Proposal includes specifications for development of the EM&CP set forth in Appendix E, specifications with respect to wetland and waterbodies set forth in Appendix F, and specifications regarding invasive species set forth in Appendix G.

L. Water Quality Certification

The Joint Proposal states that the record in this proceeding supports the water quality certification, provided the Certificate Holders comply with applicable federal and state regulations and complete any then applicable forms and/or pre-application requirements pursuant to §401 of the Federal Water Pollution Control Act.

V. PUBLIC COMMENTS

On June 8, 2021, John Donahue filed a comment raising concerns that the Project included an expansion of ROW 12.5 feet onto his property. Mr. Donahue states that the Applicants'

representatives previously contacted him about the Project and that he proposed an alternative to avoid further expansion onto his property. Mr. Donahue supports the Project and acknowledges its size and importance but states that the proposed ROW expansion onto his property will significantly impact the use and enjoyment of his property and asks that an alternative be considered.

On June 24, 2022, Thomas N. Rastani, Jr. expressed concern regarding communications with landowners along the ROW, electric and magnetic fields, noise, and visual impacts related to the Project. Mr. Rastani notes a proposed access road beside his property and argues that access to the ROW should only be allowed on utility owned property and that he should not have to tolerate construction activity beside or behind his home.

VI. PARTIES' POSITIONS REGARDING THE JOINT PROPOSAL

On June 15, 2022, the Signatory Parties (the Applicants, DPS Staff, DEC, and Ag & Markets) each submitted statements supporting the Joint Proposal. On the same day, the Town of Burke filed a statement indicating that it could not support the Joint Proposal because of outstanding issues regarding potential impacts to Town roads continue to be negotiated.[35] In their statements, the Signatory Parties each conclude that the Joint Proposal represents a reasonable resolution of all the issues in the proceeding and recommend its adoption without modification. The Signatory Parties argue that the record is adequate to justify adoption of all the Joint Proposal's terms and fully supports the findings required by Art. VII of the PSL. They also state that all interested parties were provided sufficient notice of the proceeding.

[35] Town of Burke Response (June 15, 2022).

DPS Staff states that the correspondence and discovery filed in the proceeding explain and support the terms of the Joint Proposal and provide a rational basis of its adoption by the Commission. DPS Staff also argues that the Joint Proposal appropriately balances disputed issues relative to the Applicants' initial filing and that the resolution of the issues is within the range of reasonable outcomes that could be expected through litigation.[36]

The Signatory Parties agree that the record conclusively demonstrates a need for the Project. DPS Staff points to the Commission's findings in its Order on PTPs that the Project meets criteria for making such a determination and that the Project is necessary to realize the potential of renewable energy development in New York and to meet the State's mandates under the CLCPA. The Applicants argue that the Project is consistent with New York State's goal to achieve 70% renewable energy by 2030 and that the Project will increase utilization of renewable generation from northern and western New York.[37] DPS Staff and the Applicants claim that the Project also conforms with the requirements and planning objectives of the NYISO and the State's long-range plans to expand its bulk electric system.

The Signatory Parties all argue that the evidentiary record fully describes the nature of the probable environmental impacts of the Project. They also agree that the environmental impacts have been minimized, primarily through siting within existing ROW to the extent practicable. Ag & Markets[38] and DPS Staff note that the Project crosses active agricultural land and

[36] DPS Staff Statement, (June 15, 2022).

[37] Applicants Statement, (June 15, 2022).

[38] Ag & Markets Statement, (June 15, 2022).

designated agricultural districts but conclude that impacts to these resources will be minimal and that the Project will generally allow active farming to continue along and within the ROW except for the Willis 345/230 kV and the Adirondack substations. The Signatory Parties point to the Applicant's commitment to adhere to Ag & Market's "Guidelines for Electric Transmission Right-of-Way Projects" during construction in or near agricultural operation and resources. Anticipated impacts to wetlands, agricultural lands and other resources will be further minimized to the extent practicable by adhering to the requirements set forth in the proposed Certificate Conditions and EM&CP Specifications.

The Applicants and DPS Staff note that the Signatory parties agree that the location of the Project as proposed conforms to the applicable State and local laws except those local laws which the Applicant has asked that the Commission refuse to apply to the Project. Similarly, the Signatory Parties agree that the justifications in Exhibit 7 provide sufficient basis for the Commission to refuse to apply the identified local laws. DEC notes that the Joint Proposal requires that the Project comply with applicable substantive provisions of State Law including the Environmental Conservation Law and associated rules and regulations.[39]

In response to Mr. Donahue's comments, the Applicants state that its Project team has developed a solution that limits forestry impacts on the Donahue property by shifting the centerline of the ROW and avoiding expansion of the ROW adjacent to the Donahue residence.[40] As a result, National Grid would no longer need to expand the ROW adjacent to the Donahue residence.

[39] DEC Statement, (June 15, 2015).

[40] Applicants' Reply, (June 30, 2022)

According to the Applicants, Mr. Donahue was informed of the ROW shift on June 10, 2022, and is satisfied with the outcome. DPS Staff also indicates that the design changes have addressed Mr. Donahue's concerns. DPS Staff further states that the only property acquisition at this location would be National Grid's acquisition of danger tree rights as required by the proposed Certificate Conditions.[41]

On June 30, 2022, the Applicants filed a response to the Town of Burke's filing. The Applicants argue that negotiations regarding road conditions involve contractual matters beyond the scope of an Art. VII proceeding. However, the Applicants also state that the Town and NYPA have "amicably resolved any outstanding issues" related to a town road use agreement.[42]

VII. LEGAL AUTHORITY

Public Service Law §126 provides that the Commission may only grant a Certificate for the construction and operation of a major electric transmission facility if it determines the basis of the need for the facility and the nature of the facility's probable environmental impacts.[43] PSL §126 also

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41 Joint Proposal, Appendix A, Exhibit 16 Response to DPS-1 through DPS-7. A danger tree is defined as "any tree rooted outside of an ROW that that due to its proximity and physical condition (i.e., mortality, lean, decay, cavities, cracks, weak branching, root lifting, or other instability), poses a particular danger to a conductor or other key component of a transmission facility." Case 04-E-0822, In the Matter of Staff's Investigation into New York State's Electric Utility Transmission Right-of-Way Management Practices, filed in C 27605, Order Requiring Enhanced Transmission Right-of-Way Management Practices by Electric Utilities (issued June 20, 2005), p. 13.

42 Applicant's Reply, (June 30, 2022).

43 PSL §126(a), (b).

requires the Commission to find that the facility avoids or minimizes to the extent practicable any significant adverse environmental impacts, including impacts to agricultural lands, wetlands, parklands and river corridors the facility will cross, and that the facility avoids or minimizes to the extent practicable any significant adverse impact on active farming operations.[44] Further, the Commission must find that the location of the facility as proposed conforms to applicable state and local laws and regulations except those that, as applied to the proposed facility, are unreasonably restrictive considering existing technology, factors of cost or economics, or of the needs of consumers.[45] PSL §126 requires the Commission to determine that the facility conforms to a long-range plan for expansion of the electric power grid of the State and that the facility will serve the public interest, convenience, and necessity.[46] Public Service Law §126 does not require the Commission to determine whether the project is economically feasible and nonmonetary aspects of a facility are enough to support findings that a project is needed and in the public interest.[47]

In evaluating the terms of a joint proposal submitted for Commission consideration, the Commission must determine if the joint proposal, considered as a whole, produces a result that is in the public interest. Commission Settlement Guidelines set forth factors to be used in conducting that

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[44] PSL §126(c), (d).

[45] PSL §126(g).

[46] PSL §126(e), (h).

[47] Entergy Nuclear Power Marketing, LLC v New York State Public Service Com'n, 122 AD3d 1024, 1028 (finding that three nonmonetary aspects of the project, including increasing transmission capacity, "validated the Commission's findings of need and public interest," id., at 1029).

analysis.[48] Those factors 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.

VIII. DISCUSSION AND CONCLUSION

A. Nature of Environmental Impacts

Environmental impacts related to the Project will be minimized primarily through use of existing ROW and existing access roads wherever possible. Impacts to protected streams and other important resources will be minimized by limiting crossings by access road, utilizing existing access roads, and adhering to the proposed Certificate Conditions.[49] Noise impacts to residential areas including during construction will be avoided or minimized through adherence to Certificate Conditions.[50]

The Signatory Parties' proposed Certificate Conditions appear in Appendix D to the Joint Proposal. There are 136 proposed Certificate Conditions in multiple categories including: Public Health and Safety; Environmental Management and Construction Plan; Notices and Public Complaints; Construction, Operation, Maintenance, and Restoration; Herbicide Use; Inspection and Oversight; Roads and Highways; Cultural

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

[49] See Certificate Conditions 54, 78,

[50] Certificate Condition 68, Joint Proposal Appendix D

Resources; Terrestrial and Wildlife Resources; Water Resources; Agricultural Resources; Petroleum and Hazardous Substances; Contractors and Contractor Supplies/Materials; Invasive Species; and Water Quality Certification. The proposed Certificate Conditions, together with the Specifications for Development of Environmental Management and Construction Plan (EM&CP),[51] Supplemental Specifications for Wetlands and Waterbodies,[52] the Blanding's Turtle Avoidance and Minimization Plan, and Invasive Species Management plan, are all intended to ensure that construction and operation of the Project will avoid or minimize adverse impacts to the environment and active farming operations.

We find the Joint Proposed Certificate Conditions adequately protect public health and safety and are otherwise in the public interest, as they minimize the Project's potential adverse impacts to the extent practicable.

B. State and Local Laws

As proposed in the Joint Proposal, the Project complies with the substantive provisions of all applicable state laws, including the PSL, the Environmental Conservation Law and Agriculture and Markets Law. Similarly, the Project will comply with the local laws the Applicant has identified as likely applicable to the Project except those 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.[53] The Applicants request that the Commission not apply certain local laws

[51] Joint Proposal, Appendix E.

[52] Joint Proposal, Appendix F.

[53] Application Exhibit 7.

because, as applied to the proposed facility, such local legal provision is unreasonably restrictive in view of the existing technology, factors of costs or economics, or the needs of consumers whether located inside or outside a particular municipality. The types of laws the Applicants have asked the Commission to refuse to apply local laws concern zoning, all-terrain vehicles, and solid waste. Other types include those the enforcement of which would interfere with proper safety precautions including signs, fencing, reliability or would conflict with National Electric Safety Code, SPDES General Permit for Stormwater Discharge from Construction Activity, the Stormwater Pollution and Prevention Plan, and the proposed Certificate Conditions.

The Project passes through 20 towns in five counties.[54] The Towns of Massena, Boonville, Brasher, and Burke received intervenor funding to support their participation in the proceeding. 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. Further, the Applicants have stated that the Town of Burke's concerns regarding its roads have been addressed amicably. 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. Further, we find the justifications the Applicants provides appropriate. Therefore, we find that the local laws listed in Exhibit 7 of the

[54] Towns of Clinton and Ellenburg in Clinton County; Towns of Bombay, Burke, Chateaugay, Constable, Fort Covington, and Westville in Franklin County; Towns of Brasher and Massena in St. Lawrence County; Towns of Croghan, Greig, Lyonsdale, New Bremen, and Watson in Lewis County, Towns of Boonville, Floyd, Marcy, Steuben, and Trenton in Oneida County.

Application, as applied to this Project, to be unreasonably restrictive in view of existing technology.

C. Basis of the Need for the Project and Consistency with the CLCPA

The Joint Proposal and supporting record in this Proceeding demonstrate the need for this Project. The Commission previously recognized the importance of the Project, finding that it is "needed 'expeditiously' to advance the State's clean energy goals" including the requirements of the CLCPA.[55] The CLCPA requires, among other objectives, the procurement of 6,000 MW of solar by 2025; a 70 percent reduction in greenhouse gas emissions by 2030; an 85 percent reduction by 2050; and 100 percent zero emission electricity by 2040. In furtherance of these objectives, CLCPA Section 7(2) requires all State agencies to consider whether their administrative approvals and decisions "are inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits" established in Environmental Conservation Law (ECL) Article 75. Based on these aspects of the Joint Proposal, the Commission finds that approval of the Project is consistent with the objectives of increasing the renewable energy supply and reducing greenhouse gases emissions, and therefore consistent with the CLCPA.

Also relevant to the public interest is that the Project will eliminate current curtailments of approximately 7.5 terawatt-hour (TWh) and produce congestion cost savings of approximately $450 million. Indeed, the upgrades associated with the Project would expand and complement the NYPA Smart Path

[55] Case 20-E-0197, supra, Order on Priority Transmission Projects (issued October 15, 2020).

Project[56] and the AC Transmission Projects. Once the Project and the other projects are in service, they would provide a continuous 345 kV transmission system significantly improving the deliverability of renewable generation from northern and western New York. We therefore find that granting the Certificate would also provide economic benefits through reduced curtailments.

Finally, the Project represents an upgrade to the transmission backbone system of New York that will improve reliability throughout the State.[57] Once in service, the Project will improve reliability, serve the interests of electric system economy and reliability, and provide increased transmission capability for renewable resources required to meet the State's obligations under the CLCPA.

Considering all the above, we find that the Project is in the public interest and grant the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid a Certificate of Environmental Compatibility and Public Need subject to the discussion in this Order and the certificate conditions in Appendix D to the Joint Proposal.

The Commission orders:

1. With the exception of some of the "General Provisions" discussed above, the terms of the May 19, 2022 Joint Proposal, Attachment A to this Order, including the conditions in Appendix D, subject to the discussion in the body of this

[56] Case 18-T-0207, NYPA Smart Path Art. VII; Case 19-T-0549, LS Power Grid New York Art. VII Edic/Marcy to New Scotland; Princetown to Rotterdam, and 19-T-0684, New York Transco Art. VII Schodack to Pleasant Valley.

[57] Exhibit E-4 at 9-11.

Order, are adopted and incorporated into and made a part of this Order.

2. The motion of the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for Commission waiver of certain local laws as identified in the application and in the body of this Order is granted.

3. This proceeding is continued.

By the Commission,

(SIGNED) MICHELLE L. PHILLIPS
Secretary

Case 21-T-0340 – SMART PATH CONNECT

Joint Proposal **May 19, 2022**

Case 21-T-0340 - Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a/ National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack- Porter 11, 12, and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis and Oneida Counties, New York.

By:

- The New York Power Authority
- Niagara Mohawk Power Corporation d/b/a/ National Grid
- New York State Department of Public Service
- New York State Department of Environmental Conservation
- New York State Department of Agriculture and Markets

List of Joint Proposal Appendices

- APPENDIX A: List of Testimony, Affidavits and Exhibits to be Admitted
- APPENDIX B: Description and Location of the Project
- APPENDIX C: Proposed Commission Findings
- APPENDIX D: Proposed Certificate Conditions and Monitoring Requirements
- APPENDIX E: Specifications for Development of Environmental Management and Construction Plan (EM&CP)
- APPENDIX F: Specifications for Wetlands and Waterbodies
- APPENDIX G: Specifications for Invasive Species Management Plan
- APPENDIX H: Specifications for Computer Noise Modeling and Tonality Assessment
- APPENDIX I: Blanding's Turtle Avoidance and Minimization Plan

JOINT PROPOSAL

The Power Authority of the State of New York, doing business as the New York Power Authority (NYPA) and Niagara Mohawk Power Corporation doing business as National Grid (National Grid)(collectively, NYPA and National Grid constitute the Applicant), the Staff of the New York State Department of Public Service designated to represent the public interest in this proceeding (DPS Staff), the New York State Department of Environmental Conservation (NYSDEC), the New York State Department of Agriculture and Markets (NYSAGM) and any other parties executing this Joint Proposal (collectively, the Signatory Parties) respectfully submit this Joint Proposal, which includes **Appendices A through I**, on the 19th day of May, 2022, pursuant to Rule 3.9 of the Procedural Rules of the New York State Public Service Commission (the Commission), 16 NYCRR § 3.9 (2020).

INTRODUCTION AND BACKGROUND

On June 15, 2021, the Applicant submitted its application to the Commission, in accordance with Article VII of the Public Service Law (PSL) and the Commission's regulations thereunder, for a Certificate of Environmental Compatibility and Public Need (the Application) to construct, operate and maintain the Smart Path Connect Project described in detail in the Application and **Appendix B** hereto (Smart Path Connect or the Project). The Application was accompanied by a motion, pursuant to 16 NYCRR §§ 3.3 and 3.6, seeking waivers of application requirements and requesting permission, pursuant to 16 NYCRR § 85-2.3(c), to submit certain unavailable information at a later time. By letter dated August 16, 2021, the Secretary to the Commission (the Secretary) identified certain deficiencies in the Application, which the Applicant addressed in a September 3, 2021, supplemental filing. The Applicant made three (3) additional supplemental filings on October 1, 2021, October 26, 2021, and December 7, 2021.

On October 8, 2021, the Commission issued an Order granting the Applicant's motion. Thereafter, by letter dated December 24, 2021, the Secretary informed the Applicant that its Application complied with PSL § 122 as of December 22, 2021. On March 11, 2022, the Applicant submitted a supplemental filing, revising Exhibits 2, 3, 4, 7, E-1, E-2, and E-4, to reflect adjustments to the Haverstock Substation, Willis Substation, and Marcy Substation.

Administrative Law Judge (ALJ) Anthony Belsito was designated as the presiding administrative law judge in this proceeding. On January 4, 2022, the Secretary issued a Notice of Availability of Intervenor Funding, which required that all requests for intervenor funding be submitted by February 16, 2022. On January 11, 2022, the Secretary issued a Notice for a Procedural Conference to follow the Notice of Availability of Intervenor Fundings. The Towns of Massena, Boonville, Burke, and Brasher each submitted a request for intervenor funding.

Two (2) public statement hearings were held virtually by ALJ Belsito on February 16, 2022. Each hearing was preceded by an informational forum. Following the February 17, 2022, procedural conference, ALJ Belsito issued a Ruling Awarding Intervenor Funding on February 28, 2022.

On December 27, 2021, the Applicant filed a notice of impending settlement negotiations, pursuant to 16 NYCRR § 3.9, noticing the first settlement meeting in this proceeding for January 10, 2022. Ten (10) settlement discussions were held pursuant to that Notice on January 10, 2022, January 25, 2022, February 8, 2022, February 25, 2022, March 8, 2022, March 22, 2022, April 5, 2022, April 19, 2022, May 3, 2022, and May 17, 2022.

After thorough discussion of the issues, the Signatory Parties have concluded that their various positions can be addressed through settlement and agree that settlement is now feasible.

The Signatory Parties further believe that this Joint Proposal gives fair and reasonable consideration to the interests of all parties and that its approval by the Commission is in the public interest. The Signatory Parties have made good faith efforts to accommodate the positions of the non-Signatory Parties.

TERMS OF THE JOINT PROPOSAL

I. General Provisions

1. The support of the Signatory Parties for this Joint Proposal is expressly conditioned upon approval by the Commission of all provisions thereof, 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.

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

3. The Signatory Parties agree that construction and operation of the Project described in this Joint Proposal, in compliance with the Joint Proposal and with the Proposed Certificate Conditions (set forth in **Appendix D**), will comply with PSL Article VII and with the substantive provisions of applicable state law referenced in the Proposed Commission Findings set forth in **Appendix C** attached hereto.

4. The discussions that produced this Joint Proposal have been conducted with the explicit understanding, pursuant to Rule 3.9(d) of the Commission's Rules and Regulations, 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:

i. the Signatory Parties shall promptly convene a conference and make good faith attempts to resolve any such disagreement; and,

ii. 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 the 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 A** 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 information requests produced in this proceeding, and several supplemental filings.

III. Description of the Project

12. The Signatory Parties agree that the Description and Location of Project set forth in **Appendix B**, attached hereto, accurately describes the location, configuration, and ownership of the Project, as they recommend it be approved by the Commission.

