STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 21-T-0569 - Application of Orange and Rockland Utilities, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII for Construction, Operation and Maintenance of a New 138 Kilovolt Electric Underground Transmission Line 705 within the Town of Clarkstown, Rockland County.

ORDER ADOPTING TERMS OF A JOINT PROPOSAL

Issued and Effective: February 16, 2024

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STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on February 15, 2024

COMMISSIONERS PRESENT:

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

CASE 21-T-0569 - Application of Orange and Rockland Utilities, Inc. for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII for Construction, Operation and Maintenance of a New 138 Kilovolt Electric Underground Transmission Line 705 within the Town of Clarkstown, Rockland County.

ORDER ADOPTING TERMS OF A JOINT PROPOSAL

(Issued and Effective February 16, 2024)

BY THE COMMISSION:

I. INTRODUCTION

In this Order, the Public Service Commission (Commission) adopts the terms of a Joint Proposal filed on November 29, 2023, by Orange and Rockland Utilities, Inc. (O&R or the Applicant). The Joint Proposal is signed by O&R, trial staff of the New York State Department of Public Service (DPS), the New York State Department of Environmental Conservation (DEC), the New York State Department of Transportation (DOT), the New York State Department of Agriculture and Markets (DAM), the County of Rockland, and the Town of Clarkstown (collectively Signatory Parties). No parties oppose the Joint Proposal.

The Joint Proposal and the associated Appendices (A through G) address all the statutory and regulatory issues surrounding the Applicant's request for a Certificate of Environmental Compatibility and Public Need (Certificate) pursuant to Public Service Law (PSL) Article VII for authority to construct, operate, and maintain a new 138-kilovolt (kV) underground transmission line, primarily within the public roadway rights-of-way (ROW), for a total distance of approximately 5.5 miles between the Burns Substation and the West Nyack Substation in the Town of Clarkstown, Rockland County (the Project). As is more fully discussed throughout this Order, the Project satisfies a public need and avoids or minimizes to the extent practicable significant adverse environment impacts given the state of available technology, the nature and economics of various alternatives, and all other pertinent considerations, including agricultural lands and wetlands.

We determine that the Project is necessary to relieve potential overloading of the Applicant's existing 138-kV overhead Line 702 between its Burns and Oak Street Substations, and we accordingly grant the Applicant a conditional Certificate pursuant to PSL §121.

II. PROCEDURAL HISTORY

On November 18, 2021, O&R filed its Article VII Application along with a motion requesting that certain Commission regulations governing the contents of an application pursuant to PSL Article VII be waived. The Applicant supplemented its Application on January 31, 2022. On March 18, 2022, the Commission issued an Order on Waivers granting the Applicant's request to waive certain application requirements.[1]

[1] Case 21-T-0569, Order on Waivers (issued March 18, 2022).

On March 21, 2022, the Application was deemed complete in accordance with PSL §122.

On June 3, 2022, the Applicant filed a Notice of Impending Settlement Negotiations, indicating that settlement of issues affecting the Commission's grant of a Certificate was possible. Settlement conferences were convened via telephone between November 2022 and June 2023. Settlement negotiations resulted in the Joint Proposal filed on November 29, 2023.

Notice of Proposed Rulemaking and Public Comments

Pursuant to the State Administrative Procedure Act (SAPA) §202(1), a Notice of Proposed Rulemaking related to the Applicant's waiver requests was published in the State Register on December 22, 2021 (SAPA No. 21-T-0569SP1). No comments related to the waiver requests were received, but five written comments about the Project in general have been submitted.

The written comments received express concerns regarding impacts to traffic, residential properties, health and safety, and electric rates. The Rockland County Highway Department submitted comments regarding construction practices and impacts in and near roadways.

Two public statement hearings were held at the Rockland County Seat in New City on May 25, 2022. Representatives from O&R and DPS attended but no member of the public made a statement.

Legal Authority

Pursuant to PSL §126, the Commission may grant a Certificate for the construction or 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. Public Service Law §126 also 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 impacts on active farming operations. Further, the Commission must find that the location of the facility as proposed conforms to applicable state and local laws and regulations, except those local provisions that, as applied to the proposed facility, are unreasonably restrictive considering existing technology, factors of cost or economics, or of the needs of consumers. Finally, 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.

The Climate Leadership and Community Protection Act (CLCPA) imposes a requirement on all State agencies to consider, in the context of issuing permits, licenses, administrative approvals and decisions, "whether such decisions are inconsistent with or will interfere with the attainment of the statewide greenhouse gas emissions limits" established by the DEC under the CLCPA.[2] If such administrative approvals or decisions are found to be inconsistent or to interfere, agencies "shall provide a detailed statement of justification as to why such limits/criteria may not be met, and identify alternatives or greenhouse gas mitigation measures to be required where such project is located."[3]

Finally, the Commission's Procedural Guidelines for Settlement provide that all decisions, including those adopting the terms and conditions of a joint proposal, must be just and reasonable and in the public interest. The following

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[2] L. 2019, ch. 106, §7(2) (effective January 2020).
[3] Id., §8(1).

considerations pertain to this determination here: whether the joint proposal is consistent with the law and regulatory, economic, social, and environmental State and Commission policies; whether the terms of the joint proposal compare favorably with the likely result of a fully litigated case and produce a result within the range of reasonable litigated outcomes; and whether the joint proposal provides a rational basis for the Commission's decision.

III. JOINT PROPOSAL

According to the Signatory Parties, construction, operation, and maintenance of the Project in compliance with this Joint Proposal and with the Proposed Certificate Conditions will comply with the Public Service Law and with the substantive provisions of applicable State law.[4]

A. Project Description

The proposed Project is a new 138-kV, 5.5-mile underground transmission line originating at the Burns Substation on North Pascack Road in Nanuet and terminating at the West Nyack Substation on State Route 59. The Project is entirely within the Town Clarkstown.[5] New termination structures will be installed at both substations and a new 138:69kV autotransformer will be installed at the West Nyack Substation.

The Joint Proposal recommends a realignment at the Route 59 intersection of the Project to reduce impacts to the Route 59 corridor. Rather than proceeding south along College Avenue off West Nyack Road, the Project will continue west along West Nyack Road to the intersection of Route 59. The realignment is within the ROW described in the Application and

[4] Joint Proposal, p. 4.
[5] Nanuet and West Nyack are hamlets in the Town of Clarkstown.

revised drawings showing the realignment were submitted with the Joint Proposal.[6]

B. Basis of the Need for the Project

The Joint Proposal states that the proposed Project is needed to relieve potential overloading on O&R's existing 138-kV overhead Line 702 between its Burns and Oak Street Substations. Recent studies indicate that, under summer conditions, power flow on Line 702 will exceed the line's Long-Term Emergency (LTE) rating if another 138-kV line serving the region experiences an outage. Further, additional load related to proposed data centers in the Orangetown area could result in an exceedance of the LTE rating for Line 702 if a 138-kV line outage occurs. An additional 138-kV line (652) will approach its LTE rating under the same contingency. Such overloads could result in load transfers and load shedding to avoid damaging the existing conductors. According to the Joint Proposal, the Project would immediately relieve loads on Line 702, increase regional resilience, and improve source reliability.

C. Cost

The Joint Proposal states that the final cost estimate for the Project is $57,793,401. Exhibit 9 of the Application contains an estimate of $59,818,401 which the Applicant explained includes a contingency estimate not included in the cost estimate that O&R provided in Case 21-E-0074. The final estimate is approximately $2 million less than that provided in the Application because the realignment away from Route 59 is expected to result in decreased labor costs in that amount.

D. Probable Environmental Impacts

The Joint Proposal provides a summary of the Project's

[6] Application, Exhibit 19, Route 59 Realignment Plan and Profile Drawings (November 29, 2023).

probable environmental impacts, including potential impacts to land uses, visual and cultural resources, wildlife, wetland and water resources, topography and soils, transportation, noise, communications, and electric and magnetic fields. The Joint Proposal states that environmental impacts will be minimal, and generally consist of temporary impacts to traffic related to construction disturbances, because the Project is primarily underground and within public roadway ROW and will utilize existing substations.[7]

1. Land Use, Agricultural Resources, Active Farmland

The Project will be located underground, along existing paved roadways and will cross one existing railroad ROW. Land use impacts will be temporary in these areas and all construction disturbances will be fully restored. Permanent impacts will result from the expansion of the West Nyack Substation, but such impacts will be limited to O&R's existing transmission ROW. No active farmland or agricultural resources will be impacted by the Project.

2. Visual Resources

The Signatory Parties do not expect visual impacts to geologic, historic, scenic or park resources due to the underground nature of the Project. Neither the addition of manhole covers along the exiting roadway, nor the connecting infrastructure to be installed at existing substations near similar equipment is expected to impact visual resources. The Joint Proposal notes that temporary visual impacts will occur during construction but concludes that the impacts in one area are limited as construction activities move along the Project route.

[7] Joint Proposal, p. 10.

3. Topography, Geology and Soils

O&R investigated topography, geology, soils, and groundwater resources in the Project area. The Joint Proposal indicates that the Project is not expected to have any significant adverse impacts to topography, geology, or soils as it will be installed within an existing road ROW.[8]

4. Cultural and Historic Resources

The Application includes an assessment of the Project's potential impact on cultural resources.[9] The Phase IA and Phase IB Archeological reports indicate that the Project will not affect any archeological or historic resources. The New York State Office of Parks, Recreation, and Historic Preservation agreed with this conclusion.

5. Terrestrial Ecology and Wetlands

a. Vegetation and Wildlife

The Joint Proposal states that the New York Natural Heritage Program concluded that no State-listed threatened or endangered plant species are in the vicinity of the Project. Similarly, although the United States Fish and Wildlife Service indicates that the Federally listed threatened small whorled pogonia (*Isotria medeoloides*) is documented in Rockland County, no Federally listed plant species are documented within the vicinity of the Project. The Joint Proposal also states that field observations did not identify conditions that would suggest the existence of rare plant species along the proposed route and that the vegetative communities and species observed along the Project route are common throughout New York State.

Only minimal tree clearing is required along the proposed route. However, removal of 44 trees will be required at the south end of the West Nyack Substation. The Signatory

[8] Application, Exhibit 4.
[9] Application, Exhibit 4 (revised).

Parties state that the Project is in an area with no known habitat for Indiana bats or Northern long-eared bats. The Joint Proposal includes Certificate Conditions relating to the protection of terrestrial and wildlife resources and preventing the spread of invasive species to new areas, including requiring adherence to Invasive Species Management Plan Specifications.

b. Wetlands and Aquatic Resources

Although there are 16 wetlands adjacent to the proposed route, the Project is not expected to directly impact any wetlands.[10] Several protected streams are crossed by the Project.[11] The Project will be installed by jack and bore method and encased in concrete below the stream channels, except for the crossing of Pascack Brook. The Pascack Brook will be crossed via open-cut method above the culvert through which the stream flows. The Applicant will comply with NYSDEC Supplemental Specifications for Wetlands and Waterbodies[12] to develop the Environmental Management and Construction Plan (EM&CP) for construction in these areas.

6. Electric and Magnetic Fields

Electric and magnetic fields (EMF) both occur naturally and are produced by power lines during operation. The EMF study indicates that the Project will not produce electric or magnetic fields that exceed the Commission's recommended limits.[13]

7. Transportation

The Project will be primarily located in existing transportation ROW and therefore is expected to temporarily impact road traffic during construction, including partial land

[10] Joint Proposal, p. 14.
[11] Application, Exhibit 4, Attachment 5.
[12] Joint Proposal, Attachment F.
[13] Joint Proposal, p. 32.

closures and detours. Permanent impacts to roadways are not expected.

The Applicant will consult the appropriate State and local officials to obtain the required permits and to minimize impacts to traffic. O&R will implement a Maintenance and Protection of Traffic Plan for the Project in accordance with the procedures in the Manual of Uniform Traffic Control Devices and DOT Work Zone Traffic Control Standards. The Joint Proposal outlines traffic control measures to ensure safe work areas and minimize traffic impacts.

To minimize impacts to pedestrian traffic the Joint Proposal requires the use of appropriate construction practices, including steel plates, temporary barricades, and fencing to redirect pedestrians safely around construction zones. The Joint Proposal calls for special attention to schools and other areas with significant pedestrian traffic.[14]

The Project does cross a major freight railroad but will be installed below the track by jack and bore method. The Joint Proposal indicates that the Applicant will consult with the railroad owner regarding access and design specifications to avoid impacts to the railroad.

Given the underground nature of the Project, it is not expected to have any impacts on air transportation. The above-ground equipment to be installed at the substations will not be taller than existing equipment at those locations and will not require any lighting.

8. Communications

The Joint Proposal states that the Project is not expected to impact existing communication infrastructure. Construction and operation of the transmission facility will comply with the National Electric Safety Code requirements for

[14] Id., pp. 23-25.

spacing between power and communication lines. The Joint Proposal requires that the Applicant investigate and resolve any interference complaints if any arise.

9. Noise

The Application includes documentation of the noise assessment of the alterations at the West Nyack Substation and the noise impacts associated with construction of the Project.[15] The alterations at the Burns Substation do not include sound-producing equipment so no post-construction noise assessment was performed for that substation.

The Joint Proposal includes a summary of the noise assessment and noise impacts associated with the Project. It states that construction activities including the use of heavy equipment will generally be below 90 decibels at 50 feet, excepting diamond saws (90 decibels), line drill (98 decibels), and motor crane (93 decibels). The Joint Proposal states that construction activities will primarily occur during daytime hours.[16] The Joint Proposal acknowledges that such activities are likely to increase ambient noise levels for nearby residences but notes that unavoidable noise impacts will generally be localized and temporary, except for the proposed jack and bore locations and the vicinity of State Route 59 and North Middletown Road which will likely require several weeks of construction.

The Joint Proposal requires notice to local officials and the implementation of noise mitigation methods if construction activities are required to occur beyond the time restriction included in the proposed Certificate Conditions. The Joint Proposal requires O&R to develop and implement a

[15] Application, Exhibit 4.

[16] Construction in commercial areas may occur during nighttime hours to minimize impacts to traffic. Joint Proposal, Appendix D, p. 16.

complaint-handling process to ensure any noise complaints are handled promptly and courteously. O&R is also required to notify the public of construction activities through website postings, legal notices, and distributing information sheets in the local community.

No significant noise impacts are expected during operation of the Project. Noise generated during operation of the transmission line is not expected to contribute significantly to ambient noise conditions. Similarly, no continuous-sound-producing equipment will be installed at the Burns Substation, so no increase in noise is expected. Noise modeling for the new transformer at the West Nyack Substation indicates that the transformer noise will comply with the Town of Clarkstown noise code and be below existing ambient noise levels, as well as DEC's Noise Policy Guideline limit of 65 decibels.

10. Climate Related Impacts

The Project will include gas-insulated equipment that may contain sulfur hexafluoride (SF_6), a potent greenhouse gas that is subject to statewide emission limits pursuant to the CLCPA.[17] SF_6 is frequently used in electrical transmission equipment for voltage electrical insulation, current interruption, and arc quenching. To address the potential use of SF_6, the Joint Proposal requires the Applicant to comply with all applicable state laws and regulations regarding SF_6 when ordering gas-insulated equipment. The current emission rate of any equipment containing SF_6 must be 1% or less.[18]

We agree with the Signatory Parties that the proposed Project avoids or minimizes significant adverse environmental impacts to the extent practicable due to its location

[17] ECL §75-0101(7).
[18] Joint Proposal, Exhibit D.

underground in an existing roadway ROW and the restrictions and safeguards agreed to in the Joint Proposal.

E. Availability and Impacts of Alternatives

The Signatory Parties support the proposed Project as preferrable, on balance, to any alternatives that were considered.[19] O&R provided an evaluation of alternatives as part its Application, including a "No Action" alternative, alternative technologies, overhead construction alternatives, and underground construction alternatives.[20]

The Joint Proposal states that increasing load related to new and proposed data centers in southern Rockland County will result in thermal violations on Line 652 during contingencies if no action is taken. Such violations could result in shedding load associated with approximately 8,000 customers to prevent damage to Line 652. The Joint Proposal concludes that the "No Action" alternative would not address the need for the proposed Project.

The Application also included an assessment of alternative methods of deferring the Project, including demand response, energy efficiency, distributed energy resources (DER), or a combination of such methods. The assessment determined that the underground transmission line project is not generally suitable for a non-wires alternative solution and insufficient DER is available or could be provided in the area cost-effectively to be able to defer the Project.

The three overhead transmission alternatives that the Applicant considered are detailed in Exhibit 3. The alternative of adding a 138-kV line in the Existing 702 ROW would negatively impact endangered species and would require construction adjacent to a bald eagle habit, thus limiting available

[19] Joint Proposal, p. 34.
[20] Application, Exhibit 3.

construction timeframes. Converting existing 69-kV lines (55 and 551) to 138-kV would necessitate replacing more than 100 wood poles and require prohibitively expensive substation upgrades. Further, to maintain service during construction, this option would require the placement of temporary lines to replace the lost transmission capacity during the existing line upgrades. However, the proximity of the railway, NYS Route 9W and the surrounding densely developed area would preclude construction of temporary facilities. Similarly, an alternative to re-conductor and upgrade Lines 652, 654, 656, and 658 from 69-kV to 138-kV would involve the extensive replacement or upgrade of existing transmission and substation equipment, thereby resulting in considerably greater cost than the proposed Project.

The Applicant also examined three underground alternatives. These options generally follow the proposed Project's route but utilize some private property (two options) and an option that generally followed the public roadway ROW but continues to follow State Route 59 east for approximately 2.4 miles before turning south at the West Nyack Substation, rather than utilizing the transportation ROW at the intersection of State Route 59 and College Avenue. However, it was determined that the alternatives utilizing private property would result in increased impacts to the community, private property, and environmentally sensitive areas, and the alternative following State Route 59 would disrupt the heavy traffic on this roadway and require directional drill bores across the Palisades Interstate Parkway and Sickletown Road.

The Signatory Parties concluded that the proposed Project is the best option considering the location, environmental impacts, constructability, cost, and future benefits to the electric system. The Joint Proposal states that

the proposed underground Line 705 project is the most constructible alternative that provides an immediate solution for overloading issues described above. Further, the proposed route avoids easements over private lands other than from the railway. The proposed Project is more cost-effective and will result in only minor temporary environmental impacts. Construction will occur almost exclusively in an existing roadway and will not occur within wetlands or forested lands.

F. Conformance with State and Local Laws

The Joint Proposal requires that all substantive Federal, State, and local laws, regulations, codes, and ordinances applicable to the Project shall apply, except those local laws and regulations the Commission has expressly declined to apply as being unreasonably restrictive. The Joint Proposal includes a summary of applicable ordinances for Rockland County and the Town of Clarkstown.[21] The Applicant requests that the Commission refuse to apply Rockland County Administrative Code prohibitions against locating structures (353-4.B[5]) or excavating (353-4.B[7]) within the 100-year floodplain of a designated stream or water recharge area. The Joint Proposal states that although the Project will be located within relevant 100-year floodplains, it will be installed underground in existing roadways and the surface will be restored to the original grade and paved condition without increasing impervious surface areas. Because no change to floodplain drainage or absorption patterns will occur, the Joint Proposal concludes that applying the prohibitions to the Project would wholly preclude underground installation resulting in greater environmental impacts.

[21] Joint Proposal, pp. 43-44.

The Applicant also requested that the Commission not apply Section 205 of the Town of Clarkstown Town Code related to noise. The Joint Proposal requires the Applicant to limit work in residential areas to daytime hours, but the Joint Proposal concludes that the Town's noise ordinance is unreasonably restrictive, and the Applicant cannot always guarantee compliance, particularly if nighttime, weekend, or holiday construction activities are required to minimize traffic impacts. Neither the Town nor the County objects to the Applicant's requests.

We grant the Applicant's request not to apply Rockland County Administrative Code §353-4.B (5) and (7) and Town of Clarkstown Town Code §205. Prohibiting placement of the Project underground to protect the floodplain would be unreasonably restrictive as once the construction is complete, there will be no floodplain impacts. Further, construction hour limitations and noise mitigations methods required in the Certificate Conditions will minimize noise impacts to the extent practicable. Applying the local noise ordinance in addition to these restrictions unreasonable.

