



Overhead Transmission Line and Astoria Annex- Segment 21

Case Number (10-T-0139)

Environmental Management and Construction Plan

Astoria, Queens, Queens County, New York

EDR Project Number: 21075.1

Prepared for:

CHPE, LLC

600 Broadway

Albany, NY 12207

Prepared by:

EDR

41 State Street Suite 806

Albany, NY 12207

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¹ Same version submitted to the Public Service Commission September 19, 2022 & approved October 13, 2022 with Segments 1 & 2 EM&CP, with minor change to Table 2-1.

² Same version submitted to the Public Service Commission September 19, 2022 & approved October 13, 2022 with Segments 1 & 2 EM&CP.

LIST OF ABBREVIATIONS AND ACRONYMS

ADZ	Allowed Deviation Zone	NAGPRA	Native American Graves
ANSI	American National Standards Institute		Protection and Repatriation Act
APA	Adirondack Park Agency	NARC	North American Reliability Corporation
APE	Area of Potential Effects	NESC	National Electrical Safety Code
AREMA	American Railway Engineering and Maintenance-of-Way Association	NMFS	National Marine Fisheries Service
		NPCC	Northeast Power Coordinating Council
ATRAS	Annual Transmission Reliability Assessment Study	NYCCC	New York City Construction Codes
BMP	best management practice	NYCEC	New York City Electrical Code
CC	Certificate Condition	NYCFC	New York City Fire Code
CI	Co-located Infrastructure	NYISO	New York Independent System Operator
CNY	City of New York		
CO	commercial operation	NYPA	New York Power Authority
CP	Canada Pacific	NYSDPS	New York State Department of Public Service
CRIS	Capacity Resource Interconnection Service		
CRMP	Cultural Resources Management Plan	NYSDAM	New York State Department of Agriculture and Markets
ECL	Environmental Conservation Law	NYSDEC	New York State Department of Environmental Conservation
EDPL	Eminent Domain Procedure Law	NYSDOH	New York State Department of Health
EM&CP	Environmental Management and Construction Plan	NYSDOS	New York State Department of State
EPA	United States Environmental Protection Agency	NYSDOT	New York State Department of Transportation
FERC	Federal Energy Regulatory Commission	NYSHPO	New York State Historic Preservation Office
FPA	Federal Power Act		
HDD	horizontal directional drill(ing)	NYSRC	New York State Reliability Council
HVAC	high voltage alternating current		
HVDC	high voltage direct current	OATT	Open Access Transmission Tariff
IEEE	Institute of Electrical and Electronics Engineers	OGS	Office of General Services
kV	kilovolt(s)	OPRHP	Office of Parks Recreation & Historic Preservation
LOW	Limit of Work	OSHA	Occupational Safety and Health Administration
MCL	maximum contaminant level		
MPT	Maintenance and Protection of Traffic	PCBs	polychlorinated biphenyls
MS4	Municipal Separate Storm Sewers Systems	PPO	Project Preservation Officer
NAERO	North American Electric Reliability Organization	PSC	Public Service Commission
		PSL	Public Service Law
		PWS	public water supply
		ROV	remotely operated vehicle
		ROW	right-of-way

SCFWH	Significant Coastal Fish and Wildlife Habitat	SWPPP	Stormwater Pollution Prevention Plan
SIS	Systems Impact Study	TO	Transmission Owner
SOP	Standard Operating Procedure	TPAS	Transmission Planning and Advisory Subcommittee
SPCC	Spill Prevention, Control, and Countermeasure	USACE	United States Army Corp of Engineers
SPS	Special Protection System	USFWS	United States Fish and Wildlife Service
SRIS	System Reliability Impact Study	WQC	Water Quality Certification
SSESC	Standards and Specifications for Erosion and Sediment Control		

GLOSSARY

Agricultural Land – Active agricultural land includes lands zoned for agricultural use which have been involved in the production of crops, livestock and livestock products for 3 of the last 5 years.

Allowed Deviation Zone (CC 3) – The Allowed Deviation Zone, as depicted in Appendix B to the Joint Proposal, defines the Facility/Project geographically around the nominal centerline (the “Centerline”). The Allowed Deviation Zone is depicted in Appendix B to the Joint Proposal and described in Certificate Condition 3, as amended by the Commission.

Co-located Infrastructure (CC 27) – Co-located Infrastructure I shall consist of electric, gas, telecommunication, water, wastewater, sewer, and steam infrastructure and appurtenant facilities and associated equipment, whether above ground, below ground, or submerged, that are located within the Construction Zone. CI are either owned by a state agency or municipality or a subdivision thereof or owned or operated for public utility purposes by a regulated electric, gas, telecommunication, water, wastewater, sewer, or steam service provider but do not include railroads, railways, highways, roads, streets, or avenues.

Construction Zone (CC 4) – The portions of the Allowed Deviation Zone that may be affected by construction of the Facility. The Construction Zone may also include areas outside the Allowed Deviation Zone that are needed temporarily for site investigation, access, and construction.

Facility ROW (CC 5) – The portions of the Allowed Deviation Zone to be occupied by the Facility/Project once construction is complete.

Good Utility Practice (CC 20) – Good Utility Practice shall include any of the practices, methods or acts engaged in or approved by a significant portion of the electric, gas, steam, water, sewer or telecommunications industries, as applicable, during the relevant time period, including without limitation, the electric, gas, steam, water, sewer or telecommunications utility or utilities whose service territories the work in question is being performed and/or whose facilities are physically impacted by the work in question and, for the electric power industry only, NYISO, NYSRC, NPCC, NERC, NAERO, or any successor organizations. Good Utility Practice shall include any of the practices, methods, or acts in which, in the exercise of reasonable judgement in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is intended to delineate acceptable practices, methods, or acts generally accepted in the region, such as, in the case of the electric power industry only, those practices required by FPA Section 215(a) (4).

345 kV Transmission Line – The Overhead Transmission Line is a 345kV overhead line that connects the Astoria Annex Station to the Astoria Annex Substation; see Site Plan and Construction Drawings in Appendix C for details.

Astoria Annex Substation –The Astoria Annex Substation is an existing substation located on the Con Edison Astoria Complex at 14-10 31st St, Astoria NY, 11105. Modifications to this substation include expanding the existing four-breaker ring bus Gas Insulated Switchgear (GIS) switch gear to a six-breaker ring bus configuration to accommodate the future connection locations for the Q#631 NS Power Express / Q887 CH Uprate Interconnection Project and Astoria-Rainey Cable Connection.³

Limit of Work (LOW) – The boundary in which all construction activities, stockpile materials, equipment storage, access, parking, grading, landscaping, restoration, and any other construction related activities shall occur. Additionally, the LOW is the boundary for all potential disturbance during construction. Unless otherwise specified, when the limit of clearing and grubbing is shown on the plans, it shall also be the LOW. The LOW includes the area that would be considered the limit of disturbance (LOD).

³ Per NYSDPS guidance the scope of work encompassing the proposed modifications to the Astoria Annex substation are not subject to Article VII of the NYSPSL.

1.0 SITE AND PROJECT DESCRIPTION

The Champlain Hudson Power Express (CHPE) project involves the construction of approximately 339 miles of high voltage direct current (HVDC) underground and underwater transmission cable from Montreal, Quebec, to a Converter Station in Queens, New York. From the Astoria Converter Station, the CHPE project will connect to an existing electric substation at Astoria Annex, then connect the Astoria Annex and existing Rainey Substations, both in Queens, via a new high voltage alternating current (HVAC) lines running approximately 3.5 miles through the streets of Queens. Overall, the project will bring 1,250 megawatts (MW) of renewable energy into New York by Spring 2026 to replace the use of fossil fuels and reduce carbon emissions. The proposed Project will provide enough power for more than 1 million homes, along with numerous environmental and economic benefits to millions of residents in New York State communities.

1.1 EM&CP PURPOSE AND INTENT

On March 30, 2010, Champlain Hudson Power Express, Inc. filed an Application for a Certificate of Environmental Compatibility and Public Need (the Application) with the New York State Public Service Commission (PSC) pursuant to Article VII of the New York Public Service Law (PSL) to construct and operate the transmission project known as the Champlain Hudson Power Express Project (the Project) (PSC Case 10-T-0139) (CC 1). An *Order Granting Certificate of Environmental Compatibility and Public Need* (the Certificate) was granted on April 18, 2013. In August 2020, CHPE, Inc. converted from a corporation to a limited liability company and received the PSC's approval to transfer its interest in the Certificate to CHPE, LLC and CHPE Properties, Inc. (hereafter collectively referred to as CHPE and/or Certificate Holders). The Certificate was amended on March 20, 2020, August 13, 2020, September 21, 2020, January 26, 2021, May 14, 2021, February 17, 2022, March 16, 2022, December 15, 2022, October 13, 2023, April 18, 2024, and June 20, 2024 to reflect revisions in the alignment and other Certificate Conditions (CCs). On October 13, 2022, the Commission approved the first CHPE Environmental Management and Construction Plan (EM&CP) for Segments 1 and 2 of project construction; since that time, the Commission has approved 18 Segment EM&CPs across the project's terrestrial, marine, and metro scopes.

The Article VII Application and subsequent review process included the development of numerous documents which identified natural resources within the Project Corridor and best management practices (BMPs) to minimize impacts to those natural resources as a result of the construction or operation of the Project. Specifically, the Article VII Application and the resulting Certificate included the following environmental guidance documents:

- Joint Proposal (Case 10-T-0139 Item 295)

- Certificate Conditions contained within the issued Certificate
- EM&CP Guidelines (Appendix E to the Joint Proposal)
- Best Management Practices (BMP Document) (Attachment F to the Certificate).

Other relevant authorizations/approvals/guidance include the following:

- U.S. Army Corps of Engineers (USACE) Section 404 Clean Water Act Permit
- Section 401 Water Quality Certification
- Applicant Proposed Impact Avoidance and Minimization Measures (Appendix G) to the Environmental Impact Statement prepared in accordance with the National Environmental Policy Act [NEPA]).

This EM&CP has been developed in order to facilitate construction, operation and maintenance of a short Overhead Transmission Line connecting the Astoria HVDC Converter Station (EM&CP Segment 22) and the Astoria Annex substation located in Astoria, Queens, New York in accordance with the terms and conditions of the Certificate issued by the PSC on April 18, 2013, as amended, and the documents listed above. The Overhead Transmission Line will connect the output of the Astoria HVDC Converter Station to the existing Astoria Annex Gas Insulated Switchgear (GIS) Substation which is about one-half mile from the Annex station. The modifications to the Astoria Annex substation will expand the existing four breaker GIS ring bus to a six breaker ring bus to accommodate the connection of the Annex station and the Astoria Rainey Cable project. Certificate Conditions (CCs) 6 and 7 allow the creation of segmented EM&CPs to be developed in accordance with CCs 145 through 164 (as applicable) and the Environmental Management and Construction Plan Guidelines document (EM&CP Guidelines) included as Appendix E to the Certificate. Section 1.1.1 summarizes additional resources used to develop this EM&CP.

Relevant to this Overhead Transmission Line in particular, the Certificate Holders obtained PSC approval of an Amendment to the Certificate on February 17, 2022 (Amendment 5 Approval Order) with respect to this Segment, which has also been referred to as the Astoria HVAC Connection. That Amendment modified Certificate Condition 26 from the original Article VII Certificate Order to strike references to this connection being made via a "345 kV underground Gas Insulated Line" given technical constraints and existing buried infrastructure, and authorized installation of this Segment as described in the Amendment 5 Approval Order and in this Segment 21 EM&CP. The Segment 21 EM&CP is generally consistent with the Segment scope described in that Amendment 5 Approval Order except for a slight reduction in the overall length of the Segment (1,400 feet proposed as opposed to 1,750 feet approved) and modest increase in height of some structures (150 feet versus 130 feet in Amendment 5) (also see Appendix L for an updated letter on height changes).

In accordance with CC 6, Table 1-1 contains the Certificate Holders' updated anticipated Project schedule and sequencing for dividing the overland and marine portions of the Project into EM&CP Segments to facilitate construction and sequencing (CC 6). Separate EM&CPs have been developed for the overland and marine segment outlined in Table 1-1. This Table will be updated with each EM&CP submission.

Table 1-1. Overland and Marine Segments/Packages: Project Construction and Sequencing and Scheduling

EM&CP			Segment Length (miles)	EM&CP Filing with DPS ⁴	PSC Approval Date	Start of Construction
Construction Segment	Design Packages	Location Description				
OVERLAND SEGMENTS						
1, 2	1A/1B	Putnam to Dresden/ Dresden to Whitehall	17.8	April 15, 2022	October 13, 2022	February 27, 2023
3	1C/2	Whitehall to Fort Ann Fort Ann to Kingsbury	20.8	December 23, 2022	May 18, 2023	July 27, 2023
8	5A	Rotterdam to Bethlehem	16.99	December 21, 2022	June 22, 2023	September 18, 2023
9	5B	Selkirk Bypass	5.31	December 21, 2022	June 22, 2023	February 5, 2024
4, 5	3	Kingsbury to Milton	26.5	April 24, 2023	August 17, 2023	September 6, 2023
10	6	Bethlehem to Catskill	20.9	June 21, 2023	December 18, 2023	January 16, 2024
13, 14, 15	8	Randall's Island, Harlem River Yards, Astoria	2.13	June 5, 2023	October 12, 2023	January 16, 2024
6	4A	Milton to Ballston	10.2	May 26, 2023	September 14, 2023	January 12, 2024
7	4B	Ballston to Schenectady/Rotterdam	9.6	May 26, 2023	September 14, 2023	January 12, 2024
11	7A	Catskill to Germantown	8.6	March 27, 2023	August 17, 2023	September 1, 2023
12	7B	Stony Point to Haverstraw	7.6	April 28, 2023	August 17, 2023	May 16, 2024
Laydown Yards EM&CP	3, 5B, 6	Fort Edward, Bethlehem, Coxsackie	N/A	November 17, 2022	February 16, 2023	March – September 2023
MARINE/ NEW YORK CITY SEGMENTS						
16	9	Transitional HDD (Stony Point)	N/A	September 29, 2022	March 20, 2023	June 23, 2023
17	10	3 Transitional HDDs (Putnam, Catskill, Congers)	N/A	December 14, 2022	April 20, 2023	March - October 2023
18A	11A	Lake Champlain (Pre-Lay Mattressing)	96 .8	April 4, 2023	July 20, 2023	April 12, 2024

⁴ Date of first or Preview EM&CP Submittal

EM&CP			Segment Length (miles)	EM&CP Filing with DPS ⁴	PSC Approval Date	Start of Construction
Construction Segment	Design Packages	Location Description				
18B	11B	Lake Champlain (Cable Installation)	96.8	October 19, 2023	April 18, 2024	May 17, 2024
19A	12	Hudson River (Pre-Lay Mattressing)	89.1	June 9, 2023	October 12, 2023	March 22, 2024
19B	13	Hudson River (Cable Installation)	89.1	December 1, 2023	June 20, 2024	August 6, 2024
20A	14A	Harlem River (Bulkhead Penetration)	N/A	June 6, 2024	TBD	[August 30, 2024]
20B	14B	Harlem River (Cable Installation)	6.3	[November 1, 2024]	TBD	[March 1, 2025]
21		Astoria Annex/AC Interconnection	0.3	August 15, 2024	TBD	[January 31, 2025]
22		Converter Station	N/A	January 31, 2023	May 18, 2023	June 22, 2023
23		Astoria Rainey Cable HVAC System, (Queens)	3.5	October 6, 2023	April 18, 2024	July 10, 2024

Work described in this EM&CP focuses on the construction and installation of the 345 kV Overhead Transmission Line, located within the Astoria generating and utility facilities complex (Astoria Complex) in Queens, New York (see Figure 1.1).

1.1.1 EM&CP Certificate Conditions and Environmental Protection Measures

As previously indicated, multiple documents developed in support of the Article VII Application, Certificate, and other permits/approvals issued in accordance with federal regulatory processes outline environmental protection measures relevant to the Project. Appendix D to this EM&CP includes a summary table describing how the CCs, BMPs, and EM&CP Guidelines have been addressed and incorporated into this EM&CP to assist in review by agencies. Section 2.0 provides the details of all CCs along with the location within this EM&CP each CC is addressed. Table 1-2 provides a summary of all CCs applicable to the Overhead Transmission Line and Astoria Annex EM&CP. Those Certificate Conditions which are not relevant to this specific EM&CP are identified in Table 1-2, and shaded with grey to indicate their inapplicability but will be discussed in the applicable EM&CP Packages (CC 145).

Table 1-2. Summary of Applicable EM&CP Certificate Conditions

Section	Certificate Conditions	Section Title	Location of Conditions within EM&CP
A	1-15e	General Conditions of the Order	Included in Sections 1 and 3; Appendices A, B, and C; and separate

Section	Certificate Conditions	Section Title	Location of Conditions within EM&CP
			filings, as cited in Section 2.0 or discussed elsewhere in this document.
B	16-20	Laws and Regulations	General requirements and best practices for entire construction of the Annex Station
C	21-26	HVDC-AC Annex Station Design, Interconnection and Construction	Does not apply to Overhead Transmission Line and Astoria Annex
D	27-29d	Special Conditions Regarding Co-Located Infrastructure and Related Matters	Addressed in Section 13 Co-Located Infrastructure
E	30-40	Public Health and Safety	Addressed in Sections 3, 4, 12, 13
F	41-52	Notices and Public Complaints	Addressed in Section 3, Appendix A, B, I
G	53-57	Environmental Supervision	Addressed in Section 3
H	58-74	Overland Installation	Addressed in Sections 1, 3, 4, 6, 7, 11, 12, 13, 14
I	75-80	Agricultural Lands	Does not apply to Overhead Transmission Line and Astoria Annex
J	81-84	Herbicide Use	N/A – Herbicides will not be used in construction
K	85-87	Building Code and Inspections – Annex Station and Related Buildings	Addressed in Section 4
L	88-89	Overland Restoration	Addressed in Section 14
M	90-91	Overland Habitat Areas	Addressed in Section 9, Appendix T and
N	92-101	Underwater Cable Installation	Does not apply to Overhead Transmission Line and Astoria Annex
O	102-106	Water Supply Intakes	Does not apply to Overhead Transmission Line and Astoria Annex
P	107-112	Cultural resources	Addressed in Section 11
Q	113-118	Waterbodies and Regulated Wetlands	Addressed briefly in Section 9, though there no wetlands or waterbodies on the site.
R	119-137	Transmission System Reliability	Conditions require filings/reports/studies not

Section	Certificate Conditions	Section Title	Location of Conditions within EM&CP
			related to EM&CP; relevant filings and correspondence discussed in Section 3 and Table 3-2
S	144	Mapping, Land Acquisition, and As-Built Drawings for the Annex Station	Does not apply to Overhead Transmission Line and Astoria Annex
T	145-164	EM&CP	All Sections addressed throughout this document
U	165(d)(xi)	Environmental Trust	Does not apply to Overhead Transmission Line and Astoria Annex

1.2 ASTORIA OVERHEAD TRANSMISSION LINE AND ASTORIA ANNEX LOCATION AND DESCRIPTION

The construction of the roughly 1,400 linear-foot Overhead Transmission Line and Astoria Annex modifications will take place on a 195.3-acre parcel at the Con Edison Astoria Generating Complex property at 31-45 20th Avenue, Astoria, Queens NY, 11105 (the Site). This Site was extensively disturbed by its previous owner for use as a fuel oil storage and distribution facility.⁵ The Overhead Transmission Line will consist of the following:

Transmission Line

- Six Monopole Structures
 - The underground/overhead takeoff (Riser) will be a 3-pole structure
- Two 345 kV 795 kcmil OH conductors per phase
- 200 linear feet of underground duct bank

Astoria Annex

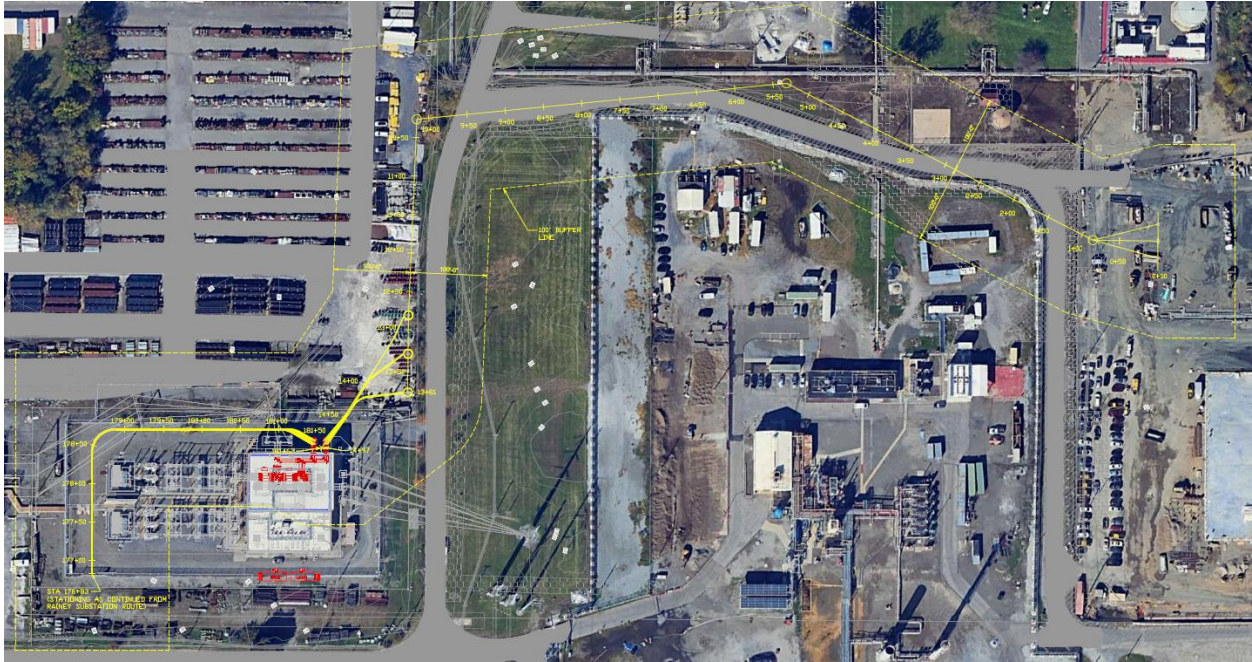
- Modifications within existing fence line for substation

⁵ The Astoria Generating Station (AGS) is subject to a Consent Order entered into by Orion Power New York, L.P., Inc. (Orion Power) and the New York State Department of Environmental Conservation (NYSDEC), NYSDEC File No. C02-19990430-28, on September 11, 2000, and amended by Modification Agreements 1 through 5, dated July 16, 2001, May 20, 2003, September 28, 2004, May 31, 2005, and March 9, 2006, respectively. The State-approved remedial activities are being performed at the Site separate and apart from this EM&CP as per the approved Environmental Remediation Plan dated July 8, 2020. The work conducted under this Consent Order falls outside the scope of this EM&CP; it is being provided here for reference purposes.

- Modifications inside building to expand GIS ring bus
- Modifications outside building for connection to overhead transmission line, and connection to Astoria Rainey Cable
- Construction of two prefabricated buildings to house new relay panels

The Overhead Transmission Line shown in Figure 1-1 will connect the output of the Astoria HVDC Converter Station (Segment 22 EM&CP approved on September 26, 2023) to the existing New York Power Authority (NYPA)-owned Consolidated Edison (Con Edison)-operated Astoria Annex GIS Substation which is approximately 1,400 feet from the HVDC Converter Station. The Transmission Line will be a single circuit 345 kV high voltage alternating current (HVAC) Transmission Line (Overhead Transmission Line). See Figure 1-1. Existing laydown areas that were developed for the Converter Station project will be utilized for construction laydown for this Segment. The intended use of the laydown yard(s) includes temporary construction trailers with portable restrooms with above-ground holding tanks for water and sanitary waste (to be serviced regularly), worker parking, and material storage only.

Figure 1-1. Overview Map



1.3 DESCRIPTIONS OF PROPOSED WORK

1.3.1 Overhead Transmission Line

The Overhead Transmission Line will be constructed along the previously disturbed roadside within the Con Edison Astoria Generating Complex Facility. No grading is proposed for the construction of the transmission facility due to existing site conditions. Soil disturbance will be minimal and limited to equipment work pads and foundation bore holes. The construction methods for the Overhead Transmission Line include installing micropile foundations, erecting and stacking structures, as well as stringing, sagging, and clipping conductor. Erosion and sediment controls will be installed prior to the start of construction and be inspected and maintained by the Project's environmental inspector(s).

1.3.2 Astoria Annex Substation

The work proposed in this EM&CP at the Astoria Annex GIS Substation will include the following:

- Expansion of the GIS ring bus inside the Astoria Annex substation from a four breaker ring bus to a six breaker ring bus
- Connection of the Astoria Converter Station (Segment 22) to the expanded ring bus
- Connection of the Astoria Rainey Cable (Segment 23) to the expanded ring bus

- New external structures to support GIS connections for overhead transmission line and Astoria Rainey Cable (Segment 23)
- Construction of two prefabricated buildings to house new control panels
- Underground duct banks for Astoria Rainey Cable and a section of the Astoria Converter Station Transmission Line.

1.4 DEVIATION ZONE

The Overhead Transmission Line and Astoria Annex modifications are fully contained to the tax parcel Block: 850, Lot: 310 located in the Borough of Queens, New York, and located within previously approved deviation zones.

2.0 CERTIFICATE CONDITIONS

Table 2-1 identifies where each applicable CC to the Overhead Transmission Line and Astoria Annex are addressed in this EM&CP.

Table 2-1. Certificate Conditions		Compliance Status	EM&CP Section/Appendix
A. General Conditions of the Order		CHPE Response	EM&CP Section/Appendix
1	Subject to the Conditions set forth in this Opinion and Order, CHPE, LLC and CHPE Properties, Inc. (Certificate Holders), are granted a Certificate of Environmental Compatibility and Public Need (Certificate), pursuant to Article VII of the New York PSL, authorizing the construction and operation of an electric transmission facility comprised of the following components: (i) two HVDC cables capable of transmitting 1,000 MW extending from the United States/Canada border east to the Town of Champlain, New York under the waters of Lake Champlain to the Town of Dresden, New York, extending to the hamlet of Cementon in the Town of Catskill, New York where the cables will exit the water to proceed along existing highways and railroad ROW, as well as under state park land through horizontal directional drill (HDD) borings, to bypass Haverstraw Bay, reentering the Hudson River at Hook Mountain State Park in Clarkstown, New York and continuing in the waters of the Hudson and Harlem Rivers to a point south of the Willis Avenue Bridge and north of the Bronx Hill, following the railroad ROW in the Bronx and then across the East River to terminate at Astoria, Queens (the HDVC Line); (ii) a voltage source Annex Station to convert HVDC to high voltage alternating current (HVAC) be constructed at Astoria, Queens, that will be connected to the New York Power Authority (the Authority or NYPA) 345-kilovolt (kV) HVAC gas insulated switchgear (GIS) Substation (the Annex Station and, collectively with the HVDC Line, the HVDC Transmission System); and (iii) a HVAC cable	CHPE will comply	The Overhead Transmission Line and Astoria Annex Segment comply with Amendment 5 to this condition, as described throughout this EM&CP.

	circuit extending from the NYPA's 345 kV GIS Substation at Astoria, Queens to Con Edison's 345 kV Rainey Substation located on the corner of 6th Avenue and Vernon Boulevard in Queen, New York (the Astoria-Rainey Cable and, collectively with the HVDC Transmission Line System, 'the Facility'). [As Amended by Certificate Amendment 2 (August 13, 2020, authorizing use of Preferred Alternatives), Amendment 3 (January 26, 2021, modifying certain routing in the Harlem River Yard in New York City and augmenting Deviation Zone for Rockland County locations), Amendment 4 (May 14, 2021, increasing capacity from 1,000 to 1,250 MW), and Amendment 5 (February 17, 2022, making certain modifications to Facility components in the Astoria complex)].		
2	The Facility route is authorized as depicted on a series of maps included in Appendix B to the Joint Proposal. [As Amended by Certificate Amendment 2 (August 13, 2020, authorizing use of Preferred Alternatives), Amendment 3 (January 26, 2021, modifying certain routing in the Harlem River Yard in New York City and augmenting Deviation Zone for Rockland County locations), and Amendment 5 (February 17, 2022, making certain modifications to Facility components in the Astoria complex)].	CHPE will comply	See Figure 1.1.
3	The Facility is defined geographically by a deviation zone (ADZ) around a nominal centerline (the Centerline), as depicted in Appendix B to the Joint Proposal. For the portion of the Facility located on land, the Allowed Deviation Zone is depicted in Appendix B to the Joint Proposal. For the portions of the HVDC Transmission System located in Lake Champlain and the Hudson, Harlem, and East Rivers, the Allowed Deviation Zone is as specified in Certificate Condition 155.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
4	Those portions of the Allowed Deviation Zone that may be affected by construction of the Facility are included in the construction zone (Construction Zone), which may also include areas outside the Allowed Deviation Zone that are needed temporarily for site investigation, access, and construction.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

5	The portions of the Allowed Deviation Zone to be occupied by the Facility once construction is complete are referred to herein as the Facility ROW. The Certificate Holders shall also acquire and maintain the continuing right to enter onto and use certain additional lands immediately adjacent to the Facility ROW needed for repair and maintenance purposes, including preclusion of vegetative encroachment, on terms prohibiting the owners of such land from taking any action on that land that would interfere with such repair and maintenance activities.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
6	The Facility may be developed in segments (each, a Segment) to facilitate construction sequencing and scheduling, including the commencement of construction of overland components thereof, provided that, with the EM&CP filing regarding the first Segment, the Certificate Holders shall identify the anticipated Segments and include a schedule for their construction, and, provided further that the EM&CP filings regarding subsequent Segments shall include updates to the Segment identification and construction schedule.	CHPE complied in connection with first Segment EM&CP submission on April 15, 2022 (DMM Item 862).	Updated Segment EM&CP schedule provided in Table 1-1.
7	In the event of any conflict between the express provisions of this Certificate and any of the provisions of the Joint Proposal, including the BMP document and the EM&CP Guidelines), both of which are attached as appendices to the Joint Proposal, the express provisions of this Certificate shall govern.	CHPE will comply	Section 1.1, Section 2.0.

8	The Certificate Holders shall, within 30 days after Commission approval of this Certificate, file with the Secretary to the Public Service Commission either a petition for rehearing or a verified statement that they accept and will comply with this Certificate. Failure to comply with this condition shall invalidate this Certificate.	CHPE has complied.	See <i>Acceptance Letter of Champlain Hudson Power Express</i> (April 23, 2013 (DMM Item 727)).
9	The Certificate Holders shall not commence site preparation or construction of a particular Segment unless and until all the necessary permits and consents referred to in Certificate Condition 16 that pertain to that Segment are received and unless and until the EM&CP for that Segment (each such EM&CP filing for a particular Segment being referred to as a Segment EM&CP) is approved by the Commission. Copies of all permits/consents required for or obtained in connection with site preparation and construction shall be provided to the Secretary to the Commission (Secretary) before commencement of any such activity. For the purposes of this Certificate, construction shall include site preparation, installation, delivery of equipment and supplies, maintenance of construction equipment during construction, clearing, and grading, but shall not include component manufacture, including cable manufacture.	CHPE will comply	Section 3.3
10	The Certificate Holders shall not commence work on any Segment until they shall have obtained all required interests in real estate, including interests in real estate to be used for access roads (whether obtained through a conveyance, consent, permit, or other approval) as are necessary and applicable for such Segment. Evidence of the obtaining of such interests shall be provided to the Secretary prior to commencement of the work.	CHPE will comply	Section 4.2
11(a)	The Certificate Holders shall not place transmission cable in any waterway, trench, conduits, or other location intended for permanent installation prior to the issuance of (i) by appropriate Canadian federal and/or provincial authorities of those approvals and permits necessary in order to allow for the construction of transmission facilities interconnecting with the bulk power system operated by TransÉnergie (or a successor to such organization) and extending to the New York border; (ii) by the United States	CHPE has fully complied as of September 13, 2023 (see DMM	No further discussion required.