IV. Environmental Compatibility and Public Need

13. The Commission must consider the totality of all relevant factors in making its determination of environmental compatibility and public need. The relevant factors include, without limitation, the need for the Project, the cost of the Project, the environmental impacts of the Project, impacts on active farming operations, the availability and impacts of alternatives, undergrounding considerations, conformance to the State's long-range plans, electric system reliability, state and local laws, and the public interest, convenience and necessity.

A. The Need for the Project

14. Exhibit E-4 of the Application (Evidentiary Record Exhibit 13, **Appendix A**), entitled Engineering Justification, explains in detail why the Project is needed.

15. The Signatory Parties agree that, consistent with the Commission's findings in its October 15, 2021, Order on Priority Transmission Projects in Case 20-T-0197, the Project is necessary to realizing the full potential of renewable energy development in the Northern New

York area and meeting the State's targets under the Climate Leadership and Community Protection Act (CLCPA).

16. The Signatory Parties agree that the Project complements and expands upon both the Smart Path (Case 18-T-0207) and AC Transmission Proceedings (Case 19-T-0549 and 19-T-0684) projects, and together these projects will establish a continuous 345 kV path that greatly expands the deliverability of renewable generation from northern and western New York to load centers. The Project will also significantly reduce congestion and curtailments affecting that renewable generation thereby reducing the costs of delivered power for customers. (*See* Evidentiary Record Exhibit 13, Exhibit E-4 at 4, 9-11, **Appendix A).**

B. Cost

17. A detailed estimate of the total capital costs of the Project, as well as costs associated with development and permitting of the Project under Article VII, is set forth in Exhibit 9 of the Application (Evidentiary Record Confidential Exhibit 9, **Appendix A**).

18. A more refined and definitive cost estimate will occur after the Certificate is issued, taking into account all Certificate Conditions and requirements of the Environmental Management & Construction Plan (EM&CP) and associated monitoring plans. Actual Project costs will be based on the final design of the Project facilities and the price at the time of construction.

19. The economic impact of Project construction, both direct and indirect, is expected to be primarily limited to the Project's construction-related employment. A portion of the Project's overall budget will support local jobs, income, sales, and taxes as a result of Project-related spending on local workers and goods and services. This spending may increase demand

for local services, including local procurement in the Project vicinity. Long-term economic impacts are not anticipated because of the Project.

C. Environmental Impacts of the Project

20. The Evidentiary Record describes the nature of the probable environmental impacts of the Project which are briefly summarized below. The Signatory Parties agree that the Project, as proposed to be located and configured in this Joint Proposal and the accompanying Appendices, represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations. The proposed design maximizes the use of existing right-of-way (ROW), avoids or minimizes the disturbance of natural habitat to the extent feasible, and minimizes potential disturbance to existing land uses, activities, and traffic.

21. The Signatory Parties agree that Applicant's preparation of the laydown yards, as described in Record Exhibit 23, as set forth in **Appendix A** to this Joint Proposal, represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations.

i. Land Use Impacts

22. Land uses adjacent to or near the Project vary widely along the existing transmission line route. However, due to the use of the existing ROW, there will be virtually no discernable change in land use conditions along the transmission line portion of the Project.

23. There will be changes in land use resulting from substation construction. The Haverstock Substation will change the existing land use of the site from rural/undeveloped to developed/utility, while the Willis 345/230 kV Substation will change the existing land use from agricultural to developed/utility land, and the ROW connection to the Willis 345/230 kV

Substation will require 2.2 acres of forest to be cleared. Similar changes will occur for the proposed Adirondack Substation and Austin Road Substation.

24. The Project is consistent with the goals of the 2016 New York State Open Space Plan and the various comprehensive land use plans adopted by the local municipalities along the ROW, as described in Exhibit 7. The Project will have a negligible effect, if any, on local and regional land use patterns and/or planning due to the use of the existing ROW.

ii. Agricultural Resource Impacts

25. The Signatory Parties agree that the facility represents a minimum adverse impact on active farming operations that produce crops, livestock, and livestock products, as defined in Section 301 of the Agriculture and Markets Law, considering the state of available technology and the nature and economics of various alternatives, and the ownership and easement rights of the impacted property.

26. The Project ROW crosses active agricultural lands and eight (8) designated New York agricultural districts. (Evidentiary Record Exhibit 4, **Appendix A**, and associated Supplemental Filings).

27. The operation of the Project will generally allow for the co-existence of active farmland and transmission lines within the Project ROW and reduce the total number of structures on the ROW. However, the Willis 345/230 kV Substation and Adirondack Substation will have permanent impacts on agricultural lands (Evidentiary Record Exhibit 4, **Appendix A,** and associated Supplemental Filings).

28. During the construction phase, some agricultural operations may be temporarily disrupted. To minimize potential impacts to such agricultural resources, the Applicant will adhere to NYSGAM's "*Guidelines for Electric Transmission Right-of-Way Projects"* dated

April 27, 2011, and will identify and implement measures designed to minimize impacts to active agricultural land in the EM&CP. The Applicant will also adhere to the conditions set forth in Section O, Agricultural Resources, of the Proposed Certificate Conditions attached hereto as **Appendix D.**

iii. Visual Resource Impacts

29. The Applicant conducted a viewshed analysis, field evaluation, and visual simulations to evaluate the Project's impact on visual and aesthetic resources. The results of the analysis, submitted with the Application and the Applicant's Supplemental Filing, indicate that there will be increased visibility of transmission structures, which can be attributed to the height of the new structures and, to a lesser degree, some new areas of potential visibility resulting from changes in structure placement. However, the Project utilizes an existing cleared ROW and is replacing existing transmission lines, and therefore any perceived change in land use/contrast with existing landscape character will be limited.

30. Tree clearing and the addition of the proposed transmission and substation structures alters the character of the view in the vicinity of both the Haverstock Substation and Austin Road Substation. Haverstock Substation's visual impact will be limited as a result of the small number of viewers traveling along Fregoe Road, and the presence of existing transmission infrastructure in the area. The abundance of forest around the Austin Road Substation will fully or substantially screen views of the substation from most viewpoints.

31. During construction of the Project, some increased visibility of construction equipment may occur, particularly at road crossings, nearby residential development, and open space areas. Construction impacts are short term/temporary impacts that will last only for the duration of construction.

iv. Cultural & Historical Resource Impacts

32. In consultation with the Office of Parks, Recreation, and Historic Preservation (OPRHP) and interested, federally recognized Native American Nations, the Applicant developed a GIS-based predictive model to identify areas with probability to contain archaeological sites. An archaeological survey, comprised of two (2) phases, was conducted to assess the efficacy of the predictive GIS-based model and to identify any archaeological sites.

33. No archaeological sites were identified by the survey of the proposed ROW, and the OPRHP concurred with the report's recommendation that no additional archaeological work is necessary for the proposed structure locations on the proposed transmission lines. On December 6, 2021, the State Historic Preservation Office (SHPO) notified the Applicant that, based on this review, the proposed project structures will have no adverse impact to historic and cultural resources.

34. The survey results for the remainder of the Project facilities were submitted to SHPO on February 25, 2022. The Phase II survey reports were submitted to SHPO on February 28, 2022. SHPO concurred with the findings of the Phase II reports via letters dated March 7, 2022, and as filed on the Commission's Document and Matter Management System (DMM) on March 16, 2022, in this proceeding.

35. The survey methodology and results of these studies is detailed in Exhibit 4 of the Application (Evidentiary Record Exhibit 13, **Appendix A**, and associated Supplemental Filings).

36. 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, the Applicant will adhere to the conditions contained in the

Proposed Certificate Conditions attached as **Appendix D** and all other protective measures identified in the EM&CP.

v. Terrestrial Ecology & Wetland Impacts

37. Impacts to vegetation will be minimized by following an existing maintained ROW for most of the rebuilt transmissions lines and using existing access roads wherever possible. Following construction, the Project ROW will continue to be maintained in accordance with the applicable long-range right-of-way management plan and any requirements for avoidance and minimization of Blanding's turtles and upland sandpiper as set forth in the Proposed Certificate Conditions, attached hereto as **Appendix D**.

38. However, both temporary and permanent impacts to the identified vegetative community types will result from the construction of the Project. Approximately 74.8 acres of tree clearing is required within the Adirondack-Porter Proposed ROW, mostly due to slight expansion of clearing limits associated with the new 345 kV line. Tree clearing is also required for work proposed at the following substations: Haverstock Substation (8.0 acres), Austin Road Substation (19.3 acres), Marcy Substation expansion (0.3 acres), and Adirondack Substation (1.6 acres). Some tree clearing is also required to extend the Rector Road to Chases Lake Line 10 to the proposed Austin Road Substation (8.4 acres), and for the interconnections into the Marcy Substation (0.9 acres), Haverstock Substation (1.6 acres), and Willis 345/230 kV Substation (2.2 acres).

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

40. Wetland delineations were completed within the Project Area from fall 2020, summer 2021, and fall 2021, and identified three hundred-forty (340) wetlands within the study area. Forty-five (45) of the wetlands identified occur in, or in proximity to, areas mapped by the NYSDEC as state-regulated resources. State-regulated delineated wetlands (including regulated adjacent areas) and the associated acreages within the Project ROW are identified in the Wetland Delineation Report, provided as Appendix D to Exhibit 4 of the Application (Evidentiary Record Exhibit 4, **Appendix A,** and associated supplemental filings).

41. Impacts to wetlands cannot be entirely avoided because of the size and nature of the Project. Permanent and temporary impacts are associated with the construction of this Project in federal wetlands or State-regulated wetlands and the associated wetland adjacent areas. Construction activities may have indirect impacts on wetland water quality and vegetation as a result of earth disturbance and soil erosion, siltation, and sedimentation elsewhere on the Proposed ROW.

42. However, the Applicant will avoid and minimize impacts, to the maximum extent practicable, by adhering to the measures contained in the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal and the measures identified in the Project's EM&CP. For unavoidable impacts, mitigation is required. A wetland mitigation plan will be filed with the Commission in accordance with the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal, and the NYSDEC Supplemental Specifications for Wetlands and Waterbodies attached as **Appendix F** of this Joint Proposal.

43. In designing the Project, the Applicant will restrict ground disturbance in both the 100-foot adjacent areas around State-regulated wetlands, as well as within 50 feet of state-

protected streams, by minimizing the placement of transmission structures, access roads, staging areas, and other facilities in these areas, where feasible.

44. Two hundred-twelve (212) streams were identified during the Applicant's survey, seventy-four (74) of which are considered "protected" streams (C[T] or higher). The Applicant will minimize impacts to protected streams by minimizing the number of streams crossed by access roads, by utilizing existing crossings as much as possible, not placing structures in streams, spanning across streams, and adhering to all other measures identified in the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal and the NYSDEC Supplemental Specifications for Wetlands and Waterbodies attached as **Appendix F** of this Joint Proposal.

45. The Applicant minimized impacts to wildlife habitat by routing the Project primarily within an existing ROW. As such, most of the Project's potential impacts to wildlife and wildlife habitat will be temporary and restricted to the period of construction. However, some permanent habitat impacts, described in Exhibit 4 of the Application (Evidentiary Record Exhibit 22, **Appendix A**, and associated supplemental filings), will occur from construction of the new substations.

46. The Applicant conducted a survey of invasive species within the Project area. The results of this survey were included in the Invasive Species Report submitted as an appendix to Exhibit 4 of the Application (Evidentiary Record Exhibit 4, **Appendix A**). The Applicant will prepare an Invasive Species Plan in accordance with the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal, and the Invasive Species Management Plan Specifications attached as **Appendix G** of this Joint Proposal. This plan shall ensure compliance with 6 NYCRR Part 575.

vi. Impacts on Protected Wildlife & Plants

47. The New York Natural Heritage Program (NYNHP) identified several federal and state protected threatened and endangered species as potentially in the vicinity of the Project: bald eagle (state threatened), Blanding's turtle (*Emydoidea blandingii*; state threatened), eastern sand darter (*Ammocrypta pellucida*; state threatened), mooneye (*Hiodon tergisus*; state threatened), upland sandpiper (*Bartramia longicauda*; state threatened), northern long-eared bat (*Myotis septentrionalis*), and loggerhead shrike (*Lanius ludovicianus*; state endangered). In addition, Indiana bat (*Myotis sodalis*) has been identified as being federally endangered. Avoidance, minimization, and mitigation measures (if necessary) will be implemented in accordance with the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal.

i. The Project is not anticipated to have any impact on the northern long-eared bat, Indiana bat, bald eagle, loggerhead shrike, or their habitats.

   a. With respect to Indiana and northern long-eared bats, NYSDEC recommends that all snag and cavity trees be left standing anywhere in the State, though acknowledges that this is only required in limited instances in accordance with the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal.

ii. NYSDEC determined that one (1) area was identified has having one or more characteristics of suitable habitat for upland sandpiper. The Applicant will adhere to the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal.

iii. Impacts to the eastern sand darter and mooneye will be avoided through the implementation of soil erosion and sediment controls to be included in the EM&CP.

iv. During field review, two (2) areas were identified as having one or more characteristics of suitable Blanding's turtle wetland habitat. These two areas are at least 2.5 miles away from the closest known occurrence. The Applicant will adhere to the protective measures identified in the Proposed Certificate Conditions set forth in **Appendix D** of this Joint Proposal and the *Blanding's Turtle Avoidance and Minimization Plan*, set forth in **Appendix I**, to ensure that impacts to the species and its habitat are avoided.

48. According to correspondence with NYNHP and online consultation with the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC), no Rare, Threatened, and Endangered plants have been documented in the Project area. Therefore, it is anticipated that no impacts to threatened or endangered plant species will occur during construction of the Project.

vii. Impacts on Topography & Soils

49. The Project is in four (4) physiographic provinces: the St. Lawrence Lowlands, the Adirondack Mountains, the Tug Hill Plateau, and the Hudson-Mohawk Lowlands. The Application identified potential limitations to development along the Project ROW, including a few isolated areas of steep slopes associated with stream and/or river valleys throughout the Project area. These limitations and other topographical considerations will influence structure placement and foundation design but will not have a long-term effect on the integrity of the proposed structures.

50. Construction and operation of the Project is not expected to result in significant cumulative effects to topographic and soil conditions within the Project area, because it was a previously disturbed ROW.

51. Minor changes to topography will occur because of grading necessary to prepare work areas and access roads for construction. After completion of construction activities, access roads will be used during operation and maintenance. It is not anticipated that operation and maintenance activities will cause disturbance to topography, geology, or soils.

52. The Applicant will specify measures to minimize disturbing soils and topography along the Project and off-ROW access roads in the EM&CP.

viii. Transportation Impacts

53. The anticipated effects of Project construction and operation on airports, railroads, marine traffic, roadways, and pedestrian ways are described in Exhibit E-6 of the Application (Evidentiary Record Exhibit 15, **Appendix A**), and summarized below. The Project will have no discernible permanent impact on these transportation systems.

54. There are two (2) public use airports, two (2) private use airports, and two (2) private heliports within five (5) miles of the Project ROW. Obstruction evaluations will be completed pursuant to the Federal Aviation Administration criteria enumerated in 14 CFR Section 77 Subpart C, and the Applicant will submit the results of the evaluations to the Secretary prior to commencement of construction in the relevant area.

55. The Project perpendicularly crosses four (4) railroad corridors. The final design for the Project will incorporate appropriate transmission facility design criteria, line clearance requirements, and railroad safety clearances. Because the proposed transmission lines will cross the railroads perpendicularly rather than follow the train tracks longitudinally, and at existing

transmission line crossing locations, the Project is not expected to cause operating issues with rail circuits. However, the Applicant will review the final designs and coordinate construction activities with the railroad companies.

56. The Project ROW crosses Robinsons Bay and the Wiley Dondero Power Canal, both located on the St. Lawrence River. Construction at these crossings is limited to the installation of optical ground wire, which will have no impact on marine traffic.

57. The Project crosses eight (8) navigable waters. However, the Project will have no adverse effects on marine traffic as the Applicant does not anticipate any in-stream construction in these navigable waters.

58. The Project perpendicularly crosses approximately one hundred-seventeen (117) state, county, and local roadways in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties. The Applicant will submit a Utility Work Permit Application for all applicable road crossings following final design of the Project, and a Maintenance and Protection of Traffic Plan will be prepared as a component of the EM&CP in accordance with the Proposed Certificate Conditions in **Appendix D** of this Joint Proposal. The Applicant does not anticipate any discernable impact to traffic because of Project operation.

ix. Noise Impacts

59. The Applicant's audible noise analysis, submitted with Exhibit 4 of the Application (Evidentiary Record Exhibit 22, **Appendix A**, and associated supplemental filings), examined potential noise impacts from the construction and operation of the Project.

60. Noise-level changes from the proposed Project's construction activity will be minimal. Construction noise will be temporary and vary according to the construction equipment in use, the distance to noise receptors (e.g., residences), intervening ground cover and existing

background or ambient noise. Due to the temporary nature of the construction activities and best practices with regards to controlling construction noise in the directions of noise sensitive areas, no adverse impacts with respect to construction noise are anticipated.

61. Noise from Project operation will include sound sources associated with both transmission line and substation operation. Operation of the transmission lines is not expected to cause any significant impact to the ambient noise environment.

62. The Project, as designed with detailed mitigation where needed, except as noted below, will meet the NYSDEC guidance of an increase over existing sound levels of no more than 6 dBA and the DPS design goals of 35 dBA for the Project equipment at the noise sensitive receivers near the substation and 45 dBA across all properties and boundary lines from the substations, as well as the identified local ordinances, to the extent that specific local ordinance waiver requests are not requested by the Applicant as part of the Application. Sound modeling for the Project will be designed to meet sound goals for property and boundary lines existing as listed in the Certificate Condition 68 **(Appendix D)**. Because the Project was identified as a Priority Transmission Project necessary to meet the State's mandates under the CLCPA by the Commission in its October 15, 2021, Order in Case 20-T-0197, the Signatory Parties agree that the Project will adhere to the DPS design goals, except for instances as described in Certificate Condition 68 specific to the Massena and Adirondack substations based on the nature of the neighboring properties and the distance from sensitive receivers.

63. 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 H.

x. Communications Impacts

64. The Applicant's review of Federal Communication Commission databases identified several registered communications antennas and/or towers within 1.2 miles of the Project centerline. As more fully described in Exhibit E-5 of the Application (Evidentiary Record Exhibit 14, **Appendix A**), The Project is not expected to result in any significant interference with radio, television, cellular phone reception, railway signaling and communications, or microwave transmissions. If interference with communications is reported along the Project ROW, the Applicant will take appropriate action to address such interference.

65. The Applicant will comply with applicable provisions of the National Electrical Safety Code related to appropriate spacing between the proposed transmission lines and communication facilities and has designed the transmission lines to minimize corona effects. The Applicants will follow the "Call Before You Dig" protocol and contact potential third-party underground communication cable operators to confirm the locations of any underground communication facilities that will be within or crossed by the Project ROW.

xi. Electric & Magnetic Fields

66. Based on the calculated electric field levels (as provided by the Applicant in the docket), the Project will not cause an exceedance of the electric field standard of a maximum of 1.6 kV/m at the edge of the ROW, one (1) meter above ground level, with the line at rated voltage and 7 kV/m, 11 kV/m, and 11.8 kV/m measured at one (1) meter above ground over public roads, private roads, and other terrain, respectively, as established by the Commission in Opinion No. 78-13, issued June 19, 1978.

67. Additionally, based on the calculated magnetic field levels, the Project will not cause an exceedance of the 200 milligauss (mG) standard for magnetic fields established by the

Commission in its Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities, issued September 11, 1990. However, two (2) sections of the existing line currently exceed the 200 mG standard. The Project minimally alters the magnetic field values at the edge of ROW for these sections, with one cross-section increasing in value slightly (<1%) and the other cross-section decreasing in value by approximately 5%.