The Joint Proposal notes several filings the Applicant will make with various New York State agencies. After the Commission approves a final Project design as part of the EM&CP, the Applicant will obtain highway work permits from DOT related to work within or adjacent to State highway ROWs. The Applicant will notify and coordinate with the New York State Thruway Authority regarding work along North Middletown Road where it passes underneath the Thruway. The Applicant will also notify and coordinate with the Palisades Interstate Park Commission for work on West Nyack Road where it passes underneath the Palisades Interstate Parkway.

Installation of the Project will temporarily disturb more than one contiguous acre and therefore require coverage under a DEC Stormwater Pollution Discharge Elimination System General Permit for Stormwater Discharges from Construction Activities. The Applicant will also develop and implement a Stormwater Pollution Prevention Plan (SWPPP) to address stormwater management, soil erosion, sediment control and pollution control. The SWPPP must employ best management practices to prevent stormwater pollution. The SWPP will be submitted as part of the EM&CP. The Applicant will also provide the SWPP to the Town of Clarkstown for review and approval as a municipal stormwater community.

The Applicant will also request a Water Quality Certification from the Commission as the Project will require a U.S. Army Corps of Engineers Section 404 Permit.

G. Consistency with the CLCPA

The Project does not directly emit greenhouse gases and is not associated with greenhouse gas emitting generation. By increasing the reliability and resiliency of the electrical grid, the Project is expected to support additional transmission that will be needed to connect renewable generation to load centers.

Also, the Project is not expected to disproportionally impact disadvantaged communities as defined in the CLCPA. Most of the Project is located outside any DEC-designated disadvantaged community. Beyond extending the fence line by 60 feet at the West Nyack Substation, impacts to such designated communities will be temporarily related to construction activities, which will be primarily limited to day-time hours in residential areas. We agree with the Signatory Parties that the granting a Certificate to the Project is consistent with the requirements of the CLCPA.

H. Conformance with Long-range Plans for the Electric Grid

The Joint Proposal concludes that the Project will be consistent with the most recent State Energy Plan, particularly the policy to support energy systems enabling significant reductions of greenhouse gas emissions by 2050. The State Energy Plan also recognized a need for additional transmission to support an increase in renewable energy and to maintain grid reliability and resiliency. We agree that Project will improve reliability and resiliency as described above and is consistent with these policies.

I. System Reliability Impact Study

Article VII applications must include a System Reliability Impact Study or system impact study (SIS) forwarded by the Transmission Planning Advisory Subcommittee for approval by the operating committee of the New York Independent System Operator (NYISO), which shows effects on stability of the interconnected system.[22] Preparation, review, and approval of the appropriate system study is governed by the NYISO pursuant to Attachment X of its Open Access Transmission Tariff. The Commission granted the Applicant's waiver regarding this requirement because the Project does not trigger the need for an SIS according to the NYISO.[23]

J. Public Interest, Convenience, and Necessity

The Applicant conducted public outreach and information efforts related to the Project.[24] The Applicant published notice of the Application in The Journal News and Rockland County Times for two consecutive weeks prior to its filing. Copies of the Application were also provided to the public libraries for Nanuet, West Nyack, and New City. O&R also

[22] Sixteen NYCRR §88.4(a)(4).
[23] Case 21-T-0569, Order on Waiver Requests, supra.
[24] Application, Appendix C.

served all adjacent landowners by first-class mail notifying them that the Project may affect their property and providing detailed instructions on how to become a party to this proceeding. The Joint Proposal indicates that the Applicant will continue to provide updates of the Project to owners and occupants of properties adjacent to the Project ROW throughout construction.

K. Certificate Conditions

The Signatory Parties claim that the 112 Proposed Certificate Conditions set forth in Appendix D are acceptable and appropriate for inclusion in a Certificate authorizing construction and operation of the Project. The Proposed Certificate Conditions cover, among other issues, invasive species, water quality, and environmental protections. Several Proposed Certificate Conditions are intended to protect vehicle and pedestrian traffic. The Proposed Certificate Conditions also specify several requirements regarding the contents of the EM&CP.[25]

We find that the Certificate Conditions will ensure impacts related to the construction and operation of the Project are avoided or minimized to the extent practicable.

L. Miscellaneous

The Joint Proposal contains several paragraphs labelled "General Provisions."[26] These paragraphs, 1 through 9, consist of agreements by and among the signatories to the Joint Proposal – they are self-executing and do not require any Commission action.

[25] See Joint Proposal, Appendix D.
[26] Joint Proposal, pp. 5-7.

COMMISSION FINDINGS and CONCLUSION

The Joint Proposal filed here is supported by the Applicant, DPS, DEC, DAM, DOT, Rockland County, and the Town of Clarkstown, all of which have been active participants throughout this proceeding. As discussed above, we find that the parties have adhered to our settlement rules and guidelines in producing a Joint Proposal that addresses all the statutory and regulatory issues surrounding the Applicant's request for a Certificate to construct, operate, and maintain the Project. In particular, the Joint Proposal considers the probable environmental impacts of the Project and details the steps necessary to ensure that any such adverse impacts are minimized to the extent practicable given currently available technology and the nature and economics of potential alternatives.

As discussed throughout this Order, the Project is needed for reliability and resiliency purposes and is consistent with the CLCPA; accordingly, a finding of public need is fully supported by the record.

The Joint Proposal contains additional proposed findings in Appendix C. These findings are detailed and well-supported by the record; accordingly, we adopt them as our own and incorporate them here by reference.

Considering all the above, we grant the Applicant 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. The terms of the Joint Proposal filed on November 29, 2023 (Attachment A to this Order), including the conditions in Appendix D, subject to the discussion in the body of this Order, are adopted and incorporated into and made a part of this Order.

2. The Applicant's motion 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

STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

CASE 21-T-0569 - Application of Orange and Rockland Utilities, Inc. for a Certificate of Environmental Compatibility and Public Need to Install a New 138kV Underground Electric Transmission Line from the Burns Substation to the West Nyack Substation in Rockland County.

JOINT PROPOSAL TO THE NEW YORK STATE PUBLIC SERVICE COMMISSION

By: Orange and Rockland Utilities, Inc.
Staff of the New York State Department of Public Service
New York State Department of Environmental Conservation
New York State Department of Transportation
New York State Department of Agriculture and Markets
County of Rockland
Town of Clarkstown

Dated: November 27, 2023
Albany, New York

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STATE OF NEW YORK
PUBLIC SERVICE COMMISSION

Case 21-T-0569 - Application of Orange and Rockland Utilities, Inc. ("O&R") for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the PSL for the Construction, Operation, and Maintenance of a New 138 kilovolt Underground Electric Transmission Line and Related Equipment from the Existing Burns Substation at 71 N. Pascack Rd., Nanuet to the Existing West Nyack Substation at 209 State Route 59, West Nyack, NY; all Situated Within The Town of Clarkstown, Rockland County, NY.

This JOINT PROPOSAL, which includes Appendices A through G attached hereto and incorporated herein, is made on the 27th day of November, 2023 by and among the following parties (collectively referred to as the "Signatory Parties"): Orange and Rockland Utilities, Inc. (O&R or Applicant); Staff of the New York State Department of Public Service designated to represent the public interest in this proceeding (DPS Staff); the New York State Department of Environmental Conservation (NYSDEC); New York State Department of Transportation (NYSDOT); New York State Department of Agriculture and Markets (NYSAGM); County of Rockland (County), and the Town of Clarkstown (Clarkstown).

INTRODUCTION

On November 18, 2021, the Applicant filed with the Commission application documents, pursuant to PSL Article VII and the Commission's regulations thereunder, for a Certificate of Environmental Compatibility and Public Need (Certificate) authorizing the construction, operation, and maintenance of a proposed new 138 kilovolt (kV) underground transmission line (the Facility or the Project), primarily within the public roadway rights-of-way (ROW), for a total distance of approximately five and one half miles between the Burns Substation and the

West Nyack Substation wholly in the Town of Clarkstown, County of Rockland, New York. On January 31, 2022, the Applicant filed a letter containing text and attachments in response to the Secretary to the Commission's letter dated January 14, 2022, that identified deficiencies in the November 2021 filing of application documents. On March 18, 2022, the Commission issued an Order granting the waivers requested by the Applicant, effective as of March 18, 2022. In a letter dated March 21, 2022, the Secretary to the Commission found that the application was filed or otherwise in compliance with PSL §122 as of March 18, 2022 (the application documents, inclusive of the foregoing supplement, are referred to as the "Application").

Public statement hearings were held at the Rockland County Government Building, 11 New Hempstead Rd, New City, NY 10956, on May 25, 2022, at 1:30PM and 6:00PM. A procedural conference of the active parties was held before Administrative Law Judge Anthony Belsito by WebEx on May 26, 2022.

After exploratory discussions among the parties, O&R sent a Notice of Impending Negotiation to all active parties and other interested persons, including persons and entities that own land identified in the Application as a proposed or alternate site for the Facility or whose property abuts the proposed or an alternate route. The Notice of Impending Negotiation was duly filed with the Commission on June 3, 2022. Settlement conferences were held by telephone starting in November 2022 through June 2023. Electronic communications also were used to facilitate settlement discussions.

After thorough discussion of the issues, the Signatory Parties recognized that the parties' various positions could be addressed through settlement and agreed that settlement was feasible. The Signatory Parties believe that this Joint Proposal gives fair and reasonable consideration to the interests of customers, transmission owners, and the public in assuring the provision of safe

and adequate service, and that it achieves a negotiated result that satisfies parties with varied and often adverse positions.

TERMS OF JOINT PROPOSAL

I. GENERAL PROVISIONS

1. Each provision of this Joint Proposal is in consideration and support of all the other provisions of this Joint Proposal and is expressly conditioned upon approval of the terms of this Joint Proposal in full by the Commission. If the Commission fails to adopt the terms of the Joint Proposal, the parties to the Joint Proposal shall be free to pursue their respective positions in this proceeding without prejudice. The terms and provisions of this Joint Proposal apply solely to, and are binding only in, the context of the present Article VII Application and do not necessarily reflect the position any Signatory Party would take in an 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.
2. The Signatory Parties agree to submit this Joint Proposal to the Commission along with a request that the Commission adopt the terms and provisions of this Joint Proposal as set forth herein. The Signatory Parties agree that construction, operation, and maintenance of the Project in compliance with this Joint Proposal and with the Proposed Certificate Conditions set forth in Appendix D attached hereto will comply with the Public Service Law and with the substantive provisions of applicable State law referenced in the Proposed Commission findings set forth in Appendix C, attached hereto.
3. The Signatory Parties recognize that certain provisions of the Joint Proposal contemplate actions to be taken in the future to effectuate fully this Joint Proposal.

Accordingly, the Signatory Parties agree to cooperate with each other in good faith in taking such actions.

4. In the event of any disagreement over the interpretation of this Joint Proposal or implementation of any of the provisions of this Joint Proposal that cannot be resolved informally among the Signatory Parties, such disagreement shall be resolved in the following manner:
    a. the Signatory Parties shall promptly convene a conference and in good faith attempt to resolve any such disagreement; and
    b. if the Signatory Parties cannot resolve any such disagreement , any Signatory Party may petition the Commission for resolution of the disputed matter.
5. This Joint Proposal shall not constitute a waiver by O&R or any Signatory Party of any rights it may otherwise have to apply for additional or modified permits, approvals, or certificates from the Commission or any other agency in accordance with relevant provisions of law.
6. This Joint Proposal shall not in any way alter the Applicant's obligation to comply with any applicable substantive Environmental Conservation Law (ECL) requirements, including the Applicant's obligation to obtain any required permits from NYSDEC pursuant to the ECL for the distribution and service lines component of the Project.
7. This Joint Proposal shall not in any way alter NYSDEC's jurisdiction with regard to the distribution and service lines component of the Project.

8. This Joint Proposal shall not in any way affect the process and timing associated with NYSDEC's review and issuance of any applicable permits or other approvals required by the Applicant pursuant to the ECL for the distribution and service lines component of the Project.
9. 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

10. Appendix A, attached hereto, lists the testimony, affidavits, and exhibits that constitute the evidence the Signatory Parties agreed upon to admit as record evidence in this proceeding (collectively, the Evidentiary Record). The Evidentiary Record includes responses to certain information requests (IRs) produced in this proceeding, which the Signatory Parties believe contribute accurate, material, and relevant information to the Evidentiary Record in support of the project described in this Joint Proposal. The Signatory Parties have not included all other IR responses in the Evidentiary Record because they have either been superseded by changes to information in the Evidentiary Record, or are not required to support the project described in this Joint Proposal.

III. DESCRIPTION OF PROJECT

11. The Signatory Parties agree that the Description of Project Location set forth in Appendix B attached hereto accurately describes the location and configuration of the proposed electric transmission line. The Signatory Parties propose a new, 138 kilovolt (kV), 5.5-mile underground transmission line in this Joint Proposal. The line would originate at the existing Burns substation located at 71 N. Pascack Road and

terminate at the existing West Nyack Substation located at 209 State Route 59. The entirety of the project is within the Town of Clarkstown, Rockland County, New York.

12. The proposed route of the underground transmission is depicted in detail on a series of maps in Appendix B. The route begins at the Burns Substation located at 71 N. Pascack Road in Nanuet, New York and runs east along the substation access road until it meets the intersection with N. Pascack Road. At this intersection, the proposed route turns south and runs along N. Pascack Road until the intersection of Smith Road. The proposed route turns east at this intersection, running along the entirety of Smith Road until it meets with N. Middletown Road. At this intersection, the proposed route turns south and runs along N. Middletown Road, passing beneath New York State (NYS) Thruway (I87/287) via an underpass, until the intersection of State Route 59. The proposed route turns southeast along State Route 59 for approximately 250 feet, crossing under Nauraushaun Brook Branch and diverts from State Route 59 in an easterly direction to join with the dead end of West Nyack Road. The proposed route runs east following W. Nyack Road, passing beneath the Palisades Interstate Parkway via an underpass, for approximately 2.4 miles until it meets the intersection with Western Highway N. At this intersection, the proposed route turns south and runs along Western Highway N. for approximately 475 feet until it has passed through the State Route 59 underpass. The proposed route turns east after this underpass, crossing beneath the CSX Transportation (CSX) railroad tracks before terminating at the West Nyack Substation located at 209 State Route 59 in West Nyack, New York.

13. The Project entails construction of associated equipment at the Applicant's Burns and West Nyack Substations. The associated equipment consists of new termination structures at each substation to transition from the underground cable to an overhead connection and a new 138:69 kV autotransformer at the West Nyack Substation. This associated equipment is identified in Exhibit E-2 of the Application (Exhibit 11 of the Evidentiary Record). Unless otherwise specified in the Certificate or the EM&CP, this Certificate and the EM&CP do not govern, and are not intended to alter, the Applicant's continued operation and maintenance of the Burns and West Nyack substations or substation properties except for the construction, operation, and maintenance of the associated equipment identified as proposed modifications in Exhibit E-2 of the Application.

14. The Signatory Parties agreed to a realignment at the Route 59 intersection of the Project to reduce overall impacts to the Route 59 corridor. O&R has revised Project design drawings to show this realignment where the Project will no longer proceed south along College Avenue off W. Nyack Road, but instead continue west along W. Nyack Road to the intersection with Route 59, as described above. The realignment is entirely within the ROW described in the Application. The realignment resulted in changes to documentation included in the Application Exhibits. These changes are now depicted in Exhibit 19 of the Evidentiary Record.

15. The Applicant will endeavor, to the extent practical, to site the Facility along the intended centerline described in Appendix B. Deviations may be required by numerous factors, however, including subsurface congestion and commercial and residential impacts. Thus, the Signatory Parties request that the Commission certify placement of

the Facility centerline anywhere within the legally surveyed edge-to-edge limits of the governmentally owned road surface as necessary to minimize such factors, subject to the Applicant determining its final proposed placement of the centerline during final design, for which it will obtain surveyed road ROW limits, and the Applicant detailing such placement, and its justification therefore, in the EM&CP.

IV. ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

16. The Commission must consider the totality of all of the relevant factors in making its determination of environmental compatibility and public need. The relevant factors include, without limitation, need, environmental impact, availability and impact of alternatives, compliance with state and local laws, public safety, consistency with the Climate Leadership and Community Protection Act (CLCPA), and the public interest, convenience, and necessity.

A. Need for the Proposed Facility

17. Line 705 is needed to relieve potential overloading of the Applicant's existing 138 kV overhead Line 702 between its Burns and Oak Street Substations. Recent summer studies indicate that the megawatt flow on Line 702 will exceed its Long Term Emergency (LTE) rating in the event of the loss or outage at other 138kV lines serving the region. Additional anticipated loads from proposed data centers in the Orangetown area will further load Line 702 beyond its emergency rating in the event of a 138kV line outage and cause an additional 138kV line to approach its LTE rating with the same contingency. Should such overloads occur, load transfers to adjacent substations will be needed and, if the overloading persists, load shedding will be needed to prevent damage to the existing conductors, including Lines 702. The

Project is proposed to immediately alleviate loads on Line 702, make the regional transmission network more resilient, and improve source reliability to southern Rockland County and northern Bergen County. Additional information is provided in Exhibit E-4 of the Application (Exhibit 13 of the Evidentiary Record).

B. Environmental Impact

18. The Evidentiary Record describes the nature of the probable environmental impacts of the Project, which are briefly summarized below. Based on the Evidentiary Record, the environmental impacts are expected to be minimal and generally limited to temporary, construction-related disturbances and traffic inconveniences.

19. Due to the nature of the Project as an electric transmission facility located primarily underground within public roadway ROW and within existing substations, the Applicant has avoided or minimized the potential for the Project to result in adverse impacts in the following areas: Land Use, Sensitive Land-Use, Visual Resources, Cultural Resources, Wetlands and Aquatic Resources, Terrestrial Ecology and Rare Species, Topography, Geology, Soils and Groundwater, Transportation and Communication, Noise, Magnetic Fields, and Climate Change as set forth in Exhibit 3 of the Application.

20. The Signatory Parties agree that the Project, as this Joint Proposal proposes it to be located and configured, represents the minimum adverse environmental impact considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations.

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

B.1. Land Use

22. As noted in Exhibit 4 of the Application (Exhibit 4 of the Evidentiary Record and referred to herein as "Exhibit 4") local land use within the vicinity of Line 705 includes primarily commercial and residential properties. The Project will have minor impacts on existing land use as O&R will install Line 705 underground along existing, paved roadways and across an existing railroad ROW. All temporarily impacted land uses will be restored following construction. Permanent land use impacts will be limited to the proposed West Nyack Substation expansion area, which is located entirely within the Applicant's existing maintained transmission ROW.

B.2. Sensitive Land Use

23. The Town of Clarkstown is a suburban community intermittent with residential, commercial, and industrial properties, undeveloped land, and open spaces. Based on review of the Rockland County Planning Department mapping, land use within the Town of Clarkstown is largely residential at approximately 46%, followed by agriculture, parks, and open space at approximately 21%. The remaining approximately 33% of the Town land use is a relatively even mix of commercial, office, and industry; institutional and utilities; transportation; and other land uses. Line 705 will fall primarily within paved roadways which are bordered largely by commercial and residential properties.

24. Impacts to land use associated with construction of the Project will be minor and include vegetation trimming, clearing, installation, and restoration. Temporary impacts during construction will also include roadway lane and shoulder closures

along the proposed route, noise, and visual impacts of construction activities to surrounding residences and open spaces. All adjacent landowners will be notified of construction activities prior to any work being conducted.

B.3. Visual Resources

25. The completed project will be underground and the Substations are existing structures. Thus, the Signatory Parties do not anticipate impacts to geologic, historic, and scenic or park resources as a result of this Project.

26. The connections to existing substations will not increase the visibility of the existing substations as they will occur within existing substation fence lines and proposed equipment is similar to existing equipment in size and appearance. Exhibit E-2 details the infrastructure upgrades planned at each substation. As such, the Signatory Parties anticipate no visual resource impacts from the substation connections.