	Department of Energy of an approval pursuant to Executive Orders 10485 and 12038 (the Presidential Permit); and (iii) by the United States Army Corps of Engineers of permits pursuant to section 404 of the Federal Clean Water Act and section 10 of the Federal Rivers and Harbors Act (the Corps Permit). The Certificate Holders shall provide copies of said permits to the Secretary within 15 days of receipt. In no event shall a delay or failure to obtain any of the above-referenced approvals serve as occasion or justification for a deferral or alteration of any and all required state clean-up and restoration activities as set forth in the applicable Environmental Management and Construction Plan and relevant sections of this Certificate and the BMPs, including, without limitation, section 11 of the BMPs. [as Amended by Order Approving Amendment Issued September 21, 2020]	items 1354 and 1386).	
11(b)	Work shall advance generally in accordance with the schedule of gating events as described in Appendix 1 [This Appendix was attached the Order Approving Amendment Issued September 21, 2020]	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
11(c)	The Certificate Holders shall provide reports to the Commission regarding the status of efforts to achieve certifications and approvals of upstream facilities in Canada every six months from the date of this Order until the certifications and approvals are obtained. If Hydro Quebec-TransÉnergie is unable to achieve certification in Canada, the Certificate Holders shall (i) notify the Secretary; and (ii) stop work in New York State and initiate stabilization of disturbed sites, and (iii) undertake restoration of any sites not previously restored, as set forth in the applicable EM&CP and relevant sections of this Certificate and the BMPs, including, without limitation, section 11 of the BMPs. [as amended by Order Approving Amendment Issued September 21, 2020]	CHPE has fully complied as of September 13, 2023 (see DMM items 1354 and 1386).	No further discussion required.
12	The Certificate Holders shall promptly notify the Secretary in writing should they decide not to complete construction of all or any portion of the Facility and shall serve a copy of such notice upon all parties to this proceeding.	CHPE will comply	Not applicable to Overhead Transmission Line

			and Astoria Annex EM&CP.
13	This Certificate may be vacated on notice to the Certificate Holders if (a) the Certificate Holders has not submitted the EM&CP or the initial Segment EM&CP to the Commission for its review within 12 months of the date upon which Certificate Holders has received all permits and approvals required for the commencement of construction of the Facility from any and all governmental agencies and authorities having jurisdiction with respect thereto, and any finding made or action taken by any such agency or authority that is subjected to administrative and/or judicial review has been conclusively upheld as a result of such review, or the time period for the initiation of any such review has definitively expired, or (b) unless reasonable cause as defined in this Condition is shown, the Certificate Holders has not commenced construction of the Facility on or before the date that is six months following the approval by the Commission of the EM&CP for the initial Segment EM&CP submitted to the Commission, or the date that is 18 months following the date of the grant of this Certificate, whichever is later. Reasonable cause may include delays in the issuance of permits and approvals required for the Facility by federal agencies and other circumstances beyond the reasonable control of the Certificate Holders.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP. See permitting status report filed September 30, 2022 (DMM Item 898).
14	The Certificate Holders shall integrate and coordinate maintenance of the Facility with that of adjacent facilities, structures, and property in accordance with the EM&CP.	CHPE will comply	Section 6.5, See Appendix M.
15(a)	The Certificate is granted and the required determinations of the need for the Facility and that the Facility will serve the public interest, convenience and necessity are explicitly made contingent on Certificate Holders delivering a minimum of 1,550 MW of energy (including 550 MW of energy not flowing through the HVDC Transmission System) out of the N'PA's Astoria substation. The Certificate Holders shall file a report documenting how they will achieve this level of deliverability prior to, or at the time they file their EM&CP for the first segment of the Facility. If the Certificate Holders cannot demonstrate compliance with this deliverability requirement, the Certificate Holders shall file with the Secretary a Request for Reconsideration of the need and	CHPE has complied.	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP. The PSC approved the Deliverability Report in an Order dated October 13,

	<p>public interest, convenience and necessity determinations made with respect to the Facility. The request shall be served to all parties to this proceeding and shall clearly state that all parties may submit comments on the filing within 30 days of service. Such request shall explain why Certificate Holders believe that a lesser amount of energy deliverability is consistent with the Commission's findings that the Facility is needed and will serve the public interest, convenience and necessity. Such request shall include a discussion of each option the Certificate Holders considered as a means of achieving the minimum threshold level of deliverability. The Certificate Holders may not commence construction of the Facility unless and until the Commission has accepted the report or approved the request filed pursuant to this subpart.</p>		2022 (DMM Item 903).
15(b)	<p>The Certificate is granted and the required determination that the Facility will serve public interest, convenience and necessity is explicitly made contingent on the HVDC Transmission System being developed, financed, constructed, and operated on a merchant basis with no reliance on cost-of-service rates set by either a federal or state regulatory entity, and will not be included in utility rate base, either directly or through a contractual arrangement between Certificate Holders and any agency, authority or other entity of the State of New York, any municipal subdivision of the State of New York, any utility subject to cost-based regulation, or any instrumentality of any of the foregoing, and on the further condition that all costs associated with the use of Astoria-Rainey Cable to deliver electric energy and capacity transmitted over the HVDC Transmission System will also be recovered exclusively on a merchant basis with no reliance on cost-of-service rates set by either a federal or state regulatory entity, and will not be included in utility rate base, either directly or through a contractual agreement between Certificate Holders and any agency, authority or other entity of the State of New York, any municipal subdivision of the State of New York, any utility subject to cost-based regulation, or any instrumentality of any of the foregoing. Prior to, or at the same time they file their EM&CP for the first segment of the Facility, the Certificate Holders shall file a report documenting that they have received building contractual commitments from one or more financially responsible entities for a combined total of no less than 750 MW of Firm Transmission Service over the Facility for a period of no less than twenty-five (25) years. The Certificate Holders may not</p>	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	<p>commence construction of the Facility unless and until the Commission has accepted this report. If Certificate Holders seeks to recover any of the costs of the HVDC Transmission System, or any of the costs associated with the use of the Astoria-Rainey Cable to deliver electric energy and capacity transmitted over the HVDC Transmission System, in cost-based rates set by a Federal or State regulatory authority, the Certificate shall be deemed invalid. In the event that the Certificate Holders recovers all of any part of the costs of the HVDC Transmission System, or any of the costs associated with the use of the Astoria-Rainey Cable to deliver electric energy and capacity transmitted over the HDVC Transmission System, under a contract between Certificate Holders and any agency, authority or other entity of the State of New York, any municipal subdivision of the State of New York, any utility subject to cost-based regulation, or any instrumentality of any of the foregoing, the Certificate shall also be deemed invalid. For purposes of this provision, the term rates shall include any charges established by the NYPA or a utility operating under cost-based regulation, including without limitation base rates, surcharges, adjustments, or any other recovery mechanism.</p>		
15(c)	<p>The Certificate is granted and the required determination that the Facility will serve public interest, convenience and necessity is explicitly made based on the cost estimate for the Astoria-Rainey Cable set out in paragraph 23 of the Joint Proposal in this proceeding. Certificate Holders shall include as part of their EM&CP for the Astoria-Rainey Cable a report providing an updated construction cost estimate for the Astoria-Rainey cable, including supporting documentation. If the updated cost estimate exceeds the cost estimate in the evidentiary record of this proceeding by 10% or more, the Certificate Holders shall file with the Secretary a Request for Reconsideration of the determination of public interest, convenience and necessity made with respect to the Facility. The request shall be served to all parties to this proceeding and shall clearly state that all parties may submit comments on the filing within 30 days of service. Such request shall explain how such increased cost would be consistent with the Commission's public interest, convenience and necessity determination made in this proceeding.</p>	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

15(d)	Upon commencement of construction, the Certificate Holders shall file with the Secretary monthly reports showing the costs for the Astoria-Rainey Cable as they occur, broken out as follows: excavation costs, traffic control costs, cable installation costs, splicing costs, thermal back fill, manhole and vault costs, costs relating to damage to other facilities (gas, electric, telephone, fiber optic cables, sewer, water, etc.), engineering costs, inspector costs, fines, cable costs, and all other costs by category. The reports shall include the names of the individuals responsible for providing the information, along with their contact information, and shall contain all supporting documentation.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
15(e)	Subject to the limitations of 15(b), nothing contained in this Certificate shall be construed as affecting in any way the rights of Certificate Holders to unilaterally make application to the Federal Energy Regulatory Commission (FERC) for a change in rates, terms and conditions, charges, classification of service, Service Agreement, rule or regulation under section 205 of the Federal Power Act (FPA) and pursuant to F'RC's rules and regulations promulgated thereunder.	CHPE will comply	General condition not related to EM&CP.
B. Laws and Regulations		CHPE Response	EM&CP Section/Appendix
16	Each substantive federal, state, and local law, regulation, code, and ordinance applicable to the Facility authorized by this Certificate shall apply except as set forth in Condition 17 and except and to the extent that the Commission has refused to apply any substantive local ordinances, laws, resolutions, or other actions issued thereunder or local standards or requirements, as being unreasonably restrictive as listed in the Revised and Updated Exhibit 7 to the Application (see Exhibit 115 to the Joint Proposal). [As Amended by Amendment 2 (August 13, 2020) authorizing additional waivers for Preferred Alternative routing]	CHPE will comply	All Sections of EM&CP (designed to ensure adherence to Certificate).
17	No State or municipal legal provision purporting to require any approval, consent, permit, certificate, or other condition for the construction or operation of the Facility authorized by this Certificate shall apply, except (i) those of the PSL and regulations	CHPE will comply	All Sections of EM&CP (designed to ensure

	and orders adopted thereunder, (ii) those provided by otherwise applicable state law for the protection of employees engaged in the construction and operation of the Facility, (iii) those regarding permits issued pursuant to federally approved authority, (iv) those regarding the right to use or occupy state or municipal property (including ROW), and (v) those discussed in CC 18.		adherence to Certificate).
18	Subject to the Commission's ongoing jurisdiction, the Certificate Holders shall apply for certain local regulatory permits and approvals, to wit:	CHPE will comply	Section 4.2.3.
18(a)	The following City of New York (CNY) regulatory permits and approvals that would be applicable to construction and operation of those portions of the Facility located within the boundaries of CNY in the absence of PSL § 130: building permits, street excavation permits, street closure permits, permits for structural welding, permits under the CNY Fire Code, permits under the CNY Construction Codes and Electrical Code, permits for the discharge of wastewater and stormwater to 'NY's sewer system, permits for the use and supply of water, and forestry permits.	CHPE will comply	Section 4.2.3
18(b)	If the Certificate Holders believes that any action taken, or determination made, in connection with the permits and approvals referenced in subpart (a) of this Certificate Condition is unreasonable or unreasonably delayed, they may petition to Commission, upon reasonable notice to the permitting authority, to seek a resolution of any such unreasonable requirement or unreasonable delay. The permitting authority may respond to the petition, within 10 business days, to address the reasonableness of any requirement or delay.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
19	The Certificate Holders shall construct the Facility in a manner that conforms to Good Utility Practice, as herein defined, and all applicable standards of the American National Standards Institute (ANSI) including, without limitation, the National Electrical Safety Code (NESC), Institute of Electrical and Electronics Engineers (IEEE), Standard IEEE C2-2002, and any stricter standards adopted by the Certificate Holders.	CHPE will comply	See Table 3-2 and Glossary.

	Upon completion thereof, the Certificate Holders shall certify to the Commission that the Facility was constructed in full conformance with the standards specified herein.		
20	For the purposes of this Certificate, "Good Utility Practice" shall include any of the practices, methods or acts engaged in or approved by a significant portion of the electric, gas, steam, water, sewer or telecommunications industries, as applicable, during the relevant time period, including without limitation, the electric, gas, steam, water, sewer or telecommunications utility or utilities whose service territories the work in question is being performed and/or whose facilities are physically impacted by the work in question and, for the electric power industry only, the New York Independent System Operator (NYISO), the New York State Reliability Council (NYSRC), the Northeast Power Coordinating Council (NPCC), the North American Reliability Corporation (NERC) and the North American Electric Reliability Organization (NAERO) or any successor organizations. Good Utility Practice shall include any of the practices, methods, or acts in which, in the exercise of reasonable judgement in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to delineate acceptable practices, methods, or acts generally accepted in the region, such as, in the case of the electric power industry only, those practices required by FPA Section 215(a)(4).	CHPE will comply	Section 4.0 & Glossary
C. HVDC Converter Station Design, Interconnection and Construction		CHPE Response	EM&CP Section/Appendix
21	The Converter Station shall be located entirely on and within Subdivision Parcel A as shown on Hearing Exhibit 130 along Luyster Creek in the Astoria neighborhood of the borough of Queens (Subdivision Parcel A), a copy of which is annexed to these Certificate Conditions. The Certificate Holders shall be responsible for the cost of protecting or relocating any utility infrastructure during or as a result of construction activity by them in Subdivision Parcel A. The Certificate Holders may not use, occupy,	CHPE has complied (see Segment 22 EM&CP).	Not applicable to Overhead Transmission Line and Astoria Annex

	or take (by condemnation or otherwise) any other real property owned or occupied by Con Edison at Astoria for the Converter Station, a ring bus and related facilities that are required to complete the Facility without Con Edison's prior written consent.		EM&CP (Segment 21).
22(a)	The tallest building serving as part of the Converter Station shall not exceed 70 feet in height above finished grade, as defined below, and the tallest support tower shall not exceed 70 feet above finished grade. The finished grade shall be the grade at the elevation of the 100-year floodplain, and such additional minimal fills as necessary to provide drainage of the site. The height and arrangement of all station facilities shall be indicated in the EM&CP site plan discussed in Section 1(A) of the EM&CP Guidelines.	The Annex Station building is less than 70 feet in height. The lightning masts and AC yard dead-end gantry are required to be greater than 70 feet in height, however these infrastructures do not fall within definition of building, or support tower subject to this height limit	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.
22(b)	The Converter Station shall be designed to minimize visibility and visual impacts.	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.

22(c)	The Converter Station shall use materials that minimize glare and that are neutral in color. The design shall also include appropriate landscaping at the site.	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.
22(d)	Maintenance and enhancement of the shoreline area vegetative cover between the Converter Station site and the Luyster Creek waterway shall be addressed in the final site plan and station maintenance plans.	Location of Annex Station was amended under the Order Granting Amendment of Certificate of Environmental Compatibility and Public Need Subject to Conditions for Case 10-T-0139, Issued and Effective August 13, 2020.	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
22(e)	Exterior night lighting of the Converter Station shall be designed to provide illumination necessary for worker safety and site security purposes, giving full consideration to energy conservation, glare, and the minimization of light trespass. All such lighting shall be selected and installed to shield the lamp filaments from direct view to the greatest extent possible, which may include the use of full-cutoff fixtures without drop-down optics, use of task lighting for maintenance purposes where	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.

	feasible, and minimizing upward lighting. Lighting shall comply with worker safety requirements.		
22(f)	If Con Edison moves forward with its recently announced plan to interconnect a PAR to the N'PA's 345 kV Astoria GIS Substation, the Converter Station may also include a fourbreaker 345 kV GIS ring bus, which ring bus, if owned and operated by Applicants, shall be located entirely on Subdivision Parcel A and shall be interconnected at 345 kV to the Astoria-Rainey Cable, N'PA's Astoria GIS Substation and the Annex Station as described in hearing Exhibit 125 to the Joint Proposal.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
23	The EM&CP Site Plan for the Annex Station site shall include the following:	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.
23(a)	a site plan of sufficient detail to demonstrate conformance with the requirements of this Certificate, the Noise Mitigation Procedures of the CNY, and the EM&CP guidelines.	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition..
23(b)	construction drawings including architectural, structural, HVAC, mechanical, electrical, plumbing and fire protection plans for all structures, which drawings shall have been prepared by an architect or engineer licensed by the State of New York and in conformance with the code requirements of the CNY.	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.

23(c)	a review of the sound emissions characteristics of the high-voltage transformers selected for final project design, including typical and maximum noise levels generated at associated operating levels; and a tonal analysis based on one-third octave bands to determine the potential for tonal sound generation, including pure tones.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
23(d)	an exterior lighting plan based on illumination requirements for worker safety, which limits off-site glare.	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.
24	In developing the site plan for the Annex Station, Certificate Holders shall consult with New York State Department of Public Service (DPS) Staff and the CNY, and share preliminary drawings of foundations, elevations, renderings, stormwater control, and noise control measures, as they become available. Not later than 30 days prior to the date by which Certificate Holders expects to file the EM&CP segment for the Annex Station, they shall file with the same parties a preliminary site plan of sufficient detail to address relevant requirements of this Certificate and the EM&CP guidelines, for their review and comment.	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.
25	Prior to commercial operation of the Converter Station, the Certificate Holders shall obtain from CNY a certificate of occupancy covering the Converter Station. A copy shall be provided to the Secretary.	CHPE will comply	Not applicable to this EM&CP. Separate EM&CP will be filed that is applicable to this condition.
26	The Converter Station shall have a 345 kV connection to the Astoria Annex GIS Substation [Amended on (02/17/2022) by Amendment 5 to the Certificate]	CHPE will comply	See Figure 1-1 and Section 1 of this

			Narrative; see also Appendix C.
D. Special Conditions Regarding Co-located Infrastructure and Related Matters		CHPE Response	EM&CP Section/Appendix
27	The Certificate Holders shall engineer, construct, and install the Facility so as to make it fully compatible with the continued operation and maintenance of Co-located Infrastructure (CI), as herein defined, and affected railroads, railways, highways, roads, streets, or avenues. CI shall consist of electric, gas, telecommunication, water, wastewater, sewer, and steam infrastructure and appurtenant facilities and associated equipment, whether above ground, below ground, or submerged that:	CHPE will comply	See Appendix C. Overhead Transmission Line and Astoria Annex Site Plans and Construction Drawings.
27(a)	are located within the Construction Zone approved in the EM&CP for the Facility or a proposed Construction Zone as provided for in Certificate Condition 28(d); and	CHPE will comply	See Appendix C. Overhead Transmission Line and Astoria Annex Site Plans and Construction Drawings.
27(b)	are either owned by a state agency or municipality or a subdivision thereof or owned or operated for public utility purposes by a regulated electric, gas, telecommunication, water, wastewater, sewer, or steam service provider;	CHPE will comply	See Appendix C. Overhead Transmission Line and Astoria Annex Site Plans and Construction Drawings.
27(c)	but do not include railroads, railways, highways, roads, streets, or avenues.	CHPE will comply	See Appendix C. Overhead

			Transmission Line and Astoria Annex Site Plans and Construction Drawings.
28	In order to protect CI, Certificate Holders shall:	CHPE will comply	Section 13.0
28(a)	within 60 days of Commission issuance of a Certificate, consult with the owners and/or operators of all known electric, gas, telecommunication, water, wastewater, sewer, and steam infrastructure and appurtenant facilities and associated equipment, whether above ground, below ground or submerged, other than railroads, railways, highways, roads, streets and avenues, located either: (i) within the Allowed Deviation Zone, (ii) within three hundred (300) feet of any location outside the Allowed Deviation Zone where Certificate Holders intends to undertake any pre-construction activities; or (iii) sufficiently close to areas of anticipated pre-construction activities such that Good Utility Practice, as defined in Condition 20 of this Certificate, requires discussion of the impacts of such pre-construction activities between Certificate Holders and the owners and/or operators of such facilities (Potential CI). Such consultations shall include discussion of the likely routing of the Facility and the measures that will be employed by Certificate Holders to protect CI, including the studies required by the exercise of Good Utility Practice regarding the manner in which the Facility will be designed and installed wherever they are expected to cross CI or are expected to come in such proximity to CI that Good Utility Practice would require a specific design to be developed. All agreements and requirements resulting from this consultation shall be reflected in the proposal prescribed in subsection (d) of this Condition and the notice prescribed in subsection (e) of this Condition; and	CHPE will comply	Section 13.0
28(b)	within 60 days of Commission issuance of a Certificate, begin the process of consulting with the owners and/or operators of Potential CI to develop a construction schedule for the Facility that, among other things, coordinates system outage requirements, if any, and avoids conflicts with the internal construction programs of each affected	CHPE will comply	Section 13.0.

	owner and/or operator. This consultation shall continue throughout each phase and portion of the construction of the Facility that affects any CI or Potential CI, as applicable. As a part of this consultation, the Certificate Holders will identify to a reasonable degree of certainty the appropriate representative of the party, whether owner or operator, having primary care, custody, and control of a particular segment of Potential CI or CI (each such a representative being a Designated Representative). All agreements and requirements resulting from this consultation shall be reflected in the proposal prescribed in subsection (d) of this Condition and the notice prescribed in subsection (e) of this Condition and in the Certificate Holders' EM&CP; and		
28(c)	comply with all procedures identified by the Designated Representative(s) of the owners and/or operators of such CI or Potential CI, including, without limitation, application procedures and compliance with requirements for obtaining relevant rights, permission, permits, or authorization, whenever the Certificate Holders seeks to undertake any studies, surveys, testing, sampling, preliminary engineering, pre-construction, construction, operation, maintenance, or repair activities that involve CI or Potential CI, except in cases where such actions must be taken on an expedited basis to protect the public or to ensure reliable operation of the Facility, whereupon Certificate Holders shall provide such Designated Representatives with such notice and obtain such approvals as is reasonable under the circumstances, and except where such procedures are subject to the Commission's jurisdiction and the Commission or its designee finds such procedures to be unreasonable or unduly restrictive. Notwithstanding the foregoing, the Certificate Holders shall not be required to comply with the requirements of section (c) of this Condition for the transport or travel over or under CI or Potential CI by the Certificate Holders and their agents, employees, and contractors where such CI or Potential CI is located in, over, or under public waterways, roads, streets, highways, or railroad ROW, unless such transportation would be subject to special approval by state and/or local authorities due to the size or weight of load(s) transported; and	CHPE will comply	Section 13.0.
28(d)	provide to the owner(s) and operator(s) of Potential CI or CI, at least 180 days prior to the filing of the relevant Segment EM&CP, a proposal for the location and design of	CHPE will comply	Section 13.0.

	the Facility (including a proposed Construction Zone) and the methods of construction to be employed with respect to all locations involving CI (Proposal). The Certificate Holders' Proposal must include all studies, calculations, tests, results, explanations, protocols, drawings, proposed construction schedules, and documents developed through the consultations described in subsections (a) and (b) of this Condition, other documentation identified in Condition 162, and any other information that supports the proposal. To the extent that any such Proposal addresses CI that was not previously identified as Potential CI, the Certificate Holders shall conduct the consultations described in subsections (a) and (b) of this Condition 28 with the Designated Representative(s) of the owner(s) or operator(s) of such CI and shall perform all other activities required by such paragraphs with respect to such CI in as reasonably expeditious a manner as possible and shall provide any resulting studies, calculations, tests, results, explanations, protocols, drawings, proposed construction schedules, and documents to the appropriate Designated Representative in a timely fashion; and		
28(e)	advise owner(s) and operator(s) of CI at least 30 days prior to commencing any planned repair, construction, operation, or maintenance activity relating to the Facility affecting or occurring in the vicinity of such owner's or operator's CI, unless such actions must be taken in less than thirty (30) days to protect the public or to ensure reliable operation of the Facility, whereupon Certificate Holders shall provide such notice as is reasonable under the circumstances; provided that, in any event, "vicinity" with respect to CI used to transmit or distribute natural gas shall mean all areas within 200 feet thereof and with respect to all other CI shall mean all areas within 100 feet thereof; and	CHPE will comply	Section 13.0.
28(f)	immediately upon knowledge or discovery of any damage to or adverse effect on any CI or Potential CI resulting from any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance, or repair of the Facility, report to the owners and operators of the affected CI or Potential	CHPE will comply	Section 13.0.

	CI the nature and existence of such damage or effect and other known facts relating to the cause thereof; and		
28(g)	notify the owners or operators of CI or Potential CI as soon as possible in the event of any situation involving imminent risk to health, safety, property, or the environment requiring the Certificate Holders to cross such CI or Potential CI or to use any associated property to address the emergency. Such notice shall not be required for the transport or travel over or under CI or Potential CI by the Certificate Holders or their agents, employees, or contractors where such CI or Potential CI is located in, over, or under public waterways, roads, streets, highways, or railroad ROW unless such transportation would be subject to special approval by state and/or local authorities due to the size or weight of load(s) transported; and	CHPE will comply	Section 13.0.
28(h)	include within any Project Segment EM&CP filing relating to the Astoria-Rainey Cable a study demonstrating that the proposed installation of the Astoria-Rainey cable will have not have a negative impact on the continued operation of any Parallel CI. A draft of that study will be included in the materials that Certificate Holders are required to provide to the owner or operator of such CI pursuant to Certificate Condition 28(d) and will be subject to review and comment as provided therein. For purposes of this subsection, Parallel CI means electric transmission facilities that are located in the same public ROW and are generally parallel to the Astoria-Rainey Cable.	CHPE will comply	Section 13.0.
29	Reimbursement of Owners or Operators of CI and/or Potential CI for Certain Expenses:	CHPE will comply	Section 13
29(a)	Subject to the provisions of subsections (b) and (c) of this Condition, the Certificate Holders shall reimburse owners and/or operators of Potential CI or CI for the reasonable costs they incur in the following activities: 1. consulting with Certificate Holders as described in Certificate Conditions 28 (a) and (b). 2. reviewing pre-construction activities, designs, construction methods, maintenance and repair protocols, and means of gaining access to Potential CI or CI proposed by Certificate Holders. 3. reviewing studies and design proposals described by Condition 28(d) and the EM&CP filings described in Certificate Condition 162. 4. conducting or preparing	CHPE will comply	Section 13.0.

	such additional studies and designs as may be agreed to by Certificate Holders or approved by the Commission pursuant to Condition 29(a)(3). 5. coordinating with, and monitoring the activities of, the Certificate Holders during pre-construction activities, construction, maintenance and repair of the Facility. 6. conducting maintenance and repair work on CI property or facilities, but only to the extent of increases in such costs that result from the presence of the Facility. 7. repairing damage to Potential CI or CI or associated property caused by Certificate Holders or their representatives in connection with any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance or repair of the Facility. 8. scheduling and implementing electric system outages required by any studies, surveys, testing, sampling, preliminary engineering, preconstruction activities, construction, operation, maintenance, or repair of the Facility.		
29(b)	For the purposes of this Certificate Condition 29, cost shall be deemed to be reasonable if in the case of each separate review of a study or design proposal described in subsection (a)(3) of this Certificate Condition, the total cost to be borne by the Certificate Holders is \$5,000 or less.	CHPE will comply	Section 13.0.
29(c)	Certificate Holders' cost responsibility is limited as follows: a Potential CI or CI owner or operator who intends to incur costs as described in subsection (a) of this Certificate Condition 29 for which reimbursement will be sought for activities other than reviewing a study or design proposal described in subsection (a)(3) of this Certificate Condition 29, or for reviewing such a study or design proposal but in an amount greater than \$5,000, must provide Certificate Holders with a written description of the scope of the planned studies or activities and a good faith estimate of the expected costs, except where such studies or activities are undertaken in a situation involving unscheduled electric outages or an imminent risk to health, safety, property, or the environment, in which case Certificate Holders' reimbursement obligations shall be limited to reasonably incurred costs. Within 60 days of the expenditure by the owners and/or operators of affected Potential CI or CI of any funds which are eligible for reimbursement by the Certificate Holders under this Certificate, the Potential CI or CI owner or operator shall present Certificate Holders with a final invoice for the actual	CHPE will comply	Section 13.0.

	costs incurred, but not to exceed 25% over the good faith estimate unless approved by Certificate Holders in advance in writing or, in the case of a dispute between the Certificate Holders and the Potential CI or CI owners or operators, by the Commission. Certificate Holders shall pay the authorized invoice amount within 30 days of receipt.		
29(d)	Disputes concerning the Certificate Holders' cost reimbursement responsibility shall be brought to the Commission for resolution. The time required to resolve any dispute arising under this Certificate Condition 29 shall not be counted for the purpose of any limitation on the time available for commencement or completion of construction of the Facility.	CHPE will comply	Section 13.0.
E. Public Health and Safety		CHPE Response	EM&CP Section/Appendix
30	The Certificate Holders shall design, engineer, and construct the Facility such that, to the extent applicable, their operation shall comply with the interim electrostatic field standard established by the Commission in Opinion No. 78-13 (issued on June 19, 1978 in Cases 26529 and 26559) and the limit for magnetic fields set in the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued on September 11, 1990, in Cases 26529 and 26559) or with any standard that has superseded these standards at the time of consideration by the Commission of the EM&CP or a particular Segment EM&CP.	CHPE will comply	Section 4.2.3
31	Construction work occurring inside the boundaries of the CNY and outside the walls of buildings whose exterior walls and roof are substantially complete shall take place between 7 a.m. and 6 p.m. as required by Section 24-222 of the CNY City Administrative Code. For certain construction phases and activities, additional work hours may be necessary. Nothing herein shall preclude the Certificate Holders from making necessary arrangements for the extension of additional work hours with appropriate authorities of the CNY. Noise mitigation procedures shall follow those set forth in the approved EM&CP and shall not be less stringent than the citywide Construction Noise Mitigation Procedures provided by the CNY. DPS Staff shall be	CHPE will comply	Section 4.2.3

	notified at least 24 hours in advance if planned weekend, evening, or holiday construction becomes necessary. This condition is not intended to prohibit nighttime construction reasonably necessary to comply with restrictions on daytime construction on or along roadways or public access areas or to require the cessation of construction activities that require a continuous work effort once started. Furthermore, construction vehicles used in CNY will be outfitted with smart back up alarms.		
32	Deliveries occurring inside the boundaries of the CNY and related to construction activities shall take place between 7 a.m. and 6 p.m., except that, to the extent required to accommodate oversized delivery pursuant to a New York City Department of Transportation (NYCDOT) permit, the Certificate Holders shall be exempt from restrictions limiting delivery to 7 a.m. to 6 p.m. This condition is not intended to prohibit nighttime deliveries reasonably necessary to facilitate compliance with restrictions on daytime construction in or along roadways or public access areas or to require the cessation of construction activities that require a continuous work effort once started.	CHPE will comply	Section 4.2.3
33	The Certificate Holders shall provide timely information to adjacent property owners and/or their tenants regarding planned construction activities and schedules. The Certificate Holders shall notify these persons of construction work within 100 feet of their property at least two weeks prior to the commencement of construction in these areas and provide copies of all correspondence to the DPS Staff.	CHPE will comply	Section 3.3
34	The Certificate Holders shall keep local fire department and emergency management teams apprised of on-site chemicals and waste and shall also advise owners and operators of CI as to on-site chemicals and waste stored within 100 feet of their CI. In the case of CI located within the CNY, the Certificate Holders shall advise CI owners and operators of on-site chemicals and waste stored within 300 feet of such facilities. All chemicals shall be secured in a locked and controlled area(s).	CHPE will comply	Section 3.3
35	The Certificate Holders shall notify DPS Staff and the New York State Department of Environmental Conservation (NYSDEC) immediately of any petroleum product spills.	CHPE will comply	Section 3.3