D. Availability and Impact of Alternatives

68. The Evidentiary Record agreed upon by the Signatory Parties describes the availability and impact of alternatives to the Project and are briefly summarized below.

i. Alternative Routes

69. The Signatory Parties acknowledge that the Applicant developed the Project to avoid the acquisition of new permanent transmission ROWs, except for de minimis acquisitions that cannot be avoided due to unique circumstances. New transmission line ROW is limited to small segments for interfaces with the proposed Haverstock, Adirondack, Willis 345/230 kV, and Austin Road substations.

70. The Signatory Parties agree that underground construction is not a viable alternative because of significant construction challenges, environmental impacts, technical considerations, additional cost, and the challenges involved with long underground AC transmission lines. (Evidentiary Record Exhibit 3, **Appendix A).**

ii. Expansion of Existing Rights-of-Way

71. The Project includes rebuilding all or parts of the following transmission lines primarily within existing ROWs: NYPA's Moses-Willis 1 & 2, NYPA's Willis-Patnode and NYPA's Willis-Ryan; and National Grid's Adirondack to Porter (Chases Lake-Porter Line 11, Adirondack-Porter Line 12, and Adirondack-Chases Lake Line 13), the extension of the existing

230 kV Rector Road to Chases Lake Line 10, as well as connecting to NYPA's Moses Adirondack 1&2 (also known as the Smart Path ROW). The Signatory Parties acknowledge that because the Project is a rebuild of existing transmission lines located on existing ROWs, there will be limited instances of ROW expansion. First, a new approximately 2000-foot ROW will be established to interface with the Haverstock Substation. Second, ROWs of approximately 3000 feet will be established around the existing 230 kV Willis Substation and the new 230/345 kV Willis Substation. Third, an existing ROW at the Ryan Substation will be expanded about 0.5 acres, just north of the Substation. Fourth, there will be a new 1800-foot ROW connecting the existing Moses-Adirondack 1&2 transmission lines to the new Adirondack Substation. Finally, a fifth location along the Project ROW was originally identified as needing expansion at one legacy parcel that overlaps the north and south sides of the Moose River. However, design modifications that have occurred during the course of detailed engineering have alleviated the need for this expansion.

iii. Alternative Methods to Fulfill Energy Requirements

72. The Applicant evaluated energy efficiency, demand-side management, and distributed generation as alternative methods to fulfill energy requirements. These alternative methods cannot eliminate the existing 230 kV systems function to transmit existing generation from northern New York to load.

73. The Signatory Parties also agree that the "no action" alternative is not a viable option because the existing 230 kV transmission system is inadequate to deliver the required renewable energy. With a no-action alternative, ongoing reliability concerns on some circuits will continue, and the State's mandates under the CLCPA may not be achieved.

iv. Alternative Technologies

74. The Signatory Parties agree that the use of direct current (DC) lines is not a viable option because of the costs and additional impacts associated with the converter stations that will be required at the terminal ends of the Project, and those that will be required along the Project route for renewable resources to connect to the system.

v. Alternative Overhead Configurations

75. The Applicant evaluated multiple structure designs for the proposed transmission lines, before selecting the proposed structure types. Section 3.7 of Exhibit 3 of the Application (Evidentiary Record Exhibit 22, **Appendix A**) sets forth the advantages and disadvantages of the structure designs considered for the Project in more detail.

76. The Applicant selected 345 kV single circuit monopoles with delta phase configurations for the new 345 kV lines between Haverstock and Willis, Haverstock and Adirondack, Adirondack and Austin Road, and Austin Road to Edic, because of the faster installation time, and smaller surface disturbance and impact footprint. Additionally, the delta configuration generally results in the lowest practical electric and magnetic field values at the edge of the ROW when compared to other structure configurations.

77. The Applicant selected double-circuit transmission structures as its preferred structure alternative for the new 230 kV lines between Willis to Ryan and Patnode, because they could be constructed within the ROW while also meeting the reliability requirements.

vi. Alternative Substation Locations

78. The Project proposes to modify, expand, or construct twelve (12) substation facilities. (Table 3.3 of the Revised Application Exhibit 3 (filed on the DMM on March 11, 2022) has a list of these facilities and the list also included as Evidentiary Record Exhibit 22 in

Appendix A to this Joint Proposal). Alternative locations and/or configurations were evaluated for the following substations: Haverstock, Willis 345/230 kV, Adirondack, Edic, Marcy, and Austin Road. For the location analysis of each substation, please see pages 3-24 through 3-36 of the Revised Exhibit 3 (filed on DMM on March 11, 2022) also included as Evidentiary Record Exhibit 22, **Appendix A**). All other substation project work will be within existing substation boundaries or on nearby/adjacent land parcels. Section 3.9 of Exhibit 3 of the Application (Evidentiary Record Exhibits 19 and 22, **Appendix A**) details the substation work, and alternatives considered for the new substation sites.

79. After considering potential siting constraints, the Applicant initially concluded that the most suitable location for the Haverstock Substation was at the intersection of NYPA's existing north-south and east-west transmission ROW corridor. However, to minimize wetland impacts at the site, the substation was redesigned, reoriented, and the location was expanded to the Alternative 5 site (*See* Evidentiary Record Exhibit 3, **Appendix A**). This location is now preferred as it is the natural point of interconnection for all the transmission circuits impacted by the Project, and it will result in the least amount of additional ROW acquisition and reduce wetland impacts.

80. For the proposed Willis 345/230 kV Substation, the Applicant considered two (2) alternatives both of which were rejected because of uncooperative landowners, environmental impacts, and/or other technical constraints. The existing Willis substation will remain but will be modified to connect to the new Willis 345/230 kV Substation.

81. For the proposed Marcy Substation expansion, the Applicant considered connecting to an existing position on the west side of the substation. This alternative was rejected as it will

require extensive construction near and under energized conductors or during outages of these facilities. The proposed design can be constructed safely and efficiently with limited outages.

82. The Applicant considered two (2) alternatives to the proposed location of the Austin Road Substation before selecting a parcel of land approximately one mile south of existing Chases Lake Substation. This new location affords easy access for the adjacent public road and access to the ROW. It will also allow the station to be built in parallel with the transmission line, will support the project schedule, will have limited impact on existing wind farm generation, and will also support expansion for additional renewable resources.

83. For the Edic Substation, the Applicant considered two (2) alternatives. The first alternative included building a new breaker and half bay to the northeast of the existing station. This option would require a large amount of civil work, grading, a large fence expansion, and additional property acquisition to facilitate the build out and to avoid interference with other ongoing substation projects. This alternative also had the potential of impacting existing wetland to the northeast of the substation. It was determined that building a whole new breaker and half bay would be excessive for the requirements of this project, which combined with higher cost, ruled out the alternative. The second alternative included using an existing spare position in the southern most breaker and half bay at the existing Edic Substation (Proposed Edic). This proposed alternative was selected for this project because it would disturb the least amount of land, would meet all project requirements, and would be the least cost option.

84. For the Adirondack Substation, the Applicant first considered building at the existing site; however, there was not enough space to convert the station to 345 kV. Rebuilding on the existing site would also force long-term outages on the 230 kV system and the 115 kV generator directly connected to the substation. Next, the Applicant examined constructing a 345

kV station directly adjacent to the existing Adirondack Substation; however, the parcel was too small and did not have enough space to accommodate the new substation. The proposed location of the new Adirondack Substation (Adirondack Proposed) just south of the existing site was selected for the construction of a new 345 kV yard. This property is currently owned by National Grid and offers adequate space for the substation. The new substation location will support the required outage and transmission line sequencing required to convert the lines from 230 kV to 345 kV.

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

85. The Signatory Parties agree that the Project conforms to the requirements and planning objectives of the NYISO and is consistent with New York's long-range plans as required by PSL § 126.1(e)(2) to expand its Bulk Electric System. Completion of the Project will improve the reliability of the transmission system, serve the interests of electric system economy and reliability, and provide increased transmission capability generally and specifically for renewable resources. Current curtailments of approximately 7.5 terawatt-hour (TWh) will be eliminated and congestion cost savings will approach $450 million. The Project is designed to reinforce and upgrade the transmission backbone system of New York providing significant reliability benefits throughout the State. (*See* Exhibit E-4 at 9-11). The Parties acknowledge that the PSC has determined that the project is a Priority Transmission Project (*See* Case 20-T-0197 under the Accelerated Renewable Energy Growth & Community Benefit Act (AREGCBA)).

F. System Impact Study

86. Although 16 NYCRR § 88.4(a)(4) requires a System Reliability Impact Study for all Article VII projects, the Commission's October 8, 2021, Order on 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 14, 2021, concluded that the Project will not adversely impact the New York State Transmission System.

G. State and Local Laws

87. The Signatory Parties agree that the Project, as proposed in this Joint Proposal, fully complies with the substantive provisions of all applicable state laws, including without limitation the PSL, the Environmental Conservation Law, and the Agriculture and Markets Law.

88. 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 construction or operation of the Project 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 attached as **Appendix D** of this Joint Proposal.

89. Exhibit 7 of the Application (Evidentiary Record Exhibit 7, **Appendix A**) 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.

90. 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.

91. No local jurisdiction has filed any objection to the Applicant's requests that the Commission not apply specified local laws, as set forth in Exhibit 7. 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

92. The Applicant conducted public outreach regarding the Application, including letters to and meetings with local officials in areas affected by the Project, letters to property owners abutting the Project ROW and meetings with groups interested in the Project. In April 2021, the Applicant held multiple public open house meetings. These meetings were held virtually.

93. A Public Notice was published in the following newspapers for two consecutive weeks prior to filing the Application: the Utica Observer-Dispatch, the Plattsburgh Press Republican, the Watertown Daily Times, the Malone Telegram, and the Boonville Herald Weekly. In addition, copies of the Application were provided to the following libraries for public inspection: Badenhausen (Brasher) Branch Library, Massena Public Library, Akwesasne Library & Cultural Center, The Wead Library, Chateaugay Memorial Library, Sarah A. Munsil Free Library, Croghan Free Library, Brantingham Greig Reading and Technology Center, Port Leyden Community Library, Beaver Falls Library, William H. Bush Memorial Library, Erwin Library, Jervis Public Library, Dunham Public Library, Holland Patent Free Library, and Didymus Thomas Library. On June 14, 2021, property owners along the Project ROW were sent notification letters regarding the Project's Application filing.

94. On January 11, 2022, the Secretary to the Commission issued a Public Notice regarding the informational forums and public statement hearings for the Project. On February 8, 2022, property owners on and adjacent to the Project ROW were sent notification letters regarding the public information sessions and public statement hearings.

95. On February 16, 2022, the Commission held two (2) public statement hearings for public to provide comments on the Project. These hearings were held virtually, and each was preceded by an informational forum, during which the Applicant presented information regarding the Project.

V. PROPOSED FINDINGS

96. The Signatory Parties agree that the record in this proceeding supports all of the Commission findings required by PSL § 126 and as set out in **Appendix C** to this Joint Proposal.

VI. PROPOSED CERTIFICATE CONDITIONS

97. The Signatory Parties agree that the Proposed Certificate Conditions set forth in **Appendix D** to this Joint Proposal are acceptable and appropriate for inclusion in a Certificate of Environmental Compatibility and Public Need authorizing construction and operation of the Project as described therein and in this Joint Proposal.

VII. ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN GUIDELINES

98. The Signatory Parties agree that the specifications for development of the EM&CP set forth in **Appendix E** of this Joint Proposal, the specifications with respect to wetland and waterbodies set forth in **Appendix F**, and the supplemental specifications with respect to invasive species set forth in **Appendix G** of this Joint Proposal are acceptable and appropriate for application to the Project as described herein.

VIII. WATER QUALITY CERTIFICATION

99. The Signatory Parties agree that the record in this proceeding supports the issuance of a 401 Water Quality Certification, provided the Certificate Holders comply with applicable federal and state regulations and complete any then applicable forms and/or pre-application requirements pursuant to § 401 of the Federal Water Pollution Control Act.

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

Girish Behal (May 16, 2022 16:15 EDT)

The New York Power Authority
By: Girish Behal

Signature: Girish Behal (May 16, 2022 16:15 EDT)
Email: girish.behal@nypa.gov
Title: VP- Projects and Business Development
Company: New York Power Authority

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

Niagara Mohawk Power Corporation (d/b/a/ National Grid)
By: Kevin Bernstein, *Outside Counsel, National Grid*

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

Staff of the New York State Department of Public Service designated to represent the public interest in this proceeding
By: Noreena Chaudari
Jessie Shaw
Staff Counsel

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

New York State Department of Environmental Conservation
By: Mark Sanza, Deputy Counsel

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

New York State Department of Agriculture and Markets
By: Tara B. Wells, Senior Attorney

Case 21-T-0340

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

Testimony:
Direct Testimony of Susan Davis; Frank D'Eufemia; Mark Domino; Gordon Perkins; Jessey Horvat; Benjamin Cotts; Gabriel Weger; Christopher Howell; David Carr; Girish Behal; Ana Stachowiak; Justin Kromer; and Dr. Xia Jiang sponsoring or co-sponsoring Evidentiary Record Exhibits 1 through 15 (Exhibits 1 through 9, and E-1 through E-6 to the Application, as supplemented in this proceeding).

Affidavits:
Affidavits of Susan Davis; Frank D'Eufemia; Mark Domino; Gordon Perkins; Jessey Horvat; Benjamin Cotts; Gabriel Weger; Christopher Howell; David Carr; Girish Behal; Ana Stachowiak; Justin Kromer; and Dr. Xia Jiang.

Exhibits:

Exhibit 1:	The Application (including all Appendices thereto), and General Information (Exhibit 1 to the Application, along with the rest of the Application, which was originally filed on DMM on June 15, 2021)
Exhibit 2:	Location of Facilities (Exhibit 2 to the Application)*
Exhibit 3:	Alternatives (Exhibit 3 to the Application)
Exhibit 4*:	Environmental Impacts (Exhibit 4 to the Application)
Exhibit 5:	Design Drawings (Exhibit 5 to the Application)
Exhibit 6:	Economic Effects of the Proposed Facility (Exhibit 6 to the Application)
Exhibit 7:	Local Ordinances (Exhibit 7 to the Application)
Exhibit 8:	Other Pending Filings (Exhibit 8 to the Application)
Exhibit 9*:	Cost of Proposed Facilities (Exhibit 9 to the Application)[1]
Exhibit 10:	Description of Proposed Transmission Facilities (Exhibit E-1 to the Application)

[1]Redacted version of Exhibits 4 and 9, and E-4 are provided on the Commission's DMM at thttp://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=21-t-0340&submit=Search. If the entirety of the Exhibit or filing was confidential, then the request for confidential treatment can be found on DMM at that same location.

Exhibit 11: Other Facilities (Exhibit E-2 to the Application)*

Exhibit 12: Underground Construction (Exhibit E-3 to the Application)

Exhibit 13: Engineering Justification (Exhibit E-4 to the Application)

Exhibit 14: Effect on Communications (Exhibit E-5 to the Application)

Exhibit 15: Effect on Transportation (Exhibit E-6 to the Application)

Exhibit 16: Responses to Information Requests DPS 1-1 through 1-8[2]

Exhibit 17: Responses to Information Request DEC 1-1[3]

Exhibit 18: Letter Regarding SIS Report, filed by the Applicant on October 1, 2021 *(available on DMM)*

Exhibit 19: Response to the Deficiency Letter issued by the Commission on August 16, 2021 filed by the Applicant on September 3, 2021 *(available on DMM)* *

Exhibit 20: Applicant's October 25, 2021 Filing of Appendix G – Visual Simulations 8B *(available on DMM)*

Exhibit 21: Letters from SHPO and OPRHP filed by the Applicant on December 7, 2021 (DMM Item # 38) and March 16, 2022 (DMM Item # 71)

Exhibit 22: The Applicant's March 11, 2022 and March 22, 2022 Supplemental Filings, with revised versions filed on March 28, 2022, April 6, 2022, and April 19, 2022 *(available on DMM)**

Exhibit 23: Description of Laydown Yards (both for NYPA and National Grid)

Exhibit 24: NYSDEC-determined Upland Sandpiper Occupied Habitat Area (Confidential)[4]

[2] DPS IR-7 and DPS IR-8 responses contain confidential information and were confidentially shared with the parties under the Protected Order issued in this case.

[3] The response to DEC IR-1 contains confidential information and was confidentially shared with the parties under the Protected Order issued in this case.

[4] Contains confidential information, will be shared with the Commission's Records Access Officer confidentially.

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, David Carr, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate.

3. That I have reviewed the Supplemental Application filed on the Commission's DMM on March 11, 2022, and affirm that the Supplemental Application accurately describes the design, specification, and construction of the proposed transmission line facility, as the Supplemental Application relates to the Exhibits that I am sponsoring in this proceeding.

4. That 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.

5. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

David Carr

Sworn to before me this
25th day of April, 2022.

Notary Public

DESIRE ROSTOCKI
NOTARY PUBLIC-STATE OF NEW YORK
No. 01RO6405766
Qualified in Albany County
My Commission Expires 03-23-2024

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Gabriel Weger, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on May 2, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Gabriel Weger

Sworn to before me this
4th day of May, 2022.

Notary Public

TAMI DANIEL
Notary Public-Notary Seal
STATE OF MISSOURI
Platte County
My Commission Expires Oct. 6, 2023
Commission # 15420517

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Gordon Perkins, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Gordon Perkins

Sworn to before me this
18th day of April, 2022.

Debra Russell

Notary Public

DEBRA RUSSELL
Notary Public, State of New York
No. 01RU6061488
Qualified in Madison County
Commission Expires July 16, 2023

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Jessey Horvat, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Jessey Horvat

Sworn to before me this
18th day of April, 2022.

Debra Russell

Notary Public

DEBRA RUSSELL
Notary Public, State of New York
No. 01RU6061488
Qualified in Madison County
Commission Expires July 16, 2023

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Justin Kromer, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate.

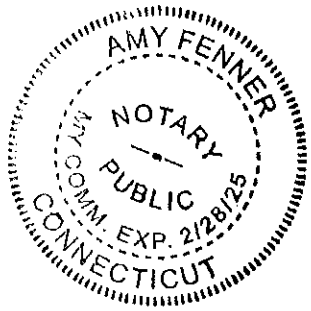
3. That I have no changes or additions to said testimony and hereby adopt the testimony as my sworn testimony in this proceeding, as if given orally.

4. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Justin Kromer

Sworn to before me this
2 day of May, 2022.

Notary Public



STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	)	Case 21-T-0340

I, Susan Davis, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Susan Davis

Sworn to before me this
9 day of May, 2022.

Notary Public

JASON M. CARUSO
MY COMMISSION EXPIRES DEC. 19, 2023
NOTARY PUBLIC
NEW HAMPSHIRE

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Girish Behal, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Girish Behal

Sworn to before me this
25th day of April, 2022.

Lisa M Farrell
Notary Public

LISA M FARRELL
NOTARY PUBLIC-STATE OF NEW YORK
No. 01FA6273130
Qualified in Queens County
My Commission Expires 12-03-2024

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Frank D'Eufemia, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Frank D'Eufemia

Sworn to before me this
19th day of April, 2022.

Notary Public

EILEEN P. FLYNN
Notary Public, State Of New York
Qualified In Westchester County
No. 02FL6016923
Commission Expires November 30, 2022

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Mark F. Domino, P.E. being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Mark F. Domino, P.E.

Sworn to before me this
5th day of April, 2022.

Notary Public

PAULA M. POWELL
Notary Public, State of New York
Reg. No. 01P06409084
Qualified in Onondaga County
Commission Expires Sep 14, 2024

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Dr. Xia Jiang, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Dr. Xia Jiang

Sworn to before me this
27 day of April, 2022.