27. Most and possibly all manhole covers will be installed within public roadway ROW, which already contains many such utility features. Given the existing widespread presence of such features, the addition of at-grade manhole covers will not result in significant visual impacts.

28. Temporary visual impacts to residents, motorists, and pedestrians will take place during installation of the cable. Visual impacts will include effects resulting from construction equipment staging and operations within and along existing public roadway ROWs. Construction activities will progress along the proposed route exposing each area for a limited amount of time. While Project activities will be continuous during the installation and proposed route construction period, no one location will be visually impacted for a significant duration because of the linear

nature of the Project. No significant visual impacts will result from Project construction activities.

29. The EM&CP will contain a detailed plan for tree clearing and vegetation removal. The detailed plan for tree clearing and vegetation removal in the EM&CP will also describe the process for disposal of cleared trees and other vegetation. The Applicant will use its usual and customary practices for vegetation management for the 705 Project.

B.4. Cultural Resources

30. As discussed in Exhibit 4, the Area of Potential Physical Effects (Physical APE) consists of those locations where Line 705 construction will result in ground disturbance that could affect a significant archaeological site. The Physical APE was limited to those areas along the proposed route that are archaeologically sensitive, which refers to the probability that an archaeological site exists in a given area. To determine these sensitive areas along the proposed route, O&R performed Phase IA Cultural Resource Reconnaissance.

31. Several cultural resource management (CRM) studies have taken place in the immediate vicinity of the proposed route. Two Phase IA and four Phase IB reconnaissance studies within one half mile of the Physical APE concluded that there are no archaeological sites within or adjacent to the Physical APE.

32. The Project will not physically affect any buildings or structures. Because the Project involves no permanent aboveground construction, it will not entail alterations of the view shed of any historic architectural resources. Consequently, Line 705 will not directly impact historic architectural properties or their historic settings.

33. Implementing a New York State Office of Parks, Recreation and Historic Preservation ("OPRHP") approved work plan, outlined in the Phase IA investigation, , O&R performed a Phase IB Archaeological Survey in June 2019. O&R identified modern debris in a few test pits throughout the Project area and severe previous disturbance throughout most of the Project area during the Phase IB Archaeological Survey. The Phase IA and Phase IB Reports determined that the proposed Project has no potential to affect any properties, including archaeological or historic resources, listed in or eligible for the NYS and National Register of Historic Places. OPRHP concurred with the determination in a letter dated July 2, 2019.
34. Based on the results of the Phase IB Archaeology Survey and OPRHP's determination, Line 705 will not impact historic and archaeological resources during construction or operation.

B.5. Wetlands and Aquatic Resources

35. A Wetland Delineation was conducted in October, November, and December 2018. An additional field effort was performed in April 2023 to evaluate potential wetlands impacts from the route change which diverted the project away from State Route 59 near the intersection with North Middletown Road. The field efforts determined that 16 wetlands are adjacent to the proposed route. Eleven (11) of the 16 adjacent wetlands are palustrine forested wetlands (PFO) and the remaining five adjacent wetlands are characterized as palustrine emergent wetlands (PEM). Project construction will not directly impact any wetlands.
36. There are seven NYSDEC-mapped streams that cross the proposed route. One of these streams, Nauraushaun Brook, crosses the Project Area three times. Four of the

seven streams are Class C waters, and the remaining three streams are Class C (T) waters. Nauraushaun Brook is Class C (T) at the Smith Road crossing and Class C at the N. Middletown Road and State Route 59 crossings. In addition, the Hackensack River, located approximately 700 feet to the east of the West Nyack Substation and proposed expansion area, is a Class A stream. Class A waters are sources of drinking water. These waters are "protected streams" and are subject to the regulations under the Protection of Waters Program.

37. The field effort determined that there will be eight perennial stream crossings along the proposed route. However, three of these perennial crossings are associated with Nauraushaun Brook. The proposed route crosses this feature at Smith Road, N. Middletown Road, and State Route 59. Therefore, the Project would cross a total of six individual perennial streams. Line 705 will be encased in concrete and jack and bored beneath stream channels, except the Pascack Brook crossing, which the Project will cross via roadbed open-cut above the culvert that conveys the stream. No in-stream work or stream bank disturbance will occur.

38. The NYSDEC Supplemental Specifications for Wetlands and Waterbodies will be used in the development of the EM&CP to address construction activities in these areas. Appendix F details these supplemental specifications.

B.6. Terrestrial Ecology and Rare Species

39. As noted in Exhibit 4, of the 5.5 miles of the proposed route, there are 5.3 miles of developed space at various intensities; and 0.2 miles of undeveloped forest, which includes Appalachian Oak-Hickory Forest, Appalachian Oak-Pine Forest, and Floodplain Forest.

40. In May 2020, O&R submitted a request to the New York Natural Heritage Program (NYNHP) to identify documented threatened and endangered flora on or in the vicinity of proposed Line 705. NYNHP's June 16, 2020 response indicated that there are no State-listed threatened or endangered plant species in the vicinity of the proposed route.
41. According to the United States Fish and Wildlife Service (USFWS) Species by County Report, the Federal-listed threatened small whorled pogonia (*Isotria medeoloides*) is documented in Rockland County. The USFWS Information for Planning and Consultation (IPaC) webpage was accessed in May 2019 and updated June 2020 did not reveal the presence of Federal listed plant species within the vicinity of Line 705.
42. Field observations did not identify unique conditions that would suggest the possible occurrence of rare plant species along the proposed route. The vegetation communities and species observed are common throughout New York State.
43. The proposed Project will require minimal tree clearing and trimming along the proposed route, except where 44 trees require removal at the south end of the West Nyack Substation.
44. During settlement negotiations it was acknowledged by all Signatory Parties that the Project ROW or other Project work areas would be located in an area with no known habitat for Indiana bats or Northern long-eared bats (NLEB). Project related activities will adhere to the requirements as it relates to Terrestrial and Wildlife Resources set forth in the Proposed Certificate Conditions presented in Appendix D.

45. Based on review of the NYSDEC environmental resource mapper, the nearest significant natural community, the Hudson River Estuary, is located approximately 2.4 miles east of the West Nyack Substation. This corresponds to the June 16, 2020 NYNHP response that indicates that there are no significant natural communities within the vicinity of Line 705.

46. In addition, the IPaC report indicates that there are no critical habitats within the vicinity of Line 705 that are under jurisdiction of the USFWS.

47. To control the introduction or spread of invasive species to unspoiled areas, O&R will employ preventative measures during construction. These measures will be detailed in the EM&CP and will adhere to requirements set forth in Appendix G or the Invasive Species Management Plan Specifications.

B.7. Topography, Geology, Soils, and Groundwater

48. O&R investigated topography, geology, soils, and groundwater resources through field observations and publicly available data including the Rockland County Soil Survey, USGS topographic mapping, and the Water Resources of Rockland County Report.

B.7.1. Topography

49. The Town of Clarkstown is located in the southern portion of Rockland County, New York. Rockland County is primarily within the northernmost extent of the Newark Basin which extends from Rockland County to south-eastern Pennsylvania. Elevation along the proposed route varies from approximately 70 to 420 feet with a downhill slope from the Burns Substation to the West Nyack Substation.

B.7.2. Geology

50. Rockland County is underlain by four major bedrock types including crystalline rocks of the Precambrian age, metasedimentary rocks of the Cambrian and Ordovician age, clastic sedimentary rock of the late Triassic age, and igneous rocks of the early Jurassic age. The Newark Basin is defined by the boundaries of a sediment-filled rift basin. It is filled with large volumes of sediments that are divided into the Stockton Formation and the Passaic Formation. The Stockton Formation is characterized by light colored arkosic sandstones and the overlying Passaic Formation is characterized by red-brown sandstone and siltstone.

51. According to publicly available data from the NYSDEC Division of Mineral Resources, there are three water wells and one consolidated mine in the vicinity of Line 705. Two of the three wells are located approximately 0.87 mile west of the proposed route, one of which has been cancelled and the other has been plugged and abandoned. The remaining well, located approximately 0.94 miles northeast of the proposed route has been cancelled. The consolidated mine identified as the West Nyack Quarry located approximately 0.87 miles northeast of Line 705. This is a permitted crushed/broken stone mine approximately 153 acres in size.

52. Based on review of the USGS National Seismic Hazard Map, the likelihood of a seismic event in the vicinity of the Project is moderate.

B.7.3. Soils

53. Fourteen soil types are located along the proposed route. Soil characteristics of the 14 soil types along Line 705 are included in Exhibit 4. Approximately 89 percent of the soils along the proposed route are upland soils characterized as moderately well

drained to well drained. The dominant texture of these soils is gravelly to fine sandy loam, with some silt loam and loam. Depth to bedrock ranges from 20 to greater than 80 inches and the depth to water table ranges from 18 to greater than 80 inches for these soils. The remaining approximately 11 percent of the soils along the proposed route are hydric soils characterized as poorly drained to very poorly drained. The dominant texture of these soils is silt loam and muck, with some loam and sandy loam. Depth to bedrock is greater than 80 inches and the depth to water table ranges from 0 to 36 inches for these soils. The Wethersfield gravelly silt loam (3 to 8 percent slopes) soil unit encompasses the proposed West Nyack Substation expansion area.

54. A geotechnical investigation was performed on behalf of the Applicant along the proposed route in February and March 2019. Fourteen (14) soil borings were completed at depths of 15 to 40 feet bgs using the hollow stem auger technique. For each soil boring, select soil samples were analyzed by a geotechnical laboratory to assess multiple characteristics to support the design of Line 705. Hard silts and clays interbedded with very dense sands and gravels were encountered at thirteen of the 14 soil borings. This dense material was on average encountered at approximately 19 feet bgs with depths ranging from 9 to 33 feet bgs. A hard weathered rock stratum is expected to exist below 40 feet bgs.

B.8. Transportation

55. O&R submitted a comprehensive evaluation of potential impacts to Transportation as Exhibit E-6 of the Application (Exhibit 15 of the Evidentiary Record). The Project will be primarily located in existing transportation rights of way. There will be

temporary impacts to transportation (partial lane closures and detours where unavoidable) experienced during project construction. There will be no long-term impacts to transportation resulting from operation and maintenance of the installed project.

B.8.1. Airports

56. Based on review of the United States Department of Transportation (USDOT) data, there are no airports within 5 miles of the proposed Project. The nearest airport is the Westchester County Airport, located approximately 13 miles east of the West Nyack Substation. There is one heliport located within 5 miles of the proposed Project. The heliport is identified as the Wyeth Ayerst heliport, which is located approximately 1.5 miles south of Line 705.

57. O&R would install the proposed Project underground, with the exception of equipment additions at the Burns and West Nyack Substations. The proposed components installed above ground within the substations will not exceed the height of the equipment that currently exists at each location. Furthermore, lighting or other potential visual disruptions that would require mitigation is not required for the proposed Project. Based on this analysis, impacts to airport and heliport transportation systems associated with the Project are not anticipated.

B.8.2. Railroads

58. The proposed Project will cross a CSX Class I (major freight) railroad as the proposed route runs parallel to State Route 59 before terminating at the West Nyack Substation. CSX provides rail-based transportation services including traditional rail service and the transport of intermodal containers and trailers. The nearest public

transportation railroad system is the New Jersey Transit Pascack Valley Line that terminates in Spring Valley, New York. This line is located approximately 725 feet south of the proposed route at its nearest location.

59. The Project will cross CSX railroad tracks using the jack and bore method to install a 150 linear foot crossing. In accordance with CSX required minimum clearances, the crossing will extend a minimum of 8 feet below the grade of the railroad tracks. Entry and exit pits will be located within the existing impervious surface as depicted on the provided design drawings in Exhibit 5 of the Application (Exhibit 5 of the Evidentiary Record), with the exception of the pit in front of the West Nyack Substation, which will be located in a grassy area. Exhibit E-3 of the Application (Exhibit 12 of the Evidentiary Record) details the proposed CSX railroad crossing method .
60. The exact location of the entry and exit pits at the CSX railroad tracks will be documented in the EM&CP, however, field conditions may demand the entry and exit pits to be relocated to allow for safe and efficient construction of the Project.
61. The Project is not anticipated to impact existing railroads. The Applicant will coordinate with CSX for access and approvals during final design and prior to construction activities in the immediate vicinity of the CSX crossing. The final design for the proposed Project will be reviewed with CSX and will reflect appropriate design criteria and clearance requirements to safely cross beneath the CSX rail line. Prior to Project construction, the Applicant will acquire any Utility Crossing Permits as required by CSX. The Applicant will coordinate construction

activities with CSX to ensure that construction activities do not conflict with railroad operations, maintenance, and freight movements.

B.8.3. Roadways

62. The Project runs along paved roadways for most of its length and will be constructed within transportation ROWs. The proposed route includes seven roadways that consists of State, County, and Local roadways. These roadways are under the jurisdiction of Local agencies (i.e., County and Town Highway Departments) or NYSDOT. In addition, the proposed Project will perpendicularly cross 36 Local roadways, two County roads, one State route, and passes beneath three viaducts. Exhibit E-6 (Exhibit 15 of the Evidentiary Record) attached to the application includes a table of each roadway crossing. Impacts to roads and traffic will be limited to Project construction. No impacts will occur during normal operation of Line 705. The Applicant will consult the appropriate State and Local officials and obtain the required permits in advance of construction. The Applicant will work with State and Local officials to minimize impacts to traffic to the maximum extent practicable during construction and will notify the appropriate jurisdiction of the approximate date that work will begin along the roadway or within the roadway crossing.

63. A portion of the proposed Project will run along two roadways NYSDOT maintains. Line 705 will run along State Route 59 for approximately 250 feet, and cross beneath State Route 59 via a viaduct as it traverses Western Highway N. The Project will cross State Route 304 at its intersection with W. Nyack Road. The Project will also pass beneath Interstate 87 via a viaduct as it traverses N. Middletown Rd. Lastly, the proposed Project will pass beneath the Palisades Interstate Parkway via a viaduct

along W. Nyack Road. The Applicant developed the proposed Project route in consultation with the NYSDOT. The Applicant will obtain the required Highway Work Permits from the NYSDOT for construction of Line 705 along and beneath State Route 59, and the crossing of State Route 304 as required before the start of construction. The Applicant will comply with any acquired NYSDOT permits during Project construction and implement Best Management Practices (BMPs) to prevent sediment or other materials from entering the Local roadways.

64. In addition, the Palisades Interstate Park Commission (PIPC) operates the Palisades Interstate Parkway and the New York State Thruway Authority operates Interstate 87. As previously indicated, the Project will cross underneath these roadways via existing roadway viaducts. There is no anticipated impact to the Palisades Parkway or Interstate 87 as part of the Project.

65. The anticipated traffic control measures along the proposed Project roadways are outlined in the sections below.

B.8.3.1. Maintenance and Protection of Traffic

66. O&R will implement a Maintenance and Protection of Traffic (MPT) Plan for the Project as part of the EM&CP that identifies the procedures to be used to provide a safe construction zone for construction along the roadways. All MPT measures will be implemented in accordance with the procedures in the Manual of Uniform Traffic Control Devices (MUTCD) and NYSDOT Work Zone Traffic Control Standards. Traffic control measures will be developed as part of the final design to address temporary signage, temporary shoulder and lane closures, and procedures for moving equipment and materials within the ROW. Construction activities may close travel

lanes temporarily, but the Applicant will provide that there is always one lane open for traffic flow, to the extent possible. Traffic control personnel and safety signage will be employed to control safe and successful traffic flow when lanes are temporarily shut down. Prior to construction, the Applicant will coordinate with Local officials to maintain driveway accesses or provide acceptable access alternatives that minimize the temporary disruption to properties located along the Project route.

B.8.3.2. Signs

67. All signs and traffic control used during construction will comply with NYSDOT and MUTCD requirements. Sign placement will be determined in consultation with the jurisdictional agency, and at a minimum, signage will be placed at required locations within the advance warning, transition, activity, and termination areas.

68. Flaggers or Local police will be present at all times when equipment is crossing any road, when equipment is being loaded or unloaded along the roadways, and when temporary travel lane closures are in effect.

B.8.3.3. Road Repairs and Restoration

69. Typically, an approximately 5-foot deep by 4-foot-wide trench will be dug along the seven roadways noted in the project description. Trench depths will extend deeper as necessary to avoid existing utilities and at stream and culvert crossings. Exhibit E-3 of the Application (Exhibit 12 of the Evidentiary Record) provides details regarding the underground construction and Exhibit 5 of the Application (Exhibit 5 of the Evidentiary Record) provides design drawings that illustrate the crossing depths of these features on the Proposed Plan and Profile Drawings. A minimum of 30 inches

of backfill will cover the concrete-encased polyvinyl chloride (PVC) pipes and fill in to the top of the trench. The top of the trench will be returned to its original condition (e.g., pavement) with a pavement cross-section that, at a minimum, matches the existing pavement thickness. Prior to construction, the Applicant will coordinate with NYSDOT, Rockland County, and the Town of Clarkstown with respect to the timing and phasing of final pavement restoration. If construction activities or vehicles damage any paved roadways beyond the anticipated trench digging, the Applicant will follow the site restoration sequence outlined in Exhibit E-6 of the Application (Exhibit 15 of the Evidentiary Record).

B.8.3.4. Pedestrian Traffic

70. The proposed Project is bound largely by residential and commercial properties. Six of the seven roadways of the proposed Project have pedestrian sidewalks for portions of, if not their entire lengths. Western Highway N. does not have any pedestrian sidewalks along the proposed route. The sides of Western Highway N. are primarily asphalt since they are entrances/exits to businesses located along the roadway.

71. The Applicant will minimize impacts to pedestrian traffic by implementing construction practices such as steel plates, temporary barricades, and fencing to re-direct pedestrians safely around construction zones. Special attention will be given to schools and high-density residential and commercial areas which experience heavy pedestrian traffic.

B.9. Noise

72. A noise assessment was performed in September 2019 for the proposed aboveground alterations at the West Nyack Substation. The proposed alterations at the Burns

Substation do not include sound-producing equipment, and therefore post construction sound modeling was not conducted for this substation. In addition, noise impacts associated with construction were reviewed based on NYSDEC guidelines as defined at "Assessing and Mitigating Noise Impacts" (NYSDEC, 2001. Assessing and Mitigating Noise Impacts. Accessed August 2021. Available online at, https://www.dec.ny.gov/docs/permits_ej_operations_pdf/noise2000.pdf). The full Noise Study documentation is available in Section 4.12 of Exhibit 4 of the Application. The following summary of the Noise Study and noise impacts from the Project are provided below.

B.9.1. Existing Conditions

73. Noise sensitive areas in the vicinity of the proposed Line 705 include residential areas, parks, churches and cemeteries, light industrial and office park areas, and limited institutional uses (i.e., schools). These typical noise sensitive areas are found at varying distances from the proposed route.

74. A wide range of noise settings occurs in the surrounding area due to the dense residential and commercial development. The proposed route is located along existing roadways, which experience motor vehicle traffic. There are also areas of vacant, undeveloped woodlands, low-density and medium-density single-family dwellings, parks, cemeteries, highway corridors (Palisades Interstate Parkway and New York State Thruway), and light industrial development.

75. Construction activities will involve the use of vehicles and heavy equipment. Typical heavy equipment needed during this type of project includes: excavators, loaders, cranes, dump trucks, drills, jackhammers, chain saws, wire pulling equipment, and

paving equipment. The sound levels of common construction equipment anticipated to be used for installation of Line 705 will all be below 90 decibels at 50 feet distance, with the exception of a diamond saw (90 decibels), line drill (98 decibels), and motor crane (93 decibels).

B.9.2. Environmental Effects and Mitigation

76. The Project is not anticipated to have a significant adverse noise impact within the vicinity of the proposed route. Impacts during Project construction and operation are discussed below.

B.9.3. Noise During Construction

77. Construction equipment will be similar to that used during typical public works projects. It is anticipated that construction activities will be limited to occur during daytime hours and not generate significant noise impacts. Project construction activities are likely to temporarily increase ambient noise levels for residences closest to the construction activity, but unavoidable impacts will be localized, temporary, and mitigated to the extent practicable via measures that will be detailed in the EM&CP and described below. To the extent practicable, noise generating construction activity in noise sensitive areas will be scheduled in accordance with NYSDEC guidelines and standards contained in the municipal codes.