	The Certificate Holders shall also notify owners and operators of CI of any petroleum product spills within 100 feet of their CI, provided however that in the case of CI located within CNY, the Certificate Holders shall advise CI owners and operators of petroleum product spills within 300 feet of such facilities		
36	The Certificate Holders shall comply with the requirements for the protection of underground facilities set forth in 16 New York Codes, Rules, and Regulations (N.Y.C.R.R.) Part 753, entitled "Protection of Underground Facilities."	CHPE will comply	Section 13.3
37	Parking for construction workers shall be in designated areas that do not interfere with normal traffic, cause a safety hazard, or interfere with existing land uses, including CI.	CHPE will comply	Section 4.10; See also Appendix C. Overhead Transmission Line and Astoria Annex Site Plans and Construction Drawings.
38	Direct disturbance to properties shall be avoided by accessing the overland Construction Zone from existing roadways or approved access roads where feasible. The Certificate Holders, in undertaking the Facility, shall not violate the property rights of individual landowners and shall not commit trespass upon their lands. Before the Certificate Holders attempts to enter private property that they do not have the legal right to enter, they shall first obtain the permission of the landowner and shall abide by all conditions on such permission that the landowner may impose. If the Certificate Holders relies on a document as evidence of their easement or other right to access land owned in fee by an individual landowner, they shall provide a copy of such document to the landowner upon his or her request.	CHPE will comply	Section 4.7; See also Appendix C. Overhead Transmission Line and Astoria Annex Site Plans and Construction Drawings.
39	For each location where the Facility involves construction across or within the ROW limits of a road, street, highway or public thoroughfare, the Certificate Holders shall implement a Maintenance and Protection of Traffic (MPT) plan that identifies	CHPE will comply	Section 12.1; See Appendix C. Overhead

	procedures to be used to maintain traffic and provide a safe construction zone for those activities within the roadway ROW. The Certificate Holders shall also prepare MPT plans for each location where construction vehicles will access the Construction Zone from a local roadway. The MPT plans shall address temporary signage, lane closures, placement of temporary barriers, and traffic diversion.		Transmission Line and Astoria Annex Site Plans and Construction Drawings.
39(a)	All signage utilized shall comply with the New York State Department of Transportation (NYSDOT) Manual of Uniform Traffic Control Devices (Manual No. 7155) and, within State highway ROW, a Highway Work Permit issued by NYSDOT. Placement of signs shall be determined in consultation with the jurisdictional agency. At a minimum, signs shall be placed at the following distances: (1) Signs announcing construction at 500 feet and 1,000 feet; (2) Signs depicting workers at 300 feet; and (3) Where blasting is to take place within 50 feet of a road, a blast warning sign at 1,000 feet.	CHPE will comply	Section 12.0; See Appendix C. Overhead Transmission Line and Astoria Annex Site Plans and Construction Drawings.
39(b)	Flagmen shall be present at all times when equipment is crossing or entering any road, when equipment is being loaded or unloaded, and when two-lane traffic has been reduced to one lane. All flagging operations shall comply with 17 N.Y.C.R.R. Part 131.	CHPE will comply	Section 12.0; See Appendix C. Overhead Transmission Line and Astoria Annex Site Plans and Construction Drawings.
40	To the extent required in connection with the delivery of oversized components, the Certificate Holders or their suppliers shall obtain any necessary permits from applicable state agencies and provide copies of such permits to the Secretary.	CHPE will comply	Section 12.0 and Section 3.3
F. Notices and Public Complaints		CHPE Response	EM&CP Section/Appendix

41	<p>The Certificate Holders shall make available to the public a toll-free or local phone number of an agent or employee who will receive complaints, if any, during the construction of the Facility. In addition, the phone number of the Secretary and the phone number of the Commission's Environmental Compliance Section shall be provided. A log shall be maintained that lists at least the date of any complaint, identity and contact information for the complaining party, the date of the Certificate Holders' response, and a description of the outcome. Phone logs shall be made available to DPS Staff upon request. The Certificate Holders shall report to DPS Staff every complaint that cannot be resolved after reasonable attempts to do so. Any such report shall be made within three business days after receipt of the complaint.</p>	CHPE will comply	Toll-free number and contact information included in notices (Appendix B) and remaining requirements addressed in Public Involvement Plan and Complaint Resolution Plan (Appendix H).
42	<p>No less than two weeks before commencing site preparation, the Certificate Holders shall: (1) provide notice to local officials and emergency personnel in the area where they will be working on the Facility; and (2) provide notice to the owners of property identified in CC 33 herein; and (3) provide such notice for dissemination to local media and display in public places (such as general stores, post offices, community centers, and conspicuous community bulletin boards); and (4) in the event that the site preparation is delayed after notice is given, additional notice as set forth above shall be provided before site preparation is resumed. The notice shall be written in language reasonably understandable to the average person and shall contain: (1) a map and a description of the Construction Zone in the local area; and (2) the anticipated date for start of construction in the local area; and (3) the name, address, and local or toll-free telephone number of an employee or agent of the Certificate Holders who will receive complaints, if any, during the construction of the Facility; and (4) a statement that the Facility, as applicable, is under the jurisdiction of the Commission, which is responsible for enforcing compliance with environmental and construction conditions and which may be contacted at an address and telephone number to be provided in the notice. Upon distribution, a copy of such notice shall be filed with the Secretary.</p>	CHPE will comply	Section 3.3

43	The Certificate Holders shall provide the Engineering, Procurement, and Construction Contractor retained to undertake construction of the Facility and their other construction Contractors (Contractors or EPC Contractors) with complete copies of this Certificate and any and all permits, certificates, and approvals required to initiate and/or complete construction of the Facility, including, without limitation, approved Segment EM&CPs and governmental approvals issued pursuant to § 401 and § 404 of the Federal Clean Water Act, and § 10 of the Federal Rivers and Harbors Act. To the extent that the listed documents are available before contracts for construction services are executed, such copies shall be provided to the Contractors prior to the execution of such contracts.	CHPE will comply	See Table 3-2.
44	The Certificate Holders shall notify all Contractors that the Commission may seek to recover penalties for violation this Certificate and other Orders issued in this proceeding, not only from the Certificate Holders, but also from their Contractors, and that Contractors also may be liable for other fines, penalties, and environmental damage.	CHPE will comply	See Table 3-2.
45	No later than three days after completion of the transaction(s) pursuant to which the costs of construction of the Facility are funded (Closing), the Certificate Holders shall notify the Secretary of the date of such Closing.	CHPE has complied	See Letter Notice dated November 3, 2022 (DMM Item 905).
46	The Certificate Holders shall inform the Secretary and NYSDEC at least five days before commencing site preparation for the Facility.	CHPE will comply	See Table 3-2 below.
47	The Certificate Holders shall provide DPS Staff, NYSDOT, and NYSDEC with bi-weekly status reports summarizing construction and indicating construction activities and locations scheduled for the next month.	CHPE will comply	See Table 3-2 below.

48	Within 10 days of the completion of final restoration activities, the Certificate Holders shall notify the Secretary that all restoration has been completed in compliance with this Certificate and the Order(s) approving the EM&CP.	CHPE will comply	See Table 3-2 below.
49	Within 60 days of completing construction of the HVDC Transmission System, the Certificate Holders shall consult with the New York State Office of General Services (OGS) Bureau of Land Management regarding specifications for providing as-built information and mapping of the submerged portions of the HVDC Transmission System in conformance with the requirements of the OGS Bureau and 9 N.Y.C.R.R. Part 271. Within 60 days of that consultation, the Certificate Holders shall provide to the OGS as-built information and mapping complying with its specifications (including shapefile information compatible with ArcView® GIS software) and shall file with the Secretary copies of the as-built information and mapping and proof of filing with the OGS.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
50	No later than three days after the date on which the Facility commences commercial operation (CO) of the Facility, the Certificate Holders shall notify NYSDOT, NYSDEC, and the Secretary of the date of such commencement.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
51	The Certificate Holders shall promptly notify DPS Staff and NYSDEC if a New York State listed species of special concern is observed to be present in the Facility area.	CHPE will comply	Section 3.3 and 9.3; Appendix F.
52	The Certificate Holders shall promptly notify DPS Staff, NYSDEC and the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) (if applicable) if any threatened or endangered wildlife species under 6 N.Y.C.R.R. Part 182 (TE species) or any rare, threatened or endangered plant species under 6 N.Y.C.R.R. Part 193 (RTE plants) are observed to be present in the Facility area so as to determine the appropriate measures to be taken to avoid or minimize impacts to such species. If necessary to avoid or minimize impacts to such species or as directed by DPS Staff, the Certificate Holders shall stabilize the area and cease construction or ground	CHPE will comply	Section 3.3 and 9.3; Appendix F.

	disturbing activities in the Facility area until DPS Staff have determined that appropriate protective measures have been implemented.		
G. Environmental Supervision		CHPE Response	EM&CP Section/Appendix
53(a)	The Certificate Holders shall employ at least six inspectors on the HVDC Transmission System (or at least five inspectors if the Certificate Holders elects to use the same individual as both environmental inspector (Environmental Inspector) and agricultural inspector (Agricultural Inspector) as follows: (i) an Environmental Inspector employed full-time on the HVDC Transmission System; (ii) a construction inspector employed full-time on the HVDC Transmission System during construction of overland portions of the HVDC Transmission System, including construction of the Annex Station (Construction Inspector); (iii) an aquatic inspector employed full-time on the HVDC Transmission System (Aquatic Inspector); (iv) an Agricultural Inspector; (v) a safety inspector employed full-time on the HVDC Transmission System (Safety Inspector); and (vi) a part-time quality assurance inspector who will inspect the work site from time to time (Quality Control and Quality Assurance Inspector).	CHPE will comply	Section 3.1; Appendix F.
53(b)	The Certificate Holders shall employ the following inspectors in connection with the Astoria-Rainey Cable: (i) an Environmental Inspector; (ii) a Construction Inspector; (iii) a Safety Inspector; and (iv) a Quality Control and Quality Assurance Inspector.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
53(c)	During periods of relative inactivity on the Facility, the number of inspectors and the extent of their presence at the Facility construction site may be temporarily decreased commensurate with the decline in activity levels; likewise, during periods of relatively high activity on the Facility, the number of inspectors and the extent of their presence at the Project site may be temporarily increased commensurate with the increase in activity levels.	CHPE will comply	Section 3.1; Appendix F.

53(d)	The Certificate Holders shall provide DPS Staff a weekly schedule of the Environmental Inspector and the Construction Inspector and their cell phone numbers.	CHPE will comply	Section 3.0
53(e)	The Environmental Inspector and Construction Inspector shall be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor each Contractors' compliance with the provision of every Order issued in this proceeding and applicable sections of the PSL, New York State Environmental Conservation Law (ECL), the Water Quality Certification (WQC) issued in connection with the Facility pursuant to section 401 of the Federal Clean Water Act and the approved EM&CP.	CHPE will comply	Section 3.0
53(f)	The Agricultural Inspector shall be available to provide site-specific agricultural information as necessary for development of the proposed EM&CP through field review, as well as to have direct contact with affected farm operators, County Soil and Water Conservation Districts, and the NYSDAM. The Agricultural Inspector shall maintain regular contact with the Environmental Inspector and the Construction Inspector throughout the construction phase. The Agricultural Inspector shall also maintain regular contact with the affected farmers and County Soil and Water Conservation Districts concerning farm resources and management matters pertinent to the agricultural operations and the site-specific implementation of the approved EM&CP.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP, which contains no agricultural lands.
53(g)	The names and qualifications of the Environmental Inspector and the Construction Inspector shall be submitted to DPS Staff and NYSDEC at least two weeks prior to the start of construction.	CHPE will comply	Section 3.0
53(h)	The Environmental Inspector's qualifications shall satisfy those of the Qualified Inspector pursuant to the NYSDEC State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-10-001) (SPDES General Permit).	CHPE will comply	Section 3.0

53(i)	The Certificate Holders' employees, Contractors, and subcontractors shall be properly trained in the construction, operation, and maintenance of the Facility.	CHPE will comply	Section 3.1
54	The authority granted to the Certificate Holders in this Certificate and any subsequent Order(s) in this proceeding is subject to the following conditions necessary to ensure compliance with such Order(s):	CHPE will comply	Section 3.4
54(a)	The Certificate Holders shall regard DPS Staff representatives (authorized pursuant to PSL § 8) as the Commission's designated representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate or may violate the terms of this Condition, the WQC, or any other Order in this proceeding, either the Certificate Holders' Environmental Inspector or DPS Staff may issue a stop work order for that location or activity.	CHPE will comply	Section 3.4
54(b)	A stop work order issued by DPS Staff shall expire 24 hours after issuance unless confirmed by a single Commissioner. If a stop work order is confirmed, the Certificate Holders may seek reconsideration from the confirming Commissioner or the whole Commission. If the emergency prompting the issuance of a stop work order is resolved to the satisfaction of the Commissioner or the Commission, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect.	CHPE will comply	Section 3.4
54(c)	Stop Work Authority will be exercised sparingly and with due regard to potential environmental impact, economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is or is claimed to be violated. Before exercising such authority, DPS Staff will consult (wherever practicable) with the Environmental Inspector. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holders' construction manager and the Director of the DPS Office of Energy Efficiency and the Environment. If DPS Staff issues a stop work order, neither the Certificate Holders nor the Contractor will be prevented from undertaking any	CHPE will comply	Section 3.4

	safety-related activities that 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 during these discussions.		
54(d)	Exercise of Stop Work Authority: If DPS Staff or the Environmental Inspector discovers a specific activity that represents a significant environmental threat that is or immediately may become a violation of this Condition, the WQC, or any other Order in this proceeding, and on-site construction personnel refuse to take appropriate action after being advised of the threat, DPS Staff and/or the Environmental Inspector may direct the field crews to stop the specific potentially harmful activity immediately. If the direction to stop work is issued by DPS Staff and Certificate Holders' responsible personnel are not on site, the DPS Staff will immediately thereafter inform the Construction Inspector and/or the Environmental Inspector of the action taken. The stop work order will be lifted by the DPS Staff when the situation prompting its issuance has been resolved.	CHPE will comply	Section 3.4
54(e)	DPS Staff's Implementation of Specific Measures to Protect the Public and the Environment: If DPS Staff determines that a significant threat exists such that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, the DPS Staff may, in the absence of the Environmental Inspector and the Construction Inspector, or in the presence of such personnel who, after consultation with the DPS Staff, refuse to take appropriate action, direct the Certificate Holders or their Contractors to implement the corrective measures identified in the approved EM&CP. The field crews shall comply with the DPS Staff's directive immediately. DPS Staff will immediately thereafter inform the Certificate Holders' Construction Inspector and/or Environmental Inspector of the action taken.	CHPE will comply	Section 3.4
54(f)	DPS Staff or the Environmental Inspector will promptly notify the appropriate NYSDEC representative of any activity that is a significant environmental threat to a state-regulated wetland or its adjacent area, a protected stream or other waterbody, a TE	CHPE will comply	Section 3.4

	species, or a State- or Federally- identified hazardous waste site or that may become a violation of this Condition, WQC, or any other Order issued in this proceeding pursuant to subsection (d) of this Certificate Condition 54.		
55	The Certificate Holders shall organize and conduct site-compliance audit inspections for DPS Staff as needed, but not less frequently than once per month during the site preparation, construction, and restoration phases of the Facility and at least annually for two years after the COD.	CHPE will comply	See Table 3-2.
55(a)	The monthly inspections shall include a review of the status of compliance with all conditions contained in this Certificate, the WQC, and any other Order issued in this proceeding, and with other legal requirements and commitments, as well as a field review of the construction site, if necessary. The inspections may also include: (1) review of all complaints received, and their proposed or actual resolutions; and (2) review of any significant comments, concerns, or suggestions made by the public, local governments, or other agencies; and (3) review of the status of the Facility in relation to the overall schedule established prior to the commencement of construction; and (4) other items the Certificate Holders or DPS Staff consider appropriate.	CHPE will comply	Section 3.2.3
55(b)	The Certificate Holders shall provide a written record of the results of the inspection, including resolution of issues and additional measures to be taken, to agencies involved in the inspection audit.	CHPE will comply	Section 3.2.3
56	Nothing herein shall be deemed to limit the right of any jurisdictional agency to enter and inspect the Facility to assess compliance with any permit issued by such agency or any applicable substantive statute or regulation under such agency's jurisdiction; provided, however, that such inspection shall, to the extent possible, be coordinated with the DPS Staff (authorized pursuant to PSL § 8).	CHPE will comply	Section 3.1
57	Nothing in this Certificate shall restrict NYSDOT's authority over Certificate Holders' use of state highways, including without limitation NYSDOT's authority to place inspectors on site to monitor and observe the Certificate Holders' activities on state	CHPE will comply	Section 3.1

	highways and/or to request the presence of state or local police to assure the safety of freeway travelers at such times and for such periods as NYSDOT deems appropriate.		
H. Overland Installation		CHPE Response	EM&CP Section/Appendix
58	At least two weeks prior to the start of overland construction, the Certificate Holders shall hold a preconstruction meeting to which they shall invite DPS Staff, NYSDOT, and NYSDEC. The agenda, location, and attendee list for this meeting shall be agreed upon between DPS Staff and the Certificate Holders. The Certificate Holders shall supply draft minutes from this meeting to all attendees. The attendees may offer corrections or comments, and thereafter the Certificate Holders shall issue the finalized meeting minutes to all attendees. If, for any reason, the Contractors retained by the Certificate Holders to construct the Facility cannot finish the construction of such facilities, and one or more new construction contractors are needed, there shall be another preconstruction meeting with the same format as outlined above.	CHPE will comply	Section 3.2
59	The Certificate Holders shall confine construction to the Construction Zone and approved additional work areas as detailed in the approved EM&CP. A detailed construction schedule and location timeline shall be provided to DPS Staff prior to construction.	CHPE will comply	Section 1
60	The Certificate Holders shall identify encroachments within the Construction Zone and contact individual property owners or occupants to address and seek to rectify such potential encroachments on a case-by-case basis. The Certificate Holders shall report to DPS Staff the result of efforts to address and rectify encroachments in the Construction Zone periodically, but in no event less than quarterly.	CHPE will comply	Section 4.7
61	The Facility may not be located beneath existing buildings, footings, or foundations, except as authorized in the EM&CP, and all excavations shall be in accordance with all applicable standards and specifications, including: (a) the Building Code of New York State, including Section 1803 and other relevant sections; and (b) the Occupational	CHPE will comply	Not applicable to Overhead Transmission Line

	Safety and Health Administration (OSHA) Technical Manual (OTM), including Section V: Chapter 2 and other relevant sections; and (c) OSHA Regulations, including Part Number 1926, Standard Number 1926.651, and other applicable provisions.		and Astoria Annex EM&CP.
62	Except as authorized in any Segment EM&CP, the Certificate Holders shall not construct or allow their Contractors to construct any new, or improve any existing access roads for the construction, operation, or maintenance of the Facility.	CHPE will comply	Section 4.10
63	Before construction begins on any Segment, the boundaries of the Construction Zone shall be delineated in the field. Also, the Certificate Holders shall stake and flag all access roads and extra workroom areas to be used in constructing that Segment.	CHPE will comply	Section 4
64	The Certificate Holders shall adopt appropriate measures to minimize fugitive dust and airborne debris from construction activity and details of measures to be implemented shall be described in the proposed Segment EM&CP. If contamination in the ground is detected during overland construction and such contamination is of the kind that will lead to volatilization or off-gassing of such contamination or chemical constituents thereof, the Certificate Holders shall contact the New York State Department of Health (NYSDOH), NYSDEC, and DPS Staff prior to further disturbance. Additionally, the Certificate Holders shall conform to practices and procedures described in the DER10/Technical Guidance for Site Investigation and Remediation and the NYSDOH Generic Community Air Monitoring Plan ("CAMP"), to the extent applicable. Nothing in this Certificate shall have the effect of diminishing, enlarging, or altering in any way the obligations of any party that may be triggered in the event a spill of petroleum or a release of hazardous substances to the environment ("Reportable Event") is detected within the Construction Zone by the Certificate Holders and/or their contractors and other representatives during overland construction of the Facility, including, without limitation, any obligation the Certificate Holders may have to report such Reportable Event to the NYSDEC Oil and Hazardous Materials Spills Hotline (800-518-457-7362).	CHPE will comply	Section 6.3.2

65	Disposal of trees and woody material:	CHPE will comply	Section 8.1
65(a)	The Certificate Holders shall negotiate in good faith with each landowner the purchase of rights to all logs over 6 inches in diameter at the small end and 8 feet or longer (merchantable logs) to be cleared from the Construction Zone. Certificate Holders shall not leave any permanent slash piles or log piles along passenger railroad routes or public highways. The Certificate Holders' removal of the merchantable logs resulting from clearing the Construction Zone shall be based on factors such as the attributes of the site, outcome of landowner negotiations, and attributes of the logs, and the Certificate Holders shall explain these factors in detail in the proposed EM&CP.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
65(b)	The Certificate Holders shall comply with the provisions of 6 N.Y.C.R.R. Part 192, Forest Insect and Disease Control.	CHPE will comply	Section 9.4 and Appendix K.
65(c)	The Certificate Holders shall prepare a plan for removal, reuse, recycling, and disposal of all woody material. Logs and woody material that cannot be reused or sold shall be either chipped on site, stacked along the edge of the Final Layout Area (as defined at CC 139), hauled to a NYSDEC approved landfill or other suitable off-site location, or buried on the Final Layout Area with landowner agreement. The Certificate Holders shall not leave any logs or other woody material in any designated floodway or other flood hazard area.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
66	All trees over 2 inches in Diameter at Breast Height or shrubs over 4 feet in height damaged or destroyed by activities during construction, operation, or maintenance, regardless of where located, shall be replaced within the following year by the Certificate Holders with the equivalent type of trees or shrubs except if: (a) other arrangements are specified in the approved EM&CP; or (b) equivalent type replacement trees or shrubs would interfere with the proper clearing, construction, operation, or maintenance of the Facility or would be inconsistent with State-invasive species policy; or (c) replacement would be contrary to sound ROW management practices, or to any approved long-range ROW management plan applicable to the	CHPE will comply	Section 14.2

	Facility or adjoining ROW; or d. the owner of land where the damaged or destroyed trees or shrubs were located (or other recorded easement or license Holders' with the right to control replacement) declines replacement.		
67	The Certificate Holders shall provide detailed soil erosion and sediment control plans in a Stormwater Pollution Prevention Plan (SWPPP), which shall be included with the first Segment EM&CP associated with the overland route of the Facility. Soil and sediment control measures shall be implemented early in the construction process and be installed prior to and maintained in acceptable condition for the duration from any clearing or earthmoving operations through to the permanent stabilization of the soil. Erosion and sediment control devices shall be installed in accordance with the New York State Standards and Specifications for Erosion and Sediment Control (SSESC), the approved EM&CP Annex Station drawings, permit conditions, regulatory approvals, and as otherwise necessary or directed by the Environmental Inspector to prevent adverse impacts to environmentally sensitive areas. The SWPPP shall include a schedule for necessary inspections at all control measure locations. The SWPPP shall be available at the construction site and available to the public upon five days written notice.	CHPE will comply	Section 3.3, 6.3 and SWPPP (Appendix F).
68	The Certificate Holders shall coordinate with DPS Staff and the NYSDOT regarding all plans and work to be performed in state-owned ROWs under the NYSDOT's supervision and management. Prior to filing any Segment EM&CP involving any such state-owned ROW, the Certificate Holders shall provide DPS Staff and NYSDOT Staff with a preliminary design marked to avoid conflict with potential transportation projects that NYSDOT Staff may seek to undertake in the future and shall offer to consult with NYSDOT Staff concerning any comments it may offer and shall use reasonable efforts to accommodate any NYSDOT concerns.	CHPE will comply	Section 3.3 and 12.0; also see Appendix A.
69(a)	In preparing the proposed EM&CP, the Certificate Holders shall consult with each transportation department or agency having jurisdiction over any roads, related structures, and components that will be crossed by the Facility or used for direct access to the Construction Zone. If the access road takes direct access from, or lies within the	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex

	limits of, such roads, the Certificate Holders shall notify each relevant transportation department or agency of the approximate date when work will begin.		EM&CP, which is located entirely within a controlled-access, utility-owned energy complex.
69(b)	Infrastructure subject to the requirements of Condition 69(a) include: movable bridges over the Harlem River and their associated apparatus, including any cables, chains or other apparatus allowing for their operation; and a planned pedestrian and bicycle pathway and associated infrastructure, including landscaping, lighting, rail crossings, fences, railroad gates, and stormwater retention facilities, and associated subsurface components, to be constructed under and in the vicinity of the Hells Gate Bridge in the Bronx, whether constructed or designed at the time of the EM&CP development. The procedures and protections outlined in CCs 27 through 29 shall apply to the movable bridges and other apparatus, and, if they are in place at the time of construction of the Facility, the aforementioned infrastructure associated with the pedestrian and bicycle pathway.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
70	Construction access to the Construction Zone at controlled-access highways shall be provided from off-highway locations.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
71	The Certificate Holders shall minimize the impact of construction of the Facility on traffic circulation. Traffic control personnel and safety signage shall be employed to facilitate safe and adequate traffic flow when secondary roadways are affected by construction.	CHPE will comply	Section 12.1 and Appendix C.

72	The Certificate Holders shall consult periodically with state and municipal highway transportation agencies about traffic conditions near the site of the Facility and shall notify each such transportation agency of the approximate date work will begin in its jurisdiction and Construction Zone access points that connect with the highways in that jurisdiction.	CHPE will comply	Sections 3.3 and 12.1
73	The Certificate Holders shall be responsible for checking all culverts and assuring that they are not crushed or blocked during construction and restoration of the Facility and, if a culvert is blocked or crushed, taking immediate steps to replace or repair the culvert in accordance with applicable state or local standards.	CHPE will comply	Section 13.4 and 14.2.
74	Disturbed areas, ruts, and rills shall be restored to original grades and conditions with permanent revegetation and erosion controls appropriate for those locations. Disturbed pavement, curbs, and sidewalks shall be restored to their original preconstruction condition or improved.	CHPE will comply	Section 13.4 and 14.2.
I. Agricultural Lands		CHPE Response	EM&CP Section/Appendix
75	The Certificate Holders shall design the Facility to the extent possible to avoid crop fields or other active agricultural land.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
76	During the acquisition of rights to use lands comprising the Construction Zone, the Certificate Holders shall ask the owners of such lands that appear to be either undeveloped or used as active agricultural land whether such lands are presently being used for agricultural purposes and, if so, whether such lands are being operated, in whole or in part, by third parties. During the preparation of the EM&CP, the Certificate Holders shall use this information, along with any additional information received during consultation with the NYSDAM, to identify land within the	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	Construction Zone reasonably believed to be active agricultural land. The Certificate Holders shall provide the owners and identified operators of such land with a telephone number to facilitate direct contact with the Certificate Holders and the Agricultural Inspector(s).		
77	Where construction entrances are required from public roadways to the Construction Zone across agricultural fields, temporary access shall use matting or road installation. The use of topsoil stripping for construction access, as opposed to matting, shall only be allowed with approval from DPS Staff in consultation with the NYSDAM. For matting, the mats shall be layered where necessary to provide a level access surface. For road installation and topsoil stripping, an underlayment of durable, geotextile fabric shall be placed over the exposed subsoil surface prior to the use of temporary gravel access fill material. Complete removal of the construction entrance upon completion of the Facility and restoration of the affected site is required prior to topsoil replacement. Segments of farm roads utilized for access shall be improved as necessary following consultation with the farm operator and the NYSDAM prior to use, subject to the Commission's ongoing jurisdiction.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
78	The Certificate Holders shall provide a monitoring and remediation period of two years following completion of Construction Zone restoration in active agricultural areas. The Certificate Holders shall retain the services of the Agricultural Inspector through this period. The monitoring and remediation phase shall be used to identify any remaining agricultural impacts associated with construction of the Facility that need mitigation and to implement the follow-up restoration. During the monitoring and remediation period, on site monitoring shall be conducted at least three times during each growing season and shall include a comparison of growth and yield for crops within and outside the Construction Zone. When subsequent crop productivity within the Construction Zone is less than that of the adjacent unaffected agricultural land, the Agricultural Inspector, in conjunction with the Certificate Holders and in consultation with other appropriate organizations including the NYSDAM, shall help to determine the appropriate rehabilitation measures for the Certificate Holders to implement (soil decompaction, topsoil replacement, etc.). During the various stages of construction of	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	the Facility, all affected farm operators shall be periodically apprised of the duration of remediation by the Agricultural Inspector. Because conditions that require remediation may not be noticeable at or shortly after the completion of construction, the signing of a release form prior to the end of the remediation period shall not obviate the Certificate Holders' responsibility to fully redress all impacts caused by construction of the Facility. After completion of the specific remediation period, the Certificate Holders shall continue to respond to the requests of the farmland owner/operators to correct adverse impacts to agricultural resources caused by construction of the Facility.		
79	The Agricultural Inspector shall work with farm operators during the planning phase to develop a plan to delay pasturing of livestock in the Construction Zone, work areas, access roads, or staging areas following construction until pasture areas are adequately revegetated. The Certificate Holders shall be responsible for maintaining temporary fencing on the Construction Zone, work areas, access roads, or staging areas until the Agricultural Inspector determines that the vegetation in the Construction Zone is established and able to accommodate grazing. At such time, the Certificate Holders shall be responsible for removal of the fences.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
80	On affected farmland, restoration practices shall be postponed until favorable (workable, relatively dry) topsoil/subsoil conditions exist. Restoration shall not be conducted while soils are in a wet or plastic state. Stockpiled topsoil shall not be re-graded until plasticity, as determined by the Atterberg field test, is significantly reduced. No Facility restoration activities shall occur in agricultural fields in the months of October through May unless DPS Staff has determined after consultation with Ag & Mkts that favorable soil moisture conditions exist. The Certificate Holders shall monitor and advise Ag & Mkts and DPS Staff regarding tentative restoration planning.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
J. Herbicide Use		CHPE Response	EM&CP Section/Appendix

81	The application of herbicides shall be made under the direct supervision of a NYSDEC Certified Applicator (Applicator) who shall own or be employed by a NYSDEC registered business. The supervising certified Applicator shall be familiar with and understand the Conditions of this Certificate, the approved EM&CP, and any other pertinent Orders issued in this proceeding and shall be present in the field to ensure compliance with provisions in such documents for targeting species and for proper application of authorized herbicides.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP. There is no planned herbicide use during construction.
82	All herbicides used shall have valid registrations under applicable state and federal laws and regulations.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
83	Application of herbicides shall conform to all label instructions and all applicable federal and state laws and regulations. Herbicides shall not be applied within 100 feet of any public water supply (reservoirs and wellheads), or any private well-head of which Certificate Holders have actual knowledge. Applicators shall reference maps that indicate treatment areas, and wetland and adjacent area boundaries, prior to treating. Applications required in seasonally flooded freshwater wetlands shall be undertaken during the dry season.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
84	The Certificate Holders shall notify DPS Staff and the appropriate NYSDEC Regional Natural Resource Supervisor(s) and Pesticide Control Specialist 14 days prior to the commencement of any herbicide application on the Facility.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
K. Building Code and Inspections - Converter Station and Related Buildings		CHPE Response	EM&CP Section/Appendix

85	Prior to the commencement of construction of the Converter Station and related buildings, the Certificate Holders shall first obtain review and written certification by the CNY Department of Buildings that the construction plans for the Converter Station are in compliance with the New York City Electrical Code (NYCEC), the New York City Fire Code (NYCFC), and Title 28 of the New York City Administrative Code, including the New York City Construction Codes (NYCCC). Within 10 days of receiving any written certification, the Certificate Holders shall file a copy of such certification with the Secretary and shall serve a copy on the Director of the Office of Energy Efficiency and the Environment.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
86	During construction of the Converter Station and related buildings, the Certificate Holders shall obtain periodic inspections of the construction work by the CNY Department of Buildings for compliance with the NYCFC, NYCEC and NYCCC.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
87	Prior to the use or occupancy of the Converter Station and related buildings, the Certificate Holders shall first obtain written certification by the CNY Department of Building that the construction was completed in compliance with the NYCFC, NYCEC, and the NYCCC. Within 10 days of receiving any written certification, the Certificate Holders shall file a copy of such certification with the Secretary and shall serve a copy on the Director of the Office of Energy Efficiency and the Environment	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
L. Overland Restoration		CHPE Response	EM&CP Section/Appendix
88	At the conclusion of all Facility construction, Construction Zone areas, work areas, access roads, and/or staging areas shall be thoroughly cleared of all debris such as wood, nuts, bolts, spikes, wire, pieces of steel, and other assorted items.	CHPE will comply	Section 14.1
89	The Certificate Holders shall, on completion of construction of the Facility:	CHPE will comply	Section 14.1