Notary Public

MARINA FELDMAN
Notary Public, State of New York
No. 01FE 6113819
Qualified in Westchester County
Commission Expires August 02, 2024

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Ana Stachowiak, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Ana Stachowiak

Sworn to before me this
10th day of MAY, 2022.

Lorna Johnson
Notary Public

LORNA JOHNSON
NOTARY PUBLIC, STATE OF NEW YORK
Registration No. 01JO4961652
Qualified in Queens County
Commission Expires March 6, 2026

24320081.1

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	)	Case 21-T-0340

I, Christopher Howell, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on May 2, 2022, to the extent that the supplemental filings effect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Christopher Howell

Sworn to before me this
13 day of May, 2022.

Notary Public

ASHLEY MEYER
Notary Public - State of Kansas
My Appt. Exp. 12/14/22

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Application of New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid for a Certificate of Environmental Compatibility and Public Need for the Rebuild of Approximately 100 Linear Miles of Existing 230 kV to Either 230 kV or 345 kV along with Associated Substation Upgrades Along the Existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, and National Grid's Adirondack-Porter 11, 12 and 13 Lines in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York	Case 21-T-0340

I, Benjamin Cotts, being duly sworn, depose and say:

1. That my direct testimony was pre-filed on June 15, 2021 ("Direct Testimony") in the captioned proceeding by the Power Authority of the State of New York d/b/a/ New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid.

2. That I have reviewed my Direct Testimony and affirm that it is complete and accurate. I also reviewed the supplemental filings submitted in Case 21-T-0340 since June 15, 2021, and the Supplemental Application filing made by the New York Power Authority and Niagara Mohawk Power Corporation d/b/a National Grid on March 11, 2022 to the extent that the supplemental filings affect my Direct Testimony.

3. That 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. That if I were asked the questions stated in my Direct Testimony today, my answers would be the same as stated therein.

Benjamin Cotts

Sworn to before me this
18 day of May, 2022.

Notary Public

Donna Whicher
Notary Public, State of Maryland
Commissioned in Anne Arundel County

Case 21-T-0340

APPENDIX B
DESCRIPTION AND LOCATION OF THE PROJECT

The Project consists of rebuilding approximately 100 linear miles of existing 230 kilovolt ("kV") transmission lines to either 230 kV or 345 kV, along with associated substation construction and upgrades. The Project includes rebuilding all or parts of the following transmission lines primarily within existing rights-of-way ("ROW"): NYPA's Moses-Willis 1 & 2, NYPA's Willis-Patnode and NYPA's Willis-Ryan; and National Grid's Adirondack to Porter (Chases Lake-Porter Line 11, Adirondack-Porter Line 12, and Adirondack-Chases Lake Line 13), the extension of the existing 230 kV Rector Road to Chases Lake Line 10, as well as connecting to NYPA's Moses-Adirondack 1&2 (also known as "MA 1&2" or "Smart Path") ROW.

The major components of the Project are discussed in detail below (the owner of each facility comprising each component is noted in parentheses), as well as in Exhibit 2, E-1, and E-2 of the Application.

SPECIFIC PROJECT DESCRIPTIONS BY TRANSMISSION LINE SECTION

The Project includes upgrading several existing circuits to increase power transfer capabilities throughout Northern New York. The transmission line portion of the Project is discussed below in six (6) distinct segments.

Segment 1: Moses-Haverstock (MH1, MH2, & MH3) (NYPA)

This portion of the Project involves the construction of approximately 0.2 miles of three (3) single-circuit 230 kV lines on steel H-frame, monopole, and horizontal 3-pole structures, for a total of approximately nine (9) structures with single-bundle conductor and optical ground wire (OPGW) functionality. These three circuits will serve as the interface between the MA 1& 2 and Moses-Willis 2 Lines, and the Haverstock Substation. In addition, approximately 2 miles of the existing MW2 line, which will become the MH3 line, will remain in place and OPGW will be installed.

Segment 2: Haverstock-Willis (HW1 & HW2) *(NYPA)*

This segment of the Project consists of: (1) removing the existing Moses-Willis 230 kV 1 & 2 lines and replacing with two (2) single-circuit 345 kV lines on steel predominantly monopole structures, for a total of approximately 410 structures with double-bundle conductor and OPGW functionality, generally on the existing centerline; and (2) constructing two 230 kV tie-lines between the existing Willis Substation and the new Willis 345/230 kV Substation. This segment of the Project is approximately 35.4 miles long and generally within the existing ROW, with the exception of the ROW connections into and out of Haverstock and Willis. Temporary bypasses will be installed outside of the MW-Patnode ROW, to the east of Haverstock, for the duration of Haverstock Substation construction. There will also be temporary connections from the W1 and W2 tie lines to the existing MW-Patnode ROW during construction of the new Willis 345/230 kV Substation.

Segment 3: Haverstock-Adirondack (HA1& HA2) (NYPA)

This segment of the Project involves constructing the connections between the Smart Path lines, and the Haverstock and Adirondack Substations. The connection to Haverstock Substation consists of two (2) single-circuit 345 kV lines on steel monopole structures, for a total of approximately six (6) structures. The connection to the proposed Adirondack Substation consists of two (2) single-circuit 345 kV lines on steel monopole structures, for a total of approximately six (6) structures.

Segment 4: Willis-Ryan/Patnode (WRY1, WRY2, WPN1, WPN2, & RYP2) (NYPA)

This segment of the Project extends approximately 8.7 miles, and consists of: (1) removing existing structures between the existing Willis Substation and Ryan Substation, and replacing with two (2) double-circuit 230 kV lines on approximately 110 predominantly steel monopole structures, generally on their existing centerlines; and (2) replacing existing structures between Ryan Substation and Patnode Substation, with one (1) double-circuit 230 kV line of structures and one (1) single-circuit 230 kV line of structures on steel predominantly monopole structures. The new configuration will include two new 230 kV circuits between Willis and Ryan, one (1) new 230 kV circuit between Ryan and Patnode, and two (2) new 230 kV circuits between Willis and Patnode. After leaving the Ryan Substation, heading east, the Willis to Patnode circuit will pick up the existing Ryan to Plattsburgh 230 kV circuit to be double circuited.

Segment 5: Adirondack -Porter (AAR1, ARE1, & AM1) (National Grid)

This segment of the Project consists of the rebuild and 345 kV voltage upgrade of three (3) existing 230 kV National Grid circuits over approximately 54.2 miles, and the removal of the existing 230 kV Adirondack to Chases Lake Line 13, Chases Lake to Porter Line 11, Adirondack to Porter Line 12, and the 230 kV Edic to Porter Line 17. The existing single-circuit 230 kV wood pole H-Frame structures will be replaced with 345 kV single-circuit, steel predominantly monopole structures, for a total of approximately 652 structures with double bundled conductor and OPGW functionality.

Segment 6: Rector Road - Austin Road Line 10 (RRAR1) (National Grid)

This segment involves extending the existing Rector Road - Chases Lake 230 kV transmission line for approximately 1.0 mile, on the eastern side of the existing Adirondack-Porter Line, from the site of the existing Chases Lake Substation to connect to the new Austin Road Substation. The proposed structures will be single-circuit 230 kV steel monopole structures, for a total of approximately thirteen (13) structures with single bundle conductor and OPGW functionality.

SPECIFIC PROJECT DESCRIPTIONS BY STATION

The Project involves the construction of four (4) new substations, as well as upgrades to seven (7) existing substations. The work at each substation is discussed below.

Haverstock Substation (NYPA)

The new Haverstock Substation will be built south of the existing Moses Substation to interconnect with the 345 kV Smart Path Project and the rebuilt 345 kV Moses-Willis 1&2 lines, as well as

connect to existing 230 kV lines from the Moses Substation. This substation will have a seven (7) bay "double-breaker, double-bus" configuration at 345 kV. The configuration includes four (4) positions for 345 kV lines and three (3) positions for 345/230 kV autotransformers. Each autotransformer will directly connect with a 230 kV line to the Moses Substation. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Adirondack Substation (NYPA)

The proposed work will involve constructing a new 345/115 kV Adirondack Substation that will be constructed just to the south of the existing Adirondack 230/115 kV Substation. Major portions of the existing Adirondack 230/115 kV Substation will be decommissioned. The new substation will include three (3) bays of a "breaker-and-a-half" configuration at the 345 kV voltage level. The third bay will have just two (2) breakers, so the configuration results in five (5) positions which includes four (4) positions used for 345 kV lines and one (1) position used for a 345/115 kV autotransformer. The autotransformer will have a low-side 115 kV breaker which will directly connect with an existing 115 kV line to the nearby Beaver Falls generation station. There will be two (2) 345 kV lines from Haverstock Substation and two (2) 345 kV line positions for lines running south to existing Marcy and new Austin Road 345 kV substations . There will be two (2) 140 MVAR shunt capacitor banks, one connected to each 345 kV bus. There will also be two (2) 100 MVAR shunt reactor banks, one connected to each 345 kV bus. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Austin Road Substation (National Grid)

The new 345/230 kV Austin Road Substation will be constructed approximately a mile south of the existing Chases Lake Substation. The existing 230 kV circuit-breakers and bus work at Chases Lake Substation will ultimately be decommissioned and replaced by the new Austin Road Substation. The existing Chases Lake Substation control house and associated facilities will remain. The new substation will be a three (3) position ring bus with expansion to two (2) bays of a "breaker-and-a-half" configuration at the 345 kV voltage level. Room has been allotted inside the yard to allow for an additional expansion of two (2) bays, for a total of four (4) 345 kV bays. Two (2) positions of the ring bus are for incoming 345kV lines. The third position is for a 345/230 kV autotransformer with a 13.8kV tertiary for station service. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Willis 345/230 kV Substation (NYPA)

The new Willis 345/230 kV substation will be constructed adjacent to the existing Willis 230/115 kV Substation. There will be three (3) bays of a "breaker-and-a-half" configuration at the 230 kV voltage level. The configuration results in six (6) positions which includes two (2) positions used for 230 kV lines to the Ryan Substation, two (2) positions used for 230 kV lines to the Patnode Substation, and two (2) positions used for 345/230 kV autotransformers. The autotransformers will directly connect with 345 kV transmission lines to the Haverstock Substation. There will be one (1) 75 MVAR shunt capacitor bank connected to a 230 kV bus. Additionally, there will be one 230 kV breaker connected to each bus which will each have a short 230 kV line connection to the existing Willis 230 kV yard. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Existing Willis 230/115 kV Substation (NYPA)

The existing Willis 230 kV bus will be modified to abandon Bay 1. The existing Willis 230 kV Bay 2 position will be repurposed to allow an interconnection to the new Willis Substation East Bus. The existing Willis 230 kV Bay 3 position will be repurposed to allow an interconnect to the new Willis Substation West bus. The autotransformers at the existing Willis Substation will continue to connect to the existing east and west 230 kV buses, but utilize the Bay 2 & 3 interconnection lines to connect to the new Willis 345/230 kV Substation. There will be protection and control work performed within the existing control enclosure to accommodate the changes to the existing Willis Substation.

Patnode Substation (NYPA)

The proposed work at Patnode involves adding two (2) additional 230 kV breakers to the ring bus and connecting a second 230 kV line to Willis. There will be protection and control work performed within the existing control enclosure to accommodate the changes to the physical 230 kV yard and to coordinate local line protection with the new protection at the opposite end of the line. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Ryan Substation (NYPA)

The proposed work at Ryan involves adding one (1) additional 230 kV breaker to the ring bus and connecting a second 230 kV line to Willis. There will be protection and control work performed within the existing control enclosure to accommodate the changes to the physical 230 kV yard and to coordinate the local line protection with the new protection at the opposite end of the line. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Moses Substation (NYPA)

The proposed work at Moses involves the line terminals for the existing Adirondack lines (MA1, MA2) and Willis #2 line (MW2) becoming lines to Haverstock (MH1, MH2, and MH3). Those lines along with the lines to Massena (MMS1, MMS2) will have wave traps removed to accommodate changes in line protection. The Willis #1 line (MW1) will be disconnected, and the line position will become an empty spare position. The autotransformer 3 and MH3 positions will be switched within the substation. There will also be protection and control work performed within the existing control enclosure to coordinate local line protection with new protection at the opposite end of the line.

Massena Substation (NYPA)

The proposed work at Massena involves adding two (2) 230 kV, air-core, series reactors, one to each of the Moses 230 kV lines. These will be placed within the existing fence line and 230 kV free-standing current transformers will be installed with them. There will also be protection and control work performed within the existing control enclosure to coordinate the local line protection with the new protection at the opposite end of the line for the lines mentioned above. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Marcy Substation (NYPA)

The proposed work at Marcy involves adding a new bay on the East side of the substation. The new line from Adirondack will then connect to this bay. There will be protection and control work performed within the existing control enclosure to accommodate the new line and breaker additions and changes in the 345 kV yard. Additional substation equipment is detailed in Exhibit E-2 of the Application.

Edic Substation (National Grid)

The proposed work at Edic involves adding one (1) 345 kV breaker to the 345 kV bus for one (1) 200 MVAR shunt capacitor bank and a new 345 kV line to the Austin Road Substation. There will be protection and control work performed within the existing control enclosure to accommodate the changes to the physical 345 kV yard and to coordinate local line protection with the new protection at the opposite end of the line. The existing eastern fence line of Edic will need to be expanded by an area approximately 61 feet by 120 feet. Additional substation equipment is detailed in Exhibit E-2 of the Application.

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APPENDIX C
PROPOSED COMMISSION FINDINGS

1. The Power Authority of the State of New York, doing business as the New York Power Authority (NYPA) and Niagara Mohawk Power Corporation doing business as National Grid (NYPA and National Grid, collectively, the Applicant), submit and the Public Service Commission (Commission) agrees that based on the information provided in the Evidentiary Record Exhibits 2, 3, 5, 6, 10, 13, 19 and 22 sponsored by S. Davis (WSP, USA), M. Domino (National Grid), F. D'Eufemia (NYPA), D. Carr (Burns & McDonell), G. Behal (NYPA), and Dr. Xia Jiang (NYPA), the Project as described in Appendix B to the Joint Proposal is needed to realize the full potential of renewable energy development in the Northern New York area and will help meet the mandates under the Climate Leadership and Community Protection Act (CLCPA).

2. Based on the information provided in the Evidentiary Record Exhibits 2, 3, 4, 5, 6, 10, 14, 17, 19, 20, 21, 22, and 23, sponsored by S. Davis (WSP, USA), M. Domino (National Grid), F. D'Eufemia (NYPA), D. Carr (Burns & McDonell), G. Behal (NYPA), A. Stachowiak (NYPA), G. Perkins (EDR), J. Horvat (EDR), B. Cotts (Exponent, Inc.) G. Weger (Burns & McDonell), and C. Howell (Burns & McDonnell), the Project will be designed, constructed and operated in a manner that avoids, minimizes or mitigates impacts on environmental resources along the Project's Right-of-Way (ROW), including substations. The nature of the probable environmental impacts resulting from the Project includes:
    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 ROW;
    c) temporary and limited impacts to active agricultural lands, including the permanent impact at the proposed location for the Willis Substation (approximately 7 acres), where the landowner is cooperative;
    d) temporary and minimal, incremental permanent impacts to visual resources that will be avoided or minimized to the extent practicable;
    e) temporary and permanent impacts to wetlands that will be appropriately avoided, minimized, and mitigated if necessary; and
    f) calculated electromagnetic fields at the edge of the ROW not causing an exceedance of the Commission's policies regarding electromagnetic fields.

    The nature of the environmental impacts resulting from the Project may also include potential impacts to certain threatened and endangered species that will be appropriately avoided, minimized, and mitigated, to the extent it is necessary.

3. Based on the information provided in the Evidentiary Record Exhibits 2, 3, 4, 5, 6, 10, 14, 17, 19, 20, 21, 22 and 23, sponsored by S. Davis (WSP, USA), M. Domino (National Grid), F. D'Eufemia (NYPA), D. Carr (Burns & McDonell), G. Behal (NYPA), A. Stachowiak (NYPA), G. Perkins (EDR), J. Horvat (EDR), B. Cotts (Exponent, Inc.) G. Weger (Burns & McDonell), and C. Howell (Burns & McDonnell), the Project represents the minimum adverse environmental impact, considering the state of available technology and the nature

and economics of the various alternatives and other considerations. The Project will maximize the use of approximately 100 miles of existing utility-owned transmission line corridor, and such use of existing ROW will avoid or minimize the disturbance of natural habitat to the extent feasible, and minimizes 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. Additionally, the siting of new or expanded substations represents the minimum adverse environmental impact, considering the available technology and the nature and economics of the various alternatives and other considerations.

4. Based on the information provided in the Evidentiary Record Exhibits 4 and 22, supported by the testimony of S. Davis (WSP, USA), G. Perkins (EDR), J. Horvat (EDR), B. Cotts (Exponent, Inc.) G. Weger (Burns & McDonell), and C. Howell (Burns & McDonnell), the Project represents the minimum adverse impact on active farming operations that produce crops, livestock and livestock products, as defined in Section 301 of the Agriculture and Markets Law, considering the state of available technology.

5. Based on the information provided in the Evidentiary Record Exhibits 3, 12, and 22, sponsored by F. D'Eufemia (NYPA), and M. Domino (National Grid), no portion of the Project should be constructed underground due to the substantially higher cost, adverse impacts on system operations, safety concerns, and far greater environmental impacts of underground construction in the Project ROW.

6. Based on the information provided in the Evidentiary Record Exhibits 6, 13, and 18, sponsored by S. Davis (WSP, USA), G. Behal (NYPA), Dr. Xia Jiang (NYPA), and M. Domino (National Grid) the Project conforms to the requirements and planning objectives of the NYISO and is consistent with State's long-range plans for the enhancement of the transmission facilities and will serve the interests of electric system economy and reliability. The Project will provide significant reliability benefits to New York State through enhancement and reinforcement of the existing backbone transmission infrastructure. The Project will significantly reduce congestion and curtailments and result in substantial congestion cost savings and capacity market benefits, thereby reducing the costs of delivered power for customers.

7. Based on the information provided in the Evidentiary Record Exhibits 7 and 22, sponsored by S. Davis (WSP, USA) the location of the Project 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 Exhibit 7, 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 A to the Joint Proposal, the Project will serve the public interest, convenience, and necessity.

APPENDIX D
PROPOSED CERTIFICATE CONDITIONS FOR NYPA/NATIONAL GRID
SMART PATH CONNECT PROJECT

PROPOSED CERTIFICATE CONDITIONS

A. Conditions of the Order

The Commission orders:

1. Subject to the conditions set forth in this Order, the New York Power Authority ("NYPA") and Niagara Mohawk Power Corporation doing business as National Grid ("National Grid") (or the "Certificate Holders") are granted a Certificate of Environmental Compatibility and Public Need (the "Certificate"), pursuant to Article VII of the New York Public Service Law ("PSL"), authorizing the Certificate Holders to rebuild approximately 100 linear miles of existing 230 kilovolt ("kV") transmission lines to either 230 kV or 345 kV along with associated substation construction and upgrades along the existing NYPA Moses-Willis 1&2, Willis-Patnode, Willis-Ryan, a portion of Ryan-Plattsburgh and National Grid's Adirondack-Porter 11, 12, and 13 rights-of-way ("ROWs") in Clinton, Franklin, St. Lawrence, Lewis, and Oneida Counties, New York (the "Smart Path Connect Project" or the "Project").

2. The Certificate Holders shall, within thirty (30) days after the issuance of the Certificate, file with the Secretary to the Commission (the "Secretary") either a petition for rehearing or a verified statement that they accept and will comply with the Certificate for the Project. Failure of the Certificate Holders to comply with this condition shall invalidate the Certificate.