78. An important consideration regarding noise levels generated during this Project is the transient nature of construction activities typical of transmission line projects. This consideration is significant since not all pieces of equipment are used simultaneously and as work progresses along the proposed route, noise generated will be dispersed through various phases. Planned construction activities will continuously move along

the proposed route and will typically only occur at a specific location for one week during daylight hours. Exceptions to this duration will be the proposed jack and bore locations and in the vicinity of State Route 59 and N. Middletown Road, which may require several weeks to construct.

79. Construction operations will be conducted within the time restrictions defined in the Certificate Conditions located in Appendix D. However, if nighttime, weekend or holiday activities should occur outside the specified time restrictions, then appropriate notifications to local officials will be made and noise mitigation measures will be implemented as required.

80. Regardless of the noise mitigation measures employed, the Applicant realizes that at times, there may be complaints about noise levels during construction. The Applicant has developed and will implement the plan described below for the Project to accommodate potential noise-related complaints. Complaints received during construction activities will be handled promptly in an efficient and courteous manner. The complainant will be informed of the nature of the construction activity and informed that efforts will be made to minimize the problem. The Applicant will take appropriate action to correct the issue and inform the complainant of the investigation's results. In addition, to minimize potential noise complaints, the public will be kept informed of construction activities that may adversely impact the surrounding noise levels. This will be accomplished through internet site postings, Project website updates, legal notices, or distribution of fact sheets to the surrounding community.

B.9.4. Noise During Project Operation

81. Impacts to noise as a result of Project operation is not anticipated as Line 705 would be underground. Noise generated by the operation of Line 705 would contribute little to area noise levels when compared to other common sources, such as that from vehicles, aircraft, and industrial sources.

82. Upgrades at the Burns Substation will not entail additional continuous sound-producing equipment. Therefore, an increase in noise impacts resulting from the operation of the Burns Substation are not anticipated.

83. A new transformer is proposed to be installed at the West Nyack Substation. Noise levels from the planned installation of the new transformer were modeled at worst case scenarios. The modeling revealed that noise levels for the new transformer, operating and maximum capacity, were between 38.7 dBA and 48.6 dBA. These values are significantly lower than the existing daytime and nighttime ambient noise levels, and will not result in any perceptible noise increase above existing ambient noise levels. Furthermore, the modeled future noise impact levels resulting from the new transformer are below the NYSDEC Noise Policy Guideline sound-level limit of 65 dBA and will be in compliance with the Town of Clarkstown Noise Code. The results of the noise assessment concluded that the proposed new transformer will result in no change to the existing noise levels at the substation property lines, and that the proposed new transformer will be in compliance with all applicable noise standards and criteria, and all applicable noise code limits.

84. The NYSDPS and the local residences where the construction will occur will be notified at least 24 hours prior to any planned nighttime, weekend, or holiday construction if it is necessary.

85. Noise mitigation as outlined in the NYSDEC guidelines will not be required for the proposed Project as the Project is not anticipated to raise ambient levels greater than 3 decibels.

B.10. Communications

86. The proposed Project is not anticipated to impact existing communication facilities including radio, television, or other systems as it will be installed underground. Overhead transmission lines may interfere with communication systems through gap noise and corona; however, underground transmission lines do not cause these interferences.

87. The Applicant has conducted ground surveys for all existing underground facilities, including communication cables, with the assistance of Dig Safe New York. These underground facilities are depicted on the design drawings in Exhibit 5 (Exhibit 5 of the Evidentiary Record). Construction and operation of Line 705 will comply with the National Electric Safety Code (NESC) in regards to spacing requirements between power and communication lines. The Applicant will be sensitive to any reports of possible interference during and after construction activities and will investigate and resolve any interference complaints. The Applicant proposes to employ potential mitigation measures such as increased shielding of the transmission line, repair of any defects, and the relocation of the impacted communication equipment.

B.11. Electric and Magnetic Fields

88. In accordance with PSL §122(l)I and 16 NYCRR §86.5(a), the electric and magnetic field (EMF) impacts associated with the Project were evaluated and the results of calculated EMF levels are described in the following sections.

B.11.1. New York State Standards

89. The Commission implemented an edge-of-ROW magnetic field interim standard of 200 milliGauss (mG) in a Policy Statement dated September 11, 1990. The interim standard ensures that magnetic fields of major electric transmission facility at the ROW edge will be no stronger than the fields typical of existing 345 kV lines operating throughout New York. The NYSDPS also has standards for electric fields within and at the ROW edge; however, these standards are not applicable to the proposed Project as Line 705 will be installed underground. In addition, the maximum electric field at 1 meter above ground over public roads must be less than 7.0 kilovolts per meter (kV/m) in accordance with the Public Service Commission Opinion No. 78-13.

B.11.2. EMF Modeling

90. To assess the potential EMF impacts associated with the proposed Project, O&R performed an EMF study for the proposed Line 705 and the alterations proposed at the Burns and West Nyack Substations. Magnetic field calculations were performed for the proposed Line 705 using the Biot-Savart's law and superposition of the magnetic fields generated by each current carrying element. To model EMF levels generated from the proposed equipment at the Burns and West Nyack Substations, PLS-CADD software designed by Power Line Systems, Inc. (PLS) was utilized.

91. The highest calculated magnetic field values for any of the trench configurations for proposed Line 705 examined at 1 meter elevation above the surface across the ROW configurations will fall below all of the recommended limits. Insulated power cables, as proposed for Line 705, do not produce an electric field external to the concrete cable shield and metallic shield/sheath. Based on the completed EMF modelling for the proposed alterations at the Burns and West Nyack Substations, the peak EMF levels will occur within the substation fence line perimeters, and diminish rapidly as the distance from the proposed substation equipment increases. The EMF levels generated from the proposed substation equipment will not exceed the permissible limits and requirements of New York State.

B.11.3. Environmental Effects and Mitigation

92. Based on the results of the EMF studies, neither the proposed Line 705 nor the substation alterations will produce electric or magnetic fields in exceedance of recommended limits. Therefore, the proposed Project will have minimal effect on the public.

B.12. Climate Change

93. The Project will include gas-insulating equipment that contains Sulfur hexafluoride (SF6).

94. SF6 is a statutorily defined greenhouse gas (GHG) pursuant to the Climate Leadership and Community Protection Act (CLCPA). ECL § 75-0101(7). Thus, SF6 is part of the statewide greenhouse gas emission limits. ECL § 75-0107; 6 NYCRR Part 496..

95. On December 19, 2022, the Climate Action Council, pursuant to the CLCPA, voted to approve the "New York State Climate Action Council Scoping Plan" (Scoping Plan) which recommended how to achieve the mandates of the CLCPA, including the statewide greenhouse gas emission limits, in order to avoid the most devastating impacts of climate change.

96. With respect to SF6, the Scoping Plan states that, "[t]he most potent of the GHG's identified in the [CLCPA] is [SF6], which is 17,500 times more potent than CO2 based on a 20-year global warming potential (GWP) and persists in the atmosphere for thousands of years. SF6 is most commonly used as an insulator in electricity transmission and distribution equipment and its use continues to grow." Pg. 242, New York State Climate Action Council Scoping Plan. SF6 is most frequently used for electric insulation and/or arc-quenching in gas-insulated equipment such as switchgears, switches, circuit switchers, gas-insulated substations, and circuit breakers.

97. O&R supports the goals of the CLCPA and the significant changes anticipated for the energy generation and delivery systems in NYS. The objective of condition 112 in the proposed Certificate is to mitigate greenhouse gas emissions and to provide for compliance with the CLCPA (including Section 7). The Scoping Plan further states: "[] significant future investments in new transmission infrastructure should include a plan for fully phasing-out reliance on SF6 including measures for existing equipment, to minimize leaks as the State transitions to environmentally friendly and cost-effective alternatives." Pg. 242, New York State Climate Action Council Scoping Plan.

98. O&R is a member of Electric Power Research Institute (EPRI) where it benchmarks with peer utilities to stay informed of industry advances in efforts to reduce greenhouse gas emissions and to research alternatives to SF6 while maintaining the safe operation and reliability of the electric power grid.

C. Availability and Impact of Alternatives

99. The Application and exhibits agreed upon by the Signatory Parties to be admitted as record evidence in this proceeding describe the availability and impact of alternatives to the Project and are briefly summarized below. Considering all factors, the Signatory Parties agree that the Project as described in Appendix B is preferable, on balance, to any of the alternatives considered.

100. The Applicant performed an evaluation considering alternatives to the proposed Project, including the "No Action" alternative; alternative technologies; overhead construction alternatives; and underground construction alternatives, including installation that would utilize private property outside the transportation ROW for a portion of the route. The complete Alternatives Analysis is attached to the Application as Exhibit 3 (Exhibit 3 of the Evidentiary Record and referred to herein as "Exhibit 3"). The proposed project has been planned to solve the load limitations that the southeastern Rockland County area is experiencing.

C.1. The "No Action" Alternative

101. The "No Action" alternative, to leave the transmission system as is, was evaluated to determine the viability of not implementing any system upgrades with respect to current or forecasted system conditions.

102. The recent siting of data centers in Orangeburg, southern Rockland County, as well as proposed additional data centers in this area, would continue to increase demand on the electric delivery system. No action would result in thermal violations of Line 652 during contingencies, leading to load shedding of approximately 8,000 customers to prevent damage to the Line 652 conductors. This situation would only worsen each passing year and would be further exacerbated with the addition of large data center loads in the Orangeburg, New York area resulting in additional thermal violations on Lines 654 and 656. Over time, the "No Action" alternative would result in further degradation in the reliability of electrical service which is unacceptable based on the Applicant's design standards and risk assessment methodology. For these reasons, the "No Action" alternative would not address the purpose of and need for the proposed Project and is therefore not considered a viable option.

C.2. Alternative Technologies

103. In December of 2017, the Applicant examined Non-Wires Alternative (NWA) technologies as potential solutions to meet the energy demands of the Project area. The Applicant secured an independent assessment to review the suitability of deferring the traditional upgrade by alternative methods, such as demand response and energy efficiency, along with the determination for the availability of Distributed Energy Resources (DER), or a combined portfolio thereof. The independent assessment conducted by Navigant was included in direct testimony in the Company's most recent New York State Public Service Commission rate case filing.

104. Two independent assessments were prepared by Navigant. The first report presents an analysis of the Project Type Suitability, Timeline Suitability, and Cost

Suitability of an NWA and found that the underground line project fails O&R's overall NWA suitability criteria. The second report evaluated whether the Project needs can be met through different DER methods and concluded that not enough DER is available in the Project area, or can be cost-effectively added to defer the Project.

C.3. Overhead Transmission Line

105. The Applicant investigated three overhead transmission options: adding a second 138kV circuit to the exiting Line 702 corridor; converting existing Lines 55 and 551 to 138kV; and re-conductoring and upgrading Lines 652, 654, 656 and 658. These alternatives are detailed in Exhibit 3.

C.3.1. Additional 138kV Line on Existing Line 702 Corridor

106. This existing overhead corridor alternative would have a negative impact on endangered species, have a limited timeframe for construction adjacent to a bald eagle habitat, would be significantly disruptive to the public and although the utility has an easement the work would require owner agreement and extensive clearing. For these reasons this alternative is not considered a viable option.

C.3.2. Conversion of Lines 55 and 551 to 138kV

107. The conversion of these 69kV lines would require the replacement of roughly 120 wood pole structures over approximately 13 miles, which are partially framed and insulated for 69kV. This alternative would require temporary lines during construction to maintain service, which would not be possible to provide given the close proximity of the railway, adjacent NYS Route 9W and the densely developed areas surrounding this corridor. In addition, this alternative would require the

conversion of the Cedar Switch and Grassy Point stations in Stony Point to 138kV. If the construction of temporary lines were possible, the estimated cost for this alternate project would be $136 million. Also, any underground options to run a new 138kV line between the Lovett and West Nyack Substations would far exceed the costs and impacts of the proposed Line 705 solution. For these reasons, this alternative is not viable.

C.3.3. Re-conductor and Upgrade Lines 652, 654, 656 and 658 from 69kV to 138kV

108. The estimated cost to upgrade the approximately eleven (11) miles of these lines is $170 million, including the replacement of all existing overhead and underground conductors, wood poles and steel structures, as well as the upgrade or replacement of the Upper Saddle River, Montvale and Harings Corner Substations. The cost associated with this project would be considerably greater than the cost associated with the installation of Line 705. In addition, this alternative would not provide support and redundancy to the local 69kV system. Given these limitations and significant constructability concerns, as well as the costs associated with the both the transmission and substation projects, this alternative is not a viable option.

C.4. Underground Transmission Line

109. The Signatory Parties have determined that installing new Line 705 underground to be the best option when considering the location, environmental impacts, constructability, and future benefits to the electric delivery system operation. The Underground Line 705 project is the only constructible project that provides an immediate solution for the issues described in the Need for the Proposed Facility. By installing Line 705, the new line will provide a second transmission source to the

West Nyack 138kV bus to back up Line 561 and allow for Lines 561, 652, and 702 to stay in service in their current state. However, before proposing the route for the Project wholly within transportation thoroughfares, and in order to seek to minimize the short-term impacts to the community during construction, the Applicant examined other underground route configurations. These options generally follow the proposed Project's route but utilize some private property (two options) and a less-intrusive public thoroughfare (one option).

C.4.1. Underground Outside Transportation ROW

110. The Applicant considered two underground alternatives utilizing properties outside of the transportation ROW for portions of the route; however, both were determined to be non-viable due to higher impacts to the community and private property and environmentally sensitive areas. These alternatives are detailed in Exhibit 3.

C.4.2. Underground Using Transportation ROW (Variation of Preferred Route)

111. The first underground alternative that utilizes a variation to the preferred transportation ROW follows the transportation ROW for the majority of its length. However, rather than utilizing the transportation ROW at the intersection of State Route 59 and College Avenue, this alternative continues to follow State Route 59 east for approximately 2.4 miles before turning south in front of the Applicant's West Nyack Substation located at 290 State Route 59 in West Nyack, New York. At the West Nyack Substation, the route would continue to the rear of the Station. This route, however, would require additional directional drill bores to cross the Palisades Insterstate Parkway and Sickletown Road. Further, it was determined the disruption at

Route 59 would be too impactful to the heavy traffic use along this route. Further analysis regarding this alternative can be found in Exhibit 3.

C.4.3. Underground Within Transportation ROW (*Preferred Route*)

112. The proposed route begins at the Burns Substation located at 71 North Pascack Road in Nanuet, New York and runs east along the substation access road until it meets the intersection with North Pascack Road. At this intersection, the proposed route turns south and runs along North Pascack Road until the intersection of Smith Road. The proposed route turns east at this intersection, running along the entirety of Smith Road until it meets with North Middletown Road. At this intersection, the proposed route turns south and runs along North Middletown Road, passing beneath the NYS Thruway (I87/287) via an underpass, until the intersection of State Route 59. The proposed route turns southeast along State Route 59 for approximately 250 feet and diverts through an existing ROW to meet the dead end of West Nyack Road. The proposed route runs east following West Nyack Road, passing beneath the Palisades Interstate Parkway via an underpass, for approximately 2.4 miles until it meets the intersection with Western Highway North. At this intersection, the proposed route turns south and runs along Western Highway North for approximately 475 feet until it passes through the State Route 59 underpass. The proposed route turns east after this underpass, crossing beneath the CSX railway tracks before terminating at the West Nyack Substation located at 209 State Route 59 in West Nyack, New York.

113. This preferred route would not require property easements over private lands other than from CSX or the use of eminent domain because the Applicant will install it along the roadways within the transportation ROW, which would be a cost-benefit

to the proposed Project. In addition, only minor, temporary environmental impacts are anticipated as it would be installed entirely along existing, paved roadways. No construction would occur within wetlands or forested lands. Therefore, impacts to wetlands, wildlife, existing land use, and cultural resources are not anticipated. Only temporary and minor impacts during construction would be anticipated for streams and transitory wildlife.

114. Construction of Line 705 almost entirely within the transportation ROW would result in temporary traffic impacts during construction. However, there are no anticipated impacts to traffic once Line 705 is in operation. The North Middletown Road and State Route 59 intersection is moderately to heavily utilized by the community, ranging from approximately 10,001 to 75,000 vehicles per day. However, proper traffic controls in accordance with NYSDOT requirements would be implemented and the local community would be notified of upcoming commuting disruptions.

115. Installing Line 705 underground completely within the transportation ROW is the preferred alternative. This alternative is the most constructible approach while eliminating permanent impacts to natural and cultural resources by installing Line 705 along existing, paved roadways.

116. A modification to the preferred route within the ROW was made during settlement negotiations to minimize impacts to Route 59 due to the heavy traffic this road sees on a daily basis. The modification eliminates the use of College Ave. to intersect between West Nyack Road and Route 59 and instead continue the route down West Nyack Road to meet Route 59. The route change had the additional

benefit of reducing the overall cost of the Project by an estimated $2,025,000. This route change versus what was included in the Application has been documented in Exhibit 19 of the Evidentiary Record. The revised route is now shown on the Plan and Profile drawings in Exhibit 19.

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

117. The Facility will be consistent with the most recent State Energy Plan, which establishes as a policy objective that the state of New York will support energy systems that enable the state to significantly reduce greenhouse gas emissions by 2050, consistent with the CLCPA. The New York State Energy Plan also states that an increase in renewable energy will require additional transmission in New York. As such, the proposed Project will support this additional transmission. Further, the State Energy Plan also discusses the need for grid reliability and resiliency. The proposed project will satisfy this requirement by supplying the service area with new infrastructure to provide stable and secure transmission of energy to customers.

E. System Reliability Impact Study

118. Pursuant to 16 NYCRR §88.4(a)(4), Article VII Applications must include a System Reliability Impact Study (SRIS) or system impact study (SIS) "forwarded by the Transmission Planning Advisory Subcommittee [TPAS] for approval by the operating committee of the New York Independent System Operator [NYISO], which shows effects on stability of the interconnected system." Preparation, review, and approval of the appropriate system study is governed by the NYISO pursuant to Attachment X of its Open Access Transmission Tariff.

119. The Applicant requested a waiver related to this requirement stating that NYISO has communicated that the proposed Project does not meet the threshold for a System Impact Study based on the system studies performed by the Applicant. Because the Project does not trigger the need for an SIS according to the NYISO, the requested waiver was granted by the Commission.

F. State and Local Laws

120. As discussed in Condition 12, 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 declined to apply any local law or regulation as being unreasonably restrictive. In particular, the Signatory Parties recognize that 16 NYCRR Part 125 obligates O&R and its contractors to report to the Commission any accidents related to the construction, operation, or maintenance of the Project. O&R or its contractors must immediately report accidents involving inpatient hospitalization or death to the Commission.

121. The Project is located within the Town of Clarkstown in Rockland County. In accordance with PSL Section 130, the Applicant will not apply for Local approvals or permits in connection with the installation of Line 705, but will comply with the substantive requirements of these ordinances with the exception of those listed in Exhibit 7 of the Application (Exhibit 7 of the Evidentiary Record). County and municipal code sections governing construction and operation of the project are presented in detail in Exhibit 7 – Local Ordinances of the Application. A summary of the ordinances and the project compliance status is presented below for Rockland County and the Town of Clarkstown.

F.1. Rockland County

122. The proposed route crosses two Rockland County Stream Control Act (RCSCA) designated streams: Pascack Brook and Nauraushaun Brook. Nauraushaun Brook is crossed three times by the proposed route. Both streams have associated 100 and 500-year floodplains. The Project is compliant with all substantive requirements listed in the Rockland County Administrative Code. Structure is defined in the Rockland County Administrative Code as "any man-made object, including, but not limited to, buildings, houses, warehouses, cranes, billboards, dams and retaining walls, which the Agency may from time to time identify as prohibited objects in the one-hundred-year floodplain". The proposed Project will require excavation in the form of open-cut trenching within 100-year floodplains of Pascack Brook and Nauraushaun Brook.