89(a)	provide an assessment of the need for landscape improvements, including vegetation planting, earthwork, or installed features to screen or landscape with respect to road crossings, residential areas, parks, highways, Annex Stations, and substations; and	CHPE will comply	Section 14.1
89(b)	prepare plans for any visual mitigation found necessary, considering removal, rearrangement, and supplementation of existing landscape improvements or plantings; and	CHPE will comply	Section 14.1
89(c)	consult with DPS Staff on the content and execution of their landscape improvement assessment, resultant landscaping plan specifications, and materials list; details shall include measures for controlling maintenance and third party or wildlife damage to any landscape or vegetation plantings; and	CHPE will comply	Section 14.1
89(d)	assure the reduction or elimination of net storm water runoff within or immediately adjacent to the Construction Zone and any contribution to sources of non-point pollution resulting from the finished condition; and	CHPE will comply	Appendix C and G.
89(e)	present assessments and plans for DPS Staff review within one (1) year of the date the Facility is placed in service.	CHPE will comply	Sections 3.3 and 14.1.
M. Overland Habitat Areas		CHPE Response	EM&CP Section/Appendix
90	The Certificate Holders shall incorporate the measures described in the Karner blue butterfly (<i>Lycaeides melissa samuelis</i>) <i>Impact Avoidance and Minimization Report</i> (Exhibit 109 to the Joint Proposal) into the EM&CP. Prior to the commencement of construction, the Certificate Holders shall arrange a "walk through" of the Construction Zone where lupine habitat has been identified for representatives of the DPS Staff, NYSDEC, the EPC Contractor, and others as deemed appropriate to discuss and review these measures including the location of the flagging of lupine and nectar patches of potential and occupied butterfly habitat. The flagging shall be maintained until	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	construction has been completed and all disturbed areas have been restored to their final grade.		
91	Within six months after the commencement of commercial operations of the Facility, the Certificate Holders shall provide a ROW maintenance plan for the Facility ROW from Route Mile 145, south of Scout Road in the Town of Wilton, New York to Route Mile 180, north of County Line Road in the Town of Rotterdam, New York. This plan shall include but not be limited to methods of maintenance, access routes to the ROW, seasonal construction windows, and the education of all company employees and contractors regarding all measures to avoid occupied habitat associated with Karner blue butterfly and frosted elfin butterfly. The plan shall also provide requirements for notification of the DPS Staff and NYSDEC of any planned maintenance or repair work within, or in the vicinity of occupied habitat that requires excavation or ground disturbance.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
N. Underwater Cable Installation		CHPE Response	EM&CP Section/Appendix
92	All the terms and conditions of the WQC are incorporated by reference into this Certificate as though fully set out herein. Any changes to the WQC shall be governed by the provisions of Condition 158 of this Certificate.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
93	Construction within navigable waters and pre-installation route clearing activities (prelay grapnel run and associated obstruction and debris removal) shall occur within the construction time frames set forth in Table 1-1. After consultation with DPS Staff, the New York State Department of State (NYSDOS), and NYSDEC, the Certificate Holders may seek an appropriate modification of the time frames, either in the proposed EM&CP or subject to the provisions of Condition 158 of this Certificate.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

94	Commencement of in-river work within 1 mile south of the designated Significant Coastal Fish and Wildlife Habitats (SCFWHs) at Haverstraw Bay shall occur during the high, or flood, tide condition in order to avoid and/or minimize impacts from resuspended sediments to the SCFWH habitat of Haverstraw Bay.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
95	The Certificate Holders shall use installation techniques for underwater cable installation activities that are appropriate for the prevailing substrate conditions.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
95(a)	<p>Cable installation in the Hudson, Harlem, and East Rivers shall be designed and installed to meet the following criteria: (i) Where the cables shall be located within the limits of the maintained Federal Navigation Channels (a) in the Harlem, Hudson, and East Rivers, the Certificate Holders shall install the cables to a depth of at least fifteen (15) feet below the federally-authorized depth of the Federal Navigation Channel and (b) in the Harlem River, the Certificate Holders shall install the cables to those elevations below the federally-authorized depth of such Channel that have been specified by the USACE in Permit NAN-2009-0189 and by the New York State Department of State in its determination of March 3, 2014 made pursuant to the federal Coastal Zone Management Act;</p> <p>(ii) and where the cables shall be located outside the limits of the maintained Federal Navigation Channels in such rivers, the Certificate Holders shall install the cables to the maximum depth achievable that would allow each pole of the bi-pole to be buried in a single trench using a jet-plow, which is expected to be at least six (6) feet below the sediment water interface or, if sand waves are present, the trough of said waves, or as authorized by DPS Staff, NYSDEC, and NYSDOS as discussed in condition 95(a) (iii), below the existing riverbed outside maintained Federal Navigation Channels, except where utility lines or other infrastructure are crossed or where geologic or topographic features prevent burial at such depth. (iii) No changes in the installation</p>	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	<p>technology or burial depth shall be allowed without a written statement from NYSDOS stating that the deviation would not result in coastal effects that differ significantly from the coastal effects reviewed by NYSDOS in Certificate Holders' original federal coastal consistency certification (Coastal Consistency Certification). In the event that NYSDOS determines that such deviation would result in coastal effects that differ significantly from those reviewed in the Coastal Consistency Certification, the Certificate Holders shall seek a written concurrence from NYSDOS for any such project changes that would require an amendment to the Certificate Holders' Coastal Consistency Certification. Nothing in this Certificate shall be construed to limit or expand any rights Certificate Holders may have to seek administrative or judicial review of any action or inaction by NYSDOS relating to any such deviation. [as Amended by Amendment 1 (March 20, 2020)].</p>		
95(b)	<p>Cable installation in Lake Champlain shall be designed and installed to meet the following criteria: (i) in locations where the water depth is less than 150 feet, the target burial depth is 3 to 4 feet below the sediment surface, except where the cables cross other utility lines or other infrastructure or where geologic or bathymetric features prevent burial at such depth, and adequate measures for cable and infrastructure protection are provided; (ii) in locations where water depth is 150 feet or greater, the target burial depth is 3 to 4 feet below the sediment surface, however the cables may be buried at shallower depths or laid on the lake bed where Certificate Holders provides a report prepared by a recognized authoritative technical consultant demonstrating and concluding that public health and safety can be appropriately protected without such burial, and the proposed installation method is approved by the Commission in the Segment EM&CP. (iii) Where the cables shall be located in the portion of Lake Champlain south of Crown Point (Route Mile 73), the Certificate Holders will rely on the shear plow installation method or, when reliance on such method is infeasible, an alternative method that avoids environmental impacts to a substantially equivalent degree. Where cables shall be located in the portion of Lake Champlain north of Crown Point, the Certificate Holders shall rely on a jet-plow or shear plow, or, in deeper water, either a self-propelled remotely operated vehicle</p>	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	(ROV) that shall bury the cables using water jetting after the initial surface lay of the cables from the vessel.		
95(c)	Utility and other infrastructure crossings shall be executed consistent with site-specific design measures for each such crossing as specified in the approved EM&CP.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
96	In the event that the target depth of cover (consistent with the requirements of Condition 95) has not been substantially achieved in an area due to geologic or topographic features and not due to limitations associated with a utility crossing, following the post-installation inspection provided for in Condition 161, the Certificate Holders shall report the actual depth of cover, and propose a plan, with a reasonable schedule, consistent with Good Utility Practice whose definition is provided in Condition 20, for achieving an adequate burial depth or protection level given the location to NYSDEC, NYSDOS and DPS Staff for review and comment.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
97	As long as the Certificate Holders complies with the requirements of Condition 96, failure to achieve the depth of cover consistent with the requirements of Condition 95 shall not be a basis for an order to cease installation of the remaining cable sections, an order not to energize, or an order to cease operation. An order not to energize or to cease operation will be issued only after affording the Certificate Holders an opportunity to show cause why such order should not be issued.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
98	The Certificate Holders shall employ HDD and dredging to install the proposed underwater cables from the proposed cable landfall locations to avoid disturbance to near shore sediments. The exit pit of each HDD borehole shall be installed within temporary dredged cofferdams or into a steel casing rise pipe. The walls of each temporary cofferdam shall extend above mean high water during dredging to contain suspended sediments associated with dredging activities and hence limit the	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	dispersion of the suspended sediments to the interior footprint of the temporary cofferdam.		
99	As part of the planning process for dredging, consultations with NYSDEC and USACE shall occur, at which time the specific practices to be employed shall be discussed. All cofferdams and any other dredged area shall be backfilled with clean material. The dredging practices and procedures to be utilized by the Certificate Holders shall be specified in the EM&CP and shall include:	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(a)	A closed (i.e., sealed) environmental (clamshell) bucket with sealing gaskets or an overlapping sealed design at the jaws and seals or flaps positioned at locations of vent openings, approved by the Commission, shall be used to minimize sediment suspension at the dredging site for fine grained unconsolidated (silty) sediments and for dredging across or within Federal Navigation Channels. Seals or flaps designed or installed at the jaws and locations of vent openings must tightly cover these openings while the bucket is lifted through the water column and into the barge, and the closed environmental (clamshell) bucket dredge shall be equipped with sensors to ensure complete closure of the bucket before lifting through the water.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(b)	Dredging Practices: The following practices shall be applied to all activities to ensure that large amounts of sediment are not released into the water column: (1) Hoist speed shall be limited so that the bucket is raised through the water column at a rate of 2 feet per second or less. The bucket shall be lifted in a continuous motion through the water column and into the barge; (2) The dredge shall be operated to control the rate of the descent and to maximize the depth of penetration without overfilling the bucket; (3) Washing of the gunwales of the dredge scow shall be avoided except to the extent necessary to ensure the safety of workers; and (4) The bucket shall be lowered to the level of the barge gunwales prior to release of the load and the dredged material shall be placed deliberately and in a controlled manner; (5) Operations shall be suspended until all necessary repairs or replacements are made when a significant	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	loss of water and visible sediments from the bucket are observed; and (6) Dredged material shall not be side cast or returned to the water.		
99(c)	Barge overflow is prohibited.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(d)	Barge/Scow Type: Barges or scows shall be of solid hull construction or be sealed.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(e)	Dredging Monitoring: An on-board Aquatic Inspector(s) shall be present at all times during dredging operations.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(f)	Dredging Windows: Dredging shall occur within the underwater construction windows identified in Table 1 of Condition 93.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(g)	Decanting Operations: Decanting of barges shall be approved by DPS Staff in consultation with NYSDEC prior to implementation. Barges may not be decanted before 24 hours of settlement within the scow.	CHPE will comply	Not applicable to Overhead Transmission Line

			and Astoria Annex EM&CP.
99(h)	Only barges in good operating condition shall be used. Deck barges shall not be used, unless modified to allow no barge overflow and as approved by the Aquatic Inspector and DPS Staff in Consultation with NYSDEC.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(i)	The Aquatic Inspector shall inspect all dredging equipment prior to use and shall perform periodic inspections of all such equipment no less than once per week. The contractor shall demonstrate to the Aquatic Inspector that the bucket dredge operator has sufficient control over the bucket depth in the water and bucket closure.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(j)	All sediments excavated during cofferdam construction and transition activities at the landfall location must be disposed of at a state-approved upland disposal site. All contaminated sediments excavated during placement in the navigation channel shall be disposed of in a state-approved upland disposal site.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(k)	During dredging operations, the Certificate Holders shall provide weekly reports on progress to date, document compliance with Certificate requirements, and such other information as determined necessary based on consultation with DPS Staff, NYSDEC, and NYSDOS.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
99(l)	All cofferdams and any other dredged area shall be backfilled using imported clean material, as needed, to restore the stream, lake, or riverbed to preconstruction contours. This work shall be completed in accordance with the relevant approved Segment EM&CP.	CHPE will comply	Not applicable to Overhead Transmission Line

			and Astoria Annex EM&CP.
99(m)	In no instance shall excavated contaminated sediment be placed back into a waterbody.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
100	Underwater activities shall be undertaken in a manner that minimizes the potential for interference with navigation.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
101	The Certificate Holders shall coordinate with NYSDOT on cable construction and maintenance activities within Lake Champlain that may affect construction, operation, maintenance, and inspection of the Crown Point Bridge in Lake Champlain.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
O. Water Supply Intakes		CHPE Response	EM&CP Section/Appendix
102	The Certificate Holders shall review the pre-installation marine sediment survey to determine if the location of any public water supply (PWS) structure along the HVDC Transmission System route can be identified.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
103	The Certificate Holders shall provide notice that the EM&CP is available for review to operators of PWS facilities located within 1 mile of the in-water facility. The notice shall	CHPE will comply	Not applicable to Overhead

	include, in plain language: (i) details about the planned work; (ii) hours and duration of activities; (iii) provisions for protection of facilities, if applicable; (iv) identification of locations where additional information and copies of the EM&CP are available; (v) contact information for Certificate Holders' personnel, including a toll-free number; and (vi) instructions on how comments regarding construction plans and mitigation measures may be filed with the Secretary, indicating appropriate deadlines for commenting and contact information. Proof of notice shall be provided to the Secretary.		Transmission Line and Astoria Annex EM&CP.
104	The Certificate Holders shall notify operators of PWS facilities of construction work within 1 mile of their intake structure(s) at least 30 days prior to the commencement of any underwater work (including but not limited to grapnel, preconstruction, and construction activities) in these areas or within the period requested by the systems operators during the consultation process detailed in CC 150. Such notice shall be in the form of a written letter as well as any other method identified during the consultation process detailed in CC 150. The Certificate Holders shall provide copies of all written correspondence to DPS Staff.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
105	Operational Control: The schedule of grapnel/debris removal and all phases of construction shall be coordinated in consultation with each PWS facility. Construction and pre-construction operations within 1 mile of an intake shall be performed at night or another scheduled time when systems are not operating to the extent reasonably possible.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
106	PWS Sampling during Grapnel/Debris Removal and Construction Operations: The Certificate Holders shall establish a fund that provides for each of the PWS facilities identified by the NYSDOH as being within 1 mile of the underwater cable facility to enable completion of the following testing, with payment for this work being based on the mechanism established during the consultation provided for by CC 150:	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
106(a)	One pre-construction raw water sample collected no more than 12 hours prior to in-water operations occurring in proximity to the intake structure. Samples collected shall	CHPE will comply	Not applicable to Overhead

	be analyzed for total metal concentrations with United States Environmental Protection Agency (EPA) Method 200.8. Raw water samples collected from PWS facilities located along the Hudson River shall also be analyzed for polychlorinated biphenyls (PCBs) with EPA Method 508A. All pre-construction raw water samples collected from the PWS facilities should be reported using a 24-hour turnaround.		Transmission Line and Astoria Annex EM&CP.
106(b)	Two sets of post-construction raw water and finished water (post-treatment) samples from the PWS facility. The first set shall be collected immediately following operations occurring in proximity to the intake structure and the second set shall be collected approximately 12 hours after conclusion of operations.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
106(c)	Post-construction raw water samples from all PWS facilities shall be analyzed for total metal concentrations with EPA Method 200.8. Raw water samples collected from PWS facilities located along the Hudson River shall also be analyzed for PCBs with EPA Method 508A. All post-construction raw water samples collected from the PWS facilities shall be reported using a 24-hour turnaround. Finished water samples shall be held at the laboratory.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
106(d)	If raw water sample results suggest any significant water quality impacts associated with any pre-construction or construction operations, the finished water samples shall be analyzed: (a) for total metal concentrations with EPA Method 200.8 and, (b) if collected from PWS facilities located along the Hudson River, for PCBs with EPA Method 508A. All finished water samples submitted for analysis shall be reported using a 24-hour turnaround. The decision to analyze the finished water samples shall be made by DPS Staff in consultation with the NYSDOH.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
106(e)	If analysis of finished water sample results indicates that there has been a maximum contaminant level (MCL) violation caused by the installation activities, the Certificate Holders shall employ the mitigation measures prescribed in accordance with Condition 14(c) of the WQC in all locations where cable installation operations are within 1 mile of a water intake structure. If the Certificate Holders proposes to employ	CHPE will comply	Not applicable to Overhead Transmission Line

	mitigation measures not otherwise provided for in accordance with CC 14(c) of the WQC, they must first consult with the DPS Staff, NYSDEC, and the Aquatic Inspector. In the event that DPS Staff determines that the mitigation techniques are unable to mitigate the MCL violation(s), underwater cable installation shall be suspended, and the Certificate Holders shall consult with DPS Staff, NYSDOH, and NYSDEC regarding alternative cable installation techniques and propose such changes to the approved EM&CP in accordance with Condition 158 as may be necessary.		and Astoria Annex EM&CP.
106(f)	The Certificate Holders shall provide copies of all laboratory data reports for samples collected from each PWS facility located along the Hudson River to NYSDOH and DPS Staff.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
P. Cultural Resources		CHPE Response	EM&CP Section/Appendix
107	The Certificate Holders shall: (a) avoid creating adverse impacts on heritage resource sites, archeological sites, historic structures, and underwater cultural resources in the vicinity of the Facility by implementing location, design, vegetation management, resource protection, and construction scheduling measures as shall be specified in the approved EM&CP; and (b) provide cultural and heritage resource impact mitigation measures as specified in the approved EM&CP or facility management and restoration plan(s).	CHPE will comply	Section 11
108	The Certificate Holders shall refrain from undertaking construction in areas where archeological surveys have not been completed and until such time as the appropriate authorities, including New York State Office of Parks Recreation & Historic Preservation (OPRHP) and DPS Staff, have reviewed the results of any additional historic properties and archeological surveys that are required. These archeological surveys may be segmented in conjunction with the preparation of the EM&CP to	CHPE will comply	Section 11

	permit the review, approval, and commencement of any circuit or Annex Station improvements prior to review and approval for the remaining portions of the Facility.		
109	The Certificate Holders shall develop a Cultural Resources Management Plan (CRMP) as described below. The CRMP shall be developed in consultation with the OPRHP Field Services Bureau, Indian tribes, the Advisory Council on Historic Preservation (Council), the U.S. National Park Service, DPS Agency Preservation Officer, and other stakeholders (as appropriate). The CRMP shall provide for the identification, evaluation, and management of historic properties within the Area of Potential Effects (APE) of the Facility. The CRMP shall also outline the processes for resolving adverse effects on historic properties within the APE and determining the appropriate treatment, avoidance, or mitigation of any effects of the Facility on these resources.	CHPE will comply	Section 11 and Appendix L.
110	Should archeological materials be encountered during construction, the Certificate Holders shall stabilize the area and cease all construction activities in the immediate vicinity of the find and protect the site from further damage. Within 24 hours of such discovery, the Certificate Holders shall notify and seek to consult with DPS Staff and OPRHP Field Services Bureau to determine the best course of action. No ground-disturbing activities shall be permitted in the 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 have been determined.	CHPE will comply	Section 3.3, Section 11, and Appendix L.
111	Should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the vicinity of the find shall be halted immediately and the site shall be protected from further disturbance. Within 24 hours of any such discovery, the Certificate Holders shall notify the DPS Staff and OPRHP Field Services Bureau. Treatment and disposition of any human remains that may be discovered shall be managed in a manner consistent with the Native American Graves Protection and Repatriation Act (NAGPRA); the Council's Policy Statement Regarding Treatment of Burial Sites, Human Remains, any Funerary Objects (February 2007); and OPRHP's Human Remains Discovery Protocol. All archaeological or remains-related encounters and their handling shall be further	CHPE will comply	Section 3.3, Section 11, and Appendix L.

	reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections.		
112	The Certificate Holders shall have a continuing obligation during the life of the Facility to respond promptly to complaints of negative archeological impacts and to consult with OPRHP, the Council, Indian tribes, and other appropriate parties identified in the CRMP to resolve adverse effects on historic properties and determine the appropriate avoidance, treatment, or mitigation measures.	CHPE will comply	Section 11 and Appendix L.
Q. Waterbodies and Regulated Wetlands		CHPE Response	EM&CP Section/Appendix
113	The Certificate Holders shall minimize disruption to regulated wetlands during the construction, operation, and maintenance activities of the Facility.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
113(a)	Regulated wetland locations shall be delineated in the field and indicated on the proposed EM&CP drawings for the Construction Zone and any access roads. Such delineations shall be delivered for review to DPS Staff, NYSDOS, and NYSDEC and, for wetlands within the Adirondack Park, to the Adirondack Park Agency (APA), at least 30 days prior to the filing of the proposed EM&CP.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
113(b)	Any activities that may affect regulated wetlands shall be designed and controlled to minimize adverse impacts, giving due consideration to the environmental features and functions of the regulated wetlands and the 100-foot adjacent area associated with any state-regulated wetlands (adjacent area).	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
113(c)	The Certificate Holders shall, to the maximum extent practicable, avoid direct impacts to regulated wetlands and construct access roads outside regulated wetlands and	CHPE will comply	Section 9.1

	adjacent areas. Any direct impacts that are not avoided shall be minimized and appropriately mitigated.		
113(d)	Construction through regulated wetlands or adjacent areas shall be done with tracked equipment or on temporary mats or geotextile/gravel access roads and shall be restricted to access roads and work areas set forth on the approved EM&CP drawings, provided that the Certificate Holders' use of geotextile and gravel for access roads shall not contravene the requirements set forth in CC 77 of this Certificate.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
113(e)	Clearing of existing vegetation in wetlands or in or near waterbodies shall be limited to that material necessary to allow completion of construction activities and to allow for reasonable access for long-term maintenance to reduce the amount of activity and disturbance to the wetland and adjacent area.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
113(f)	Equipment or machinery shall not be washed in any regulated wetland or adjacent area, and runoff resulting from washing operations shall not be permitted to directly enter any regulated wetland or protected stream or waterbody.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
113(g)	Excavated material shall be stockpiled outside regulated wetland areas and all excess material shall be disposed of in approved overland locations.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
114	The Certificate Holders shall minimize disruption to streams and waterbodies during construction, operation, and maintenance of the Facility. Measures to protect such streams and waterbodies from runoff and sedimentation during construction (other than installation of underwater cables in navigable waters) shall include:	CHPE will comply	Not applicable to Overhead Transmission Line

			and Astoria Annex EM&CP.
114(a)	The development of an inventory that includes for each Segment: (i) a listing of waterbodies within the Construction Zone, including associated stream width, NYSDEC classification, proposed crossing method, and any potential construction schedule window developed during the preparation of the proposed EM&CP; (ii) a spreadsheet that contains the GPS coordinates (latitude and longitude) of each waterbody; (iii) a digital photograph of each waterbody, cross-referenced to its GPS coordinates; and (iv) a wetland delineation shape-file. This inventory shall be delivered for review to DPS Staff, NYSDOS, and NYSDEC and, for waterbodies within the Adirondack Park, to APA, at least 30 days prior to the filing of the proposed EM&CP;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP. See discussion at Section 9.1.
114(b)	Limitation of construction vehicle access across streams and waterbodies to existing bridges and culverts and to temporary crossings installed in accordance with the provisions set forth in the approved EM&CP;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
114(c)	Construction of equipment crossings to allow for unrestricted flow and to prevent soil from entering streams and waterbodies. Temporary crossings shall be designed and constructed to withstand the two-year flood event at a minimum;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
114(d)	Except where an access path is necessary, a 15-foot-wide buffer zone shall be maintained at all waterbody crossings along any railroad ROW;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

114(e)	Prohibition of vehicular access where alternative access can be provided;	CHPE will comply	Section 4.10
114(f)	Restriction of equipment and materials (including fill, construction materials, or debris) from being deposited, placed, or stored in any waterbody;	CHPE will comply	Section 5.4, 5.5, and Appendix F.
114(g)	In general, and to the maximum extent practicable, refueling of equipment, storage mixing, or handling of open containers of pesticides, chemicals labeled "toxic," or petroleum products, shall not be conducted within one hundred (100) feet of a stream or waterbody or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under certain circumstances identified below, subject to the practices set forth in the approved EM&CP.	CHPE will comply	Sections 5.4, 5.5, and Appendix J.
	(1) Refueling of hand equipment will be allowed within 100 feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of hand-held equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.		
	(2) Refueling of equipment will be allowed within 100 feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Absorbent pads or portable basins will be deployed under the refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the equipment to be refueled. All equipment		

	operating within 100 feet of a wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release.		
	(3) Field personnel and Contractors shall be trained in spill response procedures, including the deployment and maintenance of spill response materials;		
114(h)	Employment of precautions, when not feasible to move the affected vehicle or equipment from an environmentally sensitive area to a suitable access area (i.e., pumping equipment), to prevent petroleum products or hazardous materials from being released into the environment. These precautions include (but are not limited to) deployment of portable basins or similar secondary containment devices, use of ground covers (such as plastic tarpaulins), and precautionary placement of floating booms on nearby surface waterbodies;	CHPE will comply	Sections 5.5
114(i)	Implementation of EM&CP procedures for erosion and sediment control (in accordance with the SWPPP to be included with the proposed EM&CP) early in the construction process and prior to the start of grading and excavation activities; such procedures shall be maintained throughout the construction period and in accordance with SSESC;	CHPE will comply	Sections 6.3, Appendices G and C.
114(j)	Pumping of water from dewatering operations into a temporary straw bale or silt fence barrier or filter bag to settle suspended silt material prior to discharge. Direct discharge of sediment laden water to state- and/or federally- regulated wetlands and to streams and stormwater systems shall be avoided;	CHPE will comply	Section 6.3.3, Appendix F, and Appendix J
114(k)	Runoff resulting from equipment or machinery washing operations shall be prevented from directly entering any State-regulated wetland or protected stream or waterbody;	CHPE will comply	Section 6.3.1, Appendix F
114(l)	Development and implementation of spill response and cleanup procedures to minimize and respond to any accidental spills of petroleum producing chemicals or hazardous liquids that occur during construction;	CHPE will comply	Appendix I

114(m)	A requirement that, during the performance of any HDD waterbody crossing, contractors monitor the use of inert biodegradable drilling solution and, in the event of a detected release of fluid, implement the procedures specified in the approved EM&CP. For any release occurring in a waterbody, the Certificate Holders shall immediately notify DPS Staff and NYSDEC of details of the release and the course of action they recommend taking;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
114(n)	Monitoring of the status of each HDD waterbody crossing while construction activities are underway until the crossing has been completed and the stream and stream banks have been restored. In the event of any potential or actual failure of the crossing, the Certificate Holders shall have adequate staff and equipment available to take necessary steps to prevent or avoid adverse environmental impacts;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
114(o)	Completion of backfilling operations and of cleanup and restoration of the stream crossing, banks, and bank approaches (at least 50 feet adjacent to each bank) within 24 hours. If needed, stream banks shall be reestablished to original grade immediately after stream bank work is completed. The banks shall then be permanently stabilized by seeding with native grasses, mulching, and, if needed, planting native shrub seedlings	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
115	The Certificate Holders shall notify DPS Staff and NYSDEC at least 5 days prior to construction involving protected stream crossings.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
116	NYSDEC field representatives will notify the DPS Staff representative and the Certificate Holders' appropriate representative and, for wetlands within the Adirondack Park, APA of any activities that violate or may violate either the terms of this Certificate or the ECL. DPS Staff, NYSDEC field representatives, and, for wetlands within the Adirondack Park, the APA will consult in assessing site conditions and determining whether a recommendation should be made to DPS Staff to exercise its	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	stop work authority or, alternatively, whether the Certificate Holders should be directed to take action to minimize further impacts to streams and regulated wetlands as appropriate.		
117	The Certificate Holders shall establish and implement a program to monitor the success of wetland and stream restoration upon completion of construction and restoration activities. The success of wetland revegetation shall be monitored and recorded annually for the first two (2) years (or as required by any applicable permit) after construction, or longer, until wetland re-vegetation is successful. Wetland re-vegetation will be considered successful when the vegetative cover is at least 80 percent of the type, density, and distribution of the vegetation in adjacent wetland areas that were not disturbed by construction. If re-vegetation is not successful at the end of two years, the Certificate Holders shall develop and implement (in consultation with a professional wetland ecologist) a plan to actively revegetate the wetland with native wetland herbaceous plant species.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
118	If DPS Staff, in consultation with NYSDEC, determines that restoration of damage to wetlands caused by use of temporary road mats has not been adequate, the Certificate Holders shall prepare a mitigation plan for impacts arising from the use of temporary road mats. Such plan shall provide for compensatory mitigation in the form of a proposed project to address the loss of wetland functions, such as vegetation plantings or a project to address invasive species in wetlands.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
R. Transmission System Reliability		CHPE Response	EM&CP Section/Appendix
119	This section of this Certificate deals with the interconnection of the Facility to the New York State Bulk Power System (NYSBPS) and with certain aspects of the operation of the Facility while interconnected with the NYSBPS. Some of these matters may also be subject to regulation by FERC under the FPA. Nothing contained in this section shall be construed as limiting or waiving Certificate Holders rights under the FPA in any way. If Certificate Holders petition a tribunal of competent jurisdiction to determine	CHPE will comply	General Requirement not applicable to Overhead Transmission Line

	whether any of the conditions and/or requirements established within this Transmission System Reliability section are regulated within the scope of FERC's exclusive jurisdiction under the FPA, Certificate Holders will provide a copy of such petition to DPS Staff within three days of filing. If determined by such tribunal to be within FERC's exclusive jurisdiction, Certificate Holders' compliance with FERC's requirements applicable to such matters (including without limitation any requirements established in any tariff or service agreement accepted for filing by FERC) shall be regarded as full and complete compliance with any such conditions and/or requirements established in this section.		and Astoria Annex EM&CP.
120	The Certificate Holders is authorized to construct and agree to design, engineer, and construct the HVDC Transmission Facility's Attachment Facilities (as defined in the Open Access Transmission Tariff (OATT) of the NYISO, as provided in the Optional Interconnection Study (OI) and System Reliability Impact Study (SRIS) approved by NYISO, NYISO's Transmission Planning and Advisory Subcommittee (TPAS), and NYISO's Operating Committee (OC), the applicable NYISO Class Year Annual Transmission Reliability Assessment Study (ATRAS), and the Facility's Interconnection Agreement with the applicable parties, which may include the NYPA, Con Edison and NYISO (the IA). The Certificate Holders shall utilize Good Utility Practice as described in CC 20, in the design, engineering, and construction of the HVDC Transmission System's Attachment Facilities.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
121	The Certificate Holders shall connect the HVDC Transmission System to the 345 kV Astoria bus owned by NYPA at 345 kV, as shown in Appendix B. Certificate Holders shall connect the Astoria-Rainey Cable to the 345 kV Astoria bus owned by the NYPA and to the 345 kV Rainey bus owned by Con Edison as shown in Appendix B.	CHPE will comply	Section 1
122	The Certificate Holders shall work with the NYPA and Con Edison, and any successor Transmission Owner(s) (TOs) (as defined in the NYISO Agreement) to ensure that the Facility has a power system relay protection and appropriate communication capabilities to ensure that operation of the electric transmission system is adequate under NPCC Bulk Power Protection Criteria, and meets the protection requirements at	CHPE will comply	No specific discussion in this Segment EM&CP.

	all times of the NERC, NPCC, NYSRC, NYISO, Con Edison, and NYPA and any successor organizations. The Certificate Holders shall ensure that their power system relay protection and communication capabilities comply with applicable NPCC criteria and shall be responsible for the costs to verify that their relay protection system is in compliance with applicable NERC, NPCC, NYISO, NYSRC, Con Edison and NYPA criteria.		
123	The following requirements apply: (a) The Certificate Holders shall be responsible for the Facility's share of the cost of System Upgrade Facilities (as that term is defined in the OATT) as determined by NYISO in accordance with its FERC approved tariffs, rules, and procedures; (b) The Certificate Holders shall be responsible for the cost of interconnection facilities as they are defined in Attachment S of the OATT, and to the extent set forth in the IA; (c) Payments from the Certificate Holders to NYPA and/or Con Edison of the amounts contemplated in this Certificate Condition shall be made in accordance with the terms of the IA; (d) The Certificate Holders shall maintain the Facility in accordance with the approved tariffs and applicable rules and protocols of NYPA, Con Edison, NYISO, NYSRC, NPCC, NERC, and NAERO, and successor organizations; (e) The Certificate Holders shall obey operational orders and dispatch instructions issued by NYISO or its agent or successor pursuant to applicable tariffs, manuals, rules, protocols, and other relevant documents applicable to the Facility. If the NYISO System Operator encounters communication difficulties, the Certificate Holders shall obey dispatch instructions issued by the Con Edison Energy Control Center, or its successor(s), pursuant to applicable tariffs, manuals, rules, protocols, and other relevant documents applicable to the Facility in order to maintain reliability of the transmission system.	CHPE will comply	No specific discussion in this Segment EM&CP.
124	The Certificate Holders shall fully comply with the applicable reliability criteria of NYPA, the Commission, Con Edison, NYISO, NPCC, NYSRC, NERC, NAERO and their successors. If the Facility fails to meet such reliability criteria at any time, the Certificate Holders shall notify NYISO immediately, in accordance with NYISO requirements, and	CHPE will comply	General requirement; No specific discussion in this Segment EM&CP.

	shall simultaneously provide the Commission, NYPA and Con Edison with a copy of the NYISO notice.		
125	The Certificate Holders shall file a copy of the following documents with the Secretary and provide any updates to the documents throughout the life of the Facility:	CHPE will comply	No specific discussion in this Segment EM&CP.
125(a)	all facilities agreements with Con Edison, NYPA, and successor Transmission Owners (as defined in the NYISO agreement);	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
125(b)	any documents submitted to the NYSRC, including but not limited to, any updates issued by the NYSRC;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
125(c)	the SRIS or any OIS or the Systems Impact Study (SIS) approved by the NYISO Operating Committee, and the Final Class Year Facilities Study. Should the Certificate Holders apply in the future to NYISO for additional Capacity Resource Interconnection Service (CRIS) rights for the Facility, they shall file with the Commission copies of all documents submitted to NYISO, provided however that in the case of documents containing confidential information of the NYISO, Certificate Holders shall not be obligated to file any materials that NYISO refuses to authorize Certificate Holders to file. Certificate Holders shall file such documents with the Commission, even if they choose not to fund construction of the System Deliverability Upgrades (as that term is defined in the OATT) required to obtain such additional CRIS rights;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
125(d)	the Relay Coordination Study (which shall be filed not later than six months prior to the projected date for circuit energization or testing and commissioning activities of	CHPE will comply	Not applicable to Overhead

	the Facility, and shall be performed in concert with Con Edison and NYPA, and the results of which shall be provided to Con Edison and NYPA);		Transmission Line and Astoria Annex EM&CP.
125(e)	a copy of the IA(s) and all updates thereto throughout the life of the Facility	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
125(f)	a copy of the facilities design studies, including all associated drawings and support documentation and a copy of the manufacturer's "terminal facilities design characteristics" of the equipment installed (including test and design data); updates thereto throughout the life of the Facility; and	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
125(g)	if any equipment or control system with different characteristics is to be installed, the Certificate Holders shall provide that information to the Commission, NYPA and Con Edison before any such change is made at least three months in advance so that it can be reviewed prior to installation (throughout the life of the Facility).	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
126	Within five business days of any failure of equipment causing a reduction of more than 10% percent in the capability of the Facility to transmit electric power, the Certificate Holders shall promptly provide to DPS Staff, NYPA, and Con Edison copies of all notices, filings, and other substantive written communications with NYISO as to such reduction, any plans for making repairs to remedy the reduction, and a proposed schedule for any such repairs. The Certificate Holders shall provide monthly reports to DPS Staff, Con Edison, and NYPA on the progress of any repairs until completed. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident, and a discussion of how future occurrences will be avoided. The Certificate Holders shall work cooperatively with	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	<p>NYPA, Con Edison, and NYISO to avoid any future occurrences. If such equipment failure is not completely repaired within nine months of its occurrence, the Certificate Holders shall provide a detailed report to the Secretary within nine months and two weeks after the equipment failure, setting forth the progress on the repairs and indicating whether the repairs will be completed within three months. If the repairs will not be completed within three months, the Certificate Holders shall explain the circumstances contributing to the delay and demonstrate why the repairs should continue to proceed.</p>		
127	<p>The Certificate Holders shall include in the Facilities Study for the HVDC Transmission System prepared by NYISO, and request that NYISO identify, the additional facilities required for the Certificate Holders to provide Black Start service, as well as the cost of those facilities. If the Certificate Holders subsequently decide to participate in the NYISO's Black Start program, they shall demonstrate annually that the Facility can be black started. The Certificate Holders shall schedule with the NYISO, Con Edison, and NYPA the black start test and demonstrate black start procedures. If the Black Start Test fails, the Certificate Holders shall produce a report describing the test, detailing the cause (including copies of diagrams, photos, details of the test, and illustrations of the fail test) and what actions or changes are being made to the black start procedures. A copy of the report shall be submitted to Con Edison, NYPA, the Commission, and the NYISO. The Certificate Holders will provide the opportunity for DPS Staff to observe the black start testing and to attend all meetings related to Black Start. The Certificate Holders shall effectuate a successful black start annually to qualify for the Black Start program.</p>	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
128	<p>The Certificate Holders shall coordinate with NYPA and Con Edison system planning and system protection engineers to evaluate the characteristics of the transmission system before purchasing any system protection and control equipment related to the electrical interconnection of the Facility to NYPA's and Con Edison's transmission facilities. This discussion is designed to ensure that the equipment purchased will be able to withstand most system abnormalities.</p>	CHPE will comply	General Requirement; No specific discussion in this Segment EM&CP.