3. If the Certificate Holders decide not to commence construction of any portion of the Project, they shall so notify the Secretary in writing within thirty (30) days of making such decision and shall serve a copy of such notice upon all parties in the same manner and at the same time as they file with the Secretary.

4. If construction of the Project hereby certified is not commenced within 18 months after the issuance of the Certificate, the Certificate may be vacated by the Commission with notice to the Certificate Holders. Commencement of construction of any segment of the Project, as defined in the Environmental Management & Construction Plan ("EM&CP"), shall satisfy this requirement.

5. The Secretary may extend any deadlines established by this Order for good cause shown.

B. Description and Location of Project:

6. Appendix B, entitled "Description and Location of Project," identifies the Project components (the "Project Components") that would be constructed and owned by NYPA

APPENDIX D
PROPOSED CERTIFICATE CONDITIONS FOR NYPA/NATIONAL GRID SMART PATH CONNECT PROJECT

(the "NYPA Components") and those that would be constructed and owned by National Grid (the "National Grid Components"). The proposed location of the Project as set forth in Appendix B of the Joint Proposal is approved.

C. Laws and Regulations

7.

a. 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 as discussed herein.

b. Except as expressly authorized in these Certificate Conditions, no State or municipal 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 (collectively, "State or municipal approvals") 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 Project, (iii) those permits issued under federally-delegated or federally-approved environmental permitting programs; and (iv) those municipal approvals expressly authorized in these Certificate Conditions.

c. The Certificate Holders shall construct the Project in a manner that conforms to all applicable standards of the American National Standards Institute ("ANSI") including, without limitation, the National Electrical Safety Code ("NESC"), Institute of Electrical and Electronics Engineers ("IEEE"), Standard IEEE C2-2017, 2017 Edition, or the then current standard, and any stricter standards adopted by the Certificate Holders. Upon completion of the Project, the Certificate Holders shall send a letter to the Secretary certifying that the Project was constructed in full conformance with the NESC.

8. A copy of each permit or approval received by the Certificate Holders from the issuing agencies, including all necessary United States Army Corps of Engineers ("USACE") permits for construction in Waters of the U.S. affected by the Project pursuant to Section 404 of the Federal Clean Water Act and Section 10 of the Rivers and Harbors Act (33 U.S.C. 401 et seq.), and the State Pollutant Discharge Elimination System ("SPDES") General Permit for Stormwater Discharge from Construction Activity ("SPDES General Permit", currently GP-0-20-001), shall be provided to the Secretary by the Certificate Holders promptly after receipt by the Certificate Holders of such permit or approval and before commencement of construction across any affected area.

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9. If the Certificate Holders believe that any action taken, or determination made, by a State or municipal agency in connection with this Certificate is unreasonable or unreasonably delayed, they may petition the Commission, upon reasonable notice to that agency, to seek a resolution of any such unreasonable or unreasonably delayed determination. Such agency may respond to the petition, within five (5) business days, to address the reasonableness of any requirement or delay.

D. Public Health and Safety

10. The Certificate Holders shall design, engineer, and construct the Project such that operation thereof shall comply with the electric field standard of a maximum of 1.6 kV/meter at the edge of the ROW, one meter above ground level, with the line at rated voltage as established by the Commission in Opinion No. 78-13, issued June 19, 1978, nor shall cause a new exceedance of the magnetic field at the edge of the ROW as established by the Commission in its Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities, issued September 11, 1990.

11. The Certificate Holders 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 EM&CP. The Project shall be designed and constructed to avoid adverse effects, to the extent practicable with the Project's design, on the cathodic protection system and physical conditions of existing structures and any fuel gas transmission or distribution pipelines within the Project ROW or 25 feet from the Project ROW.

12. The Certificate Holders shall coordinate with the relevant owner(s) of gas facilities ("Gas Owners") to evaluate the effects of the Project on existing cathodic protection systems for their gas facilities and model AC interference imposed upon those existing gas facilities according to the National Association of Corrosion Engineers ("NACE") guidelines (the "AC Interference Studies"), where required. The results of the AC Interference Studies will be summarized in the EM&CP. If required, the Certificate Holders will work with the Gas Owners to design any necessary mitigation measures to the gas facilities' existing cathodic protection systems to ensure measured voltages on the natural gas pipeline and facilities will not be higher than safe levels stated in NACE guidelines. Following this design phase, the Certificate Holders will coordinate with the Gas Owners to ensure that the installation of any necessary mitigation measures occurs as soon as is practical to do so. The Certificate Holders will keep the New York State Department of Public Service ("DPS") informed of the progress of the AC Interference Studies, mitigation design, and mitigation installation timing as these efforts progress and shall notify the Secretary when installation is complete.

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13. The Certificate Holders shall develop a construction gas line safety plan in their EM&CP. The gas line safety plan shall include, but not be limited to:

    a. A table identifying the crossing method and emergency access procedures for each location;

    b. Survey marking;

    c. Safety training requirements; and

    d. Notification procedures for local officials, emergency personnel, and landowners/residents.

14. At no time shall construction activities of any kind be conducted within 25 feet of any gas pipeline without prior notification to the owner(s) and without providing the owner or owner's appointed representative the opportunity to be present.

15. The Certificate Holders shall ensure all proposed electric transmission grounding does not interfere with the pipeline's cathodic protection system or is capable of conducting a fault current that would arc to the pipeline or gas facility.

16. The Certificate Holders shall keep local fire department and emergency management teams apprised of any on-site hazardous chemicals and waste. All such chemicals and waste shall be secured in a locked and controlled area.

17. The Certificate Holders shall comply with the requirements for the protection of underground facilities set forth in 16 New York Codes, Rules, and Regulations ("NYCRR") Part 753, entitled "Protection of Underground Facilities."

18. The Certificate Holders shall take appropriate measures to minimize fugitive dust and airborne debris from Project construction activity. Exposed soils and roadways shall be wetted as needed during extended dry periods to minimize dust generation. To the extent practicable, water for dust control shall come from municipal water supplies/sources. If surface waters are used, equipment (such as intake hoses) used in collecting water for dust control shall be disinfected afterwards. No dust control substances other than water will be allowed during Project construction without prior permission from DPS, except on public and town roads.

E. Environmental Management and Construction Plan

19. The terms of this Certificate and the environmental protection measures contained in the Application shall be incorporated into the EM&CP.

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20. Final New York State Department of Environmental Conservation ("NYSDEC")-approvable Storm Water Pollution Prevention Plans ("SWPPP") shall be prepared as part of the SPDES General Permit and in accordance with the current New York State Standards and Specifications for Erosion and Sediment Control (i.e., the "Blue Book"). The Certificate Holders shall each seek separate coverage under the SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-20-001 or the then-effective SPDES General Permit). If a Certificate Holder prepares more than one SWPPP for its portion of the Project, any permanent, post-construction erosion and sediment control features are required for compliance under the GP for two separate segments, these features shall be included in each separate SWPPP. In addition to the general requirements contained in the Blue Book, the SWPPPs 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 products), excluding geotextiles used for road construction and temporary erosion control devices such as silt fence and silt sock. If non-biodegradable products are used for erosion control fabric or netting, these materials will be tracked and identified at the time of installation and must be removed entirely once site stabilization has occurred.

21.

    a. The Certificate Holders shall include the SWPPP, any required Municipal Separate Storm Sewer Systems (MS4) SWPPP Acceptance Form(s), and NYSDEC's letter of acknowledgement for the Project authorized under the SPDES General Permit in the EM&CP. The Certificate Holders shall develop the EM&CP for the Project in accordance with the SWPPP requirements in NYSDEC's then-effective SPDES General Permit.

    b. The Certificate Holders shall install temporary erosion control devices (e.g., silt fence, straw bales and structural diversions) early in the construction process or by the end of the workday for newly disturbed areas, as indicated in the EM&CP.

    c. Special conditions and erosion and sedimentation controls with respect to the Project shall be prescribed on the EM&CP Plan and Profile drawings.

22. Applicable provisions of the Certificate, the approved EM&CP, and orders approving the EM&CP shall be accommodated in any design, construction, operation, or maintenance associated with the Project.

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23. The Certificate Holders, in preparing the EM&CP, shall consult with each transportation department or agency normally having jurisdiction over any roads in the vicinity of the Project, which roads will be crossed by the certified transmission facilities or used for direct access to the Project ROW. If the access road takes direct access from, or lies within the limits of, such roads, the Certificate Holders shall notify each relevant transportation department or agency of the approximate date when work on the Project will begin.

24. Before the preparation of the EM&CP, the Certificate Holders shall contact the NYSDEC, NYS Natural Heritage Program ("NYSNHP") and United States Fish and Wildlife Service ("USFWS") to check for any updates or changes of known species of special concern threatened or endangered ("T&E") species or habitat of Significant Natural Communities in the Project area and include the responses in the EM&CP. For subsequent phases of the EM&CP, the Certificate Holders shall recontact the NYSDEC, NYSNHP and the USFWS for any additional updates and include responses in the relevant EM&CP.

25. The Certificate Holders shall provide, as a part of the EM&CP:

    a. A final design plan that conforms with the Project design set forth in the Certificate, applicable federal, state and local requirements, including, but not limited to, applicable regulations promulgated by NYSDEC, the New York State Office of Parks, Recreation & Historic Preservation ("OPRHP"), the New York State Department of Agriculture & Markets ("NYSAGM"), the Commission, the Bureau of Alcohol, Tobacco, Firearms and Explosives, the Occupational Safety and Health Administration, the NYS Department of Labor, and local government chemical and waste-storage use and handling regulations; and

    b. A discussion of the status of efforts by the Certificate Holders to obtain permits necessary for construction of the Project from Federal agencies (such as the USACE) and State agencies with federally-delegated authority.

    c. The URL address for the Certificate Holders' website containing Project information.

26. The Certificate Holders may construct the Project in a manner that deviates from the centerline within the certificated ROW, design height, location, number of structures, and structure types specified in Appendix B for appropriate environmental or engineering reasons, except where a conflict with a provision of the Certificate would be created. When proposing any such deviation, the Certificate Holders shall include in the EM&CP an explanation for the proposed deviation and supporting documentation.

27. The Certificate Holders shall not begin site preparation or construction (except for surveying, soils testing, and such other related activities as are necessary for preparation of the final design plans), nor shall they commence any proceedings under the Eminent Domain

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Procedure Law to acquire permanent ROW, temporary ROW, or off-ROW access until the Commission has approved the EM&CP. To calculate the three-year period for acquisition of property pursuant to the Eminent Domain Procedure Law, the date of Commission approval of the EM&CP covering the affected parcel shall be regarded as the date on which this Article VII proceeding was completed. Notwithstanding the foregoing provisions of this paragraph, the Certificate Holders are hereby authorized upon approval of these Certificate Conditions by the Commission to utilize the laydown yards described in Record Exhibit 23 of the Joint Proposal.

28. The Certificate Holders shall file the proposed EM&CP with the Commission in the manner directed by the Secretary and, unless otherwise directed by the Secretary, shall serve it as follows: two electronic copies on the staff of the NYSDEC Central Office in Albany; one electronic copy on the Region 5 and 6 offices of the NYSDEC; one electronic copy and one hard copy on the staff of NYSAGM; one electronic copy on the Region 2 and 7 offices of the New York State Department of Transportation ("NYSDOT"); one electronic copy on any other New York State agency (and its relevant regional offices) that requests the document; and one searchable electronic copy on the active parties on the service list who request the document. Service upon State agencies shall be performed at or prior to the time of filing with the Secretary. The Certificate Holders shall also place one hard copy and/or one electronic copy, per library preference, for inspection by the public at the same public library or libraries where the Application has been made available.

29. Contemporaneously with filing and serving the proposed EM&CP, the Certificate Holders shall disseminate, in the manner specified below, a written notice, in language reasonably understandable to the average person, that the proposed EM&CP has been filed (the "EM&CP Filing Notice").

    a. Certificate Holders shall serve a copy of the EM&CP Filing Notice on all parties to this proceeding (except those upon whom the foregoing paragraph requires the Certificate Holders to serve one or more copies of the proposed EM&CP), on all persons required to be served with the Application by statute or regulation, and on all landowners of property crossed by or abutting the Project ROW and to any residents of such property (including any farm operators) identified by such landowners ("Identified Residents") to the extent such Identified Residents were not separately served a copy of the EM&CP Filing Notice.

    b. The Certificate Holders shall include a copy of the EM&CP Filing Notice in the proposed EM&CP.

    c. The Certificate Holders shall publish a copy of the EM&CP Filing Notice in a newspaper or newspapers of general circulation, including a free newspaper where available in the vicinity of the Project.

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30. The EM&CP Filing Notice required for the proposed EM&CP shall contain, at a minimum, the following:

    a. a statement that the proposed EM&CP has been filed;

    b. a general description of the certified Project, the need for the Project, and the proposed EM&CP;

    c. the EM&CP Filing Notice served on identified persons with a record interest in property to be acquired, as described in the proposed EM&CP, shall be accompanied by a description of the type of property rights required for the Project with respect to such property;

    d. a listing of the locations and the website URL(s) where the proposed EM&CP is available for public inspection;

    e. a statement that any person desiring additional information about a specific geographical location or specific subject may request it from the Certificate Holders;

    f. the name, address, toll-free telephone number, and telephone number of an appropriate representative of the Certificate Holders;

    g. the e-mail address and postal address of the Secretary; and

    h. 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 Holders within 30 days of the date the proposed EM&CP was filed with the Commission, or within 30 days of the date of the newspaper publication of a copy of the EM&CP Filing Notice, whichever is later.

31. A certificate of service indicating upon whom all copies of the EM&CP Filing Notice were served shall be filed by the Certificate Holders with the Secretary within three (3) business days after the time the proposed EM&CP is filed, and shall be a condition precedent to approval of the proposed EM&CP. When available, proof of newspaper publication of a copy of the EM&CP Filing Notice, including a copy of such notice, shall be filed with the Secretary.

32. If blasting is required, the Certificate Holders shall include a Blasting Plan in the EM&CP which will be submitted to DPS Staff for review and approval.

33. The Certificate Holders shall not commence construction until they have received a "Notice to Proceed with Construction" letter sent by the Director of the Office of Electric, Gas and Water, or their designee.

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34. The Certificate Holders shall electronically file with the Secretary as-built plan and profile drawings within a year of Project completion. In addition, if temporary features are not included in the as-built drawings, the Certificate Holders shall submit red-line mark-up drawings of all changes that include temporary features.

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

    c. The Certificate Holders shall not execute any proposed change until the Certificate Holders have received oral or written approval, except in emergency situations threatening personal injury, property, or severe adverse environmental impact. Any oral approval from DPS Staff will be followed by written approval from the Director of the Office of Electric, Gas and Water, or their designee, or the Commission, in accordance with Certificate Condition 35(a).

F. Notices and Public Complaints

36.

    a. Until notice of Project completion is provided to the Secretary as provided in Certificate Condition 7(c), the Certificate Holders shall make available to the public a toll-free or local phone number of an agent or employee who will, for the duration

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of construction of the Project, be available to receive complaints, if any, from the public about the construction of the Project. Such agent or employee shall use reasonable efforts to respond with an acknowledgement of receipt of the complaint within one (1) business day. That 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 Holders' representative as well as: (i) the number to be called at any time in case of emergency; (ii) the phone number and email address of the Secretary; and (iii) the phone number of the DPS Environmental Certification and Compliance Section in the Office of Electric, Gas and Water.

b. The Certificate Holders' Project website shall provide a means for the public to register complaints, ask questions, etc., either through a direct link to a complaint form/email or by providing the contact information (phone and/or email address) of an agent of the Certificate Holders that can address the public's concerns.

c. The Certificate Holders shall report to the DPS Environmental Certification and Compliance Section Compliance Staff every complaint they receive that cannot be resolved within ten (10) business days after receipt of the complaint.

37.

a. As to each Project segment, at least two (2) weeks before commencing Project construction activities, the Certificate Holders shall notify the public of the anticipated date that construction will commence, as follows:

(i) provide notice to local municipal officials, school districts, utilities (as applicable), and emergency personnel along the applicable Project segment;

(ii) provide notice to local media for dissemination;

(iii) provide notice for display in the Town Halls and at least one post office or library (if available) in or near each municipality along the applicable Project segment, as well as public places such as community centers, and conspicuous community bulletin boards; and

(iv) provide notice to persons who own properties that are crossed by or abut the ROW and Identified Residents (if different from the owner).

b. The Certificate Holders shall write the notice or notices under this paragraph in language reasonably understandable to the average person and shall ensure that the notice or notices contain:

(i) a map of the Project;

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(ii) a brief description of the Project;

(iii) the anticipated date for start of site-preparation;

(iv) the name, mailing address, local or toll-free telephone number, and email address of an employee or agent of the Certificate Holders 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;

(v) a description of where to get more information about the Project, including the Project website address and the location of document repositories; and

(vi) a statement that the Project is under the jurisdiction of the New York State Public Service Commission, which is responsible for enforcing compliance with environmental and construction conditions, and which may be contacted at an address, email, and telephone number to be provided in the notice.

c. Upon distribution, a copy of the form of the notice or notices under Certificate Condition 37(b) shall be submitted to the Secretary by the Certificate Holders.

d. The Certificate Holders shall notify persons who own properties that are crossed by or abut the ROW and Identified Residents (if different from the owner), of the planned transmission line construction activities and schedule affecting their residences at least seven (7) days, but no more than thirty (30) days, prior to the commencement of such construction. The Certificate Holders shall give notice by direct mail and may affix such notice to the doors of residences. After such notices are given, and prior to the commencement of such construction, the Certificate Holders shall provide a copy of the generic form of such notice to the Secretary.

38. The Certificate Holders shall provide all contractors providing services for construction for the Project ("Contractors") with complete copies of the Certificate, the approved EM&CP, the order(s) approving the EM&CP, updated construction drawings, any site- specific plans, NYSDEC's then-effective SPDES General Permit, any permit issued pursuant to Section 404 of the Federal Clean Water Act, Section 10 of the Rivers and Harbors Act, and the Section 401 Water Quality Certification. To the extent that the listed documents are available before contracts for construction services are executed, such copies shall be provided by the Certificate Holders to their Contractors prior to the execution of such contracts.

39. The Certificate Holders shall notify their respective Contractors that the Commission may seek to recover penalties for any violation of the Certificate and other orders issued in this proceeding, not only from the respective Certificate Holders, but also from their respective

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Contractors and that Contractors also may be liable for other fines, penalties, and environmental damage.

40. The Certificate Holders shall inform the Secretary in writing at least five (5) days before commencing construction for the Project.

41. Each month after providing notice specified in the preceding paragraph, the Certificate Holders shall provide DPS Staff, NYSAGM, and NYSDEC with monthly status reports summarizing construction and indicating construction activities and locations including NYSDEC-regulated wetlands, adjacent areas, and streams scheduled for the next month. Updates will be provided as necessary to account for material changes to the construction plan.

42. Within ten (10) days after each line of the Project is in service, the Certificate Holders shall notify the Secretary in writing of that fact.

43. The Certificate Holders, within ten (10) days of the completion of final restoration, shall notify the Secretary that all such restoration has been completed in compliance with this Certificate and the order(s) approving the EM&CP.

G. ROW Construction, Operation, Maintenance and Restoration

44.

a. At least two (2) weeks prior to the start of construction, the Certificate Holders shall hold a preconstruction meeting to which they shall invite DPS Staff, NYSDEC, NYSAGM, and NYSDOT. An agenda, the location, and an attendee list shall be agreed upon between DPS Staff and the Certificate Holders. Notification to the invitees of the meeting shall be at least ten (10) days prior to the meeting date.

b. The Certificate Holders shall supply draft minutes from this meeting to all attendees and invitees, the attendees may offer corrections or comments, and thereafter Certificate Holders shall issue the finalized meeting minutes to all attendees and invitees.

c. If, for any reason, the Contractors cannot finish the construction of the Project, and one or more new construction contractors are needed, the Certificate Holders shall hold another preconstruction meeting with the same format as outlined above.