123. The Applicant requested that the Commission refuse to apply to the Project the limitation set forth at the Rockland County Administrative Code §353-4.B (5) and (7) if they are interpreted to prohibit the Project in these floodplains. O&R proposes to install the project underground along existing, paved roadways, which minimizes environmental impacts to the maximum extent practicable. All structures proposed within the 100-year floodplain will be located underground and the surface will be restored to its original grade and condition (i.e., pavement). There will be no change to impervious coverage at construction completion once restored to the existing grade and existing condition. Therefore, no alterations to the existing floodplain drainage or absorption rate patterns will occur. Application in a manner that would preclude the construction of the proposed Project or any of the underground alternatives

examined by the Applicant would result in greater environmental impacts than the overhead transmission alternatives examined.

F.2. Town of Clarkstown

124. The Applicant will maximize compliance with noise ordinances by limiting work in residential areas to daytime hours. However, the Applicant requested that the Commission refuse to apply the Section 205 code provision for Noise to the project because it is unreasonably restrictive and the Applicant cannot guarantee compliance at all times.

F.3. State Filings

F.3.1. New York State Department of Transportation – Utility Work Permit

125. NYSDOT requires that a Utility Work Permit application be submitted to install utilities within or adjacent to State highway ROW. The Utility Work Permit application includes submission of Traffic Control Plans for construction activities occurring within State ROWs. The proposed Project runs along State Route 59 for approximately 250 feet and passes beneath State Route 59 via an underpass along Western Highway N. In addition, the proposed Project crosses State Route 304 at the intersection with W. Nyack Road.

126. Following Commission approval of the final design as part of the EM&CP, the Applicant will obtain highway work permit(s) from NYSDOT pursuant to 17 NYCRR, Part 131 for the construction and operation of the Project within or adjacent to State highway ROW, subject to the Commission's continuing jurisdiction.

F.3.2. New York State Thruway Authority – Notification/Coordination

127. The proposed Project passes beneath the NYS Thruway (I87/287) via an underpass along N. Middletown Road. The Applicant will notify and coordinate work on this County road, passing under the NYS Thruway Authority to complete the work associated with this Project.

F.3.3. Palisades Interstate Park Commission – Notification/Coordination

128. The proposed Project passes beneath the Palisades Interstate Parkway via an underpass along W. Nyack Road. The Applicant will notify and coordinate as work progresses on W. Nyack Road passing under the Palisades Interstate Parkway to complete the work associated with this Project.

F.3.4. NYSDEC – SPDES General Permit for Stormwater Discharges from Construction Activity (GP-0-15-002)

129. Installation of Line 705 will temporarily disturb greater than 1 contiguous acre and require coverage under a New York State Department of Environmental Conservation (NYSDEC) Stormwater Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities (GP-0-15-002).

130. In addition, a Stormwater Pollution Prevention Plan (SWPPP) will be developed and implemented, which will address stormwater management, soil erosion, sediment control and pollution control. The SWPPP will include Best Management Practices (BMPs) to prevent stormwater pollution and will be incorporated within the EM&CP.

131. The proposed Project is located entirely within the Town of Clarkstown, requiring only one municipal stormwater (MS4) community to be notified of the Project. As

part of the SPDES application process, the Applicant will submit the developed SWPPP to the Town of Clarkstown for its review and approval as a MS4 community. As an indication of its approval, Clarkstown will provide a completed MS4 SWPPP Acceptance Form back to the Applicant. The Applicant will then submit a Notice of Intent (NOI) to NYSDEC through their on-line system (eNOI) and include a copy of the Clarkstown's MS4 SWPPP Acceptance Form along with the other required submittals to obtain the SPDES GP-0-15-002 permit authorization.

F.3.5. NYSDPS – Section 401 Water Quality Certification

132. The Applicant will request a Water Quality Certification (WQC) from the Commission as the Project will require a U.S. Army Corps of Engineers (USACE) Section 404 Permit.

G. Consistency with the CLCPA

133. The CLCPA, which was enacted in July 2019, codifies the State's nation-leading clean energy and environmental goals, notably statewide greenhouse gas emissions limits. Pursuant to §7(2) of the CLCPA, the Commission must assess whether its administrative approvals, including Article VII Certificates, are inconsistent with or will interfere with attainment of the statewide greenhouse gas emissions limits. Line 705 itself does not directly emit greenhouse gas emissions, nor is it associated with electric generation that emits greenhouse gas emissions. Thus, it would not increase statewide greenhouse gas emissions. As described in Exhibit E-4 (Exhibit 13 of the Evidentiary Record), Line 705 is needed to prevent potential overloading of the Applicant's existing 138 kV overhead Line 702 between its Burns and Oak Street Substations. As Line 705 will contribute to a more reliable and resilient electric grid,

Line 705 will help support additional transmission needed to bring renewable electricity to load centers. Accordingly, the Commission's granting of an Article VII Certificate is not inconsistent with the CLCPA's statewide greenhouse gas emissions limits.

134. The CLCPA not only seeks to expeditiously reduce statewide greenhouse gas emissions, but to do so equitably. As such, §7(3) of the CLCPA prevents the Commission's administrative approvals, including Article VII Certificates, from disproportionally burdening disadvantaged communities identified pursuant to ECL §75-0101(5). While the majority of Line 705 would be located outside of disadvantaged communities, as shown on the map titled "Line 705 Disadvantaged Community Locations," included in the Evidentiary Record as Exhibit 20, small portions at each end of Line 705 are located in DEC-identified disadvantaged communities. These portions are primarily the portions of Line 705 that would interconnect to the existing Burns and West Nyack substations. As detailed in Exhibits 4 and 6 of the Evidentiary Record, Line 705 would be installed underground. Thus, it would not displace any existing land uses or have deleterious economic impacts. Appendix J and Exhibit 4, included in the Evidentiary Record as Exhibit 4, demonstrate no increased visual impact. Aside from expanding the West Nyack substation fence line by 60 feet, Line 705's only impacts are temporary impacts associated with construction. In addition, O&R would minimize these impacts, such as by conducting construction activities in residential areas during daytime hours, as stated in Appendix D, condition 80(a). Accordingly, an Article VII Certificate would not disproportionally impact disadvantaged communities.

H. Public Interest, Convenience, and Necessity

135. As stated in Appendix C to the Application, the Public Outreach Plan,(Exhibit 18 of the Evidentiary Record) the Applicant conducted public outreach and information efforts in support of the Project. The Applicant published a Public Notice was published in The Journal News and Rockland County Times for two consecutive weeks prior to filing the Application. In addition, the Applicant provided copies of the Application to the following libraries for public inspection: Nanuet Public Library; West Nyack Public Library; and New City Library.

136. As also stated in the Public Outreach Plan, on November 23, 2021, O&R served all "Landowners," as defined in PSL § 120(5), by first-class mail with a letter notifying them that the Project may affect their property and providing detailed instructions on how to become a party to this proceeding.

137. As also stated in the Public Outreach Plan, the Applicant will continue to provide updates of the Project to owners and occupants of properties adjacent to the Project ROW throughout the Article VII process through construction.

V. PROPOSED FINDINGS

138. The Signatory Parties agree that the record in this proceeding supports the proposed findings set forth in Appendix C attached hereto.

VI. PROPOSED CERTIFICATE CONDITIONS

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

VII. ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN GUIDELINES

140. The Signatory Parties agree that the General Guidelines for EM&CP(s) set forth in Appendix E attached hereto are acceptable and appropriate for application to the proposed Project as configured herein. The final design for the Project will be presented as part of the EM&CP(s).

VIII. WATER QUALITY CERTIFICATION

141. O&R will submit a request to the Commission for a WQC in accordance with Section 401 of the Clean Water Act and Commission regulations will be submitted. Upon issuance, the WQC will be submitted 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.

IX. COSTS

142. The Applicant's costs for the Project, as originally estimated, are set forth in Exhibit 9 of the Application (Exhibit 9 of the Evidentiary Record and referred to herein as "Exhibit 9"). In response to interrogatory DPS-4, the Applicant explained

that the approximately $7.22 million discrepancy between the Applicant's estimate in Case 21-E-0074 of $52,600,000 and the estimation in Exhibit 9 of $59,818,401 was due to a contingency estimate that was not included in the Case 21-E-0074 estimate. In response to interrogatory DPS-8, question 4, the Applicant indicated that the Project route change away from State Route 59 led to cost savings of approximately $2,025,000 due to decreased labor costs. The final cost estimate for the Project is $57,793,401.

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

11/27/23

Orange and Rockland Utilities, Inc.
By:
Victor J. Gallo, Esq.
Counsel to Orange and Rockland Utilities, Inc.

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

11/27/23

Staff of the New York State Department of Public Service.
By:

Russell King, Esq.
Counsel.

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

11/17/2023

New York State Department of Transportation
By: Stephanie Winkelhake, P.E.
Chief Engineer

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

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

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

**AGM signs with respect to AG related issues only.

New York State Department of Agriculture and Markets

By: Tara B. Wells, Associate Attorney

Case No.: 21-T-0569

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

County of Rockland
By: Edwin J. Day, County Executive

Case No.: 21-T-0569

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

Town of Clarkstown, Rockland County, NY.
By: George Hoehmann, Supervisor

APPENDIX A

LIST OF TESTIMONY, AFFADAVITS AND EXHIBITS TO BE ADMITTED

List of Testimony, Affidavits and Exhibits to be Admitted

Testimony:

Pre-filed direct testimony in support of the Article VII Application for the Underground Transmission Line 705 Project is presented by witnesses by subject area. Below is a list of the witnesses whose testimony will sponsor the identified exhibit(s) or portions thereof:

- John Cioffi: Exhibit 1 – General Information Regarding the Applicant and Exhibit 9 – Cost of Facility
- Anthony Velazquez: Exhibit 2 – Location of Facilities; Exhibit 5 – Design Drawings; Exhibit 9 – Cost of Facility; Exhibit E-1 – Description of Proposed Line; Exhibit E-2 – Other Facilities; Exhibit E-3 – Underground Construction.
- James Koza: Exhibit 2 – Location of Facilities; Exhibit 3 – Alternatives; Exhibit 5 – Design Drawings; Exhibit E-2 – Other Facilities; Exhibit E-4 – Engineering Justification
- Roleto Mangonon: Exhibit 3 – Alternatives; Exhibit E-4 – Engineering Justification
- Casey M. Tompkins: Exhibit 4 – Environmental Impact
- Prakash B. Pradhan: Exhibit 4 – Environmental Impact
- Earle C. Bascom, III: Exhibit 4 – Environmental Impact
- Venkatahareesh B. Kona: Exhibit 5 – Design Drawings; Exhibit E-3 – Underground Construction
- Brooke Briganti: Exhibit 6 – Economic Effects
- Bryan Pariseault: Exhibit 2 – Location of Facilities; Exhibit 7 – Local Ordinances
- Joseph Dietrich: Exhibit 3 – Alternatives; Exhibit 7 – Local Ordinances; Exhibit 8 – Other Pending Filings; Exhibit E-3 – Underground Construction; Exhibit E-5 – Effect on Communication; Exhibit E-6 – Effect on Transportation.
- Timothy Steinhofer Exhibit 8 – Other Pending Filings

Affidavits:

Affidavits of John Cioffi, Anthony, Velazquez, James Heady, Roleto Mangonon, Timothy Steinhofer, Susmit Patel, Douglas Cain, Ryan Jendrasiak, Natalie Harkins, and Elizabeth Bolt.

Exhibits:

Exhibit 1: General Information Regarding the Applicant (Exhibit 1 to the Application)

Exhibit 2: Location of Facilities (Exhibit 2 to the Application)

Exhibit 3: Alternatives (Exhibit 3 to the Application)

Exhibit 4: Environmental Impact (Exhibit 4 to the Application)

Exhibit 5: Design Drawings (Exhibit 5 to the Application)

Exhibit 6: Economic Effects (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 Facility (Exhibit 9 to the Application)

Exhibit 10: Description of Proposed Transmission Line (Exhibit E-1 to the Application)

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 Communication (Exhibit E-5 to the Application)

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

Exhibit 16: Pre-Filed Direct Testimony (Appendix A to the Application)

Exhibit 17: Agency Correspondence (Appendix B to the Application)

Exhibit 18: Public Outreach (Appendix C to the Application)

Exhibit 19: Route 59 Realignment Plan and Profile Drawings

Exhibit 20: Line 705 Disadvantaged Community Location Map

Exhibit 21: Responses to DPS-1 through DPS-8

Exhibit 22: Responses to DEC-1 through DEC-2

APPENDIX B

DESCRIPTION AND LOCATION OF PROJECT

Description and Location of Project

Line 705 would be a new, 5.5-mile 138 kilovolt (kV) underground transmission line. The line would originate at the Burns substation located at 71 N. Pascack Road and terminate at the West Nyack Substation located at 209 State Route 59. The entirety of Line 705 is within the Town of Clarkstown, Rockland County, New York.

Line 705 would be located below grade within existing transportation corridors or on land O&R already owns. The existing transportation corridors consist of municipal public roadway rights-of-way (ROW) and the crossing of CSX Corporation's (CSX) railroad ROW. The proposed route is bordered by commercial and residential properties, and would proceed under surface waters, including streams. Approximate center coordinates of the route are 41.096621, -74.008077.

Generally, the transmission line would be housed in polyvinyl chloride (PVC) pipes encased in concrete. The bottom of the concrete encasement would be placed in an approximately 5-foot deep trench. There would be areas along Line 705's alignment where the trench depths would be deeper to cross under streams and culverts, and to avoid existing utilities. A minimum of 30 inches of backfill would cover the concrete-encased PVC pipes and fill in to the top of the trench. The top of the trench would be returned to its original condition (e.g., roadway pavement or topsoil along the shoulder of roadway). O&R estimates completing the installation and construction of Line 705 in approximately two years.

Planned construction methods include open-cut trenching along the existing paved roadways and jack and bore techniques to cross beneath stream features. The anticipated trench depth along existing paved roadways is approximately 5 feet, unless O&R encounters obstructions in the field (i.e., unknown underground utilities). O&R would place a total of twenty five transmission manholes/vaults approximately every 700 to 1,675 feet along the 5.5-mile transmission line. The manholes/vaults would consist of pre-cast concrete, and would be 8 feet wide, 28 feet long, and 6.5 feet in depth. Where Line 705 crosses Pascack Brook within the O&R property at the Burns Substation, open-cut trenching within the roadway would occur to an anticipated depth of approximately 3 feet and the line would pass over the stream. O&R would cross all other streams using the jack and bore technique to a depth of approximately 15 feet, with the exception of Nauraushaun Brook at the intersection of N. Middletown Road and State Route 59, where the proposed depths are 18 to 20 feet. O&R would also use the jack and bore method at two other locations along the proposed route: (1) the railroad tracks adjacent to the West Nyack Substation, and (2) the West Nyack Road intersection with State Route 304. The railroad track crossing would be an approximately 150 linear foot crossing. The depth below grade would range between approximately 10 to 35 feet. The State Route 304 crossing would be an approximately 230 linear foot crossing. The depth below grade would be approximately 16 feet. Entry and exit pits would occur within existing impervious surfaces as depicted on the provided proposed plan and profile drawings in Exhibit 5 of this application, with the exception of the pit in front of the West Nyack Substation, which is a grassy area within New York State Department of Transportation (NYSDOT) property. The design drawings also include known underground

utilities and test hole information for the geotechnical and vacuum hole studies performed in March and June of 2019, respectively. Anticipated areas requiring tree clearing or trimming along the proposed route are also depicted on the design drawings. The proposed transmission line would also require equipment additions and upgrades to the Burns and West Nyack Substations.

Exhibit 2 details the proposed route of the underground transmission line. The route begins at the Burns Substation located at 71 N. Pascack Road in Nanuet, New York and runs east along the substation access road until it meets the intersection with N. Pascack Road. At this intersection, the proposed route turns south and runs along N. Pascack Road until the intersection of Smith Road. The proposed route turns east at this intersection, running along the entirety of Smith Road until it meets with N. Middletown Road. At this intersection, the proposed route turns south and runs along N. Middletown Road, passing beneath New York State Thruway (I87/287) via an underpass until the intersection of State Route 59. The proposed route turns southeast along State Route 59 until the intersection with College Avenue. At this intersection, the proposed route turns north until the intersection with W. Nyack Road. At this intersection, the proposed route runs east following W. Nyack Road, passing beneath the Palisades Interstate Parkway via an underpass, for approximately 2.4 miles until it meets the intersection with Western Highway N. At this intersection, the proposed route turns south and runs along Western Highway N. for approximately 475 feet until it has passed through the State Route 59 underpass. The proposed route turns east after this underpass, crossing beneath the CSX railroad tracks before terminating at the West Nyack Substation located at 209 State Route 59 in West Nyack, New York.

The final design drawings in the Environmental Management and Construction Plan ("EM&CP") would show, among other things: (a) the final ROW and centerline; (b) known underground utilities and facilities along the route; (c) temporary construction access and workspace rights, permanent underground easement rights, and tree clearing rights in areas where the Applicant does not now have such rights; and (d) temporary conduit fusing locations and construction laydown, storage and marshalling yards.

The proposed 138 kV underground cable system would consist of three 3,500 thousands of circular mils (kcmil) copper cables measuring approximately 4.92 inches in diameter. The components of each cable would include:

(i) Compact segmented copper conductors comprised of annealed bare copper strands, measuring approximately 2.004 inches in diameter;

(ii) Cross-linked polyethylene (XLPE) insulation with thickness 0.866 inches, surrounded by inner and outer semi-conducting compound insulation shields;

(iii) Metallic cable shield surrounded with inner and outer semi-conductive swelling tape moisture barriers; and

(iv) Graphited black high-density polyethylene (HDPE) outer jacket with semiconducting layer.

The cable system would be designed for operation at 138 kV, and its nominal and initial operating voltage would also be 138 kV. O&R would install each cable in a 6-inch inside diameter

Schedule 40 polyvinyl chloride (PVC) conduit. In addition to these three conduits, O&R would install one 6-inch diameter conduit for communication and two conduits as spares. O&R would typically arrange the six-conduit section in a two layers of three configuration. As a part of this Project, O&R plans to install two additional 6-inch conduits in the same transmission duct bank at two different sections for future storm hardening of its current overhead distribution system. O&R would typically arrange the eight-conduit sections in a two layers of four configuration.

O&R would splice the new 138 kV underground transmission cables inside proposed transmission manholes/vaults that connect PVC duct-banks. O&R would install a fiber optic cable in one of the six conduits that would bypass every transmission vault, connect each adjacent fiber handhole (where the fiber optic cable would be spliced), and re-join the proposed transmission duct-bank in the immediate vicinity. Additionally, for certain areas where the transmission line passes under major crossings (such as major culverts, State routes or railroad tracks), O&R plans to utilize a 30-inch diameter steel casing with six 6-inch inside diameter Schedule 40 PVC conduits installed by pipe-jacking. Refer to Figure E-1-1 for a typical 138 kV underground cable cross-section.

O&R has statutory and municipal franchise rights to install electric facilities within public roadways. O&R has consulted with the Town of Clarkstown and Rockland County to obtain the appropriate permits to perform the installation of Line 705 within existing transportation ROWs, which are discussed in Exhibit 7.

O&R may need to install Line 705 beyond the transportation ROW limits, which would require property rights. The proposed jack and bore crossing of the CSX railroad tracks before terminating at the West Nyack Substation may require property easements for the entry and exit pits associated with this technique. The proposed entry and exit pits located east and west of the CSX railroad are currently located within the NYSDOT ROW associated with State Route 59.

O&R will coordinate with landowners for temporary access during construction where necessary. As noted above, locations for temporary construction, such as laydown and storage areas, would be identified in the EM&CP. Property access agreements for temporary construction access and tree clearing rights required for Line 705 would also be addressed in the EM&CP.

Revised Route at the Route 59 Intersection

O&R responded to a request for realignment at the Route 59 intersection of the Project to reduce overall impacts to the Route 59 corridor. Revised Project design drawings show this realignment where the Project would continue west along W. Nyack Road to the intersection with Route 59 instead of proceeding south along College Avenue off W. Nyack Road. Exhibit 19 of the Evidentiary Record depicts the realignment, which shows the plan and profile of the new route. The same area of the proposed Project prior to the revised route was submitted as Figure 5-3, Exhibit 5 of the Application (Exhibit 5 of the Evidentiary Record). Sheets 21-23 of the 43 sheet plan set show the plan view and profile of the proposed Project before the realignment. The realignment is entirely within the ROW described in the Application.