129	The technical considerations of interconnecting the Facility to the NYPA's and Con Edison's transmission facilities shall be documented by the Certificate Holders and provided to Staff of the Bulk Power Systems Section of DPS, Con Edison, and NYPA prior to the installation of transmission equipment. Updates to the technical information shall be furnished as available throughout the life of the Facility.	CHPE will comply	General Requirement; No specific discussion in this Segment EM&CP.
130	The Certificate Holders shall work with NYPA and Con Edison engineers and safety personnel on testing and energizing equipment and develop a start-up testing protocol providing a detailed description of the steps that they will take to limit system impacts prior to and during testing of the Facility. Such protocol shall be provided to NYISO, Con Edison, and NYPA for review and comment and, following the review and comment phase, a copy of such protocol shall be provided to Staff of the Bulk Electric System Section of the DPS. The Certificate Holders shall comply with this protocol once established, unless NYISO provides written authorization to Certificate Holders to deviate from that protocol. The Certificate Holders shall make a good faith effort to notify DPS Staff of meetings related to the electrical interconnection of the Facility to NYPA's or Con Edison's transmission system, as applicable, and provide the opportunity for Staff to attend those meetings. The Certificate Holders shall provide a copy of the testing protocol to Staff of the Bulk Electric Systems Section of DPS.	CHPE will comply	General Requirement; No specific discussion in this Segment EM&CP.
131	The Certificate Holders shall make modifications to the Facility if it is found by the NYISO or the Commission to cause reliability problems to the New York State Transmission System. If the NYPA, Con Edison, or the NYISO bring concerns to the Commission, the Certificate Holders shall be obligated to respond to those concerns. The Certificate Holders shall prepare a report within 45 days of notification by DPS Staff that DPS Staff has determined that a reliability problem exists.	CHPE will comply	Section 3.3
132	No less than 60 days prior to the Facility's anticipated COD, the Certificate Holders shall file with the Secretary, Operation and Maintenance Plan(s) for the Facility's Interconnection Facilities. The plan(s) shall be updated yearly, and a copy of the	CHPE will comply	Section 3.3

	updated plan(s) shall be filed with the Secretary; the plan(s) and updates shall be provided to Con Edison and NYPA.		
133	<p>The Certificate Holders shall file with the Secretary, no less than 60 days prior to delivery of test energy from the Facility to the Astoria Annex Substation and the Rainey Substation, a report regarding the measures taken to achieve the 1,250 MW deliverability commitment established in Condition 15(a) hereof, as well as copies of all studies, drawings, and backup documentation that support all such measures. The Certificate Holders shall provide a draft of such report to Con Edison for its review and comment at least thirty days prior to the filing of such report. The measures for achieving the 1,250 MW deliverability commitment specified by the Certificate Holders in that report shall not include a Special Protection System (SPS) or other operational measures subject to individual approval by NYISO, the New York State Reliability Council or other applicable reliability authorities, unless Con Edison informs the Certificate Holders, no more than twenty five days after receiving Certificate Holders' draft report, that as a result of changed circumstances since the execution of the Stipulation in Commission Case 10-T-0139 on June 26, 2012, it disputes Certificate Holders' conclusion that they can achieve 1,550 MW of energy deliverability out of the Astoria Annex Substation and into Con Edison's transmission system. In the event that Con Edison takes the position that Certificate Holders cannot meet the 1,550 MW energy deliverability commitment using such facilities, nothing in this Certificate shall limit Certificate Holders' right to propose to meet this deliverability commitment by using an SPS, other operational measures or any other measures, or the right of any party, including Con Edison, to object to the use of such measures. In such circumstances, the Certificate Holders shall include with their report all documentation for the design of any such SPS, other operational measures or other measures, with a complete description of all components and logic diagrams. Prior to delivery of test energy to the Astoria Annex Substation, the Certificate Holders shall provide documentation to DPS Staff that any such measures to be used by the Facility have received all required approvals from all applicable authorities, including without limitation NYISO and NPCC.</p>	CHPE will comply	General Requirement; No specific discussion in this Segment EM&CP.

134	In the event the HVDC Transmission System trips offline (other than as a result of any Operational Measures), the Certificate Holders shall notify DPS Staff, within 1 hour of the incident. Following the incident, the Certificate Holders shall notify DPS Staff, NYPA, and Con Edison of the cause of the trip, and what actions, if any, the Certificate Holders are taking to rectify the cause. The Certificate Holders shall call and report to the Staff of the Bulk Electric Systems Section of the DPS within 6 hours of any transmission related incident that affects the operation of the Facility. The Certificate Holders shall submit a report on any such incident within seven days to the Bulk Electric System Staff, Con Edison, and NYPA. The report shall contain, when available, copies of applicable drawings, descriptions of the equipment involved, a description of the incident and a discussion of how future occurrences will be prevented. The Certificate Holders shall work cooperatively with Con Edison, NYPA, NYISO, NPCC, NYSRC, NERC, and DPS Staff to prevent any future occurrences.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
135	If there is a failure of one of the Facility's cables, the Certificate Holders shall report, within one day of determining the location of the fault, to Bulk Electric System Section of DPS Staff, Con Edison, and NYPA as well as the likely location of and schedule for repairs. Any changes in the schedule shall be reported to DPS Staff, Con Edison, and NYPA.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
136	The Certificate Holders shall provide the Bulk Electric System Section of DPS with a copy of their emergency procedures and contacts, and an updated copy shall be provided with documentation of any modifications	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
137	The Certificate Holders shall report any theft of materials related to the Facility with a value in excess of \$10,000 to the DPS Representative within one business day of the time when the theft comes to the attention of the Certificate Holders. The Certificate Holders shall provide the DPS Representative with a list of the stolen items to the extent known and a copy of any police report.	CHPE will comply	Section 3.3

S. Mapping, Land Acquisition, and As-built Drawings for the Facility		CHPE Response	EM&CP Section/Appendix
138	Each Segment EM&CP shall include a detailed map or maps showing (a) the boundaries of the Construction Zone associated with the work to be performed in connection with such Segment, including access routes, laydown and storage areas, sampling locations, and other relevant places, and (b) the anticipated ultimate location and the anticipated boundary of the Facility ROW and, (c) in the case of overland ROW, areas associated therewith, as follows: (i) areas within which periodic vegetative management may be necessary in order to prevent significant intrusion of tree roots into the Facility ROW, (ii) areas within which future ground alteration, structural construction, or other permanent installations by others generally should be precluded in order to protect the Facility and ensure appropriate access thereto for the purposes of repair and maintenance, and, (iii) areas offering (a) continuous longitudinal access along and (b) intermittent linking access from public roads and highways or established railroad access routes to the Facility ROW.	CHPE will comply	Appendix C
139	Following final completion of construction of a particular Segment, the Certificate Holders shall prepare and provide to the DPS the as-built design drawings, which shall include a detailed map or maps showing: (a) the boundary of the permanent Facility ROW and areas that will be subject to periodic vegetation management (Final Layout Area), (b) the location of the Facility as installed (As-built Design Drawings). All As-built Design Drawings provided to DPS pursuant to this condition shall include shapefile information compatible with ArcView® GIS Software, and (c) With respect to As-built Design Drawings that relate to installation of the Project on lands owned or controlled by the Canadian Pacific Railway, such As-built Design Drawings shall be provided to DPS staff within 90 days of the completion of construction and shall conform with Section 5.5.5 of the American Railway Engineering and Maintenance-of-Way Association (AREMA) Manual for Railway Engineering, taking into account the fact that such standard is specifically addressed to fiber optic infrastructure. With respect to As-built Design Drawings that relate to installation of the HVDC Transmission System on lands owned or controlled by the CSX Transportation, such	CHPE will comply	See Table 3-2.

	As-built Design Drawings shall be provided to DPS staff within 90 days of the completion of construction and shall conform to an appropriate standard that is substantially equivalent in terms of detail to the AREMA standard referenced, and (d) With respect to As-built Design Drawings that relate to submerged portions of the HVDC Transmission System, such As-built Design Drawings shall indicate areas in which the cables are laid in deep waters without cover and areas in which the cables are laid on the bottom but covered, in which case(s) the type of cover (i.e., natural bed material, rip-rap or concrete mattress cover) shall also be described.		
140	Except as may be detailed, justified, and approved by the Department of Public Service pursuant to the EM&CP process, each edge of the permanent overland Facility ROW shall be no closer than (a) when located entirely within lands owned or controlled by a railroad company or a public highway, 6 feet to the outer surface of the nearest installed cable and (b), in all other areas, 8 feet to the outer surface of the nearest installed cable. [as amended in Amendment 1 (March 20, 2020)].	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
141	The Certificate Holders shall acquire control of all lands within the overland Final Layout Area by fee, easement, or other appropriate interest and shall perfect, in accordance with New York State law relating to the official recordation of instruments related to land and other possessory interests, their rights to use and occupy such lands for the life of the Facility, as appropriate.	CHPE will comply	See Section 4.2.
142	For each Segment EM&CP that involves municipal lands with respect to which the Certificate Holders cannot acquire control by fee or easement, the Certificate Holders shall provide to the Commission an instrument or instruments confirming that the affected municipality has consented to the use of such lands and shall in any and all events comply with PSL § 68 with respect to exercise of rights conferred pursuant to such consents.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
143	For all rights concerning property comprising the Facility ROW, the Construction Zone, off-rights-of-way access, storage or staging areas, or the like, to be acquired, the Certificate Holders shall cause an examination of title (title search) to be conducted in	CHPE will comply	Section 3.3, 4.7

	the same manner as would be conducted by a reputable title insurance company to identify all of-record owners, mortgagees, lien holders, lease holders, or others with an interest in such property rights to be acquired. The Certificate Holders shall serve written notice(s) of the EM&CP filing on each such person identified, and on any person owning the land underlying an affected easement or leasehold interest of record. Such notice would include, at a minimum, the procedures and deadlines for submitting comments.		
144	The Certificate Holders shall not commence any proceedings under the New York State Eminent Domain Procedure Law (EDPL) to acquire any part of the Facility ROW areas temporarily needed areas within the Construction Zone, or off-ROW access until the Commission has approved the relevant Segment EM&CP. To calculate the three-year period for acquisition of property pursuant to the EDPL, the date of Commission approval of a Segment EM&CP covering the affected parcel shall be regarded as the date on which this Article VII proceeding was completed. The Certificate Holders retains all rights afforded them by the New York Transportation Corporations Law and the EDPL.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
T. Environmental Management and Construction Plan		CHPE Response	EM&CP Section/Appendix
145	Except where the provisions of this Certificate require otherwise, the environmental protection measures contained in the Joint Proposal and the Certificate Holders' Article VII Application, the WQC, the approved EM&CP Guidelines, and the approved BMPs shall be incorporated into the proposed EM&CP and applied during construction, operation, and maintenance of the Facility. Applicable Conditions of this Certificate, approved EM&CP, and orders approving the EM&CP and any Segment EM&CP shall be included in any design, construction, ownership, or maintenance contracts associated with the Facility.	CHPE will comply	Section 1.1
146	The Certificate Holders shall provide, as a part of the proposed EM&CP, a final design plan that conforms with the design of the Facility set forth in this Certificate, applicable	CHPE will comply	Appendix C

	federal, state, and local requirements (including, but not limited to, applicable regulations administered by or in connection with the OSHA, NYSDEC, OPRHP, Ag & Mkts, the APA, the Commission, NYSDOT, the Bureau of Alcohol, Tobacco and Firearms, the New York State Department of Labor, and hazardous materials, chemical and waste-storage use and handling regulations).		
147	The proposed EM&CP shall identify details of nearby electric, gas, telecommunication, water, wastewater, steam, sewer, and related facilities (whether underground, aboveground or underwater) and Measures to protect the integrity, operation, and maintenance of those facilities shall be presented in the EM&CP for each Segment, which shall explain the safety procedures that will be implemented during construction of the Facility	CHPE will comply	Section 13 and Appendices C and R.
148	With respect to each Segment EM&CP filed with the Commission and prior to the filing of the same, the Certificate Holders shall: (a) conduct a pre-installation survey that will document the location and condition of CI within the Construction Zone that is the subject of the Segment EM&CP and identify the parties owning and operating such CI and the agencies exercising regulatory jurisdiction over the same; (b) include the results of such survey as a part of such filing; (c) provide a detailed plan setting forth the measures that will be taken by the Certificate Holders to avoid damage to CI documented in connection with the filing and explaining how any reasonably foreseeable contingency will be met.	CHPE will comply	See Section 13.
149	The Certificate Holders shall identify black cherry trees located in the Construction Zone near active livestock use areas during the development of each proposed Segment EM&CP. During the clearing phase, such vegetation shall be disposed of in a manner that prevents access by livestock.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
150	In preparing the proposed EM&CP, the Certificate Holders shall consult with the NYSDOH to identify all PWS systems within one mile of the HVDC Transmission System facilities. The Certificate Holders shall consult with the operators or other	CHPE will comply	Not applicable to Overhead Transmission Line

	<p>representatives of each system to obtain information on the location of intake structures, plant operations, raw water quality parameters of concern including turbidity, and appropriate notification procedures. The results of that consultation shall be reported in the proposed EM&CP. The Certificate Holders shall include in their proposed EM&CP justification for any cable installation proposed to occur within 500 feet of a PWS intake and a description of alternative cable installation methods or modified methods (i.e., reduced speed and pressure) of trenching for cable installation in such areas as determined necessary based on information obtained from the PWS.</p>		and Astoria Annex EM&CP.
151	<p>The Certificate Holders shall file copies of the proposed EM&CP as directed by the Secretary, and serve five hard copies and two copies on CD-ROMS on DPS Staff, two copies on the Staff of the NYSDEC in the Central Office in Albany, one copy on each Regional Office of NYSDEC where the Facility is located, one copy on the Commissioner of OPRHP, one copy on staff of the Palisades Interstate Park Commission (if the Segment EM&CP relates to construction that may take place in Rockland County), one copy on the Staff of NYSDAM, one copy on NYSDOT in the Central Office in Albany and one copy on each municipality and Regional Office of NYSDOT where the relevant portion of the Facility is located (if requested by such municipality or NYSDOT), one copy on NYSDOS, one copy on any other New York State agency (and its relevant regional offices) that requests the document, and one copy on active parties on the service list who request the document (in the case of a municipality, such service shall be directed to the Chief Executive Officer thereof). Service upon state agencies shall be in the same manner and at the same time as filing with the Secretary. The Certificate Holders also shall place electronic or hard copies for inspection by the public on an internet website and in at least one public library or other convenient location in each municipality in which the construction authorized in that portion of the EM&CP will take place. Contemporaneously with the filing and service of the proposed EM&CP, the Certificate Holders shall provide notice, in the manner specified below, that the proposed EM&CP has been filed.</p>	CHPE will comply	See cover materials, affidavits of service, and Appendix B.

152	The Certificate Holders shall serve written notice(s) of the filing of the proposed EM&CP or Segment EM&CP on all parties to this proceeding, as well as the relevant railroads and CI owners whose facilities, properties, and/or structures within the geographic scope of that portion of the EM&CP that may be impacted, including but not limited to tracks and devices, and shall attach a copy of the notice so served to each copy of the proposed EM&CP or Segment EM&CP. Further, the Certificate Holders shall publish the notice(s) in a newspaper or newspapers of general circulation in the vicinity of the Segment(s) to which the EM&CP relates.	CHPE will comply	Section 3.3 and Appendix B.
153	The Certificate Holders shall provide notice that the EM&CP is available for review to the chief executive officer of each affected municipality and to residents, businesses, and building, structure, and facility owners and, to the extent known, operators of the same when such land uses are located within 100 feet of the HDD staging areas, off-ROW construction access roads, and the overland components of the Facility. The notice shall include, in plain language: (i) details about the planned work locations; (ii) hours and duration of activities; (iii) provisions for protection of properties, if applicable; (iv) provisions for maintenance and protection of pedestrian and vehicle access to buildings and properties; (v) identification of locations where additional information and copies of the EM&CP are available; (vi) contact information for Certificate Holders personnel, including a toll-free number; and (vii) instructions on how comments regarding construction plans and mitigation measures may be filed with the Secretary, indicating appropriate deadlines for commenting and contact information. The Certificate Holders shall also provide a hard copy synopsis of any approved Segment EM&CP for residents owning property located within 100 feet of the Construction Zone as delineated therein. Such synopsis shall include a hard copy page(s) from the approved Segment EM&CP that may have relevance to the resident's property. Proof of notice to residents, businesses, and building and structure owners shall be provided to the Secretary.	CHPE will comply	Section 3.3 and Appendix B.
154(a)	The Certificate Holders shall provide notice to residents, businesses, and building, structure, and facility (including underground, aboveground and underwater facilities) owners and operators within 100 feet of any HDD staging area or trenching activity	CHPE will comply	Not applicable to Overhead Transmission Line

	with an offer to inspect foundations before, during, and after construction. The notice provided shall include the following provisions: (i) an offer to inspect building, facility, and structure foundations before, during, and after construction; (ii) an explanation of the benefits of such inspections and what documentation will be provided to building or facility or structure owners and operators; and (iii) proof of notice to residents, businesses, and building, facility, and structure owners and operators shall be provided to the Secretary. Proof of notice shall accompany filing of the proposed EM&CP.		and Astoria Annex EM&CP, as no trenching or HDD is proposed in this Segment and.
154(b)	Inspections of building foundations conducted for residents, businesses, and building, facility, or structure owners or operators, or for which Certificate Holders reimburses such costs expended by any such individuals for this purpose, shall (i) provide each building, facility, or structure owner or, to the extent known, operator with documented conditions at each significant stage of construction; (ii) include photographs of any existing and post-construction damage and document measurements of foundation crack lengths during each inspection phase; (iii) provide each building, facility, and structure owner/operator a report detailing foundation condition findings; and (iv) provide a copy of each prepared report to DPS Staff within 30 days of completion.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP, as no such facilities fall within the identified distances and/or no such activities are proposed in the EM&CP.
154(c)	HDD site preparation or trench excavation work shall not commence until all building, facility, and structure owners and operators provided with notice under sub-part (b) above have accepted or declined inspection offers, or a response has not been received within two weeks from service.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
155(a)	The written notice(s) and the newspaper notice(s) of filing the proposed EM&CP or Segment EM&CP shall contain, at a minimum, the following: (1) a statement that the proposed EM&CP has been filed; (2) a general description of the Facility and the proposed EM&CP; (3) with respect to the written notice(s) for identified persons with a record interest in property to be acquired or significantly disturbed by construction, a specific description of the ROW of the Facility, as applicable, temporarily needed	CHPE will comply	Section 3.3 and Appendix B.

	areas within the Construction Zone, or off ROW access to be acquired; (4) a listing of the locations where the proposed EM&CP is available for public inspection; (5) a statement that any person desiring additional information about a specific geographical location or specific subject may request it from the Certificate Holders; (6) the name, address, and telephone numbers of an appropriate Certificate Holders representative; (7) the address of the Secretary; and (8) a statement that any person may be heard by the Commission on any matter or objection regarding the proposed EM&CP by filing written comments with the Secretary and the Certificate Holders within 30 days of the date the proposed EM&CP was filed with the Commission (or within 30 days of the date of the newspaper notice, whichever is later).		
155(b)	A certificate of service indicating upon whom all EM&CP notices and documents were served and a copy of the written notice shall be filed with the Secretary at the time the proposed EM&CP is filed, and shall be a condition precedent to approval of the EM&CP.	CHPE will comply	Section 3.3 See cover materials, affidavits of service.
156(a)	For the overland portions of the Facility, construction outside the Allowed Deviation Zone, to the minimum extent necessary, as detailed and justified in an EM&CP submittal, shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a specific provision of this Certificate would be created.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
156(b)(1)	For the HVDC Transmission System installed in Lake Champlain and the Hudson River, the Allowed Deviation Zone shall be anywhere within those bodies of water where the water depth exceeds 20 feet at mean low water, and where installed in the Harlem and East Rivers the Allowed Deviation Zone for the HVDC Transmission System shall be anywhere where the water depth exceeds 10 feet at mean low water, provided however that: (1) Where the HVDC Transmission System Centerline enters any of the Exclusion Zones identified on the maps contained in Appendix B to the Joint Proposal, the Allowed Deviation Zone shall be limited to 150 feet on either side of the Facility Centerline. The	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	<p>Certificate Holders' rights to enter into such Exclusion Zones are as follows: Prior to installation in these areas, the Certificate Holders shall provide in the EM&CP an analysis as to whether there are any reasonable and feasible underwater alternatives outside of the Exclusion Zones that would allow for burial at the target depth of 6 feet. No deviation in the Centerline may cause the HVDC Transmission System to enter into any of the Exclusion Zones identified in that Appendix B without (a) the Certificate Holders providing in the EM&CP an analysis that there are no other reasonable and feasible alternatives that would allow for achieving the target burial depth of 6 feet and (b) the written consent of NYSDEC. In the event the Certificate Holders is unable to agree on a change to the Centerline governed by this subpart, the Certificate Holders shall be free to file an application for an amendment to this Certificate setting out their proposed new Centerline and the environmental and engineering considerations underlying that proposal;</p>		
156(b) (2,3,&4)	<p>(2) No deviation of over 150 feet in the Centerline may cause the HVDC Transmission System to come within 160 feet of any instance of "Lake Champlain Maritime Museum ("LCMM")/CHPE Marine Route Survey Cultural Resources" identified in Appendix B to the Joint Proposal without (a) the Certificate Holders providing in the EM&CP an analysis that there are no other reasonable and feasible alternatives; and (b) the written consent of the New York State Historic Preservation Office (NYSHPO). In the event that the Certificate Holders and NYSHPO are unable to agree on a change to the Centerline governed by this subpart, the Certificate Holders shall be free to file an application for an amendment to this Certificate setting out their proposed new Centerline and the environmental and engineering considerations underlying that proposal; and (3) No deviation of more than 150 feet in the Centerline may cause the Facility to be located or re-located within any Significant Coastal Fish & Wildlife Habitat identified in the NYS Coastal Management Program without: a. the Certificate Holders providing in the EM&CP an analysis that there are no other reasonable and feasible alternatives that would allow for achieving the target depth of cover of 6 feet; b. the written consent of NYSDEC. In the event that the Certificate Holders and NYSDEC are unable to agree to a change in the Centerline governed by this subpart, the Certificate Holders shall be free to file an application for an amendment to this</p>	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	Certificate setting out their proposed new Centerline and the environmental and engineering considerations underlying that proposal; c. a written statement from NYSDOS stating that the deviation would not result in coastal effects that differ significantly from the coastal effects reviewed by NYSDOS in Certificate Holders' original federal Coastal Consistency Certification. In the event that NYSDOS determines that such deviation would result in coastal effects that differ significantly from those reviewed in the Coastal Consistency Certification, the Certificate Holders shall seek a written concurrence from NYSDOS for any such project changes that would require an amendment to the Certificate Holders' Coastal Consistency Certification. Nothing in this Certificate shall be construed to limit or expand any rights Certificate Holders may have to seek administrative or judicial review of any action or inaction by NYSDOS relating to any such deviation; and (4) No significant increase in adverse effects to CI or other infrastructure results from proposed facility re-location.		
157	All deviations from the design depth, height, and location of facilities or structures shall be presented in the proposed EM&CP for approval. An explanation for the proposed deviations shall be provided, with supporting documentation. Deviations shall be allowed for appropriate environmental or engineering reasons without modification to this Certificate, except where a conflict with a specific provision of this Certificate would be created. If a deviation is proposed after approval of the EM&CP, the procedures contained in CC 158 of this Certificate shall apply.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
158	The EM&CP approved by the Commission may incorporate modifications from the EM&CP proposed by the Certificate Holders. No change to the approved EM&CP may thereafter be made except in accordance with the following procedures:	CHPE will comply	Section 3.2.6 and Appendix E.
158(a)	For a proposed change that: (i) would involve a site listed or eligible for listing on the New York State or National Register of Historic Places, the Certificate Holders shall give at least two weeks prior notice to the Field Service Bureau of OPRHP; (ii) would involve any state-regulated wetland or protected stream or water body, the Certificate Holders shall give at least two weeks prior notice to NYSDEC, and, if within the Adirondack Park, to APA; (iii) would affect the occupied habitat of a TE species, the	CHPE will comply	Section 3.2.6

	<p>Certificate Holders shall give at least two weeks prior notice to NYSDEC and to the USFWS or NMFS (where applicable) prior to providing notice to DPS staff of the proposed change; (iv) would affect the individual or habitat supporting RTE plants, the Certificate Holders shall give at least two weeks prior notice to NYSDEC and DPS; (v) would involve agricultural land, the Certificate Holders shall give at least two weeks prior notice to NYSDAM; (vi) would involve the herbicides planned for use (including mixed proportions, additives or method of application), the Certificate Holders shall give at least 30 days prior notice to NYSDEC; (vii) would affect land or water owned or controlled by CNY, the Certificate Holders shall give at least two weeks prior notice to CNY.</p>		
158(b)	<p>The Certificate Holders shall report any proposed changes to the EM&CP to DPS Staff. DPS Staff will refer to the Commission for approval any proposed changes that cause a substantial increase in environmental impact, after consultation with NYSDEC, any proposed changes that relate to contested issues decided during the proceeding, and any proposed changes affecting State highways (but need not do so if the report indicates NYSDOT's agreement to such proposed changes). DPS Staff is authorized to approve all other proposed changes, in accordance with the procedure outlined herein, and will submit reports of such changes to the Secretary or the Secretary's designee, which reports will be posted on the Commission's website under this case number.</p>	CHPE will comply	Section 3.2.6
158(c)	<p>Upon being advised that DPS Staff will refer a proposed change to the Commission, the Certificate Holders shall notify all active parties that have requested to be so notified, as well as property owners or lessees whose property is affected by the proposed change. The notice shall: (i) describe the original conditions and the requested change; (ii) provide documents supporting the request; and (iii) state that persons may comment by writing to the Commission within 21 days of the notification date.</p>	CHPE will comply	Section 3.2.6