45. The Certificate Holders' maintenance of their respective Project Components will be in accordance with NYPA's and National Grid's respective maintenance practices as well as long range vegetation management plans, as may be amended from time to time, as and when necessary for the safe functioning of the Certificate Holders' assets.

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46. The Certificate Holders shall confine construction for the Project to the certified ROW and approved additional work areas as detailed in the approved EM&CP.

47. The Certificate Holders shall stake and/or flag all on or off-ROW access roads and other areas needed for construction such as structure work areas and laydown and storage areas. Certificate Holders shall mark any known danger trees on land adjacent to either edge of the ROW, as certified, for review and acceptance by DPS Staff. The Certificate Holders may fell any danger tree in accordance with ROW management practices or in accordance with the Certificate Holders respective long-range vegetation management plans.

48. The Certificate Holders shall schedule construction activities and yard activities on the Project to occur between the hours of 7:00 a.m. through 7:00 p.m. Monday through Saturday. If, due to safety, weather concerns, continuous operation requirements, or planned outage restrictions, such construction activities are required to occur on a Sunday or before/ after 7:00 a.m./ p.m., the Certificate Holders after consultation with the affected municipality, shall seek verbal or e-mail approval from DPS Staff. To the maximum extent practicable, such approval shall be requested at least 24 hours in advance unless the Sunday or before/ after 7 a.m./ p.m. construction activities are required for safety reasons that arise less than 24 hours in advance.

49. Construction shall not commence in any segment of the Project until the real property rights necessary to construct and operate at least 70% of the length of the portion of the Project on such segment are obtained. All segments shall be identified in the EM&CP. The Certificate Holders shall provide a detailed construction schedule to DPS Staff prior to its construction in any segment, together with evidence of such property rights.

50. In connection with ROW vegetation clearing, the Certificate Holders shall:

    a. comply with the provisions of 6 NYCRR Part 192, Forest Insect and Disease Control, and Section 9-1303 of the New York State Environmental Conservation Law ("ECL") and any quarantine orders issued thereunder;

    b. note on the EM&CP drawings the clearing and disposal techniques;

    c. not create a maximum wood chip depth greater than three (3) inches, except for chip roads or invasive species control, nor store or dispose chips in wetlands, within stream banks or floodways or agricultural lands;

    d. utilize the wood resource generated by the clearing in accordance with sound environmental techniques;

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e. leave stumps in place within 50 feet of streams unless construction of an access road or work pad necessitates removal. Trees shall not be felled into any stream or onto the immediate stream bank; and

f. limit clearing of natural vegetation to that material which poses a hazard or hindrance to the construction activity. Snags which provide shelter in streams for fish shall not be disturbed unless they cause serious obstructions, scouring or erosion.

51. The Certificate Holders shall, as part of their purchasing of new ROW and/or danger tree rights, negotiate in good faith with each landowner the purchase of rights to all logs over six (6) inches in diameter at the small end and eight (8) feet or longer ("Merchantable Logs"); the Certificate Holders' removal of the Merchantable Logs resulting from clearing the Project ROW will be to an off-ROW location(s) and Certificate Holders will provide notice of the location(s) to be included in the EM&CP.

52. Certificate Holders shall acquire danger tree rights where necessary for the construction and operation of the Project within three (3) years of EM&CP approval or within that time period commence condemnation proceedings. This Certificate Condition does not preclude the Certificate Holders from exercising their eminent domain powers outside of the three-year period, or otherwise acquiring the rights to remove a danger tree outside of the three-year period. Certificate Holders shall notify DPS Staff once rights are acquired.

53. The Certificate Holders shall include in the EM&CP a plan for removal, reuse, recycling, and disposal of all existing equipment (e.g., transformers, wood poles, conductors, etc.). The Certificate Holders shall remove from the ROW to appropriate destinations and handle, in accordance with the EM&CP, existing transmission facility equipment that they or their Contractor removes or replaces as part of the Certificate Holders' work on the Project.

54. The Certificate Holders shall not construct, nor allow any Contractor in their employ to construct, any new access road or improve or use any existing access road, unless such road is shown in the EM&CP. Should the Certificate Holders need additional access, they shall follow the procedures recited in Certificate Condition 35.

55. Wreck out depressions from existing transmission poles, or guard structure removals, must be backfilled to or above grade prior to demobilization from the corresponding work area to ensure safety for affected landowners, livestock, and farm equipment.

56. The Certificate Holders 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.

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57. The Certificate Holders shall be responsible for checking all culverts and assuring that they are not crushed, blocked, or otherwise damaged during construction and restoration of the Project. If a culvert is crushed, blocked or otherwise damaged during construction or restoration of the Project, Certificate Holders shall repair the culvert or replace it with alternative measures appropriate to maintaining proper drainage. Culvert repairs or replacements shall follow specifications in the EM&CP.

58. The Certificate Holder shall, upon completion of the Project:

    a. conduct an assessment of the need for landscape restoration, including vegetation planting, earthwork or installed features to landscape the Project with respect to public road crossings, residential areas, and switchyards and substations owned by the Certificate Holders;

    b. prepare plans for any visual mitigation found necessary, and, in connection therewith, removal, rearrangement and supplementation of existing landscape improvements or plantings should be considered, as appropriate;

    c. consult with DPS Staff on content and execution of its assessment, resultant landscaping plan specifications and materials list; details shall include measures for third party or wildlife damage to any landscape and vegetation plantings; and

    d. present draft assessments and plans to DPS Staff for review and file a final plan with the Secretary within one (1) year after the date each segment of the Project is placed in service; each plan will be limited to the area impacted by the relevant segment.

59. All trees over four (4) inches in diameter (measured four feet above ground) or shrubs over four (4) feet in height damaged or destroyed by the Certificate Holders' activities during construction, regardless of where located, shall be replaced by the Certificate Holders with equivalent-type trees or shrubs, subject to the provisions of 6 NYCRR Part 575, *Prohibited and Regulated Invasive Species*, except where:

    a. the approved EM&CP permits otherwise;

    b. equivalent-type replacement trees or shrubs would interfere with the proper clearing, construction, operation, or maintenance of the Project;

    c. replacement would be contrary to sound ROW management practices or to the Certificate Holders' long range vegetation management plans; or

    d. a property owner or other recorded easement or license holder with the right to control replacement (other than the Certificate Holders) on whose land the damaged or destroyed trees or shrubs were located declines replacement.

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60. The Certificate Holders shall ensure that the EM&CP shall: (a) identify plans for tree protection; and (b) indicate on the drawings where tree protection measures will be applied (if any are known at the time of EM&CP preparation).

61. The Certificate Holders shall include plans in the EM&CP to prevent unauthorized access to and along the ROW, which plans shall include the following:

    a. posting signs at the edges of the Project ROW in those locations where the Project 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, if any; and

    e. final determination of locations of gates and berms shall be made during a post-construction assessment of the Project, in consultation with DPS Staff.

62. Prior to restoration within a given area of the Project, the Certificate Holders shall thoroughly clear the areas of the ROW and work areas where construction occurred of debris related to electric line construction or removal, such as nuts, bolts, spikes, wire, and pieces of steel. All construction debris (e.g., building materials, non-biodegradable erosion and sediment controls and work site refuse), temporary stone not suitable for reuse, large mechanically fractured rock resulting from drilling operations not suitable for reuse, and excess sediment not suitable for reuse generated by the Project shall be completely removed prior to completion of restoration of uplands, agricultural lands, wetlands, adjacent areas, waterbodies, floodplains and floodways. Determinations of what materials are suitable for reuse shall be determined in consultation with DPS Staff. Construction-generated debris shall be properly disposed of at an approved offsite waste disposal location.

H. Herbicide Use During Construction

63. If the Certificate Holders apply herbicides on the Project, they shall do so only under the direct supervision of a NYS Certified Applicator who shall own or be employed by a New York State-registered business. The supervising certified applicator shall be familiar with and understand the provisions of this Certificate and shall be present in the field to ensure that the Certificate Holders' application of herbicides complies with their long-range vegetation management plan and the Certificate.

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64. If the Certificate Holders apply herbicides on the Project, they shall ensure that all herbicides they use have valid registrations under applicable state and federal laws and regulations. If the Certificate Holders desire 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 Holders shall submit the proposed change for approval pursuant to Certificate Condition 35 of this Certificate. No change inconsistent with the pesticide labeling shall be proposed.

65. If the Certificate Holders apply herbicides on the Project, they shall apply such herbicides only in conformity with all label instructions and all applicable state and federal laws and regulations. They shall apply herbicides in compliance with the Certificate Holders respective long-range vegetation management plans and the Certificate. They shall ensure that their applicators reference maps which indicate treatment areas, and wetland and adjacent area boundaries, prior to treating. They shall ensure that applications required in seasonally flooded freshwater wetlands are undertaken during a dry season.

66. If the Certificate Holders apply herbicides on the Project, they shall ensure that their application of herbicides within wetlands and the 100-foot adjacent areas associated with State-regulated wetlands shall be performed only by backpack treatment or squirt bottle method.

67. If the Certificate Holders apply herbicides on the Project during or in preparation of construction on agricultural lands (including pastures and farmsteads):

    a. The Certificate Holders shall ensure that, in doing so, they do not allow equipment wash water or excess herbicide to enter wetlands, streams or waterbodies.

    b. The Certificate Holders' agriculture inspector (as defined in Certificate Condition 69 & 106) shall be involved with the notification to the agricultural producer providing ample time to provide livestock segregation practices from the proposed herbicide affected areas. If the agricultural producer is unable to move livestock to unaffected secluded pasture(s), the Certificate Holders will be responsible to provide, install and 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.

    c. If the Certificate Holders propose to apply herbicides during or in preparation of construction on agricultural lands operated under or in pursuit of the National Organic Program according to 7 CFR Part 205, the Certificate Holders shall determine the location of such organic producers, and determine the Certificate

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Holders' rights to apply herbicides on leased 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.

I. Noise

68. The Certificate Holder shall present to the Commission by filing with the Secretary at a minimum of sixty (60) days prior to the start of civil construction (pouring of foundations) at a substation the following:

a. 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 property 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 substation(s), outside any residence, 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 averagesound level from the substation(s) outside any residence from any other non-tonal operational sound sources associated with the substation(s) not included in Certificate Condition 68 (a)(i). 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 for those noise sources will be assumed to be tonal and prominent.

(iii) 45 dBA Leq-1-hour maximum equivalent continuous average sound level from the substation(s) across all properties and boundary lines, except for delineated wetlands and utility and transportation rights of way(s), or where the Certificate Holder has an enforceable agreement with the property owner waiving this limit or as specified in Certificate Condition 68 (a)(iv) below. 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.

(iv) 55 dBA Leq-1-hour maximum equivalent continuous average sound level from the Adirondack and the Massena substations at the eastern and northeastern boundary lines, respectively, except for delineated wetlands and

utility and transportation rights of way(s). 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.

(v) 45 dBA Leq-1-hour maximum equivalent continuous average sound level from the substation(s) emergency generator(s) outside any residence and 55 dBA Leq-1-hour maximum equivalent continuous average sound level from the substation(s) emergency generator(s), across all properties and boundary lines, except for delineated wetlands and utility and transportation rights of way(s), or where the Certificate Holder has an enforceable agreement with the property owner waiving any of these limits. 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.

b. Final design, computer noise modeling and tonal evaluation of the substations according to the Specifications for Computer Noise Modeling and Tonality Assessment, Appendix H attached to the Joint Proposal in this proceeding. No post-construction noise testing by the Certificate Holders will be necessary.

J. Oversight and Supervision

69.

a. The Certificate Holders shall each use an inspector or inspectors during construction for Project oversight. Inspector(s) may be used to act for multiple inspection roles so long as such inspector(s) are qualified; including, but not limited to, the environmental inspector and the agricultural inspector, as long as the agricultural inspector has enough time to also function as an environmental inspector.

b. The Certificate Holders shall provide DPS Staff with the environmental inspector's daily reports within 48 hours of completion with the sole intention of keeping DPS Staff informed of on-going activities. There shall also be a construction supervisor employed full-time on the Project for each Certificate Holder; along with at least one safety inspector who will inspect the work site from time to time; and at least one quality assurance inspector who will inspect the work site from time to time. Inspectors shall also be responsible for, or oversee, periodic safety inspections of the work site, thereby fulfilling the role of safety inspector. In addition, the quality assurance inspector may also fulfill the inspection requirements under the Certificate.

c. The Certificate Holder will adhere to the inspection requirements of the then-effective SPDES General Permit, including but not limited to the inspection frequency, report content, and inspector education/training requirements. The

inspector education/training requirements are described in the definitions section of the Construction General Permit.

70.

a. During periods of relative inactivity on the Project, after consultation with and acceptance from DPS Staff, the Certificate Holders may temporarily decrease the number of hours worked by inspectors and the extent of their presence at the Project site commensurate with the decline in Project activity; likewise, during periods of relatively high activity on the Project, after consultation with and acceptance from DPS Staff, the number of inspectors and the extent of their presence at the Project site may temporarily increase commensurate with the increase in Project activity. The Certificate Holders shall ensure that the frequency of inspections by the environmental inspector shall comply with the requirements of the SPDES General Permit.

b. The environmental inspector shall have stop work authority over all aspects of the Project that could create an adverse impact to the environment.

c. The Certificate Holders shall provide to DPS Staff, NYSAGM and NYSDEC the cell phone numbers of the Certificate Holders' environmental inspector and construction supervisor. The environmental and agricultural inspectors may have direct communication with DPS Staff, NYSAGM and NYSDEC throughout the duration of the Project to answer questions or provide updates on Project status.

d. The Certificate Holders shall ensure that their environmental inspector, the agricultural inspector, and construction supervisor are equipped with sufficient access to documentation, transportation, and communication equipment to effectively monitor Certificate Holders' Contractor's compliance with the provisions of every Order issued in this proceeding with respect to Project and to those sections of the PSL, ECL, Section 401 Water Quality Certification, and the EM&CP.

71. The Certificate Holders shall ensure that the names and qualifications of their environmental inspector, agricultural inspector and construction supervisor are submitted to DPS and NYSAGM (pursuant to Certificate Condition 106) at least two (2) weeks prior to the start of construction of the Project. The Certificate Holders shall ensure that their environmental inspector's qualifications satisfy those of a "Qualified Inspector" pursuant to the SPDES General Permit.

72. The Certificate Holders' 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.

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73. 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 Holders 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 DPS Staff stop work order shall expire twenty-four (24) hours after issued unless confirmed by a single Commissioner. DPS Staff shall give the Certificate Holders notice by electronic mail of any application to a Commissioner to have a stop work order confirmed. If a stop work order is confirmed, the Certificate Holders may seek reconsideration from the confirming Commissioner or the whole Commission. 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 potential environmental impact, economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is violated. Before exercising such authority, DPS Staff representatives will consult (wherever practicable) with the Certificate Holders' representative(s) 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 brought immediately to the attention of the Certificate Holders' Project Manager(s) and the Director of the Department of Public Service Office of Electric Gas & Water. In the event that a DPS Staff representative issues a stop work order, neither the Certificate Holders nor the Contractor will be prevented from undertaking any safety-related activities as they deem necessary and appropriate under the circumstances. The issuance of a stop work order or the 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 a specific activity that represents a significant environmental threat that is, or immediately may become, a violation of the Certificate or any other Order in this proceeding, the DPS Staff representative may -- in the absence of the Certificate Holders supervisory personnel, or in 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 potentially

harmful activity immediately. If the Certificate Holders' personnel are not on site, the DPS Staff representative will immediately thereafter inform the Certificate Holders' construction supervisor(s) and/or environmental inspector(s) of the action taken. The stop work order may be lifted by the DPS Staff Representative 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 the Certificate Holders 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 Holders or the relevant Contractors to implement the corrective measures identified in the approved EM&CP. The field crews shall comply with the DPS Staff representative's directive immediately. The DPS Staff representative will immediately thereafter inform the Certificate Holders' construction supervisor(s) and/or environmental inspector(s) of the action taken.

f. The Certificate Holders will promptly notify DPS Staff, NYSAGM (for agricultural lands), and the NYSDEC (for NYSDEC-jurisdictional areas or SWPPP violations) of any activity that involves a violation of the Certificate.

74. The Certificate Holders shall organize and conduct site-compliance inspections for DPS Staff as needed during construction of the Project. Such inspections shall be conducted no less frequently than once per month. 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 conditions contained in the Certificate and any other Order issued in this proceeding, other legal requirements and commitments, as well as a field review of the Project site, if necessary. The inspection also may include:

i. Review of all complaints received, and their proposed or actual resolutions;

a Review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies and indicate how the Certificate Holders has responded to the public, local governments, or other agencies;

b Review of the status of the Project in relation to the overall schedule established prior to the commencement of construction; and

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c Other items the Certificate Holders or DPS Staff consider appropriate.

ii. The Certificate Holders shall provide a written record of the results of the inspection, including resolution of issues and additional measures to be taken, to agencies involved in the inspection audit or requesting copies of the written record at the pre-construction meeting.

75. The Certificate Holders shall ensure that the required safety rules and regulations are communicated to site inspectors in a documented tailboard meeting prior to entry onto the site for work on the Project. Site inspectors are responsible for interpreting these rules for their non-English speaking and reading-impaired employees. Once a site inspector has received the Safety Awareness training session, he or she is authorized to visit that site for which the training was held. A separate training session is required for each jobsite.

76. At their sole discretion, the Certificate Holders may restrict access to the Project area and require certain persons seeking such access to be appropriately trained in matters such as environmental protection and safety.

77. The Certificate Holders may require site inspectors to supply their own personal protective equipment for any tours of construction sites. This shall include a properly fitted, currently valid, hardhat, safety glasses with side shields, and safety-toed boots at any time while on site, unless the visitor is in a vehicle or in a construction trailer.

K. Roads and Highways

78. The Certificate Holders shall delineate on the EM&CP drawings the locations of proposed temporary access roads, proposed permanent access roads, and existing access roads. The Certificate Holders shall ensure that proposed access road improvements and measures for environmental impact minimization and access control are included in the EM&CP.

79. The Certificate Holders shall minimize the impact of Project construction on traffic circulation. The Certificate Holders shall ensure that traffic control personnel and safety signage are employed to ensure safe and adequate traffic flow when roadways are affected by Project construction.

80. The Certificate Holders shall coordinate all work on the Project during construction at state and municipal road and highway crossings with the appropriate state and municipal officials and shall obtain the required authorization for such work, subject to the Commission's continuing jurisdiction as appropriate.

81. The Certificate Holders shall coordinate with the appropriate municipal agencies and police departments for traffic management of roads under municipal jurisdiction.

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

83. To the extent required in connection with the delivery of oversized components for the Project, the Certificate Holders or their suppliers shall obtain any required permits from applicable agencies.

84. NYSDOT shall have authority to place inspectors on-site to monitor and observe the Certificate Holders' activities on state highways, and/or to request the presence of state or local police to assure the safety of freeway travelers, at such times and for such periods as NYSDOT deems appropriate. All costs thereof shall be borne by the Certificate Holders.

85. The Certificate Holders shall coordinate all State Highway crossings and longitudinal occupations with NYSDOT. The Certificate Holders shall obtain the necessary permits from NYSDOT, including, as appropriate, a Highway Work Permit and Use and Occupancy Permit pursuant to 17 NYCRR Part 131, including, if necessary, the filing by NYSDOT of a request with the Federal Highway Administration for an exception to the Accommodation Plan for Longitudinal Use of Freeway Right-of-Way by Utilities, for the construction, operation and maintenance of the Project in the ROW of State highways. Said Use and Occupancy Permit shall include payment of a fair market value- based fee for use of State property.