APPENDIX C

COMMISSION FINDINGS

Commission Findings

1. The Project, which is the construction of a new 138 kV underground transmission line primarily within municipal public roadway rights-of-way for a total distance of approximately five and one-half miles between the Burns Substation and the West Nyack Substation wholly in the Town of Clarkstown, County of Rockland, New York, is needed to alleviate potential overloading on the regional transmission network and thereby bolster reliability.
2. The Project will be designed, constructed, and operated in a manner that avoids or minimizes impacts to environmental resources. The nature of the probable environmental impacts resulting from the Project includes:
   (a) minimal incremental visual impacts from the construction of the Project;
   (b) temporary disturbance and inconvenience, including noise and debris, associated with construction activities; and,
   (c) maximum calculated electromagnetic fields at the edge of the Project's right-of-way that comply with the Commission's guidelines.
3. 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.
4. The entire Project will be located underground except for portions located within the Burns Substation and the West Nyack Substation.
5. The location of the Project conforms to the substantive provisions of applicable state and local laws and regulations issued thereunder, except those local laws and regulations which the Commission refuses to apply because it finds, based on the justifications set forth in Exhibit 7, that as applied to the Project, such are unreasonably restrictive in view of the existing technology, or of factors of cost or economics, or of the needs of consumers whether located inside or outside of such municipality.
6. The Project will have no adverse impact on active farming operations that produce crops, livestock, and livestock products, as defined in section three hundred one of the 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.
7. Pursuant to CLCPA §7(2), construction, operation, and maintenance of Line 705 will not interfere with the CLCPA's statewide greenhouse gas emissions limits because Line 705 itself does not increase statewide greenhouse gas emissions. Indeed, as Line 705 will contribute to a more reliable and resilient electric grid, Line 705 will help support additional transmission needed to bring renewable electricity to load centers.
8. Pursuant to CLCPA §7(3), construction, operation, and maintenance of Line 705 will not disproportionally impact disadvantaged communities. As Line 705 will be located entirely underground or within existing substations, any, its impacts will be temporary in nature and minimized to the extent practicable. Moreover, such impacts are limited in geographic scope.

9. Based on the entire record as listed on Appendix A, the Project will serve the public interest, convenience, and necessity.

APPENDIX D

PROPOSED CERTIFICATE CONDITIONS

PROPOSED CERTIFICATE CONDITIONS

A. Conditions of the Order

1. Subject to the conditions adopted in the attached order, Orange and Rockland Utilities, Inc. (the "Certificate Holder") is granted a Certificate of Environmental Compatibility and Public Need ("Certificate") pursuant to Article VII of the New York Public Service Law ("PSL"), authorizing the construction, operation and maintenance of a proposed new 138 kilovolt ("kV") underground transmission line (the "Facility" or "Project") in the Town of Clarkstown, NY.

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

3. If the Certificate Holder decides not to commence construction of any portion of the Facility, it shall so notify the Secretary in writing within 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 it files with the Secretary.

4. The Certificate Holder shall construct the Project in accordance with this Certificate, with the approved Environmental Management and Construction Plan ("EM&CP"), including any Best Management Practices ("BMPs") provided therein, and any subsequent Commission orders.

5. The Certificate Holder shall integrate and coordinate maintenance of the certified project with that of its facilities in the Project Right-of-Way ("Project ROW").

6. If construction of the Project hereby certified is not commenced within 18 months after the Certificate Holder files a verified statement that it accepts and will comply with the Certificate, the Commission may vacate the Certificate with notice to the Certificate Holder.

7. Except for deadlines established by statute, the Secretary may extend any deadlines established by this Order for good cause shown.

8. The Certificate Holder shall construct the Facility in a manner that conforms to the then-current Building Code of New York State and all applicable standards of the American National Standards Institute ("ANSI") and the National Fire Protection Association ("NFPA") including, without limitation, the National Electrical Safety Code ("NESC"), Institute of Electrical and Electronics Engineers ("IEEE") Standard IEEE [C2-2012, 2017], and any stricter standards adopted by the Certificate Holder. Upon completion of the Project, the Certificate Holder shall file a letter with the Secretary certifying that the Project was constructed in full conformance with the NESC.

9. The Certificate Holder shall coordinate all work performed on State and municipal roads and highways 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.

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

B. Description and Location of Project

11. **Appendix B of the Joint Proposal**, entitled "Description and Location of Project," identifies the description and location of the Project. **Exhibit 11 of the Evidentiary Record of the Joint Proposal** identifies the accessory facilities to be located at the Certificate Holder's Burns and West Nyack substations.

C. Laws and Regulations

12. 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 declined to apply any local law or regulation as being unreasonably restrictive.

13. No State or local law, regulation, code, or ordinance purporting to require any approval, consent, permit, certificate, or other condition for the construction or operation of the Project authorized by the Certificate shall apply, except for:

a) Those of the PSL and regulations and orders adopted thereunder;

b) Those provided by otherwise applicable state law for the protection of employees engaged in the construction and operation of the Project;

c) Those permits issued under a federally delegated or approved environmental permitting program;

d) The appropriate state and municipal authorizations for construction at State and municipal road and highway crossings or longitudinal occupations that are issued within the sole jurisdiction of NYSDOT or municipality, and subject to the Commission's continuing jurisdiction; and

e) Those expressly authorized in these Certificate Conditions.

14. The Certificate Holder's maintenance of the Project will be in accordance with the Certificate Holder's Commission-approved Transmission Vegetation Management Plan, as amended from time to time, except where a conflict with a provision of applicable law or the Certificate would be created.

15. If, after attempting to resolve any issues with the appropriate State or municipal agency, the Certificate Holder believes that any action taken, or determination made, by a State or municipal agency in connection with this Certificate is unreasonable or unreasonably delayed, it 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) days to address the reasonableness and requirement of the delay. Notwithstanding the preceding sentence, NYSDOT may respond to the petition within ten (10) days.

16. Promptly after receipt and prior to construction, the Certificate Holder shall file with the Secretary a copy of each permit or approval received from any Federal, State, or municipal agency.

17. Nothing herein shall preclude the Certificate Holder from voluntarily subjecting itself to any State or local approval, consent, permit, certificate or other condition for the construction or operation of the Project, subject to the Commission's continuing jurisdiction.

D. Public Health and Safety

18. The Certificate Holder shall design, engineer, and construct the Project such that its operation shall comply with the electric and magnetic field standards established by the Commission in Opinion No. 78-13, issued June 19, 1978, and the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities, issued September 11, 1990. Such compliance shall be evidenced by an EMF study certified by professional engineer licensed by the State of New York. Such a study must also accompany any proposed changes to the Project ROW.

19. The Certificate Holder shall engineer and construct the Facility to be fully compatible with the operation and maintenance of 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 Project's EM&CP.

20. The Certificate Holder shall comply with the requirements for the protection of underground facilities set forth in 16 NYCRR Part 753, entitled "Protection of Underground Facilities."

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

22. During construction or maintenance, the Certificate Holder shall notify the New York State Department of Environmental Conservation ("NYSDEC") of any fuel or chemical spill it is required to report in accordance with NYSDEC regulations and guidance and shall notify New York State Department of Public Service ("DPS") Staff as soon as possible thereafter.

23. The Certificate Holder shall take appropriate measures to minimize fugitive dust and airborne debris from 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 or sources. If surface waters are used, equipment shall be disinfected afterwards. No dust control substances other than water will be allowed during Project construction without prior DPS Staff permission.

24. The Certificate Holder 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.

25. The Certificate Holder or its supplier, as the case may be, shall obtain any permits from applicable agencies required for the delivery of oversized components for the Project.

26. The Certificate Holder shall have the right to require that any person seeking to access the Project area first be appropriately trained in environmental protection and safety.

E. Environmental Management and Construction Plan

27. Except where this Certificate requires otherwise, the terms of the Certificate and the environmental protection measures contained in the Application shall be incorporated into the EM&CP. These environmental protection measures shall be applied during construction, operation, and maintenance of the Project. Applicable provisions of the Certificate, EM&CP, and Commission Order(s) approving the EM&CP shall be accommodated in any design, construction, ownership, or maintenance contracts associated with the Project.

28. The EM&CP shall be developed in accordance with these Certificate Conditions.

29. The Certificate Holder shall provide as part of the EM&CP:

a) A final design plan that conforms to the Project design set forth in the Certificate, applicable federal, state, and local requirements, including applicable NYSDEC, New York State Office of Parks, Recreation and Historic Preservation ("OPRHP"), New York State Department of Agriculture and Markets ("NYSAGM"), Commission, Bureau of Alcohol, Tobacco, Firearms, and Explosives, Occupational Safety and Health Administration, NYS Department of Labor, and local government chemical and waste-storage use and handling regulations;

b) A discussion of the status of the Certificate Holder's efforts to obtain permits necessary for construction of the Project from Federal agencies and state agencies with federally delegated authority; and

c) The URL address for the Certificate Holder's website containing Project information.

30. In preparing the proposed EM&CP, the Certificate Holder shall consult with each transportation department or agency normally having jurisdiction over any roads in the Project vicinity that will be affected by Project construction. The EM&CP will include a scope and methods to assess the pre-construction condition of municipal roads. The assessment will include an evaluation of road pavement, road base, stormwater facilities, sidewalks, street furniture and other amenities found in the road right-of-way.

31. The EM&CP will incorporate measures to comply with NYSDOT regulations governing the Accommodation of Utilities in Within State Right-of-Way (17 NYCRR Part 131), NYSDOT's Requirements for the Design and Construction of Underground Utility Installations Within the State Highway Right-of-Way, and Highway Law Section 52 as may be applicable to the Facility.

32. Before preparing and prior to filing the EM&CP, the Certificate Holder shall contact the NYSDEC Region 3 Natural Resources Supervisor, NYS Natural Heritage Program and the United States Fish and Wildlife Service ("USFWS") to check for any updates or changes of known threatened or endangered plant or animal species, or special concern species listed in New York, (collectively, "T&E" species) or habitat or Significant Natural Communities in the Project area.

33. Deviations from the certified centerline shall be allowed for appropriate environmental or engineering reasons, except where a conflict with an explicit provision of the Certificate would be created.

34. The EM&CP shall identify any water withdrawal activities that the Certificate Holder anticipates will be regulated pursuant to 6 NYCRR §§ 601.3 and 601.6, if any. If the EM&CP identifies regulated water withdrawal activities in preceding sentence, the EM&CP shall also provide the information outlined in 6 NYCRR § 601.10 for any such activities. Prior to commencement of such activities, DPS Staff, in consultation with NYSDEC, will determine whether to recommend that the Commission impose any conditions or restrictions on such activities. Such determination will be based on the substantive portions of the following regulations: 6 NYCRR §§ 601.11, 601.12, 601.16, 601.19, and 601.20.

35. The Certificate Holder shall not commence construction of any portion of the Project, the preparation of the site for the construction of any portion of the Project, or any proceedings under the Eminent Domain Procedure Law ("EDPL") to acquire property rights with respect to any portion of the Project until the Commission has approved the EM&CP for such portion of the Project. To calculate the three-year period for acquisition of property pursuant to the EDPL, 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. Surveying, soils testing, and such other activities as are necessary for preparation of the final design plans for the Project do not constitute the construction of any portion of the Project or the preparation of the site for the construction of any portion of the Project.

36. The Certificate Holder shall file an electronic copy of its proposed EM&CP with the Secretary and, unless otherwise directed by the Secretary, serve one electronic copy on each of: the assigned Project Manager in the Major Projects Management Bureau of the NYSDEC Central Office in Albany; the Natural Resources Supervisor of the Region 3 office of the NYSDEC; the staff of the NYSAGM; the staff of the Region 8 office of the NYSDOT; any other New York State agency that requests the document; and any party on the service list who requests the document. Within 7 business days after the Certificate Holder files the proposed EM&CP with the Secretary, it shall deliver two hard copies to DPS Staff. The Certificate Holder also shall place one electronic copy or one hard copy for inspection by the public in a convenient location in each municipality in which construction will take place, which location for a given municipality may be a library in such municipality identified in the Service List for the Application. The Certificate Holder will also make the EM&CP accessible on its Project website by way of either direct PDF download(s) or a web link to the DPS website page(s) where the EM&CP is available.

37. Contemporaneously with filing and serving the proposed EM&CP, the Certificate Holder 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) The Certificate Holder 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 Holder to serve a copy of the proposed EM&CP) and on all persons required to be served with the Application by statute or regulation.

b) The Certificate Holder shall deliver by first class mail a copy of the EM&CP Filing Notice to the owners or residents (if different from the owners) of all properties that abut the Project route and all properties on which new property rights are required for the Project.

c) The Certificate Holder shall include a copy of the EM&CP Filing Notice in the proposed EM&CP.

d) The Certificate Holder shall publish a copy of the EM&CP Filing Notice in a newspaper or newspapers of general circulation near the Facility.

e) The EM&CP Filing Notice delivered to the owners and residents (if different from the owners) of properties on which property rights are to be acquired shall be accompanied by a description of the type of property rights required for the Project with respect to such property (e.g., fee, easement, lease, etc.).

38. The EM&CP Filing Notice 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 Facility and of the content of the proposed EM&CP;

c) the EM&CP Filing Notice served on identified persons with 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 websites where the Certificate Holder and DPS have made the proposed EM&CP 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 Holder;

f) the name, address, and telephone numbers of an appropriate Certificate Holder representative;

g) the e-mail address and postal address of the Secretary and the DPS website;

h) the URL address for the Certificate Holder's website containing Project information; and

i) a statement that any person may be heard by the Commission on any matter or objection regarding the proposed EM&CP by filing written comments with the Secretary and the Certificate Holder within 30 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.

39. A certificate of service evidencing service of the EM&CP Filing Notice as required above shall be filed with the Secretary within 7 business days after the time the proposed EM&CP is filed, and shall be a condition precedent to approval of the EM&CP. When available, proof of publication of the newspaper notice(s) of filing the proposed EM&CP, including a copy of such notice, shall be filed with the Secretary.

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

a) The Certificate Holder shall report any changes it proposes to DPS Staff. If the change involves the jurisdictional area of another agency, DPS Staff will consult such agency. DPS Staff will refer any proposed changes that will not result in any increase in adverse environmental impacts or are not directly related to contested issues decided during the proceeding to the Chief of Environmental Certification and Compliance ("EC&C") Section of the Office of Electric, Gas and Water for approval. DPS Staff will refer all other proposed changes to the Commission for approval.

b) Upon being advised that DPS Staff will refer a proposed change to the Commission, the Certificate Holder shall notify all parties as well as property owners, residents (if different from the owners), or lessees whose property is affected by the proposed change. The notice shall: (1) describe the original conditions and the requested change; (2) state that documents supporting the request are available for inspection at specified locations; (3) state that persons may comment by writing or calling (followed by written confirmation) to the Commission within 21 days of the notification date; and (4) provide the Secretary's email address, phone number, and mailing address. Any delay in receipt of written confirmation will not delay Commission action on the proposed change.

c) The Certificate Holder shall not execute any proposed change until it receives written approval from the Chief of EC&C or the Commission in accordance with paragraph (a) of this condition, except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in the approved EM&CP.

41. If blasting is required, the Certificate Holder shall include a Blasting Plan in the EM&CP, which will be submitted to DPS Staff for review and approval and to the NYSDOT Main Office Geotechnical Engineering Bureau for review and approval.

42. The Certificate holder shall not commence construction until the Director of the Office of Energy System Planning and Performance or their designee has sent a Notice to Proceed with Construction letter. Construction means the beginning of tree clearing, site clearing, ground disturbance, site preparation, and grading activities related to installation of the Project. Commencement of Construction does not include soils or groundwater testing, surveying (such as geotechnical drilling) and similar preconstruction activities to determine the adequacy of the site for construction and the preparation of filings pursuant to this Certificate. Commencement of Construction also does not include other activities, such as limited staging and limited tree cutting that are required to perform such pre-construction activities.

43. The Certificate Holder shall electronically file with the Secretary as-built plan and profile drawings within six months of project completion. If temporary features are not included in the as-built drawings, the Certificate Holder shall submit redline drawings of all changes that include temporary features.

44. The Certificate Holder shall obtain coverage under the then-current State Pollutant Discharge Elimination System ("SPDES") General Permit for Construction Activities (currently, GP-0-20-001) and will prepare one or more final NYSDEC-acknowledged Storm Water Pollution Prevention Plans ("SWPPP") and, as appropriate, the municipal separate storm sewer system approval, in accordance with the current NYS Standards and Specifications for Erosion and Sediment Control ("NYSSESC"). In addition to the general requirements set forth in the NYSSESC, the SWPPP shall include the following protocols:

a) To minimize the risk of introducing invasive species, use of hay bales is strictly prohibited;

b) All erosion control fabric or netting must be 100% biodegradable natural product, excluding geotextiles used for road construction and temporary erosion control devices such as silt fence and silt sock.

45. The following stormwater, erosion, and sedimentation conditions shall be applicable to the Project:

a) The Certificate Holder shall include a SWPPP and, if possible, the municipal separate storm sewer system approval, and the NYSDEC's SPDES General Permit applicable to Phase I work, which will be appended to the Phase I EM&CP. If not included in the Phase I EM&CP, the Certificate Holder shall file the municipal separate storm sewer systems approvals and the NYSDEC's letter of acknowledgment with the Commission prior to approval of the Phase I EM&CP.

b) The Certificate Holder shall include a SWPPP, and, if possible, the municipal separate storm sewer systems approvals, and NYSDEC's letter of acknowledgement authorized under NYSDEC's SPDES General Permit applicable to Phase II work, in the applicable, post-Phase I EM&CP. If not included in the applicable, post-Phase I EM&CP, the Certificate Holder shall file the municipal separate storm sewer systems approvals and the NYSDEC's letter of acknowledgment with the Commission prior to approval of the relevant EM&CP.

c) The Certificate Holder shall install temporary erosion control devices (e.g., silt fences, straw bales, and structural diversions) as soon as practicable and appropriate or by the end of the workday for newly disturbed areas, as indicate d in the EM&CP.

F. Notices and Public Complaints

46. The Certificate Holder shall make available to the public a toll-free or local phone number of an agent or employee who will, for the duration of construction of the Project, be available to receive complaints, if any, from the public about the construction of the Project. That number shall include a recorded outgoing message that will, when a call is not answered by a person, provide the caller with: (i) the number to be called at any time in case of

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

47. The agent or employee who receives a complaint shall make reasonable efforts to respond to complaints with an acknowledgement that the agent or employee has received the complaint.

48. The Certificate Holder's Project website shall provide a means for the public to communicate to the Certificate Holder about the Project (e.g., to register complaints or ask questions) through either a direct link to a complaint form or email or by providing the contact information (phone and/or email address) of a representative of the Certificate Holder who can respond to communications that include questions and concerns about the Project from members of the public.

49. The Certificate Holder shall report to DPS Staff every complaint that cannot be resolved, and describe the actions taken to address the complaint, within ten (10) business days after receipt of the complaint.

50. a) No less than two (2) weeks before commencing site preparation, the Certificate Holder shall notify the public of the anticipated date that site preparation will commence, as follows:

i. provide notice to local officials and emergency personnel along the entire Facility route;

ii. provide notice to local media for dissemination;

iii. provide notice for display in the libraries identified in the Service List of the Application, the Certificate Holder's Project website, and other public places (such as general stores, post offices, community centers and conspicuous community bulletin boards); and

iv. provide notice to property owners and residents of properties (if different from the owner) that are in or adjacent to the Project ROW, including the NYSDOT.

b) The notice or notices under this paragraph shall be written in language reasonably understandable to the average person and shall contain:

i. a map of the Project;

ii. a brief description of the Project;

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

iv. the anticipated date for start of site preparation and estimated date for Project completion (inclusive of restoration);

v. the name, mailing address, local or toll-free telephone number, and email address of an employee or agent of the Certificate Holder 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; 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 this paragraph shall be submitted to the Secretary.

d) The Certificate Holder shall notify all persons who own properties or are residents of properties (if different from the owner) that are on or abut the Project ROW of the planned construction activities and anticipated schedule affecting the abutting properties at least 14 days, but no more than 45 days (or longer on the specific request of the Certificate Holder and agreed to by DPS Staff), prior to the commencement of construction. The Certificate Holder shall deliver such notice by first class mail or, at its option, may instead affix the notices to the doors of the residences. The Certificate Holder shall provide a copy of the generic form of such notice to the Secretary prior to the commencement of construction.