158(d)	The Certificate Holders shall not execute any proposed change until they receive written approval from the Commission (if Commission approval is required pursuant to subparagraph (a) of this paragraph) or oral or written approval from DPS Staff (in the case of a change that Staff has authority to approve) except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in the EM&CP. When the Certificate Holders has obtained oral approval from DPS Staff for a change, DPS Staff will confirm such approval in writing within 10 business days.	CHPE will comply	Section 3.2.6
159	The EM&CP and, as and when appropriate, a Segment EM&CP and any proposal to modify the EM&CP or a Segment EM&CP shall address, but not be limited to, the following information:	CHPE will comply	All sections and appendices of the EM&CP.
159(a)	details of work site dimensions; construction ROW and off-ROW access needs and locations; locations and descriptions of work scheduled or planned by others in the vicinity of the construction identified after consulting relevant federal, state, and city agencies; and measures to protect adjacent facilities, structures and vegetation;	CHPE will comply	Section 12, 13, Appendix C.
159(b)	documentation of methods to meet the requirements of this Certificate and incorporation of appropriate engineering standards, regarding existing road, bridge, and culvert conditions;	CHPE will comply	Section 12, Section 13, Appendices C and R.
159(c)	location of the utility, water, steam, sewer, and wastewater crossings and other nearby utility facilities, including CI facilities, and methods for protecting the cable and other facilities, including CI facilities, at those crossings and nearby locations; the plan shall include detailed construction techniques, methods, and equipment descriptions for the protection of existing utilities including, but not limited to, how damage to existing utilities will be avoided and how any contingency will be met in case damage does occur, and for coordination with utilities and public service providers;	CHPE will comply	Section 12, 13, and Appendices C and R.
159(d)	detailed construction schedule and coordination plans, including those in connection with other utility owners and operators with respect to any work on the Facility for	CHPE will comply	Not applicable to Overhead

	which coordination is required by this Certificate or other related agreement(s), including construction calendar;		Transmission Line and Astoria Annex EM&CP.
159(e)	each construction activity as discussed in CC 58;	CHPE will comply	Section 3.2
159(f)	a comprehensive plan to identify encroachments within the Construction Zone as discussed in CC 60;	CHPE will comply	Section 4.7
159(g)	an HDD work packet providing planning, installation controls, and site measures that will be taken in accordance with good engineering practices; including relevant information and deliverables described in Section 8.1 of the BMPs;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(h)	jet plow and shear plow techniques and adjustments, including details related to crossing existing underwater facilities and infrastructure;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(i)	a work plan for dredging activities including specific practices to be used during dredging, dredged materials management plans, and proof of the ability to provide proper disposal;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(j)	drawings and specifications of any closed environmental bucket or other dredging equipment, including specifications demonstrating that appropriate design considerations are incorporated in equipment selected for deployment;	CHPE will comply	Not applicable to Overhead Transmission Line

			and Astoria Annex EM&CP.
159(k)	a pre-installation and post-energizing sediment sampling and monitoring plan, which plan will be subject to review and comment by NYSDEC and NYSDOS and will adhere to the following specifications: the plan will correspond to Attachment 2 of this Certificate, Benthic and Sediment Monitoring Scope of Study. The plan submitted to DPS Staff for approval shall include the results of the consultation with NYSDEC and NYSDOS;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(l)	details of cable pulling and splicing plans that include locations of any spare conduits that will be installed;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(m)	Night-time construction provisions, including lighting and noise control, and mitigation measures, including conditions when night-time construction will be undertaken;	CHPE will comply	Section 10
159(n)	public road traffic control and public safety and the MPT plans as discussed in Condition 39;	CHPE will comply	Appendix C (to the extent applicable within a controlled-access, utility-owned energy complex.
159(o)	details regarding street work, including provisions for minimizing the duration and extent of open excavation, traffic disruptions, and work within and adjoining public streets and public street ROW;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP, which

			does not involve public streets or ROWs.
159(p)	public safety control provisions including practices for work near residential and publicly accessible sites; fencing around open work areas, and provisions for through traffic, and alternative access;	CHPE will comply	Appendix C
159(q)	designated parking areas and equipment storage and staging locations;	CHPE will comply	Section 4.10, 5.4 and 5.5, Appendix C.
159(r)	details for drainage line repair procedure and drawings in the event of a crushed or severed drain lines;	CHPE will comply	Appendix C; Section 14.5.2.
159(s)	provision for submission of a certification by a professional engineer licensed by the State of New York stating that, if constructed in accordance with the final design plans, the Facility shall, to the extent applicable, comply with the interim electrostatic field standard established by the Commission in Opinion No. 78-13 (issued on June 19, 1978 in Cases 26529 and 26559) and the limit for magnetic fields set in the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued on September 11, 1990, in Cases 26529 and 26559) or with any standard test that has superseded these standards at the time of consideration by the Commission of the EM&CP or a particular Segment EM&CP;	CHPE has complied. See DMM Item 819.	No further discussion needed.
159(t)	a work plan for reducing magnetic fields, which will include documentation of the calculation of anticipated average magnetic field levels, overland and underwater with the Facility in operation;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

159(u)	impact avoidance and/or minimization measures for regulated wetlands, streams, and other environmental resources including any maps and plan drawings of streams, regulated wetlands, and sensitive habitat crossing locations, site-specific stream-crossing techniques for the construction of the Facility and for the construction of any access roads to be used for such construction, and selective vegetation-clearing techniques in areas near streams or regulated wetlands;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(v)	measures consistent with this Certificate, the Joint Proposal, the BMPs, and the EM&CP Guidelines to avoid and/or minimize impacts to TE species and RTE plants and their occupied habitat;	CHPE will comply	Section 9.3
159(w)	work plan for measures to be taken for protection of vegetation and visual resources of the Lakes to Locks Passage Scenic Byway (State Highway 22);	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(x)	a notice of intent to exercise authority under the SPDES General Permit for construction activities;	CHPE will comply	Appendix F
159(y)	details of erosion control plans, including grading and filling at the overland Construction Zone, Annex Station, and substation, so as to provide for the control of discharges incidental to the construction of the Facility, including to stormwater, groundwater, and surface waters, and meet applicable water quality standards;	CHPE will comply	Appendix C and F.
159(z)	methods to avoid the effects of sediment on nearby facilities and infrastructure, including avoidance techniques with respect to the clogging of outfalls and diffusers;	CHPE will comply	Appendix G and C.
159(aa)	spoil control plans for excavations, including for any materials proposed for use as backfill in the underwater or overland route, identification of its source and the evaluation of its suitability;	CHPE will comply	Appendix C

159(bb)	a blasting plan that includes the information described in the BMPs;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(cc)	work plan for storage of all petroleum products and hazardous chemicals which may be used during, or in connection with, the construction, operation, or maintenance of the Facility, fuel and fluids spill prevention and control plans;	CHPE will comply	Section 5.6 and Appendix I SPCC.
159(dd)	work plans for responding to and remediating the effects of any spill of petroleum products or hazardous substances that occurs during construction of the Facility on land or in the water in accordance with applicable federal and state laws, regulations, and guidance, which shall include proposed methods of handling spills of petroleum products and any chemicals that may be stored or utilized during the construction, operation, or maintenance of the Facility;	CHPE will comply	Section 5.6 and Appendix I SPCC.
159(ee)	plans for pre- and post-installation bathymetry, sediment, benthic invertebrate, fish, temperature, and magnetic field surveys as described in Condition 163, and mitigation;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(ff)	a plan for suspended sediment and water quality monitoring consistent with Attachment 1 of this Certificate, Suspended Sediment and Water Quality Plan Scope of Study, for jet and shear plow activities, as well as removal of large debris with an area greater than 900 square feet or longer than 30 feet in any direction;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(gg)	invasive species control measures during construction;	CHPE will comply	Section 9.4 and Appendix K.

159(hh)	appropriate measures as proposed in Karner blue butterfly (<i>Lycaeides melissa samuelis</i>) Impact Avoidance and Minimization Report attached to the Joint Proposal as Exhibit 109;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(ii)	United States Coast Guard Notice(s) to Mariners during the occupation of any surface waters of the State of New York which may present a hazard or obstacle to safe navigation;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(jj)	other mitigation measures as appropriate to demonstrate compliance with other permits and approvals;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(kk)	plans and specifications for site and pavement restoration, including pre-existing drainage systems;	CHPE will comply	Section 14.2 and Appendix C.
159(ll)	noise mitigation plan for noise sensitive sites showing the locations of residential areas and other noise-sensitive areas along the proposed ROW of the Facility and the specific procedures to be followed to minimize noise impacts related to ROW clearing, facility construction, and operation for the Facility;	CHPE will comply	Section 10.1 and Appendix C.
159(mm)	mitigation measures that will be employed should significant concentrations of waterfowl be encountered during fall migration when construction is proposed near the following SCFWH: Germantown-Clermont Flats, The Flats, Roundout Creek, Esopus Meadows, Vanderburgh Cove and Shallows, Constitution March, and Iona Island Marsh;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

159(nn)	plans for use of roadways for the delivery of oversized loads in the event that transportation of oversized loads by road is required. The Certificate Holders shall obtain any necessary governmental permits associated with transport of such oversized loads and provide copies of such permits to the Secretary;	CHPE will comply	Appendix C addresses the Plans. Any applicable permits will be submitted as issued.
159(oo)	a plan for responding to and remediating the effects of any spill of petroleum or any hazardous substances that occurs during the construction of the Facility, in accordance with applicable state and federal law and regulations. Such plan shall be developed in accordance with such applicable laws and regulations and relevant official guidance and shall include proposed methods of handling spills of petroleum products and any hazardous substances which may be stored or utilized during construction, operation, or maintenance of the Facility;	CHPE will comply	Appendix K
159(pp)	For excavations in proximity to buildings, walls, or other structures: (i) a description of the support system method for each such location where support is determined to be necessary; (ii) the rationale for each such location where it is determined that support systems are unnecessary; and (iii) support system designs for each location where it is determined that support is necessary; designs shall demonstrate approval by a registered professional engineer licensed in New York State.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
159(qq)	For excavations that will be below the level of the base or footing of any foundation or retaining wall: (i) a list of all locations where excavation below the base or footing of any structure is considered necessary; (ii) a description of the support system method for each such location where support is determined to be necessary; (iii) the rationale for each such location where it is determined that support systems are unnecessary per OSHA Requirements 1926.651(i)(2)(ii), 1926.651(i)(2)(iii), and 1926.651(i)(2)(iv); and (iv) support system designs for each location where it is determined that support is necessary; designs shall demonstrate approval by a registered professional engineer licensed in New York State.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

160	<p>The Certificate Holders shall also include in the proposed EM&CP a compliance assurance plan that includes but is not limited to: (a) The name(s) of the inspector(s) selected under Condition 53 and a statement of qualifications for each inspector demonstrating sufficient knowledge and experience in environmental and construction matters to complete the inspections and audits; (b) Provision for deployment of more than one of a particular type of inspector (or types of inspectors, when appropriate) in the event that two or more major construction operations are undertaken simultaneously in areas separated by ordinary highway driving of more than 3 hours, such that at least one inspector of a particular type shall be assigned to each such separated construction area; (c) A proposed checklist of matters to inspect for compliance, including the specific items or locations to be inspected, the inspection to be employed such as visual, auditory, testing by instrument, and acceptability criteria to be applied by the inspector(s); (d) A procedure setting forth how the Certificate Holders shall respond to and correct problems found by the inspector(s); (e) A procedure setting forth how the Certificate Holders shall respond to and correct problems identified by any utility owners or operators whose property has been damaged in any material way as a result of the construction, operation, or maintenance of the Facility; (f) A schedule for monthly environmental audits during construction and submission of audit checklists, together with a written explanation of problem(s), signed by the independent inspectors and an authorized representative of the Certificate Holders, to DPS Staff and NYSDEC; and (g) A schedule for submission of annual environmental audits during the first two years of operation of the Facility to DPS Staff, NYSDEC, and specified state and municipal agencies.</p>	CHPE will comply	Appendix G
161	<p>The Certificate Holders shall also include in the EM&CP: (a) An immediate post-installation inspection plan that shall include at a minimum: (i) the method for determining the actual cable location and actual burial depth of the cable upon completion of installation; (ii) standards to be used to determine what remedial actions are warranted consistent with Good Utility Practices (e.g., additional burial and/or protection efforts) in all locations where the cable burial depth is less than the applicable target burial depth; (iii) standards to be used to determine if any damage has been or will be caused to any pre-existing facility and/or infrastructure as a result</p>	CHPE will comply	Burial depth provisions in (a) not applicable to Overhead Transmission Line and Astoria Annex EM&CP.; section (b)

	of cable installation, operation, or maintenance, and remedial measures therefore; and (iv) the method and timing for undertaking such efforts; and (b) A maintenance and emergency action plan that shall include, at a minimum, (i) a schedule for periodic verifications, not to exceed three years for overland locations and five years for underwater locations, of the depth of burial of the cable and the standard to be used to determine, based upon inspection results, whether, and if so, what relocation, reburial, and/or added protection measures for the cable or pre-existing facilities or infrastructure are required; (ii) ROW vegetation maintenance plan; (iii) provisions for stabilizing erosion and resolving drainage problems; and (iv) control of access to the ROW and facility components.		is addressed in Section 3.3.
162	In order to protect CI described in CC 27, the Certificate Holders shall include in the EM&CP:	CHPE will comply	Section 13, Appendix M
162(a)	an interference study, conforming to industry standards and performed by an individual or individuals with suitable qualifications to conduct such study, with respect to each location at which the Facility crosses CI or comes into such proximity to CI that an interference study is warranted by Good Utility Practices, and specifying any proposed mitigation measures;	CHPE will comply	Section 13.1
162(b)	a study to determine whether the Facility may have corrosive effects on any CI, conforming to industry standards and performed by individual(s) with suitable qualifications to conduct such study, and specifying any proposed mitigation measures;	CHPE will comply	Section 13, Appendix M
162(c)	detailed cable ampacity and thermal calculations and documentation demonstrating that CI will not be adversely affected by the construction, operation, or maintenance of the Facility; such documentation shall include study results, calculations, and underlying assumptions used in the analysis and also to include, but not be limited to, cable specification, installation cross sections, thermal resistivity (tested or assumed) and, in the case of alternating current (AC) lines only, magnetic field studies;	CHPE will comply	Section 13, Appendix M

162(d)	detailed calculations and documentation demonstrating that CI will not be adversely affected by the weight and installation methodology of the Facility's cables; such calculations and documentation shall respond to and address study results and shall set forth the underlying assumptions used in the analysis and shall also include, but not be limited to, cable specification, installation cross sections, geotechnical data (tested or assumed), and proposed mechanical protection;	CHPE will comply	Section 13.1
162(e)	in the event that a Segment EM&CP proposes that the HVDC Transmission System is to cross CI located on or below the beds of the Hudson, Harlem, or East Rivers or Lake Champlain (Submerged CI), any such Segment EM&CP shall include: (i) a technical and economic analysis and documentation (including supporting information) comparing the installation of the Facility both over and beneath such Submerged CI; (ii) a detailed explanation of Certificate Holders' plans for maintaining the existing mechanical protection of any Submerged CI during and after installation of the HVDC Transmission System's cables, including a discussion of the type and replacement of thermal sands; (iii) a demonstration based on the final design of the HVDC Transmission System of the manner in which the owners or operators of such Submerged CI would have access to repair and/or maintain its Submerged CI; (iv) where requested by the Designated Representative of the owner(s) or operator(s) of such Submerged CI, Certificate Holders shall make reasonable efforts to ensure that the route of the HVDC Transmission System is designed to cross such Submerged CI at an angle which is as close to a right angle on the horizontal as is practicable having due regard to other route requirements; and	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
162(f)	documentation showing that there will be no material interference with the ability of the owners and/or operators of any CI crossed by, or in proximity to, the Facility, to repair, operate, or maintain such CI as a result of the construction, operation, or maintenance of the Facility;	CHPE will comply	Section 13.1, Appendix M
162(g)	a full description of all measures that will be employed by Certificate Holders to protect all CI that may be affected by the construction, operation, or maintenance of the Facility, including, but not limited to, detailed construction techniques and	CHPE will comply	Section 12.1, 13.2, 13.3, Appendix M

	methods, equipment descriptions, an explanation of how any contingency will be met in case damage does occur, and procedures for coordination with utilities and public service providers;		
162(h)	protocols for performing repair and maintenance work on the Facility in proximity to CI;	CHPE will comply	Section 13, Appendix M
162(i)	documentation showing agreement by the owners and/or operators of affected CI with both Certificate Holders' construction schedule for operations in the vicinity of such CI and the measures described in the EM&CP documents relating to such CI or a description of those aspects of the proposal that are disputed, and a discussion of the positions taken by the Certificate Holders and the owners and/or operators of the CI;	CHPE will comply	Section 13, Appendix M
162(j)	documentation showing agreement by CNY that CI owned or operated by CNY, whether located within the boundaries of CNY or elsewhere, has been adequately identified and protected or a description of those aspects of Certificate Holders' proposal that are disputed, and a discussion of the positions taken by the Certificate Holders and CNY; and	CHPE will comply	Section 13, Appendix M
162(k)	A decommissioning plan setting forth steps to be taken in the event that the Facility is permanently de-energized.	CHPE will comply	Section 13, Appendix M
163	Within six months after issuance of this Certificate, the Certificate Holders shall submit to the DPS Staff for review, comment, and approval in consultation with NYSDEC and the NYSDOS, detailed Standard Operating Procedures (SOPs) for compliance monitoring studies to be conducted in the Hudson River. The SOPs shall be consistent with the Scopes of Study attached to this Certificate: § Benthic and Sediment Monitoring Scope of Study (Attachment 2 to this Certificate) § Bathymetry, Sediment Temperature and Magnetic Field Scope of Study (Attachment 3 this Certificate) §	CHPE has complied.	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	Atlantic Sturgeon Pre-Installation and Post-Energizing Hydrophone Scope of Study (Attachment 4 to this Certificate)		
164	The approved SOPs required by Condition 163 shall be incorporated into the EM&CP or first Segment EM&CP that proposes to perform cable installation in the Hudson River and completion of the studies as defined by the approved SOPs shall be a requirement of this Certificate.	CHPE has complied.	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
U. Environmental Trust		CHPE Response	EM&CP Section/Appendix
165	The Certificate Holders shall establish the Hudson River and Lake Champlain Habitat Enhancement, Restoration, and Research/Habitat Improvement Project Trust ("the Trust") solely for the purposes of protecting, restoring, and improving aquatic habitats and fisheries resources in the Hudson River Estuary, the Harlem and East Rivers, Lake Champlain, and their tributaries, in order to minimize, mitigate, study, and/or compensate for the short-term adverse aquatic impacts and potential long-term aquatic impacts and risks to these water bodies from Facility construction and operation and for the administration of the Trust to the extent expressly authorized in these Certificate Condition.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(a)	Certificate Holders shall file an agreement providing for the establishment of the Trust (the Trust Agreement) within 120 days after issuance of this Certificate. The trustee selected by Certificate Holders to oversee the Trust (the Trustee) shall be, or shall be associated with, a bank accredited by and doing business in the State of New York. Both the Trust Agreement and the selection of the Trustee shall be subject to review and approval by the Commission (in consultation with NYSDEC) and, if required, the New York State Comptroller, and Attorney General.	CHPE complied by submitting a Pro-Forma Trust Agreement on October 16, 2013 (DMM Item 750).	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(b)	Within 30 days of the Closing, the Certificate Holders shall endow the Trust with an interest-bearing account established at the Trustee bank, with a first payment of \$2.5	CHPE will comply—pending	Not applicable to Overhead

	million. [Trust payment schedule revised by Amendment 6 (March 16, 2022), creating a new Table 2 for payments during Construction and Operations]	necessary approvals from the PSC of July 18, 2022 submission (DMM Item 879).	Transmission Line and Astoria Annex EM&CP.
165(c)	<p>Within 30 days of the Closing, Certificate Holders shall prepare and file with the Commission for its approval a written agreement to govern the administration and operation of the Trust (the Governance Agreement). The Governance Agreement shall:</p> <p>(i) provide that the funding commitments of the Certificate Holders will be fixed in accordance with Table 2 attached hereto and the terms stated in this condition, and that they will not be increased for any reason or decreased except as provided for in subsections (d)(vii) and (d)(ix) of this Certificate Condition; (ii) establish a Governance Committee consisting of: Certificate Holders; DPS Staff; NYSDEC; NYSDOS; CNY; APA; the New York State Council of Trout Unlimited; Riverkeeper, Inc.; and Scenic Hudson, Inc.; (iii) authorize the Governance Committee to meet prior to COD to perform the preliminary work required to implement the Trust, including consideration of whether to use a third-party administrator (the Administrator) to assist in the conduct of its business and for the administration of the Trust for tasks including but not limited to developing: (a) cash flow schedules for the Trust expenditures; (b) measures to track administrative costs; and (c) associated auditing and reporting tasks; (iv) permit the Governance Committee to retain an Administrator, if desired by the Governance Committee, and to compensate the Administrator (if any) from monies available in the Trust; (v) provide that members of the Governance Committee other than Certificate Holders will not be obligated to pay into the Trust and that no member of the Governance Committee, including Certificate Holders, shall be obligated to directly fund or perform any of the responsibilities of the Trustee, including compensation of the Trustee or the Administrator; (vi) obligate the Trust to indemnify and hold harmless all members of the Governance Committee, including Certificate Holders, from liability for any and all actions and/or inactions of the Trustee, the Administrator (if any), or any representative(s) of any of them; (vii) provide that the studies, projects and</p>	CHPE will comply—proposed Governance Agreement was approved by the PSC on June 17, 2013 (DMM Item 740). Further details were submitted on July 18, 2022 for PSC approval (DMM Item 879).	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

	activities listed in Attachment 5 hereto totaling approximately \$32.4 Million (the Priority Projects) satisfy the requirements of this Certificate Condition and shall be implemented by the Administrator (or by the Trustee if no Administrator has been selected) pursuant to a schedule to be developed by the Governance Committee in order to meet the primary objectives of the Trust during its initial implementation phase. The Governance Committee, by a three quarters vote, may determine, on the basis of changed circumstances, that a Priority Project should not be implemented; and (viii) provide that the Governance Committee shall be empowered to approve all expenditures of the monies of the Trust, provided however that no more than 75% of the monies to be provided by Certificate Holders to the Trust in any year may be designated for such Priority Projects during the first 15 years of the Trust's existence or until the Priority Projects have been completed; and (ix) require the Administrator (or the Trustee if no Administrator has been selected) to maintain a clear written record identifying any criteria and justification for the decisions of the Governance Committee and for all expenditures by the Trust itself.		
165(d)(i)	The Governance Agreement shall further require that: the Governance Committee shall manage the Trust so that, over the life of the Facility, the monies of the Trust will be able to support additional studies, projects, or activities that may result from (a) the Priority Projects, (b) studies to be agreed to at a later time by the Governance Committee, or (c) information produced by the Governance Committee, consistent with the criteria set forth in this CC 165;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(d)(ii)	the Governance Committee shall manage the Trust so that money remains available for future projects that were not identified in this Certificate and, from time to time, project ideas shall be solicited from the Governance Committee's members, other Federal and State Agencies or municipalities, individuals, and organizations located along the route of the Facility, provided these ideas are consistent with the purposes of the Trust and approved by the Governance Committee;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(d)(iii)	projects and activities approved by the Governance Committee for funding shall not replace natural resource management programs funded by the General Fund of the	CHPE will comply	Not applicable to Overhead

	State of New York or NYSDEC Environmental Programs, meet an obligation of the State of New York or any other party to this proceeding, or replace funding for the operation and maintenance of any project not previously funded by the Trust. The Governance Committee may, however, authorize the Administrator (or the Trustee if no Administrator has been selected) to use the monies of the Trust to carry out additional or new activities that are part of or are consistent with applicable State and Federal resource management and land use plans;		Transmission Line and Astoria Annex EM&CP.
165(d)(iv)	studies, projects or activities to be financed by the Trust shall have a nexus to the Facility and shall include, but not be limited to: (a) habitat restoration, enhancement, or protection; (b) habitat research; (c) fish and wildlife species restoration, enhancement, or protection; (d) stewardship activities including additional or new activities, formally adopted by the Governance Committee, that are part of or are consistent with applicable State and Federal resource management and land use plans; (e) water quality improvement (excluding projects eligible for funding under the Clean Water State Revolving Fund); and (f) scientific or administrative support to ensure coordination of Trust projects with each other and externally funded research, restoration, and stewardship projects; delivery of final products; review of reports, data sets, and metadata; and placement of project results and data to insure public access in appropriate digital and hard copy media;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(d)(v)	prior to funding any studies, projects or activities, the Governance Committee must find that such studies, projects or activities have been proven: (a) to make a contribution to the long-term protection and enhancement of fish and wildlife species and habitats in the Hudson River Estuary, the Harlem and East Rivers, and/or Lake Champlain and their tributaries; (b) to have a strong scientific foundation; (c) to achieve identified environmental goals; (d) to be consistent with applicable State and Federal natural resource management plans; (e) to address impacts associated with the construction, operation, maintenance or security of the Facility; and, (f) to be feasible from an engineering perspective;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

165(d)(vi)	the Governance Committee shall give preference to projects that: (a) achieve multiple environmental goals; (b) involve multi-stakeholders collaboration; (c) feature matching funds; and/or (d) are cost effective;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(d)(vii)	the Administrator (or the Trustee if no Administrator has been selected) shall pay any administrative costs associated with the establishment and maintenance of the Trust from any accrued interest on monies of the Trust or, if adequate interest is not accrued, such administrative costs shall be borne by the Trust, provided however that the monies of the Trust shall not be used to compensate any party, including Certificate Holders, for participation in the Governance Committee or to reimburse any such party for any expenses incurred in such participation;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(d)(viii)	Certificate Holders' obligation to make the payments into the Trust set out above and in Table 2 attached hereto shall terminate upon receipt by the Administrator (or the Trustee if no Administrator has been selected) of documentation from the NYISO or DPS stating that the Facility has ceased commercial operation. Should the Facility resume operations, the Certificate Holders shall resume the payments to the Trust on January 1st of the following year;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(d)(ix)	if the Facility ceases permanent operation for any reason, payments owed to the Trust as of the date of the final termination and the balance of unused monies in the Trust, plus any accrued interest and minus any administrative cost, shall be retained in the Trust and administered by the Governance Committee until completely expended;	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.
165(d)(x)	the Trustee, Administrator (if any) and the Governance Committee shall all be prohibited from directly or indirectly bonding or pledging any funds to be provided by the Certificate Holders at any future date; and	CHPE will comply	Not applicable to Overhead Transmission Line

			and Astoria Annex EM&CP.
165(d)(xi)	if any department, agency, authority, office or other instrumentality or subdivision of the State of New York shall claim ownership or control of the Trust or any of the funds paid into the Trust by Certificate Holders or any interest thereon, the Trustee shall immediately return all monies held in the name of the Trust to Certificate Holders.	CHPE will comply	Not applicable to Overhead Transmission Line and Astoria Annex EM&CP.

3.0 ENVIRONMENTAL PERSONNEL AND PROJECT PROCEDURES

3.1 PROJECT PERSONNEL

During Project construction, multiple inspectors and monitors will be employed to ensure appropriate adherence to all applicable CCs, the procedures, plans, and specifications described in this EM&CP, and other applicable federal, state and local laws, permits and approvals. The required qualifications and duties of each type of inspector are provided in the following sections. Figure 3-1 summarizes the high-level organizational chart. Figure 3-2 summarizes the construction personnel. While inspector positions are assigned either full- or part-time, the responsibilities and time commitments may fluctuate with the Project activity levels. The Certificate Holders and associated staff will ensure that the necessary inspectors' presence corresponds with the Project activity level (CC 53c). All Project personnel, including the Certificate Holders' employees, contractors, and subcontractors will be properly trained in the construction, operation, and maintenance of the Project (CC 53i). The necessary contact information for the inspectors is included in Appendix E - Compliance Assurance Plan. Additional contact information for other onsite inspectors will be provided to NYSDPS and NYSDEC Staff at least two weeks prior to the start of Project construction (CC 53g).

In addition to the inspector's specific qualifications listed as described in the following subsections, the following attributes are required for all inspectors (BMP Document Section 2.0):

1. Possess good communication skills, both oral and written.
2. Be honest, fair, straightforward, sincere, and possess a strong sense of integrity.
3. Be able to communicate effectively with all parties: Certificate Holders' staff and fellow Project inspectors; construction/restoration contractors, foremen, equipment operators and laborers; agency inspectors, etc.
4. Be experienced with underground utilities.

Figure 3-1. High Level Organization Chart

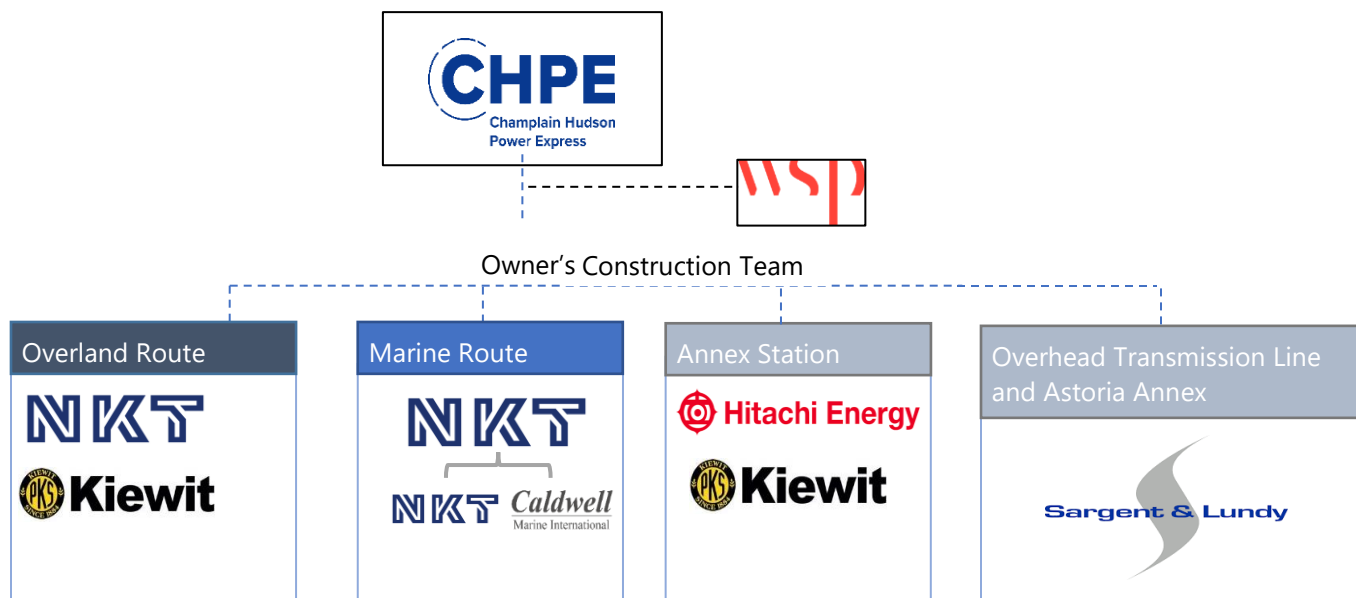
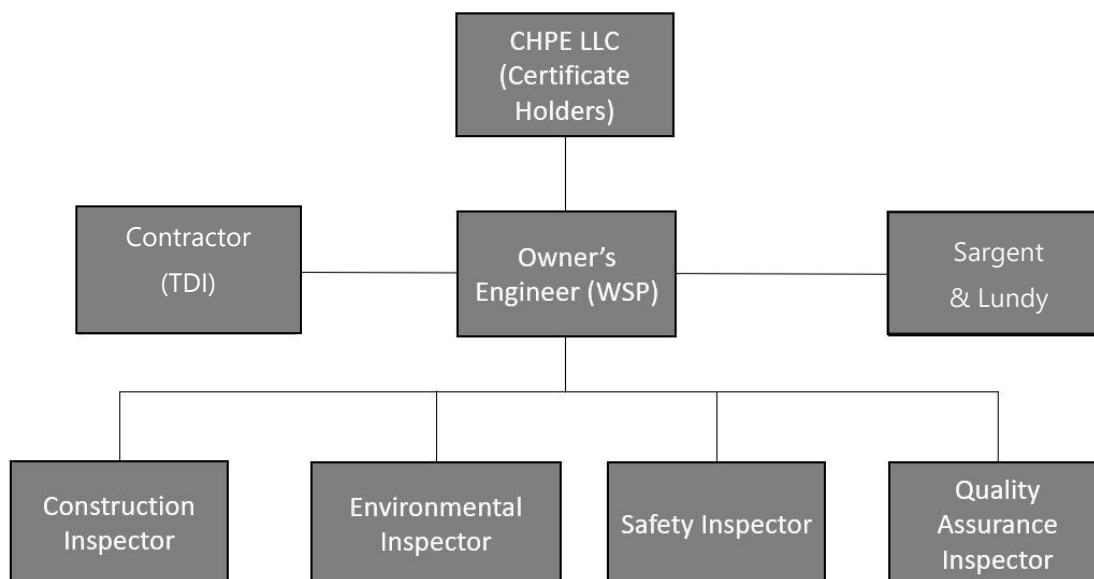


Figure 3-2. Construction Personnel Organization Chart



3.1.1 Contractors

All contractors hired by the Certificate Holders must comply with the Article VII Certificate Conditions. The Certificate Holders will provide the Engineering, Procurement, and Construction (EPC) Contractor(s) retained to undertake the construction of the Project with complete copies of the Certificate Conditions and all permits, certificates, and approvals required to initiate and/or complete construction of the Project. These documents include but are not limited to the approved EM&CP and governmental approvals issued pursuant to § 401 and § 404 of the Federal Clean Water Act, and § 10 of the Federal Rivers and Harbors Act. To the extent that the listed documents are available before contracts for construction services are executed, such copies will be provided to the Contractors prior to the execution of such contracts (CC 43).

Additionally, the Certificate Holders will inform all Contractors that the PSC may seek to recover penalties for violation of the Certificate Conditions and other Orders issued in this proceeding, not only from the Certificate Holders, but also from their Contractors, and that Contractors also may be liable for other fines, penalties, and environmental damage (CC 44).