86. The Certificate Holders shall ensure that parking for Project construction workers shall be in designated areas which do not interfere with normal traffic, cause a safety hazard, or interfere with existing land uses. These parking areas shall be designated in the EM&CP.

87. The Certificate Holders shall avoid direct disturbance to properties, where practicable, by accessing the Project ROW from existing roadways or off-ROW access roads listed in the EM&CP.

88. The Certificate Holders shall implement a Maintenance and Protection of Traffic ("MPT") plan that identifies procedures to be used to maintain traffic and to provide a safe construction zone for those activities within the roadway ROW. The MPT plan shall address temporary signage, lane closures, placement of temporary barriers, and traffic diversion. The Certificate Holders shall ensure that:

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

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

(ii) Signs depicting workers at 300 feet.

b. Flagmen shall be present at all times when equipment is crossing any public road, when equipment is being loaded or unloaded from a vehicle parked on a public road, and where two-lane traffic has been reduced to one lane. All flagging operations shall comply with 17 NYCRR Part 131.

89. The Certificate Holders shall coordinate with NYSDOT and notify DPS Staff for all work to be performed in the State highway ROWs. Prior to submitting their construction plan for any State highway ROW segment, the Certificate Holders shall provide to NYSDOT a preliminary design marked to avoid conflict with potential transportation projects that NYSDOT may seek to undertake in the future and shall offer to consult with NYSDOT concerning any comments it may offer and shall use reasonable efforts to accommodate any NYSDOT concerns.

L. Cultural Resources

90. The Certificate Holders shall ensure that no construction is undertaken in previously undisturbed areas where archaeological surveys have not been completed until such time as the appropriate authorities, including OPRHP and DPS Staff, have reviewed the results of any additional historic properties and archeological surveys that are required.

91. The Certificate Holders shall ensure that, should archaeological materials be encountered during construction, the Certificate Holders shall stabilize the area and cease all ground-disturbing activities in the immediate vicinity of the find and protect the find from further damage. Within twenty-four (24) hours of such discovery, the Certificate Holders 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. The Certificate Holders' procedure for unanticipated discoveries will be specified in the EM&CP.

92. The Certificate Holders shall ensure that, should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the vicinity of the find is halted immediately and the remains are protected from further disturbance. The Certificate Holders shall immediately notify law enforcement/coroner and OPRHP Field Services Bureau and notify DPS Staff within twenty-four (24) hours. The Certificate Holders shall ensure that treatment of human remains is done in accordance with the OPRHP's Human Remains Discovery Protocol and the Certificate Holders' procedure for unanticipated discoveries, as specified in the EM&CP, 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.

93. The Certificate Holders shall ensure that the creation of adverse impacts on historic structures in the Project vicinity is avoided by implementing design and vegetation management measures specified in the EM&CP.

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

M. Terrestrial and Wildlife Resources

95. In order to identify T&E animal or plant species potentially located in the Project area, the Certificate Holders shall refer to 6 NYCRR Parts 182 and 193. Prior to the commencement of construction, the Certificate Holders shall provide all personnel with information on any T&E animal or plant species potentially located in the Project area and indicate measures to minimize risks to the species during construction.

96. Except as otherwise specified in Conditions 98 and 99, 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 construction activities authorized in this Certificate are conducted:

    a. The Certificate Holder shall notify NYSDEC and DPS Staff within twenty-four (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 (Limits of Disturbance) and safely cease activities in that area until DPS Staff, in consultation with NYSDEC, authorizes recommencement of activities.

    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.

97. The Certificate Holders, for the protection of T&E species, shall implement the following measures:

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a. At least two (2) weeks prior to construction activities, the Certificate Holders shall conduct a visual inspection in that area to determine if any bald eagle nests as described in the EM&CP, are present.

b. During construction and maintenance activities, if any bald eagle nest is discovered within 0.25-miles of the work area, the Certificate Holders shall notify NYSDEC and DPS Staff within twenty-four (24) hours of discovery and, except in emergency situations, the nest shall not be approached. The 0.25-mile environmentally sensitive area shall be marked, where the Certificate Holders have property rights to allow such marking, and, except in emergency situations, this area shall be avoided until DPS Staff, after consultation with NYSDEC, authorizes activities in the buffer area. In the presence of a visual barrier (i.e. tree line, topography) that obstructs the view from the nest and shields it from work activities, the setback requirement may be reduced to 660 feet.

c. Notify NYSDEC and DPS Staff within twenty-four (24) hours of the discovery of an active nest or roost of any federal or state-listed threatened or endangered bird species within an active construction, ground clearing, grading, or maintenance activity area. The Certificate Holders 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, whichever is greater, in radius from the nest or roost until notice to continue construction at that site is granted by DPS Staff, after consultation with NYSDEC.

d. Maintain a record of all incidental observations of state threatened or endangered species during construction, operation, and maintenance of the Project.

98. The Certificate Holder will avoid, minimize, and mitigate impacts to Blanding's turtles by:

a. Avoiding construction activities within occupied Blanding's turtle habitats to the maximum extent practicable. Where avoidance is not possible the Certificate Holder will implement a Blanding's Turtle Avoidance and Protection Plan (the "Avoidance and Protection Plan," which will be included in Appendix I of the Joint Proposal) that meets the requirements of Part 182. The Plan will include a quantification and assessment of impacts to the subject species and habitat. This assessment of impacts will help inform whether (1) a taking of species or species habitat is anticipated to occur, and (2) whether proposed restoration measures addressing temporary impacts would meet their goals.

b. Employing a dedicated Blanding's turtle monitor(s) as described in the Certificate Holder's Blanding's Turtle Monitoring and Handling Protocol contained in the Avoidance and Protection Plan.

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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 within six (6) months of the start of construction.

d. If a Blanding's turtle 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 twenty-four (24) hours.

99. To avoid direct impacts to individual upland sandpiper and its habitat, the following work window applies for all ground disturbance and construction-related activities, including restoration and equipment (including mats) staging, storage, and transportation, within the area determined by NYSDEC to be upland sandpiper occupied habitat as depicted in Confidential Record Exhibit 24 of the Joint Proposal:

a. Work shall be conducted only between August 16 and April 14 in upland sandpiper occupied habitat areas;

b. If construction activities must occur outside of this window in upland sandpiper occupied habitat areas:

i. The Certificate Holders must prepare, in consultation with NYSDEC and DPS, and implement an Upland Sandpiper Avoidance and Protection Plan prior to any construction activities occurring in upland sandpiper occupied habitat areas. The Plan must include a quantification and assessment of impacts to the subject species and habitat. This assessment of impacts will help inform whether a taking of species or species habitat is anticipated to occur.

ii. If necessary, the Certificate Holders shall develop 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 Commission within six (6) months of the identification that construction activities need to occur within upland sandpiper occupied habitat areas.

100. In the event that an Indiana or Northern long-eared bat hibernaculum or tree roost is identified within the Project site during the construction of the Project, the Project will comply with the requirements of Part 182 as applicable to Indiana bats and Northern long-eared bats (or any other regulation(s) then applicable to such species) and NYSDEC's then-current guidance for compliance therewith. NYSDEC's current guidance for compliance with Part 182 states that within a (i) 5 mile radius around Northern long-eared bat

hibernaculum; (ii) 2.5 mile radius around an Indiana bat hibernaculum; (iii) 1.5 mile radius around a Northern long-eared bat roost tree; and (iv) 2.5 miles radius around an Indiana bat roost tree:

a. Snags and cavity trees will be left standing unless their removal is necessary for protection of human life or otherwise approved by DPS staff in consultation with NYSDEC.

b. All tree clearing activities shall be conducted between November 1 and March 31, unless exception is granted in limited case(s) through approval with DPS staff in consultation with NYSDEC.

101. Except as otherwise specified in Conditions 98, 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.

N. Water Resources

102. The Certificate Holders shall perform all construction, operation and maintenance in a manner that first avoids then minimizes adverse impacts to waterbodies, wetlands, and the one hundred (100) foot adjacent areas associated with all State-regulated wetlands. The Certificate Holders shall ensure the following provisions to protect wetlands, waterbodies, and adjacent areas are followed as specified in the approved EM&CP:

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 prior to construction and indicated on the approved EM&CP drawings.

b. If access roads or work pads in wetlands cannot be avoided, it shall be done with temporary construction mats or using best management practices in consultation with DPS and NYSDEC staff. Such locations shall be as set forth on the EM&CP drawings; provided, however, if geotextile/gravel access roads are proposed, such proposal shall be justified in the EM&CP.

c. Unless otherwise specified in the approved 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.

d. All work in streams shall be conducted in dry conditions (in the dry), using appropriate water handling measures to isolate work areas and direct stream flow around the work area, unless otherwise specified in the approved EM&CP.

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e. There shall be no substantial increase in visible contrast in water clarity or variation of flow volume due to construction activities between upstream reaches of work areas and downstream reaches of work areas.

f. Water resulting from dewatering operations, equipment washing, or other construction related activities shall not be directly discharged into any wetland or waterbody.

g. Bridges shall be installed wherever a new permanent crossing is required for state-regulated streams (Class C(T) or higher and/or navigable), as defined in 6 NYCRR Part 608.1(u) and Part 608.1(aa). The bridge shall span the bed and banks of the stream. If a bridge is not practicable, the approved EM&CP shall provide justification for a non-bridge crossing and the permanent culvert shall be designed in accordance with the approved EM&CP.

h. 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 approved 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.

i. Fuel tanks or other chemical storage tanks shall be appropriately contained and located a minimum of 300 feet away from any wetland or waterbody. If the minimum setback cannot be achieved, the approved EM&CP shall provide justification and demonstrate that impacts to wetlands and waterbodies shall be avoided or minimized to the maximum extent practicable.

j. Equipment refueling, maintenance, and repair shall be conducted a minimum of 100 feet away from any wetland or waterbody to the maximum extent practicable.

k. Disturbed streams shall be restored to equal width, depth, gradient, length and character as the pre-existing stream channel and tie in smoothly to the profile of the stream channel upstream and downstream of the disturbance. All disturbed stream banks shall be mulched within (2) days of final grading, stabilized with 100% natural/biodegradable fiber matting, and seeded with an appropriate riparian seed mix specified in the approved EM&CP. In areas where vegetation has been uprooted or grubbed on stream banks, the vegetation shall be replaced with ROW compatible native plantings as site conditions and facility design allow, and as appropriate for consistency with existing land uses, excluding access roads and areas needed for operation and maintenance of the facility.

l. A site-specific Stream Crossing Plan shall be developed for each new permanent state-regulated (Class C(T) or higher and/or navigable) stream crossing. All

structures must be able to safely pass the 1% storm event and be capable of withstanding any higher flow intervals likely to be experienced within a specific waterbody without causing damage to the stream bed or banks. Bridges or culverts may not be dragged through the stream and must be suitably anchored to prevent downstream transport during a flood. Fill may not be placed within the stream channel below bankfull elevation and placement of abutments or fill is authorized only above and outside bankfull boundaries. Geotextile fabric must be placed below and extending onto the bank and suitable side rails built into the bridges to prevent sediment from entering the waterbody. The permanent stream crossing shall facilitate downstream and upstream passage of aquatic organisms.

m. Any in-stream work or restoration shall not result in an impediment to passage of aquatic organisms.

n. Disturbed wetlands and State-regulated wetland adjacent areas shall be immediately stabilized and restored to pre-construction contours as soon as practicable. Immediately upon completion of grading, and as consistent with existing land uses, the area shall be seeded with a seed mix of native plants specified in the approved EM&CP that is appropriate for such areas. Overall vegetative cover in restored areas shall be monitored until an 80% cover with ROW-compatible plants of the appropriate wetland indicator status have been reestablished over all portions of the restored area. Notification shall be provided to the appropriate NYSDEC Regional Natural Resources Supervisors and DPS once 80% cover has been achieved.

103. The Certificate Holders shall work with NYSDEC to develop a Wetland Mitigation Plan, if necessary, following NYSDEC's wetland mitigation guidelines and the specifications contained in Appendix F of the Joint Proposal and will submit the Plan within six (6) months of the start of construction of the segment requiring such wetland mitigation for NYSDEC Staff acceptance.

104. The Certificate Holders shall provide a copy of the USACE permit application(s) to DPS Staff upon filing with the USACE.

O. Agricultural Resources

105. The Certificate Holders shall adhere to the NYSAGM "*Guidelines for Electric Transmission Right-of-Way Projects"* dated April 27, 2011. Further clarification of the guidelines will be provided in the EM&CP as needed if not discussed in superseding conditions 106-119. Any guideline notification requirements to County Soil and Water Conservation Districts will directed to NYSAGM staff in place of these organizations.

106. As required by Certificate Condition 69(a), the Certificate Holders shall retain a qualified inspector who also qualifies as an Agricultural and Soil Conservation Specialist/Inspector

(the "Agricultural Inspector"). The Certificate Holders shall ensure that the names and qualifications of their Agricultural Inspector are submitted to NYSAGM at least two (2) weeks prior to the start of construction of the Project for approval. NYSAGM staff and the Agricultural Inspector will coordinate site inspections as needed throughout the planning, construction, restoration, and post construction monitoring phases.

107. The Agricultural Inspector shall provide project scheduling information to involved farm operators in effort to conserve the individual farm operator's labor, materials, as well as provide an opportunity for harvest of crops prior to project impacts (e.g. staking, access, soil disturbance, etc.)

108. The Certificate Holders shall identify livestock use areas during development of the EM&CP. During the clearing phase, vegetation considered toxic to livestock shall be disposed of in a manner which prevents access by livestock.

109. In agricultural areas, logs, stumps, brush, or chips shall not be piled or buried in active agricultural fields or pastures.

110. The Certificate Holders shall ensure that, during preparation of the EM&CP, and in accordance with the EM&CP, a drainage line repair procedure shall be developed, in consultation with NYSAGM, for the repair of agricultural surface or sub-surface drainage. Drawings showing the generic technique to be implemented for sub-surface drain line repairs shall be provided by the Certificate Holders. All new plastic drain tubing shall meet or exceed the American Association of State Highway Transportation Officials ("AASHTO") M252 specifications. The plan for the replacement of functional drainage systems severed during construction shall be prepared during the restoration phase (unless drainage is immediately affecting off ROW crop production), in consultation with NYSAGM.

111. The Certificate Holders shall ensure that, where construction entrances are required from public roadways to the Project ROW in agricultural fields, either construction matting will be used or an underlayment of durable, geotextile fabric is placed over the exposed subsoil surface prior to the use of temporary gravel access fill material. In locations where underground utilities are located within ten (10) feet of the shoulder of the roadway, the Certificate Holders 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 ten (10) feet or more from the shoulder of the roadway, but still within the limits of the construction entrance, the Certificate Holders 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.

112. The Certificate Holders shall ensure that segments of farm roads that need improvement in order to be utilized for access are improved in consultation with the agricultural producer/ landowner and NYSAGM prior to use. Such improvements may include the installation of geotextile fabric and crushed stone. Improvements shall be coordinated through the Agricultural Inspector and the agricultural producer to allow continued agricultural use of farm roads by the agricultural producers. Restoration of farm roads post construction will meet or exceed the pre-existing condition minimally for continued agricultural use, if not needed for the operation and maintenance of the ROW.

113. The Certificate Holders shall ensure that farm drainage features, fences, and gates affected by construction are rebuilt to preconstruction conditions upon completion of construction, and the base of all new posts are secured to a reasonable depth below the surface to prevent frost heave. The Certificate Holders shall provide information concerning the construction of fences, gates, etc. (whether temporary or permanent).

114. Certificate Holders may utilize Low Ground Pressure ("LGP") equipment (in place of matting or topsoil stripping) for one-time or limited access. Equipment will be deemed suitable for LGP access when equipment and soil conditions will not result in a visible rut that alters soil compaction and/or soil profile. The LGP access will be authorized by the Agricultural Inspector prior to the LGP access both in and out of the agricultural area to observe weather conditions in an effort to minimize the risk of soil impacts. If inadvertent rutting occurs, LGP equipment movement in agricultural areas shall cease, and restoration shall be performed as soon as practicable based on favorable site conditions.

115. The Certificate Holders shall provide access for the agricultural producer to maintain normal agricultural operations to the 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.

116. The Certificate Holders shall ensure that in agricultural areas where blasting is required:

    a. matting or controlled blasting is used to limit the dispersion of blast rock fragments;

    b. all blasted rock not used as backfill is removed from croplands, haylands and pastures. If fill material is required, the proposed material shall be filled with an

invasive free material similar to native soil to the same level as the adjacent area, plus six (6) to twelve (12) inches of additional soil to allow for settling;

c. the till and topsoil is returned in natural sequence to restore the soil profile; and,

d. farm owners/operators are given timely notice prior to blasting on farm property. The Certificate Holders and the AI(s) will notify Project Management of any livestock concerns with blasting in consultation with the blasting plan.

117. The Certificate Holders shall retain the services of an Agricultural Inspector on at least a part-time basis through a two-year monitoring and remediation period, including: 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. During this phase, the Agricultural Inspector shall also maintain a list of invasive species observed on such portion of the Project 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 ROW, the Certificate Holders, in consultation with the Agricultural Inspector, DPS Staff, and NYSAGM, shall determine whether such species were pre-existing or whether such species were introduced by their work on the Project in accordance with the Invasive Species Plan as discussed in Certificate Condition 135. If it is determined at the end of the Certificate Holders' work that the Project was directly responsible for the introduction of invasive species to the agricultural areas, the Certificate Holders shall consult with the agricultural producer, DPS Staff, NYSDEC, and NYSAGM to determine the appropriate control measures to implement.

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

119. The Certificate Holders shall ensure that, after topsoil replacement, seedbed preparation (final tillage, fertilizing, liming) and seeding should be prepared using equipment appropriate for the agricultural conditions and following either the pre-existing crop, the agriculture producer's request, and/or NYSAGM 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. Temporary workspace 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 construction activities.

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P. Petroleum and Hazardous Substances

120. The EM&CP shall include a plan for storage of all petroleum and hazardous substances which may be used during, or in connection with, the construction, operation, or maintenance of the Project.

121. The EM&CP shall include a plan for responding to and remediating the effects of any spill of petroleum and hazardous substances in accordance with applicable law and regulations. Such plan shall be developed in accordance with applicable state and federal laws, regulations and guidance, and shall include proposed methods of handling spills of petroleum products and hazardous substances which may be stored or utilized during the construction, operation, or maintenance of the Project.

122. The Certificate Holders shall comply with New York Navigation Law § 175, 6 NYCRR § 613.8 (petroleum spills), and 6 NYCRR § 595.3(b) (hazardous substance spills).

123. Certificate Holders shall notify DPS and NYDEC Staff if they learn of any fuel or chemical spill and notify the NYSDEC hotline in accordance with applicable NYSDEC regulations and guidance.

Q. Contractors and Contractor Supplies/Materials

124. At least two (2) weeks prior to the Certificate Holders' construction of a particular Project segment, as defined in the EM&CP, the Certificate Holders shall submit a report to the Secretary confirming that all required construction materials are available for the Project. For purposes of this paragraph, an item of construction material is available if: (i) it is located at a laydown yard; (ii) it is in a Certificate Holders' warehouse or other routine inventory stocking location; or (iii) it is on order from a vendor with a scheduled delivery date prior to the time scheduled for its use in the Project.

125. The Contractor shall be responsible for all construction materials after they have been received by the Contractor. All equipment shall be located within approved laydown yard(s) or within the Project ROW, or other off-ROW areas provided, however, that if a local contractor is used for the work, the local contractor's facility may be considered as an acceptable laydown yard.