51. For the duration of Project construction, the Certificate Holder shall post and maintain on its Project website a schedule that includes at least general-level information for the public about Project activities scheduled to occur during the upcoming 2-week period.

52. The Certificate Holder shall provide all contractors providing services for construction of the Project ("Contractors") with complete copies of the Certificate, the approved EM&CP, the order approving the EM&CP, updated construction drawings, and any site-specific plans prepared in accordance with Article 145 of the New York State Education Law, the SPDES General Permit for Stormwater Discharge from Construction Activity (Permit No. GP-0-15-002), any permit issued pursuant to Section 404 of the Federal Clean Water Act and any 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 Holder to their Contractors prior to the execution of such contracts.

53. The Certificate Holder shall notify all Contractors that the Commission may seek to recover penalties for violation of the Certificate and other orders issued in this proceeding,

not only from the Certificate Holder, but also from its Contractors, and that Contractors also may be liable for other fines, penalties, and environmental damage.

54. The Certificate Holder shall inform the Secretary in writing at least five (5) days before commencing construction of the Facility.

55. The Certificate Holder shall provide DPS Staff and the NYSDEC with weekly status reports summarizing construction of the Project and indicating construction activities and locations scheduled for the next week. Updates will be provided as necessary to account for material changes to the construction plan.

56. Within 10 days after the Project is fully constructed and placed in service, the Certificate Holder shall notify the Secretary in writing of that fact.

57. Within 10 days of the completion of final restoration of the Project, the Certificate Holder shall notify the Secretary in writing that all restoration has been completed in compliance with this Certificate and the order(s) approving the EM&CP

58. To the extent available, the Certificate Holder will use the most recent aerial imagery in preparing its EM&CP.

G. Construction, Operation, Maintenance, and Restoration

59. a) At least 2 weeks prior to the start of construction of the Project, the Certificate Holder shall hold a preconstruction meeting to which it shall invite its Contractors, DPS Staff, NYSDOT, and the NYSDEC. An agenda, the location, and an attendee list shall be agreed upon between DPS Staff and the Certificate Holder. The meeting invitation shall be distributed at least ten (10) days prior to the meeting date.

b) Maps showing designated travel routes, construction worker parking and access road locations and a general project schedule will be available at the meeting for the attendees.

c) The Certificate Holder shall supply draft minutes from this meeting to a representative of DPS Staff, NYSDOT, and the NYSDEC for corrections or comments, and thereafter the Certificate Holder shall issue the finalized meeting minutes to all attendees.

d) If, for any reason, the Contractors cannot finish the construction of the Project, and one or more new Contractors are needed, there shall be another preconstruction meeting with the same format as outlined above.

60. The Certificate Holder shall confine construction and subsequent maintenance to the Project ROW and to additional work areas authorized and detailed in the EM&CP.

61. Prior to commencement of construction of the Project at any location along the certified route, the Certificate Holder shall provide to DPS Staff documentation evidencing that the Certificate Holder has received all of the real property rights from owners of private properties required for the Certificate Holder to construct the Project there.

62. Each construction activity shall be described in detail in the EM&CP.

63. a) The Certificate Holder shall adhere to the NYSDEC's then effective NYSSESC also known as the "Blue Book."

b) The Certificate Holder's proposed SWPPP for the Project shall be submitted with the EM&CP.

c) Prior to construction at a location requiring the installation of temporary erosion control as indicated in the EM&CP, the Certificate Holder shall install such measures, which shall be maintained at the end of the work day in which site disturbance occurs.

64. Disturbed areas, ruts, and rills shall be restored to original grades and conditions with permanent re-vegetation and erosion controls appropriate for those locations. Disturbed pavement, curbs, and sidewalks shall be restored to their original preconstruction condition or improved.

65. In connection with vegetation management for the Project, the Certificate Holder shall:

a) Comply with the provisions of 6 NYCRR Part 192, "Forest Insect and Disease Control," and Environmental Conservation Law § 9-1303, with any quarantine orders issued thereunder.

b) Ensure crews are trained to identify insects that are identified as a prohibited or regulated invasive species in accordance with 6 NYCRR Part 575, "Prohibited and Regulated Invasive Species." Certificate Holder shall report the discovery of such insects to the NYSDEC Region 3 Supervisor of Natural Resources.

c) Not create a maximum wood chip depth greater than three inches, except for wood chip roads or for invasive species control; these areas will be specified in the appropriate, post-Phase I EM&CP(s).

d) Not store or dispose of wood chips in wetlands, floodways, agricultural fields, or within 50 feet of streams.

e) Limit clearing of natural vegetation to material that poses a hazard or hindrance to the construction activity or operation of the Facility.

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

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

b) replacement would be contrary to sound ROW management practices or the ROWMP applicable to the Project; or

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

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

H. Environmental Supervision

68. The Certificate Holder shall use at least 4 inspectors: (a) at least one environmental monitor employed full-time on the Project; (b) at least one construction inspector employed full-time on the Project; (c) at least one safety inspector who will inspect the work site from time to time; and (d) at least one quality assurance inspector who will inspect the work site from time to time. The environmental monitor shall have stop work authority over all aspects of the Project, that would create an adverse impact on the environment. The same individual may be used for multiple inspection roles, provided that the individual is qualified and has sufficient time and resources to adequately fulfill each role.

69. The environmental monitor(s) and the construction inspector(s) shall be equipped with sufficient documentation and transportation and communication equipment to effectively monitor each Contractor's compliance with the provisions of every order issued in this proceeding and applicable sections of the PSL, the ECL and regulations issued thereunder, any Section 401 Water Quality Certification, and the EM&CP.

70. The names, qualifications, and contact information of the environmental monitor(s) and the construction inspector(s) shall be submitted to the Secretary at least 2 weeks prior to the start of construction. The environmental monitor's qualifications shall satisfy those of a "Qualified Inspector" pursuant to the SPDES General Stormwater Permit for construction activity (GP-0-20-001).

71. The Certificate Holder 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 ongoing activities.

72. The Certificate Holders shall provide to DPS Staff, NYSAGM, and NYSDEC the cell phone numbers of the Certificate Holder's environmental monitor(s) and construction inspector(s). The environmental monitor(s) and construction inspector(s) may have direct communication with DPS Staff, NYSAGM, and NYSDEC throughout the duration of construction..

73. The Certificate Holder's employees, Contractors and subcontractors assigned to the construction of the Project and inspection of such construction work shall be properly trained in their respective responsibilities.

74. The Certificate Holder shall regard DPS Staff representatives (authorized pursuant to PSL Section 8) as the Commission's designated representatives in the field. In the event of any emergency resulting from 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.

75. A stop work order shall expire 24 hours after issued unless confirmed by a single Commissioner. If a stop work order is so confirmed, the Certificate Holder may seek reconsideration from the confirming Commissioner or the whole Commission.

76. Stop work authority will be exercised sparingly and with due regard to potential environmental impacts, 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 Holder's representatives possessing comparable authority. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holder's Project Manager and the DPS Chief of EC&C. In the event that a DPS Staff representative issues a stop work order, neither the Certificate Holder nor the Contractor will be prevented from undertaking any 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.

a) 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 responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with the DPS Staff representative, refuse to take appropriate action – direct the field crews to stop the specific potentially harmful activity immediately. If responsible Certificate Holder personnel are not on site, the DPS Staff representative will immediately thereafter inform the Construction Inspector or Environmental Monitor of the action taken. The stop work order may be lifted by the DPS Staff Representative if the situation prompting its issuance is resolved;

b) 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 corrective measures, the DPS Staff representative may, in the absence of responsible Certificate Holder supervisory personnel, or in the presence of such personnel who, after consultation with the DPS Staff representative, refuse to take appropriate action, direct the Certificate Holder or its Contractors to implement the corrective measures identified in the 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 Holder's Construction Inspector or Environmental Monitor of the action taken.

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

a) The monthly inspections shall include a review of the status of compliance with all conditions contained in the Certificate and any other order issued in this proceeding and with all other legal requirements and commitments, as well as a field review of the Facility site, if necessary. The inspections also shall include:

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

ii. review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies, and the Certificate Holder's response(s);

iii. review of the status of the Project in relation to the overall schedule established prior to the commencement of construction; and

iv. other items the Certificate Holder or DPS Staff considers appropriate.

b) The Certificate Holder shall provide a written record of the results of the inspection, including resolution of issues and additional measures to be taken, to all agencies involved in the inspection audit and as part of its scheduled construction update reports.

78. 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.

79. The Certificate Holder shall promptly notify DPS Staff and NYSDEC (for NYSDEC-jurisdictional areas or SWPPP violations) of any activity that involves a violation of the Certificate.

I. Roads and Highways

80. The Certificate Holder shall minimize the impact of the construction of the Project on traffic circulation. Traffic impact minimization practices shall include:

a) Conducting construction activities in residential areas during daytime hours;

b) Conducting construction activities in commercial areas during nighttime hours to the extent possible;

c) Construction activities in commercial areas shall minimize access impacts to businesses to the extent possible;

d) Coordinating construction activities with local school districts;

e) Employing traffic control personnel and safety signage to ensure safe and adequate traffic flow when construction affects secondary roadways; and

f) Where applicable, horizontal directional drilling entry and exit pits will be located outside of travel lanes.

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

82. The Certificate Holder shall coordinate with DPS Staff and NYSDOT for all work to be performed in the State highway rights-of-way. Prior to submitting its construction plan for any State highway right-of-way segment, the Certificate Holder shall provide to DPS Staff and NYSDOT a preliminary design marked to avoid conflict with potential future 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.

83. 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 and Highway Law Section 52, 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.

84. 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 Federal Highway Administration (FHWA) Manual on Uniform Traffic Control Devices and the New York State Supplement to the Manual on 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 distances in accordance with the NYSDOT 619 Standard Sheets and Specifications; and

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 and NYSDOT Standard Sheets and Specifications, Section 619.

J. Cultural Resources

85. The Certificate Holder shall not undertake construction in previously undisturbed areas where archeological surveys have not been completed until such time as the appropriate

authorities, including OPRHP and DPS Staff, have reviewed the results of any additional historic properties and archeological surveys that are required.

86. Should archeological materials be encountered during construction, the Certificate Holder shall stabilize the area and cease all construction activities in the immediate vicinity of the find, and protect the find from further damage. Within 24 hours of such discovery, the Certificate Holder shall notify and seek to consult with DPS Staff and the OPRHP Field Services Bureau to determine the best course of action. No construction activities shall be permitted in the immediate vicinity of the archeological materials until such time as the significance of the resource has been evaluated and the need for and scope of impact mitigation has been determined.

87. Should human remains or evidence of human burial(s) be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the vicinity of the find shall be halted immediately and the remains shall be protected from further disturbance. Within 24 hours of any such discovery, the Certificate Holder shall notify and consult with DPS Staff and the OPRHP Field Services Bureau. Treatment and disposition of any human remains that may be discovered shall be managed in a manner consistent with the OPRHP's Human Remains Discovery Protocol. All archaeological or remains-related encounters and their handling shall be reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections.

88. The Certificate Holder shall avoid creating adverse impacts on heritage resource sites, archeological sites, and historic structures in the vicinity of the Project by implementing specific Project location, design, vegetation management, resource protection, and construction scheduling measures described in the EM&CP.

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

K. Terrestrial and Wildlife Resources

90. The Certificate Holder shall refer to 6 NYCRR Part 182 for lists of T&E animal species and Part 193 for T&E plant species, as well as any additional species identified per Condition 32. Prior to the commencement of construction, the Certificate Holder shall provide all personnel with information on any T&E plant species or animal species and their associated habitat identified within or contiguous to the Project limit of disturbance and indicate measures to minimize risks to said species during construction.

91. Except as otherwise specified in Condition 93, during construction if any T&E animal species, as defined in 6 NYCRR Part 182, or T&E plant species, identified under 6 NYCRR Part 193, (i) is identified by DEC or DPS Staff as being in proximity to any facility components such that occupied habitat is likely to be present within the Project ROW or other work areas, or (ii) is incidentally observed or identified by the Certificate Holder on or from the Project's ROW, access roads, laydown yards, and any other areas where Project activities authorized in this Certificate are conducted, the Certificate Holder shall notify DPS staff, the Environmental Monitor, and the NYSDEC Region 3 Wildlife manager within 24 hours. Unless continued operations are necessary for the protection of human life or property, the Certificate

Holder shall immediately stop all activities areas where Project activities are authorized that risk impacting encountered species and consult with DPS Staff and DEC staff to determine the appropriate measures to protect such T&E species, including ensuring that appropriate take avoidance measures are implemented, securing the area and ceasing construction in that area if necessary to protect a T&E species from immediate harm. DPS staff shall have the authority to allow the Certificate Holder to resume work upon determining, in consultation with NYSDEC, that such work will not impact individuals of the encountered species.

92. Immediately following DPS's permission to recommence 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.

93. The Certificate Holder, for the protection of federally and State-listed species shall implement the following measures:

a) At least 14 days prior to initial construction activities for each active Project area, the Certificate Holder shall conduct a visual inspection of the Project ROW, surrounding areas visible from the Project ROW, access roads, laydown yards, or any other area where Project activities are to be conducted to determine if any bald eagle nests, are present.

b) If at any time during construction, operation, and maintenance of the Project, any bald eagle nest is discovered within 0.25 miles of the Project ROW, the Certificate Holder shall notify NYSDEC and DPS Staff within 24 hours of discovery and the nest shall not be approached. The Certificate Holder shall mark an area encompassing an estimated 0.25-mile radius from the nest tree based on aerial imagery ("buffer area"), where the Certificate Holder has property rights to allow such marking, and this area shall be avoided until DPS Staff, in consultation with NYSDEC, authorizes activities in the buffer area. If there is a visual barrier present (e.g., topography, tree line) that obstructs the view from the nest and shields it from work activities, the setback requirement may be reduced to 660 feet.

c) Notify NYSDEC and DPS staff within twenty-four (24) hours of the discovery of an active nest or roost of any federally or State-listed threatened or endangered bird species, or if any T&E species are observed exhibiting breeding or roosting behavior within an active construction, ground clearing, grading, or maintenance activity area. The Certificate Holder shall record the location of the nest or roost and 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 observations of State threatened or endangered species during construction, operation, and maintenance of the Project, including any dead, injured, and damaged T&E species, their eggs, or nest ("T&E Observations"). To the extent practicable, all reports of T&E Observations shall include the following information: species; number of individuals; age and sex of individuals (if known); observation date(s) and time(s); GPS coordinates (as property rights allow) of each individual observed (if a GPS is not available, the report should include the nearest

pole number and cross road location); behavior(s) observed; identification and contact number of the observer(s); the nature of and distance to any Project construction, maintenance, or restoration activity; and whether the death, injury, or damage to the T&E species, their eggs, or nest was caused by the Project. This report shall be provided to NYSDEC and DPS during construction, operation, and maintenance no later than 30 calendar days following any T&E Observation.

L. Petroleum and Hazardous Substances

94. The EM&CP shall include Fuel and Chemical Handling Procedures, and a spill response and route emergency plan, including the NYSDEC spill reporting contact number. This plan shall provide proposed methods of handling spills of petroleum products and any hazardous or controlled substance which may be stored or utilized during construction, operation, or maintenance of this Facility.

95. All Certificate Holder and Contractor vehicles working on the Project shall have a spill kit that is appropriate for the volume of fuel carried by the vehicle.

96. The Certificate Holder's Contractor will retain a qualified spill response company for the duration of the Project and provide that company with maps showing access roads, marshalling yards, and other information that will facilitate response to a spill location.

M. Water Resources

97. The Certificate Holder shall perform all construction, operation, and maintenance in a manner that avoids, then minimizes to the extent practicable, any significant adverse environmental impacts to streams, waterbodies, wetlands, and the 100-foot adjacent area associated with the State-regulated wetlands as specified in the EM&CP. The EM&CP will be drafted to satisfy the NYSDEC Supplemental Specifications for Wetlands and Waterbodies attached as **Appendix F**. The Certificate Holder shall ensure the following provisions to protect wetlands, waterbodies, and adjacent areas are followed in the EM&CP, as applicable:

a) Wetland locations and adjacent areas located within the Project ROW or crossed by the Project ROW or any off-Project ROW access road constructed, improved, or maintained for the Project, shall be delineated in the field at least two weeks prior to construction in those areas and indicated in the approved EM&CP.

b) Unless otherwise specified in the EM&CP, all work in streams is prohibited from October 1 through May 31 in cold water fisheries, and from March 1 through July 31 in warm water fisheries. The Certificate Holder shall consult with the NYSDEC Region 3 Bureau of Ecosystem Health Office during the development of the EM&CP to verify cold water and warm water fisheries that may be affected by the Project.

c) Concrete washout areas shall be located a minimum of 300 feet away from any wetland or waterbody. If the minimum setback cannot be achieved, the EM&CP shall provide justification and demonstrate that impacts to wetlands and

waterbodies from concrete washout areas shall be avoided or minimized to the maximum extent practicable.

d) Temporary bridges and culverts should be at least 1.25 times the width of the stream and installed without causing damage to the stream bed or banks. Culverts or bridges that will remain in place for more than 180 calendar days shall be installed in accordance with **Appendix F** of the Joint Proposal.

e) Notification shall be provided to the NYSDEC Regional Natural Resources Supervisor and DPS once 80% cover with restorative, Project ROW-compatible plants of appropriate indicator status has been achieved.

98. The Certificate Holder shall work with NYSDEC to develop a Wetland Mitigation Plan in accordance with **Appendix F** of the Joint Proposal. The Certificate Holder will submit the Plan no later than six months after the start of construction for NYSDEC Staff acceptance, if determined to be necessary by NYSDEC. If mitigation affects agricultural lands, AGM will be consulted.

99. The Certificate Holder shall take all necessary precautions to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate, or any other environmentally deleterious materials associated with the Project.

100. To the maximum extent practicable, the Certificate Holder shall secure and safely contain all equipment and machinery more than 100 feet landward of any wetland or water body at the end of each work day.

101. Unless otherwise specified in the EM&CP, the Certificate Holder shall conduct trenchless construction through streams and wetlands. If trenchless methods are not suitable, plans for trenched crossings should be submitted to NYSDEC and DPS staff for review and approval.

102. Dewatering operations shall discharge into an approved dewatering device (i.e., temporary straw bale/silt fence barrier or filter bag). The dewatering device shall not be placed on or near the top of the bank of streams and, unless demonstrated not practicable, shall not be placed within or adjacent to wetlands. When dewatering within or next to a wetland or stream, the return water shall not cause a substantial visual contrast to natural conditions.

103. There shall be no substantial increase in visible contrast in water clarity due to discharges from construction activities between upstream reaches of work areas and downstream reaches of work areas.

104. Markers used to delineate and define the boundary of regulated freshwater wetlands and streams, and also the demarcated limits of disturbance for the Project, shall be left in place, or restored if disturbed, until completion of construction activities and restoration of the impacted area.

105. Water resulting from dewatering operations, equipment washing, or other construction related activities shall not be directly discharged into any wetland or waterbody. In-stream work shall only occur during dry conditions or in "the dry." Diversion measures (e.g., dam and pump or flume) must be used. If approved measures fail to divert all flow around

the work area, in-stream work must immediately stop until diversion and dewatering measures are fully in place and properly functioning again.

106. Trees shall not be felled into any stream or onto the immediate stream bank. All stumps and root systems from trees and shrubs cut within 50 feet of any NYSDEC-regulated stream or NYSDEC-regulated wetland shall be left in place unless they interfere with construction activities.

107. Clearing of natural vegetation shall be limited to: (i) non-compatible species according to the ROWMP, and (ii) any vegetation that poses a hazard or hindrance to the construction activity or operation.