3.1.2 Environmental Inspector

The Environmental Inspector(s) will be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor all Contractors' compliance with the Certificate Conditions and applicable sections of and approvals issued pursuant to the PSL, New York State Environmental Conservation Law (ECL), § 401 and § 404 of the Federal Clean Water Act, and the procedures outlined in this EM&CP (CC 53e).

Additional Environmental Inspectors may be utilized as required to meet environmental inspection requirements set out in this EM&CP and any other relevant permit conditions. The lead Environmental Inspector will be responsible for determining when additional inspectors are needed to meet inspection requirements.

3.1.2.1 Responsibilities

The Environmental Inspector will have the following responsibilities (BMP Document, Section 2.1.1):

1. Monitor all construction activities including clearing, trenching, cable installation, installation and maintenance of temporary erosion controls, work involving wetlands, streams, agricultural lands, avoidance, and minimization of impacts to threatened and endangered (TE) species and their occupied habitat and rare, threatened, and endangered (RTE) plants, restoration work, etc.
2. Provide DPS and NYSDEC, as well as Project team members, with weekly status reports summarizing construction activities from the week prior to the report and identifying construction activities and locations scheduled for the next two weeks.
3. Coordinate inspections of the Project by NYSDEC, NYSDAM, USACE, and other involved agencies as needed.
4. Monitor and manage all environmental protection requirements of this EM&CP and closely coordinate these requirements with the Construction Inspector and the Contractor(s).
5. Monitor Contractor compliance with the provisions of the Certificate and permits, applicable sections of the PSL, and the EM&CP.
6. Verify that the right-of-way and any access roads are marked prior to construction.
7. Identify, document, and oversee corrective actions as necessary to bring an activity back into compliance.
8. Install and maintain signs and flagging/markings the boundaries of sensitive resource areas (e.g., waterbodies and wetlands) or other areas where special requirements will be in effect.
9. Locate slope breakers, drivable berms, and water bars to ensure that they will not direct water into sensitive resources such as wetlands or waterbodies.
10. Direct the Construction Inspector when site conditions make it advisable to restrict construction activities in areas of sensitive environmental resources.
11. Ensure restoration of preconstruction contours, topsoil, and vegetation.
12. Determine the need for additional erosion and sediment controls other than those already required by the Certificate and this EM&CP and ensuring that these controls are properly installed to prevent sediment flow into wetlands, waterbodies, streams, or other sensitive environmental resources.
13. Inspect and ensure the maintenance of all temporary soil erosion and sedimentation controls in fulfillment of the requirements for a qualified inspector as defined in the SPDES Construction General Permit (GP-0-24-001) (CC 53h).
14. Ensure the repair of all ineffective erosion and sediment control devices within 24 hours of identification.

15. Keep records of compliance with the environmental conditions of the Certificate, the EM&CP, and other federal, state, or local agency requirements. The Environmental Inspector will have stop-work authority over all aspects of the Project.
16. Identify areas that will be given special attention to ensure stabilization and restoration after the construction phase.
17. Be the point of contact for all emergency response procedures such as oil spills, encountering hazardous wastes, etc.

3.1.2.2 Qualifications

The Environmental Inspector must have the following qualifications (BMP Document, Section 2.1.2):

1. Sufficient knowledge and experience to manage the environmental compliance procedures described in this EM&CP.
2. A bachelor's degree in geology, soil science, natural resource science or management, forestry, or a related environmental discipline or a demonstrated equivalent knowledge, including courses in ecological sciences and experience in environmental construction inspection.
3. Necessary qualifications consistent with a "Qualified Inspector" pursuant to the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity (Permit No. GP-0-24-001).

3.1.3 Construction Inspector

The Construction Inspector(s) will be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor each Contractors' compliance with the Certificate Conditions and applicable sections of and approvals issued pursuant to the PSL, New York State ECL, § 401 and § 404 of the Federal Clean Water Act, and the procedures outlined in this EM&CP.

3.1.3.1 Responsibilities

The Construction Inspector will have the following responsibilities (BMP Document, Section 2.4.1):

1. Ensure that high standards of contract compliance are consistently maintained.
2. Work with the appropriate individuals to fully understand contract program needs and ensure that promised commitments are delivered on time and within budget.
3. Participate in construction conference calls and meetings to provide weekly updates and reports.
4. Assure that site personnel are properly directed, trained, licensed, and evaluated.

3.1.3.2 Qualifications

The Construction Inspector must have the following qualifications (BMP Document, Section 2.4.2):

1. An associate degree or higher in a construction related discipline.
2. Five years of experience in construction of transmission facilities with an understanding of the applicable construction standards and work methods, construction field issues, prints specification sheets, schematics, one-line diagrams, instructional information to construct, maintain, troubleshoot cable installation and general aspects of Transmission Line and substation construction.
3. Knowledge of federal, state, Occupational Safety and Health Administration ("OSHA"), local, and applicable environmental rules and regulations.
4. A thorough understanding of electrical principles and the hazards associated with electrical transmission work.
5. The ability to travel throughout the Project Area and work extended hours and weekends in emergency situations, as needed.

3.1.4 Agricultural Inspector

An Agricultural Inspector is not required for the scope of this project addressed in this report, as there will be no work within agricultural areas or impacts to agricultural lands (BMP Document, Section 2.3).

3.1.5 Aquatic Inspector

An Aquatic Inspector is not required for the scope of this project addressed in this report, as there will be no aquatic installation, construction, or impact (BMP Document, Section 2.3).

3.1.6 Safety Inspector

One Safety Inspector will work full-time on this project and will be present for any higher risk procedures.

3.1.6.1 Responsibilities

The Safety Inspector will assume responsibility for the following duties (BMP Document, Section 2.5.1):

1. Assist in the establishment and implementation of regulatory compliance and incident- prevention activities regarding the safety and health of employees, contractor and subcontractor personnel, and the public.
2. Assist management and direct safety specialists in analyzing any serious incidents.

3. Advise management on problem solving or decision making to eliminate safety hazards and to develop incident-prevention and regulatory compliance programs to reduce incidents that may lead to personal injury or property damage.

3.1.6.2 Qualifications

The Safety Inspector must have the following qualifications (BMP Document, Section 2.5.2):

1. Hold bachelor's degree – preferably in Safety Management, a related science or engineering discipline.
2. Have 5 to 7 years of professional safety experience.
3. Have 5 to 7 years of experience in electric or gas operations or in a related industry, preferably in a supervisory or leadership role.
4. Be certified as a Safety Professional or Occupational Health Professional or another equivalent recognized credential.
5. Have knowledge of federal, state, and local safety and health laws and regulations.
6. Have knowledge of electric operations, experience with underground utilities is a plus.
7. Knowledge of industrial hygiene principles.
8. Have proven interpersonal skills coupled with the ability to lead in connection with various broad occupational safety and health principles in a constantly changing work environment.
9. Demonstrate an ability to manage multiple high-priority tasks and engage in complex problem-solving.
10. Demonstrate a high level of ethical behavior.
11. Have excellent judgment and decision-making skills.

3.1.7 Quality Assurance Inspector

The Quality Assurance Inspector will conduct the Quality Control Audits described in the Compliance Assurance Plan in Appendix E. At least one Quality Control and Assurance Inspector will be employed on a part-time basis as needed for the Project.

3.1.7.1 Responsibilities

The Quality Assurance Inspector will have the following responsibilities (BMP Document, Section 2.6.1):

1. Perform quality audits on the transmission line, and substations project. These audits include all components required for the complete construction of the Overhead Transmission Line and Astoria

Annex and the substation, including the pouring of concrete and erection of structures, and are in addition to those required by the CNY.

2. Verify that installation of the cable complies with construction specifications.
3. Write and publish reports detailing results of field construction audits.
4. Track non-conformances for work not meeting the required specifications.
5. Require submission of corrective and preventive action from the Certificate Holders for any non-conformance with the construction plans.
6. Maintain documentation in a systematic and orderly manner.
7. Identify areas where the quality of work can be improved.
8. Participate in conference calls and meetings.
9. Develop in-process quality statistical reporting forms and charts to support the Compliance Assurance Plan found in Appendix E.
10. Conduct audits of compliance with the Certificate, Orders, and legal requirements as required by the Certificate Conditions.

3.1.7.2 Qualifications

The Quality Assurance Inspector will have the following qualifications (BMP Document, Section 2.6.2):

1. Hold a bachelor's degree and a minimum of three years of experience in a quality assurance role; or an equivalent combination of technical education and training and a minimum of eight years of experience in a quality assurance role.
2. Be able to undertake tasks with limited supervision and be highly motivated.
3. Demonstrate analytical skills with the ability to evaluate and produce routine reports.
4. Be able to collect, enter, analyze, track, and produce data.
5. Demonstrate organization and planning skills, with the ability to schedule and perform quality audits across internal and external functions.
6. Have the ability to solve complex issues.

Be familiar with construction job sites that may be in harsh climates and terrain, and in controlled conditions that require the use of Personal Protection Equipment (PPE).

3.2 PROCEDURES

3.2.1 Other Inspection and Monitoring Personnel

The NYSDOT will have full authority over the Certificate Holders' use of state highways (CC 57). With regard to this Segment, that may include the authority to issue permits for oversize or overweight vehicles using State highways for deliveries; however, Segment 21 generally does not implicate State highways.

As specified in the Certificate Conditions and pursuant to the PSL, the Certificate Holders and their associated Contractors will not limit the right of any jurisdictional agency to enter and inspect the Project to assess compliance with any permit issued by such agency or any applicable substantive statute or regulation under such agency's jurisdiction. Any such inspection should be coordinated with DPS staff to the greatest extent possible (CC 56).

In accordance with New York City Department of Building requirements, a third-party registered special inspector will perform inspection of selected materials, equipment, installation, fabrication, erection or placement of components and connections, to ensure compliance with approved construction documents and referenced standards as required.

3.2.2 Inspection & Coordination Requirements and Schedule

Table 3-1 identifies required inspections, the person performing or coordinating each, and the frequency of each. They are further detailed in Section 3.2.3. See Section 4.2.3 for required coordination on Campaign for New York Health building inspection.

Table 3-1. Inspection and Coordination Requirements and Schedule

Inspection Required	Person Performing Inspections/Coordination	Frequency of Inspections
Pre-construction Meeting	Certificate Holders invite DPS Staff, NYSDOT, NYSDEC and other required stakeholders as identified in the Certificate.	Two weeks prior to start of overland construction
Site Compliance Audit Inspection	Certificate Holders organize and conduct site-compliance audit inspections for DPS Staff	Monthly during site preparation, construction, and restoration phases of the Project. Annually for first two years of operation
SWPPP BMPs	Environmental Inspector	Weekly during soil disturbing activities

Inspection Required	Person Performing Inspections/Coordination	Frequency of Inspections
Post installation Inspection	See Compliance Assurance Plan Appendix E	See Compliance Assurance Plan Appendix E
Notifications and coordination with CI Owners' Designated Representative(s) in accordance with CC 28c-e	Certificate Holders' hired Inspectors/Contractors.	At least 30 days prior to any construction or repair within vicinity of CI

3.2.3 Inspection/Coordination Additional Details

3.2.3.1 Pre-Construction Meeting

For the preconstruction meeting, the agenda, location, and attendee list will be agreed upon between DPS Staff and the Certificate Holders. The Certificate Holders will supply draft minutes from this meeting to all attendees. The attendees may offer corrections or comments, and thereafter the Certificate Holders will issue the finalized meeting minutes to all attendees. If, for any reason, the Contractors retained by the Certificate Holders to construct the Overhead Transmission Line and Astoria Annex cannot finish the construction of such facilities, and one or more new construction contractors are needed, there will be another preconstruction meeting with the same format (CC 58, 159e).

3.2.3.2 Site Compliance Audit Inspection

The Certificate Holders will organize and conduct site-compliance audit inspections for DPS Staff as needed, but not less frequently than once per month during the site preparation, construction, and restoration phases of the Project and at least annually for two years after the commencement of operation of the Project (CC 55). These inspections will be performed in coordination with inspections along with applicable overland route segment and include a review of the status of compliance with all Certificate Conditions, the WQC, and with other legal requirements and commitments, as well as a field review of the construction site, if necessary. The inspections may also include the following:

1. Review all complaints received, and their proposed or actual resolutions.
2. Review any significant comments, concerns, or suggestions made by the public, local governments, or other agencies.
3. Review the status of the Project in relation to the overall schedule established prior to the commencement of construction.
4. Perform other activities that Certificate Holders or DPS Staff consider appropriate (CC 55a).

The Certificate Holders, with the help of the appropriate Inspectors and Project personnel, will provide a written record of the results of the inspection, including resolutions of issues, and additional measures to be taken, to agencies involved in the inspection audit (CC 55b).

3.2.3.3 SWPPP Inspections

As specified in the SWPPP in Appendix F the Certificate Holders, via the Environmental Inspector, will inspect the erosion and sediment control measures as identified in the SWPPP to ensure that they are always maintained in effective operating conditions. When soil disturbance occurs, a site inspection will be conducted by the Environmental Inspector at least once every seven days. A copy of the "Stormwater Construction Site Inspection Reports" is included in Appendix C of the SWPPP in Appendix F of this EM&CP. Where soil disturbing activities temporarily cease (e.g., winter shutdown) and temporary stabilization measures have been applied to all disturbed areas, the Environmental Inspector can stop conducting inspections.

The Environmental Inspector shall resume inspections when soil disturbing activities begin again. The Environmental Inspector shall notify the NYSDEC Regional Office's stormwater contact prior to any reduction in the frequency of site inspections. A final inspection will be performed by the Environmental Inspector where soil disturbing activities have not occurred or been resumed within two years from the start of soil disturbing activities. The final inspection will certify that all disturbed areas have achieved final stabilization, all temporary and permanent control measures have been removed, and post-construction stormwater management practices have been constructed in conformance with the SWPPP.

In locations where restoration is necessary or required, SWPPP inspections will be performed by the Environmental Inspector on a weekly basis until all disturbed areas have achieved the 80% revegetation required for final restoration. Following final restoration, erosion and sediment control measures will be removed from the site and disposed of appropriately. Descriptions related to the restoration and cleanup are summarized in Section 14 of this EM&CP. All other inspection requirements and details related to stormwater pollution control measures are included in Section 6.0 Maintenance/Inspection Procedures of the SWPPP in Appendix F.

3.2.3.4 Construction Safety Policies and Procedures

Construction Safety Policies and Procedures are included in Appendix G.

3.2.3.5 Post Installation Inspection

The procedures for the post-installation inspection plan are described in the Compliance Assurance Plan (Appendix E) (CC 161). The Certificate Holders will conduct an immediate post-installation inspection following the installation of the Segment.

3.2.4 Notifications

The Certificate Holders will provide notices to appropriate City of New York officials in the vicinity of this Segment. This notice will be distributed by notifying those interested people that this EM&CP has been submitted and is available for comment and, at the appropriate time, providing additional notices prior to construction. Newspaper and mailed notices of this EM&CP filing will be circulated concurrent with the filing of this EM&CP, using the notice forms included in Appendix B.

Affidavits of publication and/or mailing/service will be provided to the Secretary under separate cover. Notices will be distributed as follows:

1. **Newspapers (CCs 152 and 154):** the notice will be published in local newspapers in accordance with CCs 152 and 155. The Certificate Holders will publish the notice in a large newspaper of general circulation in Astoria, Queens: The text of the notice and the accompanying color map included in Appendix B were published as display advertisements and posted to the newspapers' websites where possible.
2. **Parties to the Proceeding (CC 152):** the notice was posted to the PSC's online DMM docketing system in Case 10-T-0139 for distribution to all Parties to the proceeding in conjunction with this filing.
3. **General Stakeholder Notice:** this notice was provided to landowners, residents and businesses within 100 feet of any Facility access road, or overland Facility components, if any, in accordance with CC 153; the CEOs of each host municipality in this Segment (CC 153); (see Appendix B).
4. **Interest Holders (CC 143 and 155):** to the extent that other persons hold an interest in the proposed Overhead Transmission Line and Astoria Annex, the Applicant will mail an Interest Holder notice letter to indicate that the Certificate Holders have obtained a temporary or permanent interest in Transmission Line properties, in accordance with CC 143 (see Appendix B).
5. **Agricultural Consultation (CC 76):** The Transmission Line is located on previously developed, urban land. The Astoria Annex substation is an existing structure. No agricultural resources are present at or near the Site. As such, the requirements of CC 76 did not apply to this EM&CP.
6. **Structure Owners (CC 154):** no trenching or HDD work is proposed in connection with this Segment; moreover, no residences, buildings or other structures with foundations were identified

within 100 feet of excavation activity requiring general notice of the filing and offering to inspect foundations in accordance with CC 154. Therefore, this requirement does not apply.

At the appropriate time, pre-construction notices will be displayed in public areas such as post offices and community centers as well as provided to local newspapers and news outlets (CC 42, 155a). The display of notices will be performed two weeks prior to the commencement of site preparation in Astoria, Queens. The notification to newspapers and news outlets will be performed prior to construction, as discussed further in Table 3-2.

A Public Involvement and Complaint Resolution Plan has been developed and is included in Appendix H. Further discussion of public involvement and notification procedures in advance of the construction phase, as well as the Certificate Holders' plans for addressing questions and complaints from the public during construction, are discussed in that Plan.

3.2.5 State Pollution Discharge Elimination System Notice of Intent

In accordance with the State Pollution Discharge Elimination System (SPDES) General Permit for Construction Activities (GP-0-20-001), the Certificate Holders will maintain copies of the Notice of Intent (NOI), NOI acknowledgment letter, SWPPP, and any inspection reports submitted in conjunction with this permit and records, or all data used to complete the NOI to be covered by this permit for a period of at least five years from the date that the site is finally stabilized.

3.2.6 Modifying the EM&CP

The Final EM&CP approved by the PSC may incorporate modifications from this proposed EM&CP by the Certificate Holders. No change to the approved EM&CP may thereafter be made except in accordance with the following procedures (CC 158). For a proposed change that:

1. Would involve a site listed or eligible for listing on the New York State or National Register of Historic Places, the Certificate Holders will give at least two weeks prior notice to the Field Service Bureau of OPRHP.
2. Would involve any State-regulated wetland or protected stream or water body, the Certificate Holders will give at least two weeks prior notice to NYSDEC,
3. Would affect the occupied habitat of TE species, the Certificate Holders will give at least two weeks prior notice to NYSDEC and to the United States Fish and Wildlife Service (USFWS) or National Marine Fisheries Service (NMFS) (where applicable) prior to providing notice to DPS Staff of the proposed change.

4. Would affect the individual or habitat supporting RTE plants, the Certificate Holders will give at least two weeks prior notice to NYSDEC and DPS.
5. Would involve agricultural land, the Certificate Holders will give at least 2 weeks prior notice to New York State Department of Agriculture and Markets (NYSDAM).
6. Would involve the herbicides planned for use (including mixed proportions, additives, or method of application), the Certificate Holders will give at least 30 days prior notice to NYSDEC.
7. Would affect land or water owned or controlled by the CNY, the Certificate Holders will give at least two weeks prior notice to CNY (CC 158a).

The Certificate Holders will report any proposed changes to this EM&CP to NYSDPS Staff. DPS Staff will refer to the PSC for approval for any proposed changes that cause a substantial increase in environmental impact, after consultation with NYSDEC, any proposed changes that relate to contested issues decided during the proceeding, and any proposed changes affecting state highways (if the report has not indicated NYSDOT's agreement to such proposed changes). DPS Staff is authorized to approve all other proposed changes, in accordance with the procedure outlined herein, and will submit reports of such changes to the Secretary or the Secretary's designee. The reports will be posted on the PSC's website under the relevant case number (CC 158b). Upon being advised that DPS Staff will refer a proposed change to the PSC, the Certificate Holders will notify all active parties that have requested to be notified, as well as property owners or lessees whose property is affected by the proposed change. The notice will:

1. Describe the original conditions and the requested change.
2. Provide documents supporting the request.
3. State that persons may comment by writing to the PSC within 21 days of the notification date (CC 158c).

The Certificate Holders will not execute any proposed change until they receive written approval from the PSC (if PSC approval is required) or oral or written approval from DPS Staff (in the case of a change that NYSDPS Staff has authority to approve) except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in this EM&CP. When the Certificate Holders have obtained oral approval from DPS Staff for a change, DPS Staff will confirm such approval in writing within 10 business days (CC 158d).

3.3 REPORTING AND DOCUMENT MANAGEMENT

Several CCs identified in Table 2-1 explicitly address the timing requirements for Project notifications and reports. Table 3-2 summarizes these CCs based on whether the notification is required before, during, or after construction, or at any point during those three periods. Not all notices are required for the Overhead

Transmission Line and Astoria Annex, and some notices may be required after the entire Project has been constructed.

Table 3-2. Reporting and Notification Requirements and Schedule

Description	Submitted to	Approximate Due Date
BEFORE OR CONCURRENT WITH EM&CP FILING		
The Certificate Holders will file copies of the segment EM&CP as directed by the Secretary to the Commission to relevant jurisdictional agencies as described in CC 151.	Relevant jurisdictional agencies.	Upon filing the applicable Segment EM&CP. See Appendix B and EM&CP Segment cover material.
The Certificate Holders will provide newspaper notices and written notice(s) of the filing of the segment EM&CP on all parties such as relevant railroads, infrastructure owners whose facilities, properties, and/or structures within the geographic scope of the segment EM&CP may be impacted. The notice(s) will contain the information specified in CC 152).	Relevant parties specified in CC 152.	Upon filing the applicable Segment EM&CP. See Section 3.2.4, Section 12.1, and Section 12.1 for additional details; see Appendix B for copy of notice.
The Certificate Holders will provide written notice(s) to any person with an interest in the property underlying the Certificate Holders' easements/leaseholds, including underlying landowners, other easements holders as specified in CC 143 upon filing the applicable segment EM&CP.	Relevant parties specified in CC 143.	Upon filing the applicable Segment EM&CP. See Appendix B and Section 4.7.
Provide to the owner(s) and operator(s) of all co-located infrastructure a proposal for the locations and design of the Project. The submission will contain all the information and conditions outlined in CC 28d.	Owners and operators of all co-located infrastructure	At least 180 days prior to the filing of the Overhead Transmission Line and Astoria Annex EM&CP.
The Certificate Holders will provide written notice and newspaper notices of the filing of the applicable Segment EM&CP. (CC 152). The notice will contain the information outlined in CC 155a.	Local media within the vicinity of the segments to which the segment EM&CP relates.	Concurrent with the filing of the applicable Segment EM&CP. See Appendix B.
The Certificate Holders will notify that the EM&CP is available for review to the chief executive officer of each affected municipality and to residents, businesses, and building, structure, and facility owners and to the extent known, operators of the same when such land uses are	Chief executive officer of each affected municipality. Residences, Businesses, and	Concurrent with the filing of the Segment EM&CP. See Appendix B.

Description	Submitted to	Approximate Due Date
located within 100 feet of the HDD staging areas, off-ROW construction access roads, and the overland components of the Project. The notice will meet the conditions outlined in CC 153. Proof of notice to residents, businesses, and building and structure owners will be provided to the Secretary.	Building/structure/facility owners/operators.	
The Certificate Holders will begin consultations with CI owners within 60 days of Certificate (CC 28a, 28b) and provide proposed plans and methods of construction to CI Owners within 180 days of the filing of the relevant Segment EM&CP (CC 28d): "proposal for the location and design of the Facility (including a proposed Construction Zone) and the methods of construction to be employed with respect to all locations involving CI ("Proposal"). The Certificate Holders' Proposal must include all studies, calculations, tests, results, explanations, protocols, drawings, proposed construction schedules, and documents developed throughout the consultations described in subsections (a) and (b) of this Condition, other documentation identified in Condition 162, and any other information that supports the proposal" (CCs 28a, 28b, 162).	Owners and operators of all co-located infrastructure	Within 180 days of submission of Segment EM&CP. See discussions in Section 13.
The Certificate Holders will provide CI interference studies as described in CCs 28 and 162, conforming to industry standards and performed by an individual or individuals with suitable qualifications to conduct such study, with respect to each location at which the Facility crosses CI or comes into such proximity to CI that an interference study is warranted by Good Utility Practices, and specifying any proposed mitigation measures (CCs 28, 162).	Owners and operators of all co-located infrastructure, as applicable.	Ongoing.
The Certificate Holders will provide municipal consents as applicable for each Segment with EM&CP filing.	Included in the EM&CP	As needed. See Section 4.2.3.
The Certificate Holders will provide detailed soil erosion and sediment control plans in a SWPPP, which will be included with the first Segment EM&CP associated with the overland route of the Facility. Soil and sediment control measures will be implemented early in the construction process and be installed prior to and maintained in acceptable condition for the duration from any clearing or earthmoving operations through to the permanent stabilization of the soil. The SWPPP will be available at the	Included in the EM&CP	Concurrent with filing of Segment EM&CP. Included as Appendix F.

Description	Submitted to	Approximate Due Date
construction site and available to the public upon five days written notice (CC 67).		
A certificate of service indicating upon whom all EM&CP notices and documents were served and a copy of the written notice will be filed by the Certificate Holders (CC 155b).	Secretary to the Commission.	Following each applicable Segment EM&CP filing.
BEFORE CONSTRUCTION		
All necessary permits and consents referred to in CC 16 that pertain to the Overhead Transmission Line and Astoria Annex (CC 9).	Secretary to the Commission	Before commencing site preparation and any construction activities.
The Certificate Holders shall not commence work on any Segment until they shall have obtained all required interests in real estate, including interests in real estate to be used for access roads (whether obtained through a conveyance, consent, permit, or other approval) as are necessary and applicable for such Segment. Evidence of the obtaining of such interests shall be provided to the Secretary prior to commencement of the work. (CC 10)	Secretary to the Commission	Before commencement of construction.
The Certificate Holders will inform the Secretary and NYSDEC at least five days before commencing site preparation for the Project (CC 46).	Secretary to the Commission and NYSDEC.	At least five days before commencing site preparation.
The names and qualifications of the Environmental Inspector and Construction Inspector will be submitted to DPS Staff and NYSDEC (CC 53g).	DPS Staff and NYSDEC.	At least 2 weeks prior to the start of construction.
At least two weeks prior to the start of overland construction, the Certificate Holders shall hold a preconstruction meeting to which they shall invite DPS Staff, NYSDOT, and NYSDEC. The agenda, location, and attendee list for this meeting shall be agreed upon between DPS Staff and the Certificate Holders. The Certificate Holders shall supply draft minutes from this meeting to all attendees. The attendees may offer corrections or comments, and thereafter the Certificate Holders shall issue the finalized meeting minutes to all attendees. If, for any reason, the Contractors retained by the Certificate Holders to construct the Facility cannot finish the construction of such facilities, and one or more new Construction Contractors are needed, there shall be another preconstruction meeting with the same format as outlined above. (CC 58)	DPS Staff, NSDEC, NYSDOT	At least 2 weeks prior to the start of overland construction.

Description	Submitted to	Approximate Due Date
The Certificate Holders shall confine construction to the Construction Zone and approved additional work areas as detailed in the approved EM&CP. A detailed construction schedule and location timeline shall be provided to DPS Staff prior to construction (CC 59).	DPS Staff	Prior to construction.
The Certificate Holders will keep the required parties apprised of on-site chemicals and waste stored within one hundred (100) feet of their Co-Located Infrastructure (CI) or service area. In the case of CI located within the CNY, the Certificate Holders will advise CI owners and operators of on-site chemicals and waste stored within 300 feet of such facilities (CC 34).	Local Fire Departments, Emergency Management Teams, Owners and Operators of Co-Located Infrastructure; Local Fire Departments, Emergency Management Teams in CNY.	Prior to storage of chemicals.
The Certificate Holders will provide notice to local officials and emergency personnel in the area where they will be working on the Project. The notice will meet the conditions outlined in CC 42.	Local officials and Emergency Personnel.	Two weeks prior to the commencement of site preparation in area of applicable jurisdiction.
The Certificate Holders will provide notice to local media for dissemination and display in public places (such as general stores, post offices, community centers, etc.). The notice will meet the conditions outlined in CC 42.	Media for public display.	Two weeks prior to the commencement of site preparation in area of applicable jurisdiction.
The Certificate Holders will notify the adjacent landowners and their tenants of construction work within 100 feet of their property at least two weeks prior to the commencement of construction in these areas and provide copies of all correspondence to the DPS Staff. The notice will meet the conditions outlined in CC 42 (CCs 33, 42).	Adjacent landowners & Tenants with copies to DPS Staff	Two weeks prior to commencement of site preparation in area of landowner or tenant.
DURING CONSTRUCTION		
The Certificate Holders will make available to the public a toll-free or local phone number of an agent or employee who will receive complaints, if any, during the construction of the Project. In addition, the phone number of the Secretary and the phone number of the Commission's Environmental Compliance Section will be provided. A log will be maintained that lists at least the date of any complaint, identity and contact information for the complaining party, the date of the Certificate Holders'	DPS Staff as needed.	Upon commencement of construction. See Appendix H for current toll-free number, Public Involvement Plan and Compliant Resolution Plan.

Description	Submitted to	Approximate Date	Due
response, and a description of the outcome. Phone logs will be made available to DPS Staff upon request. The Certificate Holders will report to DPS Staff every complaint that cannot be resolved after reasonable attempts to do so. Any such report will be made within three business days after receipt of the complaint (CC 41).			
The Certificate Holders will provide status reports summarizing construction and indicating construction activities and locations scheduled for the next month (CC 47).	DPS Staff, NYSDOT, and NYSDEC.	Bi-weekly.	
The Certificate Holders shall identify encroachments within the Construction Zone and contact individual property owners or occupants to address and seek to rectify such potential encroachments on a case-by-case basis. The Certificate Holders shall report to DPS Staff the result of efforts to address and rectify encroachments in the Construction Zone periodically, but in no event less than quarterly (CC 60).	DPS Staff	At least Quarterly (or more often, as identified).	
The Certificate Holders shall consult periodically with state and municipal highway transportation agencies about traffic conditions near the site of the Facility and shall notify each such transportation agency of the approximate date work will begin in its jurisdiction and Construction Zone access points that connect with the highways in that jurisdiction (CC 72).	State and Municipal highway agencies.	Periodically leading up to and during construction.	
Should archeological materials be encountered during construction, the Certificate Holders will notify and seek to consult with to determine the best course of action (CC 110). (see Cultural Resources Section 11 of the EM&CP)	DPS Staff and OPRHP Field Services Bureau.	Within 24-hours of discovery.	
Should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, the Certificate Holders will notify and consult on the appropriate course of action. All archaeological or remains-related encounters and their handling will be further reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections (CC 111). (see Cultural Resources Section 11 of the EM&CP)	DPS Staff and OPRHP Field Services Bureau.	Within 24-hours of discovery.	
The Certificate Holders will promptly notify if a New York State listed species of special concern is observed to be present in the Project Area (CC 51).	DPS Staff and NYSDEC.	As soon as possible upon discovery.	
The Certificate Holders will promptly notify if any threatened or endangered wildlife species under 6 NYCRR	DPS Staff, NYDEC, USFWS, NMFS.	As soon as possible upon discovery.	

Description	Submitted to	Approximate Date	Due
Part 182 ("TE species") or any rare, threatened, or endangered plant species under 6 NYCRR Part 193 ("RTE plants") are observed to be present in the Facility area so as to determine the appropriate measures to be taken to avoid or minimize impacts to such species. If necessary to avoid or minimize impacts to such species or as directed by DPS Staff, the Certificate Holders will stabilize the area and cease construction or ground disturbing activities in the Facility area until DPS Staff have determined that appropriate protective measures have been implemented (CC 52).			
Immediate notification of any petroleum product spills (CC 35).	DPS, NYSDEC, owners and operators of any CI within 100 feet (or 300 ft in CNY).	Immediately upon discovery of a spill of petroleum products.	
Notification prior to the commencement of any herbicide application on the Project (CC 84).	DPS Staff and the appropriate NYSDEC Regional Natural Resource Supervisor(s) and Pesticide Control Specialist.	14 days prior to the commencement of any herbicide application on the Project site.	
POST CONSTRUCTION			
The Certificate Holders shall file an Operation and Maintenance Plan(s) for the Project's Interconnection Facilities. The Plan(s) shall be updated yearly, and a copy of the update plan(s) shall be filed with the Secretary, as well as submitted to Con Edison, and NYPA (CC 132).	Secretary of the Commission.	60 days prior to the anticipated date of commercial commencement of operation (COD).	
Notification that all restoration has been completed in compliance with this Certificate and the Order(s) approving the EM&CP (CC 48).	Secretary of the Commission.	Within 10 days of the completion of final restoration activities.	
Following final completion of construction of a particular Segment, the Certificate Holders shall prepare and provide to the DPS the as-built design drawings, which shall include a detailed map or maps containing all of the information specified in CC 139.	DPS	Within 90 days following the completion of construction.	
The Certificate Holders shall provide a copy of their emergency procedures and contacts. If modifications are made an updated copy will be provided (CC 136).	Bulk Electric System Section of DPS Staff, Con Edison, and NYPA	Upon commencement of operation.	