126. DPS Staff will provide the name of a contact person(s) ("DPS Staff Representative") and the contact information (mailing address, phone number, e-mail, etc.) of that individual for purposes of this Certificate Condition and Certificate Conditions 124 through 134 of this Certificate. If a reportable accident occurs in connection with work on the Project, the Certificate Holders shall report such accident to the DPS Staff Representative as soon as possible, and shall provide a copy of the accident report, if any, to the DPS Staff Representative after it has been finalized.

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127. The Certificate Holders shall provide the DPS Staff Representative with a copy of any police report and any insurance claim filed in connection with any theft of Project-related materials, as well as a list of the stolen items. Subsequently, the Certificate Holders shall provide the DPS Staff Representative with an accounting of all replacement materials. The Certificate Holders' accounting of replacement materials shall include documentation of the insurance company's coverage and the contractor's costs for replacement.

128. The Certificate Holders shall, within six (6) 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 projected and actual costs. Such accounting may be filed on a confidential basis.

129. The Certificate Holders shall ensure that a company engineer who designed the Project, or a representative from the engineering design firm that designed the Project or another Consultant selected by the Certificate Holders, shall conduct field reviews on a monthly basis and prepare a written report of the firm's findings on whether the Project is being constructed in accordance with the design for the Project. The Certificate Holders shall provide a copy of each such report to the DPS Staff Representative as part of the next monthly status report discussed in Certificate Condition 41. The Certificate Holders shall notify the DPS Staff Representative of when the field reviews will occur.

130. If a Contractor installs materials, structures, or components that do not conform to those specified in the EM&CP, the Certificate Holders, within one (1) month after becoming aware of such incident, shall prepare and deliver to the DPS Staff Representative a summary report detailing the incident, the steps to be taken to rectify the mistake, the material and labor costs associated with rectifying the incident, and the manner in which such costs will be accounted for separately from the Certificate Holders' other Project costs.

131. The Certificate Holders shall develop a quality control plan ("Quality Control Plan") for the Project to be included in the EM&CP describing how they will ensure that the transmission line structures and components they purchase for the Project conform to the specification for structures and components described in the EM&CP. At a minimum, the Quality Control Plan shall include:

    a. the name(s) and qualifications of the individual(s) who will conduct audits under the Quality Control Plan ("Quality Control Audits"); and

    b. the frequency with which the Quality Control Audits will be performed.

132. Within five (5) business days following receipt of each Quality Control Audit report the Certificate Holders shall provide to 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 Holders purchased for installation in the Project that did not conform to the specification for structures or components described in the approved EM&CP; and, (ii) any notes pertinent to the subject matter of such audit which were made at audit meetings by the Certificate Holders' personnel and contractors who performed the audit.

133. If any Quality Control Audit conducted by the Certificate Holders confirms that one (1) or more structures or components the Certificate Holders purchased for installation in the Project did not conform to the specification for structures and components described in the approved EM&CP, the Certificate Holders shall: (i) provide written notification to the Secretary within 72 hours of the Certificate Holders' confirmation of such non- conformity; and (ii) describe the steps the Certificate Holders will take to correct the non- conformity, including whether any components must be dismantled and sent back to the manufacturer, as well as a detailed estimate of all costs and expected delays in construction resulting from such non-conformity.

134. All costs incurred by the Certificate Holders as a result of its purchase of a structure or component for installation in the Project that did not conform to the specification for structures and components described in the approved EM&CP shall be accounted for separately from the Certificate Holders' overall Project costs.

R. Invasive Species

135. The Certificate Holders shall prepare an Invasive Species Management Plan in accordance with the Invasive Species Management Plan Specifications in Appendix G to the Joint Proposal in consultation with DPS Staff, NYSDEC, and NYSAGM. The Certificate Holders shall include the Invasive Species Management Plan in the EM&CP.

S. Water Quality Certification

136. To request Water Quality Certification(s) in connection with their applications for permit(s) under Section 404 of the Federal Water Pollution Control Act authorizing construction work in federal-jurisdictional waters and wetlands, the Certificate Holders shall comply with applicable federal and state regulations and complete any then applicable forms and/or pre-application requirements for submittal to the Chief, Environmental Certification and Compliance, of the Office of Electric, Gas, and Water or their designee, pursuant to §401 of the Federal Water Pollution Control Act.

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

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

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

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

A. EM&CP Plan and Profile Drawings and Maps

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

1. Plan and Profile Details

A Line[1] 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

[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.

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 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 plan[4] - plot, grading, drainage, and electrical - and elevation views with architectural details at appropriate scales). Indicate the type of outdoor lighting, including design features to avoid off-site illumination and minimize glare; the color and finish of all structures; the locations of temporary or permanent access roads, parking areas, construction contract limit lines, property lines, designated floodways and flood-hazard area limits, buildings, sheds, relocated structures, and any plans for water service and sewage and waste disposal.

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

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

2. <u>Stormwater Pollution Prevention</u>

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

3. <u>Vegetation Clearing and Disposal Methods</u>

Identify on the plan and profile drawings:

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

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

4. Building and Structure Removal

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

5. Waterbodies

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

6. Wetlands

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

construction activities will be restricted to the extent necessary to minimize impacts on wetlands.

b. Indicate the location and type (i.e., identification code for regulated town, state, or federal wetlands) of any wetland (e.g., marsh, meadow, bog, or scrub-shrub or forested swamp) within or adjoining the ROW or any access road, as determined by site investigation and delineation.

c. Indicate type and location of precautionary measures (e.g., mats) to be taken to protect all wetlands, associated drainage patterns, and wetland functions.

7. Land Uses

a. Agricultural Areas

i. Indicate the locations of sites under cultivation or in active agricultural use including rotational pasture, pasture, hayland, and cropland.

ii. Indicate the location of any unique agricultural lands including maple sugarbushes, organic muckland and permanent irrigation systems, as well as areas used to produce specialty crops such as vegetables, berries, apples, and grapes.

iii. Indicate the location of vulnerable soils in agricultural areas that are more sensitive than other agricultural soils to construction disturbance due to slope, soil wetness, and shallow depth to bedrock.

iv. Indicate the location of all land and water management features including subsurface drainage, surface drainage, diversion terraces, buried water lines, and water supplies.

v. Designate the site-specific techniques to be implemented to minimize or avoid construction-related impacts to agricultural resources.

b. Sensitive Land Uses and Resources

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

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

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

8. Access Roads, Lay-down Areas and Workpads

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

9. Noise Sensitive Sites

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

10. Ecologically and Environmentally Sensitive Areas

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

11. Invasive Species of Special Concern

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

12. Herbicide

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

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

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

1. <u>Facility Location and Description</u>

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. <u>Stormwater Pollution Prevention</u>

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. <u>Vegetation Clearing and Disposal Methods</u>

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 under-layment, gravel surface, paved surface, etc.);

   iii. use of roads, driveways, farm lanes, rail beds, etc.; and,

   iv. other access, e.g. helicopter or barge placement. For each temporary and permanent access type, provide a figure or diagram showing a typical installation (include top view, cross section, and side view with appropriate distances and dimension). Where existing access ways will be used, indicate provisions for upgrading to meet appropriate standards.

c. Indicate the associated drainage and erosion control features to be used for access road construction and maintenance. Provide diagrams and specifications (include plan and side views with appropriate typical dimensions) for each erosion control feature to be used, such as:

   i. staked straw bale or check dam (for ditches or stabilization of topsoil);

   ii. broad-based dip or berm (for water diversion across the access road);

   iii. roadside ditch with turnout and sediment trap;

   iv. French drain;

   v. diversion ditch (water bar);

   vi. culvert (including headwalls, aprons, etc.);

   vii. sediment retention basin (for diverting out-fall of culvert or side ditch); and,

viii. silt fencing.

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

9. Noise Sensitive Sites

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

10. Ecological and Environmentally Sensitive Sites

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

11. Invasive Species of Special Concern

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

12. Herbicides

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

13. Fugitive Dust Control

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

14. Petroleum and Chemical Handling Procedures

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

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

15. Environmental Supervision

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

16. Clean-up and Restoration

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

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

scarified or rutted areas; the removal of waste (e.g. excess concrete), scrap metals, surplus or extraneous materials or equipment used;

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

17. <u>Visual Impact Mitigation</u>

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. <u>ROW Encroachment Plan</u>

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

19. <u>Wetland Mitigation Plan</u>

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.

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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 ID; 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, unless an emergency situation exists where it is necessary to protect life, no further activity may take place until DPS and NYSDEC staff are notified and a remediation plan to restore the wetlandand 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 riparian seed mix that is generally consistent with the use of an adjacent property 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 Holders 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 annual monitoring and reporting for a period of five years after completion of the wetland mitigation;
6) After each agreed-upon monitoring period, the Certificate Holders 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 Holders 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 crossing of 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 in the EM&CP 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.

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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* (Part 575), 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 an 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 and defined in Part 575 within the limits of disturbance (LOD) due to construction of the Project.

Purpose and Goals of the Plan

An ISMP shall, at a minimum, identify invasive species known or found on the Project area that are contained on the list maintained by the New York State Departments of Environmental Conservation (NYSDEC) and Agriculture and Markets (AGM) pursuant to ECL 9-1709 and Part 575, describe the methods which will be used to minimize the spread and expansion of invasive species found on site as a result of construction activities, and describe the methods which will be used to prevent introduction of new invasive species.[1] The ISMP shall include baseline surveys, construction best management practices, post-construction monitoring and an adaptive management strategy plan.

Identification of Species of Concern for the Project

As a part of the Application, baseline surveys were conducted to identify all species listed in Part 575 within the LOD (Application Baseline Surveys). The NYSDEC, upon request from the Certificate Holder, shall review the Application Baseline Surveys to identify Invasive Species of Special Concern (ISSC) and Invasive Species of High Concern (ISHC) for the Project. This shall be done prior to conducting Pre-Construction Baseline Surveys as described below.

ISSC are defined as being comprised of Prohibited IS[2] 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 Application Baseline Surveys and an analysis of regional threat, (e.g. PRISM Tier rankings[3]).

ISHC are defined as being those IS not present in the Project area, but which if newly identified in post-construction monitoring, and determined by New York State Department of Public Service (DPS) to be directly and solely attributed Certificate Holders' Project construction activities, management is required. This list will include Prohibited IS with the highest management concern, e.g. Giant Hogweed.

[1] Operation and maintenance activities are covered by the most recent version of the O&M manual.

[2] See 6 NYCRR § 575.3.

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

Pre-Construction Baseline Surveys

1. During the development of the EM&CP, Pre-Construction Baseline Surveys shall be conducted during the growing season. These surveys shall serve as a baseline for the preparation of the draft ISMP. If Pre-Construction Baseline Surveys are completed at different times or as part of different phases, the results of the surveys will be incorporated into one ISMP.

2. The entire LOD, including permanent and temporary off-ROW access roads shall be surveyed for ISSC and ISHC plants as identified in Part 575.

3. The surveys shall include qualitative observations for IS spread potential from adjacent properties and land use (e.g., areas with known IS on adjoining property, private off-site access roads that cross the ROW, concentrated bird perching locations, and wildlife and recreational trails) shall be documented.

4. The preferred survey protocol is for data to be collected in a format which can be provided to NYSDEC staff for their review as GIS data and utilize or maintain consistency with *iMapInvasives* data standards.

    a. An existing mobile application is available to facilitate data collection.

    b. Alternately, a custom ArcGIS collector application can be developed by NYSDEC or an alternative protocol may be proposed for acceptance by NYSDEC.

    c. The data collection protocol shall allow for:

        - Point data collected in the field on GPS-enabled devices; and

        - Confidentiality controls to restrict information distribution. This coding hides the data from public view and is only visible to key state agency staff and PRISM^2 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 areas with known IS ;

4. Proper Clearing and Disposal Practices (*i.e., cut and leave in areas with known IS or dispose off-sitein landfill-incinerator or approved disposal site*);

5. Equipment Cleaning; and,

6. Restoration.

IS Propagation

IS Propagation during construction shall be minimized 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 areas with known IS alongROW; and/or

3. Other mutually agreeable practices.

Post-Construction Surveys and Monitoring

1. Post-Construction Surveys shall be conducted in all LOD, both within the ROW and off-ROWareas and access roads;

2. Post-Construction Surveys of ISSC and ISHC shall be conducted in all temporary off-ROW access road areas during the final SWPPP inspections;

3. Post-Construction Surveys of ISSC and ISHC shall be conducted in all ROW LOD areas, including permanent access roads after the second full growing season from final SWPPP signoff;

4. All Post-Construction Surveys shall use the same IS Survey Protocols used during the Pre-Construction Baseline Surveys. Certificate Holders will monitor to identify changes in known stands of ISSC within the applicable LOD that were identified during the baseline surveys (i.e., increase in coverage or density of each occurrence or species present) and new occurrences of ISHC;

5. In comparing progressive monitoring data of ISSC, expansion may be defined in terms of categorical jump in the following size categories:
    - New and distinct occurrences Up to 10 sq. ft.
    - Up to 0.5 acre
    - Up to 1.0 acre
    - More than 1.0 acre

6. 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 ISSC or 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. 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 Surveys identify 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.
    - ISSC that have expanded under the above terms must be controlled
    - ISHC that have been newly identified must be eradicated

2. 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.

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 ISSC and ISHC lists.

If the Post-Construction Surveys show 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.

APPENDIX H
SPECIFICATIONS FOR COMPUTER NOISE MODELING AND TONALITY ASSESSMENT

1. Final computer noise modeling shall be conducted by using:

    a. The ISO-9613-2 Sound Propagation Standard with no meteorological correction ("Cmet");
    b. All noise sources operating at maximum sound power levels;
    c. A maximum ground factor of G=0.5;
    d. A factor of G=0 for waterbodies, if any;
    e. A height evaluation of 4.0 meters for all receptors. Single-story buildings may use a height of evaluation of 1.5 meters above the ground;
    f. A temperature of 10 degrees Celsius and 70% Relative Humidity; and
    g. 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;
    h. No foliage and no miscellaneous attenuations (Amisc) will be included in the model.

2. Final design and sound modeling shall include and conform to the following:

    a. Results shall be included in a report that shall include among others:

        i. Sound results in tabular and graphical format,
        ii. The maximum A-weighted dBA Leq (1-hour) sound pressure levels, and the maximum linear/unweighted/Z dB (Leq 1-hour) sound pressure levels from the thirty-one and a half (31.5) Hz up to the eight thousand (8,000) Hz full-octave band, at all sensitive sound receptors (non-participating properties as well as the most critically impacted portion of each external boundary line of the facility site) within the thirty (30) dBA noise contour indicating whether the use is industrial, commercial, or residential, and comply with all noise limits in the Certificate Order.
        iii. A summary of the number of receptors exposed to sound levels greater than thirty (30) dBA reported in tabular format grouped in one (1)-dB bins.
        iv. Sound contours shall be legible and rendered above a map that shall include all sensitive sound receptors, boundary lines and noise sources within the station/substation (including transformers, reactors, HVAC equipment, and other noise sources, if any);
        v. Sound contours shall be rendered at a minimum, until the 30 dBA noise contour is reached, in 1 dBA steps.
        vi. Full-size, legible digital maps and sound contours at appropriate scale shall be submitted to DPS Staff.
        vii. Height and coordinates of noise sources as included in the model in tabular format.

b. Final drawings incorporating any changes to the design including site plan and elevation details of stations/substations, all relevant noise sources (e.g., reactors, filters, HVAC equipment, transformers, emergency generator, buildings), as well as equipment dimensions, cut sheets, and technical information from the manufacturers.

c. Final computer noise modeling files shall be delivered to DPS Staff by digital means.

d. GIS files used for the final computer noise modeling, including noise source and receptor locations and heights, topography, final grading, noise barriers, boundary line, and participating status shall be forwarded to DPS Staff in digital media.

e. Sound power level information from the manufacturers or as obtained from pre-construction field tests for all noise sources (e.g., capacitors, reactors, filters, HVAC equipment, transformers, emergency generators). Supporting information from the manufacturer or the field tests will be provided.

   i. If no sound information for electric transformers from the manufacturers is available, sound power levels can be estimated by using the algorithms recommended by the Electric Power Plant Environmental Noise Guide (Volume 1, 2nd edition. Edison Electric Institute. Bolt Beranek and Newman Inc. Report 3637. 1983 Update). General dimensions (height, width, length), Electrical Power (MVA), Voltage (KVA), and NEMA ratings will be reported.
   ii. If no manufacturer's 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 how sound power levels were obtained.

f. If mitigation measures are needed, details such as dimensions, appropriate clearances, and specifications (e.g. sound walls, barriers, mufflers, silencers, enclosures) as well as mitigated NEMA ratings and sound specifications for transformer(s), if needed, will be reported. If the latter, test results from the manufacturer will be delivered to DPS prior to the installation of transformer(s). If the sound levels at receptors or boundary lines estimated with the actual sound specifications exceed any limits of the Certificate Order, mitigation will be presented to DPS for review and approval. In all cases, any mitigation, if needed, will be implemented before the start date of operations.

3. For non-tonal noise sources, if any, and for non-participating receptors that exceed or approach within 5 dBA any sound limit, a prominent tone analysis will be presented subject to the following requirements:

   a. 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).

b. The analysis will use one-third octave band information from the manufacturers or field tests (from 20 Hz up to 10,000 Hz).

c. 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: [1]

   i. Attenuation due to geometrical divergence (Adiv),[2]
   ii. Atmospheric absorption for a temperature of 10 degrees Celsius and 70% Relative Humidity (Aatm),[3]
   iii. Attenuation to the ground effect (Agr[4],[5]),
   iv. Attenuation due to a barrier (Abar) if any,[6]
   v. No miscellaneous attenuations (Amisc) will be included.

d. If no manufacturer's information or pre-construction field tests are available to demonstrate that those noise sources are not tonal as defined herein, sounds will be assumed to be tonal and prominent, 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] If a computer noise modeling software with one-third octave band capabilities is used the following simplifications will not be necessary.

[2] Adiv can be assumed to be the same at all 1/3 octave bands or 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.

[4] 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.

[5] Calculations will use the maximum height of the equipment as the height of the noise source.

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

APPENDIX I - Blandings Turtle Avoidance and Minimization Plan

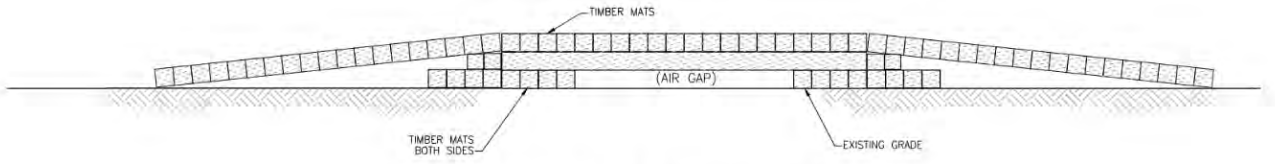
This document contains confidential information and it is exempted from public disclosure under Public Officers Law § 87(2).

Appendix A

Air Bridge Detail

Appendix A Air Bridge Detail

Air bridges will be installed along the temporary matted roads within the potential habitat areas as well as the area outside of the Potential Habitat in DEC Wetlands RR-6 and HO-2 identified on the Plan and Profile drawings. An example air bridge detail and sample photographs of the installation are provided below.



NOTES:
1. CONTRACTOR SHALL MAT THE ENTIRE ROAD IF MATS ARE SHOWN ON THE PLAN DRAWINGS AND EXISTING ROAD WIDTH IS NOT SUFFICIENT FOR SAFE PASSAGE OF VEHICLES.
2. CONTRACTOR CAN LAY MATTING IN WETLAND AS NECESSARY TO SUPPORT THE LAYER OF MATTING USED ON THE ROAD.
3. CONTRACTOR SHALL INSTALL MATS IN A MANNER TO MINIMIZE DISTURBANCE TO EXISTING WETLANDS.
4. ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH DETAILS HEREON.

AIR BRIDGE CROSSING

NOT TO SCALE