108. During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site.

109. The Certificate Holder shall inform the United States Army Corps of Engineers ("USACE") of any changes in the design of the Project that have the potential to impact any USACE-issued permit or authorization and shall file a copy of such correspondence with the Secretary

N. Invasive Species

110. The Certificate Holder shall prepare an Invasive Species Management Plan in accordance with the Invasive Species Management Plan Specifications in **Appendix G** to the Joint Proposal for DPS Staff review and acceptance in consultation with NYSDEC and AGM. The Certificate Holder shall include the Invasive Species Management Plan in the EM&CP.

O. Water Quality Certification

111. 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 preapplication requirements for submittal to the Commission and the Chief, Environmental Certification and Compliance, of the Office of Energy System Planning and Performance or their designee, pursuant to §401 of the Federal Water Pollution Control Act.

P. Climate Change

112. At the time the Certificate Holder places an order with a supplier for GIE for the Project ("Project GIE"), the Certificate Holder shall comply with all applicable laws and regulations relating to SF6 then in effect. To the extent acquired Project GIE contains SF6 ("SF6-Containing Project GIE"), the SF6-Containing Project GIE shall have an annual SF6 emission rate of 1% or less. To the extent the installation of SF6 in GIE is prohibited by applicable law or regulation that comes into effect before the Certificate Holder installs any SF6-Containing Project GIE, the Certificate Holder may avail itself of any applicable exception, variance or grandfathering provision provided for in any law or regulation applicable to SF6 in GIE.

APPENDIX E

SPECIFICATIONS FOR DEVELOPMENT OF EM&CP

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. The EM&CP shall be consistent with and incorporate the requirements of the Article VII Certificate.

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, orthoimagery maps, and illustrations shall include, but need not be limited to, all of the following information:

1. Plan and Profile Details

A Duct Bank Plan (scale minimum 1 inch = 30 feet) and Profile[1] (scale minimum 1 inch = 10 feet) showing:

a) The boundaries of any new, existing, and/or expanded right-of-way ("ROW") or roads, and where cables are to be constructed underground; plus areas contiguous to the ROW or street within which the Certificate Holder will obtain additional rights are to be shown. Lines weight, graphic symbols, lettering and colors on the plan and profile drawings will be distinct and contrasting with the drawing sheet background to improve legibility of the drawing. Standard symbols will be used when possible.

b) The location, depth, and associated size of the duct bank. The location and depth of each transmission manhole structure.

c) Typical duct bank trench sections showing minimum depth requirements, minimum trench width, acceptable soil backfill, conduit configurations (showing conduit size and material), circuit phasing, warning tape and final grade substrate. Minimum depth and width requirements will suffice recognizing that unknown subsurface conditions and/or construction means and methods exist that may alter typical duct bank installation so as they do not adversely impact the circuit system design requirements.

d) Development details and sections of the transmission manhole structures (showing height, width, and length dimensions) conduit penetrations (showing material, size, and location).

[1] For underground project design, show relation of Project to final surface grade, indicating design depth-of-cover.

e) Any underground utility or non-utility structure including the approximate depth of the structure.

f) The relationship of the Facility to nearby fence lines; roads; railways; airfields; property lines; hedgerows; fresh surface waters; wetlands; regulated adjacent areas; other water bodies.

g) Significant habitats; associated facilities; flowing water springs; nearby buildings or structures; major antennas; oil or gas wells, and blowdown valves. The location of any proposed new or expanded switching station, substation, or other terminal or associated utility or non-utility structure (attach plan[2] - 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.

h) The location and boundaries of any areas, whether located on- or off- ROW, proposed to be used for fabrication, designated equipment parking, staging, access, storage, marshalling, lay-down, and conductor pulling and splicing. Indicate any planned fencing, surface improvements, and screening.

i) Plan index will identify the company or person responsible for the preparation of the drawings.

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

a) Include on the plan and profile drawings the draft or approved Storm Water Pollution Prevention Plan (SWPPP) details. 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) will be shown on the plan view drawings at all HDD launch and receiving pit locations and other locations outside of paved streets. Typical erosion and sediment controls specifications will be provided with a schedule for implementation.

b) Include on the plan and profile drawings the draft or approved SWPPP locations of all permanent stormwater management controls that are required based on site-specific conditions or conditions of the Certificate. Permanent stormwater management controls after site stabilization are not anticipated to be required.

c) Identify whether the erosion and sediment control practices are designed in conformance with technical standards found in NYS Standards and Specifications

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

for Erosion and Sediment Control dated November 2016 (Blue Book), or revised Blue Book with a more recent date.

d) Concrete washout best management practices shall be based on the then effective Blue Book and a minimum 10 mil plastic liner will be required. Compost filter sock perimeters that are air-dried and free of undesirable seed and course material are acceptable. The EM&CP will state that locations are to be adjusted in the field based on site conditions. Basin size and type will be based on the expected volume of concrete wash out discharges.

3. Vegetation Clearing and Disposal Methods

Identify on the plan and profile drawings:

a) the locations of sites requiring trimming or clearing of vegetation and the geographic limits of such trimming or clearing;

b) the specific methods for the type and manner of cutting and disposition or disposal method for cut vegetation (e.g., chip; cut and pile; salvage merchantable timber, etc.);

c) the methods for management of vegetation to be cut or removed at each site;

d) any geographical area bounded by distinctly different cover types requiring different cut-vegetation management methods;

e) any geographical area bounded at each end by areas requiring distinctly different cut-vegetation methods due to site conditions such as vegetation cover type, land use differences, population density, habitat or site protection, soil or terrain conditions, fire hazards, or other factors;

f) different property-owners requesting specific vegetation treatment or disposal methods;

g) locations of desirable vegetation species to be preserved and/or restored; and,

h) the location of any areas where specific vegetation protection measures will be employed and the details of those measures to avoid damage to specimen tree stands of desirable species, important screening trees, or hedgerows.

4. Building and Structure Removal

Indicate the locations of any buildings or structures to be acquired, demolished, moved, or removed. No building or structure demolition is anticipated to occur during construction of this project.

5. Waterbodies

a) Indicate the name or EM&CP designation, water quality classification and location of all rivers and streams 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, by symbol or label indicate:

1) 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;
1) the activities to be restricted in such zones; and
2) 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 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) Boundaries of all federal and state wetlands and state wetland 100-foot adjacent areas ("adjacent areas") located within the ROW, crossed by the ROW, or located on or crossed by any off-ROW access road constructed, improved, or maintained for the Facility, including temporary access roads, 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.

d) New York State Wetlands under Article 24 (State Wetlands) will be illustrated as a single boundary based on field identification. Approximate map boundaries should not be illustrated on the EM&CP drawing when field wetland identification has been completed.

e) Identify on plans or in notes any restoration activities that will occur in wetlands and adjacent areas.

7. Land Uses

a) 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 (i.e., hospitals, emergency services, sanctuaries, schools, and residential areas).

b) 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).

c) 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, Marshalling Yards and Workpads

a) Indicate the locations of temporary and permanent on- and off-ROW access roads, marshalling yards and workpads. Provide construction type, material, dimensions and grading or site preparation required to develop the location for construction.

b) Provide a map of off-ROW parking areas other than marshalling yards.

9. Noise Sensitive Sites

Show the locations of noise-sensitive areas along the proposed ROW. On the notes for the Plan and Profile drawings, identify work hours.

10. Ecologically and Environmentally Sensitive Areas

a) Indicate the general locations of any known ecologically and environmentally sensitive sites (i.e., 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; etc.), within or nearby the proposed or existing ROW. Specify the measures that will be taken to protect these resources (e.g., fencing, flagging, signs "Sensitive Environmental Areas, No Access").

b) On the plan and profile indicate the type of temporary signage to be used and provide a description of measures to be completed in order to comply with the specific directives of the sign.

11. Invasive Species of Special Concern

a) Identify the location(s) of Invasive Species of Special Concern and the prescribed method to control the spread and/or eradicate the identified species.

b) Invasive Species Cleaning Stations will include: a work surface that is easy to clean with a shovel, a safe work area outside of access road travel way, walking surface will be stable in all weather conditions and trip hazards between surfaces will be minimized.

c) Identify the area where equipment and materials will be cleaned prior to leaving the ROW and the method of cleaning (Invasive Species Cleaning Area).

12. Herbicide

On the plan and profile drawing notes, indicate areas where herbicides will not be used, and describe or illustrate areas to be posted when herbicides are applied (ECL Article 33 and 6 NYCRR Part 325).

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

The EM&CP text will provide details of the analysis completed to support the development of the plan set. Individuals or consultants will be identified that have prepared various portions of the EM&CP. If the drawings are prepared by the utility company it will be stated that plans are prepared in conformance with Education Law Article 145 §7208.l - Exempt persons for the professions of engineering and land surveying. The textual portion of the EM&CP for the Facility shall include, but need not be limited to, all of the following information:

1. Facility Location and Description

Describe the location and limits of the site or ROW and explain the need for any additional rights. 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.

2. Stormwater Pollution Prevention

a) Include the information from the draft or approved SWPPP.

b) Include a list of Municipal Separate Storm Sewer System (MS-4) administrators or inspectors and their contact information.

3. Vegetation Clearing and Disposal Methods

a) Describe the specific methods and rationale for the type and manner of cutting and disposition or disposal methods for cut vegetation.

b) Detail specific measures employed to avoid damage to specimen tree stands of desirable vegetation, rare, threatened and endangered species, important screening trees, and hedgerows.

c) 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.

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, and GPS coordinates.

6. Wetlands

a) For each federal and 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; total area of permanent disturbance (sq. ft.); area crossed by Facility (sq. ft.); and conversion of federal and 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) 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.

b) 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 and previously submitted will be identified and new or more detail documentation of the above features shall be made available to Staff upon request.

c) Recreation Areas

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

8. <u>Access Roads, Marshalling Yards, and Workpads</u>

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:

1) temporary installations (e.g., corduroy, mat, fill, earthen road, geotextile, geogrid underlayment, gravel surface, etc.);
2) permanent installations (e.g., cut and fill earthen road, geotextile underlayment, gravel surface, paved surface, etc.);
3) use of roads, driveways, farm lanes, rail beds, etc.; and
4) other access, e.g. helicopter or barge placement.

c) 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 for Facility construction.

d) 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:

1) check dam (for ditches or stabilization of topsoil);
2) broad-based dip or berm (for water diversion across the access road);
3) roadside ditch with turnout and sediment trap;
4) French drain;
5) diversion ditch (water bar);
6) culvert (including headwalls, aprons, etc.);
7) sediment retention basin (for diverting out-fall of culvert or side ditch); and
8) silt fencing.

e) 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:

1) timber mat;
2) culverts including headwalls;

3) bridges (either temporary or permanent); and
4) fords.

f) All diagrams and specifications should include material type and size to be placed in streams and on stream approaches.

g) Provide justification for any access and workpad areas which are proposed to be located in a wetland, adjacent area 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, preserve or improve 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, prepared in consultation with DPS and NYSDEC, 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 and the spread of existing invasive species, during construction (e.g., soil disturbance, vegetation clearing, transportation of materials and equipment, and landscaping/revegetation).

c) Describe the type and extent of training to be provided on invasive species management to workers, including any instructions necessary to implement the Certificate Conditions relating to Invasive Species Management and Control.

12. Herbicides

Include an herbicide use plan for all vegetation clearing that:

a) Specifies 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) Describes the procedures that will be followed during application, including any label instructions, to protect non-target vegetation, streams, wetlands and adjacent areas, 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. Indicate areas where such activities are prohibited and areas where an environmental monitor must be present to conduct such activities. Address how to avoid spills and improper storage or application in the vicinity of any wetland, adjacent area, 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 reporting, 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.

c) Identify the notification and reporting responsibilities for laborers, equipment operators, supervisors, managers, and environmental monitors.

d) Describe the training on spill response to be given to laborers, equipment operators, supervisors, mangers, and environmental monitors.

e) All vehicles will have a spill kit appropriate to the size of the fuel tank.

15. Environmental Supervision

a) Describe protocols for supervising demolition, vegetation clearing, use of herbicides, SWPPP compliance, and construction, and site restoration activities to ensure minimization of environmental impact and compliance with the environmental protection provisions specified by the Certificate Conditions.

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, the SWPPP 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, restoration goals, standards and a schedule for the restoration of vegetative cover; including, but not limited to, specifications to address:

1) design standards for ground cover:
   i. species mixes and application rates by site;
   ii. site preparation requirements (soil amendments, stone removal, subsoil treatment, or drainage measures);
   iii. acceptable final cover % by cover type;
2) schedule for post construction inspections and reporting of the results of the restoration efforts to DPS Staff;
3) planting installation specifications and follow-up responsibilities;
4) a schedule or projected dates of any seeding and/or planting;
5) plans to prevent unauthorized access to and along the ROW; and
6) identify the person responsible for restoration by office, title and name.

17. Visual Impact Mitigation

Provide details of screening or landscape plans prescribed at road crossings and for adjacent property owners. Discuss existing or proposed landscape planting, earthwork, or installed features to screen or landscape substations and other Facility components. The Certificate Holder will identify by office title and name the person responsible for assessing, implementing and reporting on visual impact mitigation.

18. Protection of Existing Facilities Plan

Provide a plan indicating the details and design measures to protect the cathodic protection system and physical conditions of nearby facilities and structures, including any underground facilities. The plan shall include appropriate mitigation measures such as grounding and the upgrade of existing protection devices or other facilities as appropriate for, and identified in cooperation with, owners or operators of adjacent or nearby structures, pipelines, tanks, fences or facilities.

19. ROW Encroachment Plan

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

20. Blasting Plan

A Blasting Plan will be developed as required.

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 or to address an outage that could affect the reliability of the grid, 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 Holder must submit a Wetland Planting Remedial Plan (WPRP). The WPRP must include an evaluation of the likely reasons for the results, including an analysis of poor survival; a description of corrective actions to ensure a successful restoration; and a schedule for conducting the remedial work. Once accepted by DPS and NYSDEC, the WPRP must be implemented according to an approved schedule.

Wetland Mitigation Plan for State-Regulated Wetlands

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

1) The creation of compensatory wetlands at appropriate ratios;
2) A construction timeline for the mitigation activities;
3) Construction details for meeting all requirements contained in the Proposed Certificate Conditions;
4) Agreed-upon performance standards for determining wetland mitigation success;
5) Provisions for post-construction 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.

APPENDIX G

INVASIVE SPECIES MANAGEMENT PLAN SPECIFICATIONS

Invasive Species Management Plan (ISMP) Specifications

An "Invasive Species" (IS) is a species that is non-native to the ecosystem and whose introduction causes or is likely to cause economic or environmental harm or harm to human health. 6 NYCRR Part 575, ***Prohibited and Regulated Invasive Species***, was adopted in July 2014, to "restrict the sale, purchase, possession, propagation, introduction, importation, and transport of invasive species in New York". The purpose of this Invasive Species Management Plan (ISMP) is to describe the procedures that will be used to help prevent the introduction of new and spread of existing regulated and prohibited invasive plant species as listed in part 575 within the limits of disturbance (LOD) due to construction of the Project.

Purpose and Goals of the Plan

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

Baseline Invasive Species (IS) Survey

1. During the development of the EM&CP, a **Pre-Construction Baseline Survey** shall be conducted during the growing season. This survey shall serve as a baseline for the preparation of the draft invasive Species Management Plan. If preconstruction surveys are completed at different times or as part of different phases, the results of the surveys will be incorporated into one ISMP. As the ISMP is revised to include surveys or survey updates the Certificate Holder shall evaluate, in consultation with NYSDEC, DPS, and AGM, whether the results of the surveys also require revisions to the Adaptive Management Plan and the special and high concern species list.

2. The entire Limits of Disturbance (LOD) including permanent and temporary off-ROW access roads shall be surveyed for IS plants as identified in 6 NYCRR Part 575.

3. The survey shall include qualitative observations for IS spread potential from adjacent properties and land use (i.e., IS dominated adjoining property, private off-site access roads that cross the ROW) shall be documented.

4. The preferred survey protocol is for data to be collected in a format which can be uploaded into the statewide database *iMapInvasives*[1].

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

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

    c. The data collection protocol shall allow for:

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

- Point data collected in the field on GPS-enabled devices;
- Confidentiality controls to restrict information distribution. This coding hides the data from public view and is only visible to key state agency staff and 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 IS dominated areas;

4. Proper Clearing and Disposal Practices (*i.e., cut and leave in dominated area or dispose off-site in landfill-incinerator or approved disposal site*);

5. Equipment Cleaning; and

6. Restoration.

IS Propagation

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

1. Preparing ROW travel routes to prevent IS spread through contact with equipment/vehicles by any practical combination of matting, IS burial, clean fill cover or IS eradication; and/or

2. Providing cleaning stations for equipment/vehicles whenever leaving IS dominated areas along ROW; and/or

3. Other mutually agreeable practices.

Post-Construction Monitoring

1. Post construction surveys shall be conducted in all LOD, both within the ROW and off-ROW areas and access roads;

2. A post construction survey of IS shall be conducted in all temporary off-ROW access road areas during the final SWPPP inspections;

3. A post construction survey of IS shall be conducted in all ROW LOD areas, including permanent access roads, after the second full growing season from final SWPPP signoff;

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

4. All post-construction surveys shall use the same IS Survey Protocols used during the baseline pre-construction IS survey;

5. Upon completion of the post-construction surveys, a final report shall be prepared and submitted to the NYSDEC, AGM and DPS. The final report shall discuss whether the goals of the ISMP have been achieved and whether any additional post-construction monitoring may be warranted based on whether an expansion of identified IS of Special Concern (ISSSC) or High Concern (ISHC) as a result of construction are present, as defined in the Adaptive Management Strategy (AMS) discussed below. If the post construction monitoring report shows the aerial extent of ISSC or ISHC has expanded as defined in the AMS as a result of construction of the Project, the final report shall include a Final Adaptive Management Strategy for achieving the goals of the ISMP. DPS, AGM and NYSDEC will review the final report and DPS, in consultation with the other agencies, will determine whether the goals of the post construction monitoring have been achieved or, if applicable, whether the Final Adaptive Management Strategy must be implemented.

Adaptive Management Strategy Plan

The initial ISMP will include an Adaptive Management Strategy Plan prepared in consultation with and accepted by NYSDEC, DPS and AGM and, at a minimum must include the following elements:

1. A project specific list of Prohibited Invasive Species pursuant to 6 NYCRR Part 575 divided into two sub-lists for which management and control will be required (these lists to be generated by NYSDEC in consultation with DPS and AGM):

    a. Invasive Species of Special Concern (ISSC), being comprised of *Prohibited* IS[3] known to be present in the project area and for which NYSDEC has deemed control is necessary such that there is no expansion as defined below. This list will be generated following results of pre-construction surveys and an analysis of regional threat, (e.g. PRISM Tier rankings).

    b. Inclusion of a project specific list of Invasive Species of High Concern[4] (ISHC), being those IS not present in the project area, but which if newly identified in post-construction monitoring, eradication is required. This list will include *Prohibited* IS with the highest management concern, e.g. Giant Hogweed.

2. Management of "expansion":
    a. ISSC that have expanded under the following terms must be controlled.
    b. ISHC that have been newly identified must be eradicated.
    c. In comparing progressive monitoring data of ISSC, expansion may be defined in terms of categorical jump in *iMapInvasives* size categories, described as follows:

        iMapInvasives size categories:
        - New and distinct occurrence
        - Up to 10 sq. ft.

[3] See 6 NYCRR Part 575.3.

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

- Up to 0.5 acre
- Up to 1.0 acre
- More than 1.0 acre

3. In consultation with NYSDEC, DPS and AGM, a discussion of possible adaptive management strategies and control measures (e.g., eradication) and where and when they may be required if the post-construction survey identifies an expansion of ISSC or ISHC in LOD areas caused by construction. This should include consideration of IS phenology, control methodology (mechanical techniques, pesticide use etc.) and control objectives.

4. Discussion of conditions that may necessitate additional post construction monitoring and the extent and duration of such extended monitoring considering ongoing Long-Range Vegetative Management Plan practices.

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