Description	Submitted to	Approximate Due Date
The Certificate Holders will notify NYSDOT, NYSDEC, and the Secretary to the Commission of the date of commencement of commercial operation (CC 50).	NYSDOT, NYSDEC, and the Secretary to the Commission.	Three days after commercial operation.
The Certificate Holders will promptly provide to DPS Staff, NYPA, and Con Edison copies of all notices, filings, and other substantive written communications with NYISO as to such reduction, any plans for making repairs to remedy the reduction, and a proposed schedule for any such repairs.	DPS Staff, NYPA, Con Edison.	Within five business days of any failure of equipment causing a reduction of more than 10 percent in the capacity of the Project.
The Certificate Holders will provide monthly reports to DPS Staff, Con Edison, and NYPA on the progress of any repairs until completed. The monthly reports will contain the information specified in CC 126.	DPS Staff, NYPA, Con Edison.	Monthly until repairs are completed.
The Certificate Holders will work cooperatively with NYPA, Con Edison, and NYISO to avoid any future occurrences. If such equipment failure is not completely repaired within nine months of its occurrence, the Certificate Holders will provide a detailed report to the Secretary. The report will contain the information specified in CC 126.	Secretary to the Commission.	Within nine months and two weeks after equipment failure.
The Certificate Holders will report any failure of the Project's cables. The report will contain the information specified in CC 135.	Bulk Electric System Section of DPS Staff, Con Edison, and NYPA	Within one day of determining the location of failure in one of the Project's cables.
The Certificate Holders will provide a copy of their emergency procedures and contacts. If modifications are made, an updated copy will be provided (CC 136).	Bulk Electric System Section of DPS Staff, Con Edison, and NYPA	Upon commencement of operation.
<p>The Certificate Holders will notify DPS Staff of any system trips incidents.</p> <p>Following the incident, the Certificate Holders will provide notice of the cause of the trip and what actions, if any, the Certificate Holders are taking to rectify the cause (CC 134).</p>	<p>DPS Staff</p> <p>DPS Staff, NYPA, Con Edison</p>	If the HVDC transmission system trips offline (other than as a result of any Operational Measures).
<p>The Certificate Holders will call and report any transmission related incident that affects the operation of the Project.</p> <p>A subsequent report of the incident will be submitted. The report will contain the information specified in CC 134. The</p>	<p>Call Bulk Electric System Section of DPS Staff.</p> <p>Submit report to Bulk Electric System</p>	<p>Call within 6 hours of any incident.</p> <p>Submission of report within seven days of the incident.</p>

Description	Submitted to	Approximate Due Date
Certificate Holders will work cooperatively with Con Edison, NYPA, NYISO, NPCC, NYSRC, NERC, and DPS Staff to prevent any future occurrences (CC 134).	Section of DPS Staff, Con Edison, and NYPA	
Present CC 89's post-construction assessments and plans for DPS Staff review within one year of the date the Facility is placed in service.	DPS Staff	Within one year of COD.
ANY PERIOD DURING PROJECT (PRIOR TO CONSTRUCTION, DURING CONSTRUCTION, POST CONSTRUCTION)		
Petition describing the action or determination made in connection with the permits and approvals referenced in the Certificate Conditions that is unreasonable or unreasonably delayed (CC 18b).	Commission and appropriate permitting authority	As needed.
A summary or statement notifying the Secretary in writing of all, or any portion of the Project's construction was not completed (CC 12).	Secretary to the Commission	As needed.
The Certificate Holders will provide copies of all necessary permits from applicable state agencies for the delivery of oversized construction materials and equipment (CC 40).	Secretary to the Commission	As needed.
The Certificate Holders shall make modifications to the Project if it is found by the NYISO or the Commission to cause reliability problems to the New York State Transmission System. If NYPA, Con Edison, or the NYISO bring concerns to the Commission, the Certificate Holders shall be obligated to respond to those concerns. The Certificate Holders shall prepare a report within 45 days of notification by DPS Staff that DPS Staff has determined that a reliability problem exists (CC 131).	DPS Staff	As needed within 45 days of notification by DPS Staff.
The Certificate Holders will report any theft of materials related to the Facility with a value in excess of \$10,000 to the DPS Representative. The notice will contain the information specified in CC 137.	DPS Staff	As needed within 1 business day of the time when the theft comes to the attention of the Certificate Holders.
All proposed modifications to any of the Segment EM&CPs and subsequent notices and filings will follow the procedures described in Section 3.2.6.	DPS Staff	As needed.
The Certificate Holders will notify the owners or operators of co-located infrastructure that is impacted by the Project or has the potential to be impacted by the Project of any situation involving imminent risk to health, safety, property, or the environment that requires the Certificate Holders to	Owners and Operators of co-located infrastructure.	In the event of the emergency

Description	Submitted to	Approximate Due Date
cross any infrastructure or to use any associated property to address the emergency (CC 28g).		
The Certificate Holders will advise the owners or operators of co-located infrastructure of all construction activities that take place within the vicinity of co-located infrastructure. The vicinity will be defined as described in CC 28e.	Owners and Operators of co-located infrastructure.	At least 30 days prior to commencing any construction activities
The Certificate Holders will notify the owners or operators of co-located infrastructure if any damage to or adverse effects to the co-located infrastructure resulting from any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, and construction (CC 28f).	Owners and Operators of co-located infrastructure.	Immediately upon knowledge or discovery of damage.
The Certificate Holders shall coordinate with NYPA and Con Edison system planning and system protection engineers to evaluate the characteristics of the transmission system before purchasing any system protection and control equipment related to the electrical interconnection of the Project to NYPA's and Con Edison's transmission facilities. This discussion is designed to ensure that the equipment purchased will be able to withstand most system abnormalities (CC 128).	NYPA and Con Edison system planning and system protection engineers.	Before purchasing any system, protection and control equipment related to the electrical interconnection of the Project to NYPA's and Con Edison's transmission facilities.
The Certificate Holders shall work with NYPA and Con Edison engineers and safety personnel on testing and energizing equipment and develop a start-up testing protocol providing a detailed description of the steps that they will take to limit system impacts prior to and during testing of the Project. Such protocol shall be provided to NYISO, Con Edison, and NYPA for review and comment and, following the review and comment phase, a copy of such protocol shall be provided to Staff of the Bulk Electric System Section of the DPS. The Certificate Holders shall comply with this protocol once established, unless NYISO provides written authorization to Certificate Holders to deviate from that protocol. The Certificate Holders shall make a good faith effort to notify DPS Staff of meetings related to the electrical interconnection of the Project to the NYPA's or Con Edison's transmission system, as applicable, and provide the opportunity for Staff to attend those meetings. The Certificate Holders shall provide a copy of the testing protocol to Staff of the Bulk Electric Systems Section of DPS (CC 130).	NYISO, Con Edison, NYPA, DPS Staff, Bulk Electric Systems Section of DPS	During the testing and energizing phase of the Project.

3.4 STOP WORK ORDERS

During the pre-construction meeting, all Contractors will be notified that the Environmental Inspector(s) will have the authority to stop work and direct actions in the event of, or for the occurrence or prevention of violations of a Certificate Condition or a condition of another Project permit. The Safety Inspector will have stop work authority in the event of a leak, spill, or other event that impacts human health and safety during construction activities.

All Project personnel will be encouraged to notify the Environmental Inspector, Safety Inspector, Construction Manager, Contractor, Project Preservation Officer, or DPS Staff if they observe conditions that could potentially be in non-compliance so that corrective action(s) can be taken. If any non-compliant or potentially non-compliant actions or issues are observed, all Project personnel should report it to their supervisor as soon as it is safe to do so.

Upon becoming aware of any concern, the Environmental Inspector, Safety Inspector, and other Project personnel will meet with the contractor's or subcontractor's employees to discuss and resolve the issues. Stop Work Authority will be exercised sparingly and with due regard to potential environmental impact, economic costs involved, possible impact on construction activities, and whether an applicable statute or regulation is or is claimed to be violated.

Any observation of spills, leaking fluids or improperly stored fluids may trigger the issuance of a "stop work" notice by the Safety Inspector or the Environmental Inspector until the situation is resolved (BMP Document Section 13.7).

The Certificate Holders will regard DPS Staff representatives as the PSC's designated representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate or may violate the terms of the Certificate Conditions, the WQC, or any other terms of any relevant permits or jurisdictional agencies, DPS Staff may also issue stop work order for that location or activity (CC 54a). Before exercising such authority, DPS Staff will consult (wherever practicable) with the Environmental and/or Safety Inspector. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be brought immediately to the attention of the Certificate Holders' Construction Manager and the Director of the DPS Office of Energy Efficiency and the Environment. If DPS Staff issues a stop-work order, neither the Certificate Holders nor the EPC Contractor will be prevented from undertaking any safety-related activities that 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 during these discussions.

A stop work order issued by DPS Staff will expire 24 hours after issuance unless confirmed by a single Commissioner. If a stop-work order is confirmed, the Certificate Holders may seek reconsideration from the confirming Commissioner or the whole Commission. If the emergency prompting the issuance of a stop work order is resolved to the satisfaction of the Commissioner or the Commission, the stop work order will be lifted. If the emergency has not been satisfactorily resolved, the stop work order will remain in effect. (CC 54b)

If DPS Staff or the Environmental Inspector discovers a specific activity that represents a significant environmental threat that is or immediately may become a violation of the Certificate Conditions, the WQC, or any other terms of any relevant permits or jurisdictional agencies, and on-site construction personnel refuse to take appropriate action after being advised of the threat, DPS Staff and/or the Environmental Inspector may direct the field crews to stop the specific potentially harmful activity immediately. If the direction to stop work is issued by DPS Staff and Certificate Holders' responsible personnel are not on site, the DPS Staff will immediately thereafter inform the Construction Inspector and/or the Inspector of the action taken. The stop work order will be lifted by the DPS Staff when the situation prompting its issuance has been resolved.

If DPS Staff determines that a significant threat exists such that protection of the public or the environment at a particular location requiring the immediate implementation of specific measures, the DPS Staff may, in the absence of the Environmental Inspector and the Construction Inspector, or in the presence of such personnel who, after consultation with the DPS Staff, refuse to take appropriate action, direct the Certificate Holders or their Contractors to implement the corrective measures identified in the approved EM&CP. The field crews will comply with the DPS Staff's directive immediately. DPS Staff will immediately thereafter inform the Certificate Holders' Construction Inspector and/or Environmental Inspector of the action taken.

DPS Staff or the Environmental Inspector will promptly notify the appropriate NYSDEC representative of any activity that is a significant environmental threat to a state-regulated wetland or its regulated adjacent area, a protected stream or other waterbody, an RTE species, or a state- or federally- identified hazardous waste site or that may become a violation of the Certificate Conditions, WQC, or any other terms of any relevant permits or jurisdictional agencies. If any NYSDEC field representatives observe any activities that violate or may violate either the Certificate Conditions or the ECL, the representative will notify the DPS Staff and the Environmental Inspector. NYSDEC field representatives and APA representatives (where applicable) will consult with the Environmental Inspector in assessing site conditions and determining whether a recommendation should be made to DPS staff to exercise its stop-work authority or alternatively if the Certificate Holders should be directed to take action to minimize further impacts to streams and regulated wetlands as appropriate.

Any archeological materials or human remains encountered in the field during construction will result in a stop work order until appropriate agencies can be consulted, and appropriate mitigation measures to be implemented. See Section 11.0 of this EM&CP for additional information related to the response to cultural resources encountered during construction.

4.0 CONSTRUCTION METHODS

The Certificate Holders will construct the Transmission Line in a manner that conforms to all applicable BMPs. All cleanup and restoration methods that will be performed after construction are described in Section 13.0. All vegetation clearing methods and protection measures to be used prior to and during construction are described in Section 8.0.

As described in the SWPPP (Appendix F), the approximate construction sequence of the Transmission Line will be as follows:

1. Establish work area and contractor staging areas.
2. Install stabilized construction entrance and temporary erosion and sediment control measures (installed in progressive phases).
3. Perform initial clearing to remove vegetation (where required).
4. Perform site grading and ground stabilization if required due to site conditions. If necessary, ground stabilization shall generally consist of undercutting existing unsuitable topsoil (to be stockpiled on-site), proof rolling the subgrade, installing layers of geotextile fabric and geogrid, and installing an aggregate base. Additional E&SCs will be installed at the direction of design engineers and environmental inspectors.
5. Install building foundations
6. Erect steel superstructures
7. Install electrical equipment
8. Connect building utilities to existing utilities nearby (electric, water, sanitary)
9. When all disturbed areas have been stabilized, remove all temporary sediment and erosion control measures.

4.1 TRANSMISSION LINE REQUIREMENTS

Section R of the Certificate Conditions (CCs 119–137) outline certificate conditions specific to Transmission System Reliability. The Certificate Holders have designed the Overhead Transmission Line in accordance with these conditions as described in the following sections.

4.1.1 Building and Structure Height

The tallest structures for the Overhead Transmission Line and Astoria Annex will be the transmission structures, the substation and overhead transmission poles. The height of the tallest structures are approximately 150 feet. The overhead transmission pole heights have changed from 130 feet to 150 feet. Williams Aviation conducted a study and found that the structures do not exceed obstruction standards and would not be a hazard to air navigation to the airspace (see Williams 2024 in Appendix L). This study was conducted after the pole heights were changed. Williams Aviation submitted the Federal Aviation Administration (FAA) forms to FAA for concurrence on June 7, 2024.

The Federal Aviation Administration (FAA) completed an Aeronautical Study⁶ of the design of the Annex Station and a Determination of No Hazard to Air Navigation was issued on July 16, 2024 (See Appendix A). The study revealed that the structures do not exceed obstruction standards and would not be a hazard to air navigation. See Appendix A – Agency Correspondence for FAA Determination of No Hazard to Air Navigation.

4.1.2 Site Plan Requirements

A site plan of sufficient detail is provided in Appendix C in conformance with the requirements of the Certificate, EM&CP Guidelines, and the code requirements of the CNY. The site plan and construction drawings include architectural, structural, HVAC, electrical, plans for all structures. The site plan and construction drawings have been prepared by an architect or engineer licensed by the State of New York.

4.1.3 Coordination with CNY

In conformance with the code requirements of the CNY, the site plans and construction drawings have been packaged according to the applicable building permits required from the New York City Department of Buildings (DOB). The site plans and construction drawings have been packaged as listed in Table 4-1. The status of all work permits necessary for construction is listed in Table 12-1.

⁶ Aeronautical Study No. 2022-AEA-18583-OE

Table 4-1. DOB Permit Packages

Permit Package	Permit No.	Included Drawings	Appendix	Status
Site - Civil		Site Civil Drawings	Appendix C	Q1 2025
		Underground Ductbanks	Appendix C	Q1 2025
Structural		Structural – Site Piles and Foundations for Transmission Line	Appendix C	Q2 2025
		Structural – Site Piles and Foundations for Astoria Annex Expansion	Appendix C	Q2 2025
Architecture		Relay Buildings	Appendix C	Q1 2025
Electrical		Electrical Package	Appendix C	Q2 2025
Fire Protection		Fire Protection Systems – Fire Alarm	Appendix C	Q2 2025
Mechanical		Mechanical Package – Relay building HVAC	Appendix C	Q2 2025

4.1.3.1 CNY Inspections

During construction of the Astoria Annex modifications, the Certificate Holders will obtain periodic inspections of the construction work by the NYC DOB for compliance with the NYCFC, NYCEC and NYCCC (CC 86).

4.2 RIGHTS OF WAY AND EASEMENTS

The Certificate Holders are in the process of obtaining or have obtained appropriate easement rights from Con Edison for the Transmission Line proposed in this EM&CP.

4.3 SOIL AND MATERIALS MANAGEMENT PLAN

The Soil and Materials Management Plan is included in Appendix J attached to this EM&CP, which sets guidelines for the management of excess excavated soil associated with all excavation and other land disturbance activities associated with construction.

4.4 INADVERTENT DAMAGE TO EXISTING UTILITIES

If, during construction, damage occurs to existing utilities discussed in Section 13 and Appendix M, the typical process will be as follows:

1. Ensure the site personnel and public are safe.
2. CHPE, LLC, will immediately notify the utility owner; If the damaged utility poses an imminent danger to public safety, the contractor will contact emergency services and the utility owner.
3. Document the damage by filing a utility damage report and notify the one-call center (811) about utility damage.
4. Follow the utility owner repair procedures.

5.0 POLLUTION PREVENTION

5.1 POTENTIAL POLLUTANT SOURCES

Construction work at this location involves materials which may be found in staging/laydown areas and active work sites during construction and which may be potential pollutant sources (see Table 5-1).

Table 5-1. Potential Pollutant Sources for Annex Station Construction Activities

Pollutant	Quantity	Container and Storage Description
Used oil	50–100 gallons	Drum with secondary containment
Wire pulling lubricants	100 gallons	Approved containers
Hydraulic fluid	Greater than 25 gallons	Approved containers
Gasoline	50 gallons	5-gallon steel containers located inside secondary containment for chainsaws, pumps, etc.
Mobile fueling truck w/spill kit on board	no full-time storage. Diesel fuel 30 to 500 gallons	Steel AST
Solid waste (litter and construction debris)	Varies	Covered dumpsters
Sanitary waste	Varies	Portable facilities
Chemicals associated with laydown yard equipment maintenance	Varies	Flammable cabinets inside shops and on service trucks, shelves in storage connex, 20-inch Hazmat connex with rollup doors and built-in secondary containment

5.2 GOOD HOUSEKEEPING PRACTICES

Good housekeeping practices were developed as part of this EM&CP and are included in the “Spill Prevention” section of the SWPPP (Appendix F) as well as in the Spill Prevention Control and Countermeasures Plan (SPCC)(Appendix I). These good housekeeping practices will be followed within Project construction areas to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff:

- Where possible, store only enough products required to do the job.
- Store all materials within Project Areas in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
- Keep products in their original containers with the original manufacturer's label.

- Avoid mixing substances with one another unless recommended by the manufacturer.
- Whenever possible, use all of a product up before disposing of the container.
- Follow manufacturers' recommendations for proper use and disposal.
- The project superintendent will inspect daily to ensure proper use and disposal of materials.

5.3 WASTE DISPOSAL

5.3.1 Solid Waste

Foreign waste materials will be collected and stored in a secured area until removal and disposal by a licensed solid waste management company. All trash and construction debris from work on this Segment will be disposed of in a portable container unit. No foreign waste materials will be buried within the site. All personnel will be instructed regarding the correct procedure for waste disposal. Notices stating these practices will be posted in the Project trailer and the Contractor (or their designee) will be responsible for seeing that these procedures are followed.

5.3.2 Sanitary and Hazardous Waste

Any sanitary waste from portable units will be collected from the portable units by a licensed sanitary waste management contractor, as required by NYSDEC regulations.

The construction of the Project will require the transport, handling, use, and onsite storage of hazardous materials and petroleum products, and small amounts of hazardous wastes would be generated as by-products of the construction. These will be handled in accordance with the Construction and Safety Policies and Procedures (see Appendix G). Handling of hazardous soil materials will be in accordance with the Soil Management Plan (Appendix J).

All hazardous waste materials will be disposed of in a manner specified by local or state regulations or by the manufacturer. Project personnel will be instructed in these practices, and the individual who manages daily project operations will be responsible for seeing that these practices are followed.

Procedures for the storage and use of hazardous products are outlined in the "Spill Prevention" section of the SWPPP which is included in Appendix F. These products may include but are not limited to petroleum products, fertilizers, and paints. These procedures are used to reduce the risks associated with hazardous materials.

5.4 CONSTRUCTION MATERIALS

Materials (including fill, construction materials, or debris) cannot be deposited, placed, or stored in any waterbody as described in Section 9.1.

All construction materials stored onsite will be stored in a neat, orderly manner in appropriate containers with appropriate labels. Products will be kept in their original containers with the original manufacturer's label unless the containers are not re-sealable and manufacturer's recommendations for proper use and disposal will be followed. Original labels and Safety Data Sheets (SDSs) will be retained for the period that the product is being utilized onsite in accordance with all applicable OSHA regulations (29 CFR 1926.33). Containers will not be stored on the ground but will be stored in cabinets or on a stable working surface such as a portable trailer bed or other secure decking. Containers will be kept closed unless the material is being transferred. All transfer operations will be monitored and not left unattended (BMP Document, Section 12.3). The Good Housekeeping practices outlined in the "Spill Prevention" section of the SWPPP included in Appendix F will be followed to minimize the risk of spills or other accidental exposure of materials and substances to stormwater runoff and ecologically sensitive sites.

The Construction Contractor will not store, mix, or load chemicals labeled toxic or petroleum products within 100 feet of a wetland, river, creek, stream, lake, reservoir, or other ecologically sensitive site or existing recreational area along the proposed ROWs (BMP Document Section 12.3.1). This applies to storage and refueling and does not apply to normal operation or use of equipment or chemical in these areas. All employees and/or other handlers of hazardous materials will be properly trained and instructed on the proper reporting and handling requirements.

5.4.1 Secondary Containment

Secondary containment shall be used to prevent leaks or spills from reaching the environment and to contain spills until they can be cleaned up. Secondary containment for portable containers (drums and buckets) will be of sufficient size to contain 110% of the capacity of the largest container. Tank containment will be of sufficient size to contain 100% of the capacity of the largest tank within its boundary and have additional capacity sufficient to contain precipitation from a 25-year, 24-hour rainfall event. The liner or structural material used for secondary containment will be compatible with the product that it's expected to contain. Carbon steel, for example, would not be compatible with corrosive liquids such as sulfuric acid. In this case, plastic should be used.

Spill management consists of plastic laid underneath oil containing equipment. Plastic will be replaced on an as needed basis.

5.5 CONSTRUCTION EQUIPMENT

Construction equipment will be staged within the limits of work and/or the limits of work for the Laydown Yard(s) that were permitted in connection with the Astoria Converter Station (Segment 22). All on-site construction vehicles, including contractor employee vehicles, will be monitored for leaks and will receive regular preventative maintenance to reduce the risk of leakage. The following measures will apply to all construction material and equipment staging locations:

1. Any equipment leaking oil, fuel or hydraulic fluid will be repaired immediately or removed from the site.
2. Contractor personal vehicles at all times, and construction equipment at the end of the working day, will be parked at least 100 feet from a wetland, river, creek, stream, lake, reservoir, spring, well or other ecologically sensitive site or existing recreational area along the proposed construction ROW except where it is necessary to maintain continuity of construction.
3. Equipment cannot be deposited, placed, or stored in any waterbody.
4. Equipment or machinery will not be cleaned in any regulated wetland or adjacent area, and debris resulting from cleaning operations will not be permitted to directly enter any regulated wetland or protected stream or waterbody (CC 113f).
5. In accordance with the amended CC 114, in general, and to the maximum extent practicable, refueling equipment, storage mixing, or handling of open containers of pesticides, chemicals labels "toxic", or petroleum products will not be conducted within 100 feet of a stream or waterbody or wetland. Requirements for refueling within 100 feet of wetlands or streams will be allowed under the following circumstances.
 - i. Refueling of hand equipment will be allowed within 100 feet of wetlands or streams when secondary containment is used. Secondary containment will be constructed of an impervious material capable of holding the hand equipment to be refueled and at least 110% of the fuel storage container capacity. Fuel tanks of handheld equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Crews will have sufficient spill containment equipment on hand at the secondary containment location to provide prompt control and cleanup in the event of a release.
 - ii. Refueling of equipment will be allowed within 100 feet of wetlands or streams when necessary to maintain continuous operations and where removing equipment from a sensitive area for refueling would increase adverse impacts to the sensitive area. Fuel tanks of such equipment will be initially filled in an upland location greater than 100 feet from wetlands or streams in order to minimize the amount of refueling within these sensitive areas. Absorbent pads or portable basins will be deployed under the

refueling operation. In addition, the fuel nozzle will be wrapped in an absorbent pad and the nozzle will be placed in a secondary containment vessel (e.g., bucket) when moving the nozzle from the fuel truck to the equipment to be refueled. All equipment operating within 100 feet of a wetland or stream will have sufficient spill containment equipment on board to provide prompt control and cleanup in the event of a release.

- iii. Field personnel and contractors shall be trained in spill response procedures, including the deployment and maintenance of spill response materials.
6. The contractor will coordinate with the Environmental Inspector to determine the appropriate location for all refueling operations. These areas will be properly contained to prevent excess spillage during routine refueling.
7. Spill containment devices and materials will be readily accessible at the refueling site. Any effluent generated on/resulting from these sites will be contained, treated or disposed of, as appropriate. All drivers of fueling trucks will take all usual and reasonable environmental and safety precautions during refueling, such as connecting a safety grounding strap between the fuel tank and vehicle or equipment being refueled.
8. Drivers will frequently check for fuel spills, drips, or seeps during the refueling operation (BMP Document, Section 12). When not feasible to move a vehicle or construction equipment from an environmentally sensitive area to a suitable access area, the following precautions will be used to prevent petroleum products or hazardous materials from being released to the environment.
 1. Deployment of portable basins or similar secondary containment devices
 2. Use of ground covers (such as plastic tarpaulins)
 3. Precautionary placement of a floating boom on nearby surface waterbodies if applicable

5.6 PETROLEUM AND CHEMICAL HANDLING PROCEDURES

Petroleum and Chemical handling procedures are outlined in the Spill Prevention, Control, and Countermeasure (SPCC) Plan in Appendix I. These procedures will be used to minimize the potential for spills of petroleum and hazardous substances, or other materials, that have the potential to pollute the environment. The SPCC Plan also describes the response measures that will be implemented to contain, clean-up and dispose of any spilled substances during construction. The Certificate Holders will keep required parties apprised of on-site chemicals and waste stored within 100 feet of their CI or service area. These required parties include local fire departments, emergency management teams, and owners and operators of CI (CC 34).

5.7 SPILL RESPONSE AND CLEANUP PROCEDURES

The spill response and cleanup procedures are outlined and described in the SPCC included in Appendix I.

5.8 NOTIFICATION AND REPORTING

Section 4.0 of the SPCC included in Appendix I describes the notification and reporting requirements that are necessary after a spill has occurred. Reporting obligations are also addressed in Table 3-2.

5.9 UNANTICIPATED ENCOUNTERS WITH CONTAMINATED SOIL

Due to the heavily urbanized landscape of New York City, and the current and former use of nearby areas for industrial, commercial, and waste management operations, soils within the Project Site may be contaminated. Construction of the Project could disturb contaminants potentially deposited in the soil. The Soil and Materials Management Plan in Appendix J describes procedures for identifying and managing contaminated soils.

6.0 STORMWATER POLLUTION, SOIL EROSION, AND SEDIMENT CONTROL

An SWPPP (Appendix F) was prepared for the Overhead Transmission Line and Astoria Annex in accordance with the criteria presented in the SPDES General Permit for Construction Activities (GP-0-20-001), the New York State Stormwater Management Design Manual (January 2015), and the New York State Standards and Specifications for Erosion and Sediment Control (July 2016). Along with the EM&CP, the SWPPP and Erosion and Sedimentation Control (ESC) plans will be updated with subsequent Project phases as they occur. A copy of the SWPPP and SPDES general permit will be available on-site at all times during construction.

6.1 TOPOGRAPHY AND SITE SOILS

The Web Soil Survey of Queens County, New York indicates the occurrence of 3 soil series within the Project site. These soil series consist of Laguardia artifactual coarse sandy loam, Urban land-Laguardia complex, and Urban Land reclaimed substratum and are rated as well drained.

6.2 CONSTRUCTION SEQUENCING

The sequence of construction is summarized in Section 4.0 and further detailed in the SWPPP (Appendix F). All of the erosion and sediment controls will be temporary. Erosion and sediment controls must be implemented early in the construction process and prior to the start of grading and excavation activities, which are very limited for this Segment. Such procedures will be maintained throughout the construction period in accordance with the SWPPP (Appendix F) (CC 114i).

6.3 STRUCTURAL CONTROLS

6.3.1 Erosion and Sediment Control

Soil and sediment control measures will be implemented early in the construction process and will be installed prior to any site clearing or earth moving operations. These measures will be maintained throughout the duration of construction until the permanent stabilization of soil has been achieved. All erosion and sediment control devices will be installed in accordance with the SWPPP (Appendix F) and the New York State Standards and Specifications for Erosion and Sediment Control (SSESC or "Blue Book") (CC 67).

The "Controls" section of the SWPPP included in Appendix F describes the erosion and sediment controls that will be constructed prior to clearing or grading any portion of the Project in order to reduce excessive

stormwater runoff. If needed, additional erosion and sediment control measures will be installed following site inspections.

6.3.2 Dust Control

The Certificate Holders and all associated subcontractors will take appropriate measures to minimize fugitive dust and airborne debris from construction activity associated with construction (CC 64). Only plain water will be used for dust suppression. Stabilized construction entrances will be consistent with NYSDEC stabilized construction entrance requirements (see Site Plan and Construction Drawings in Appendix C) and will also help provide dust control. All applicable regulations and standards related to dust control will be followed including the SDESC page 2.25.

6.3.3 Dewatering Methods

The construction Contractor or applicable subcontractor will be responsible for providing a dewatering system for construction that is of adequate size and capacity to lower and maintain the groundwater at the specified level. Dewatering is not anticipated for this Segment; however, should the Contractor encounter groundwater, the following measures are in place:

The proposed dewatering will be limited to the excavations that will extend below the water table. The construction Contractor will contain groundwater that collects in open excavations to prevent uncontrolled migration. The construction Contractor will be prepared to pump groundwater into appropriately sized containers and transport containerized water off-site for disposal at an approved disposal facility (see Appendix F).

For the excavations that extend below the water table, the construction Contractor will:

1. Utilize groundwater cut-off methods (such as steel sheeting) driven into a silt organic layer to reduce groundwater withdrawal volumes and pumping rates.
2. If additional cut-off is required, then the bottom of the sheeted excavation will be sealed by placing tremie grout to reduce infiltration through bottom of the excavation. If necessary, other ground improvement techniques (grouting) will be implemented by the Contractor to reduce the volume of groundwater withdrawals to manageable volumes.
3. The dewatering will be performed through sumps within the sheeted excavation. A dewatering hose will be connected to a temporary tank for off-site disposal.

4. Groundwater will be evaluated prior to treatment and/or disposal. Baseline groundwater sampling will be sampled in a manner required by a receiving disposal facility, and in compliance with applicable laws and regulations. (See Section 3.3.2.3 of Appendix F)
5. Soil excavated from the trench shall be stockpiled separately within a straw bale/silt fence barrier to prevent siltation into surrounding areas.
6. Include standby pumps and power sources for continuous operation.
7. The intake of the hoses used to withdraw the water from the trench will be elevated and screened.
8. No wells/wellpoints shall be utilized as dewatering practices during construction.
9. The Contractor will perform the work to minimize dewatering discharges to keep dewatering withdrawal volumes less than 100,000 gallons per day in any 30-day consecutive period.

The dewatering system will be kept in continuous operation from the time excavation is started in the dewatering area (or before if required by site conditions to lower groundwater to the elevations) until the time backfilling is completed at least two (2) feet above the normal groundwater level. All water removed from the excavation will be conveyed in a closed conduit to storage tanks to be properly disposed of at an approved off-site location. No trench excavations will be used as temporary drainage ditches. All water removed from the excavation will be disposed of by the construction Contractor in a manner that does not endanger public health, property, or any portion of the Project under construction or completed. If contaminated water is encountered during dewatering, the procedures described in Section 3.3.2.3 of the Stormwater Pollution Prevention Plan (Appendix F of this EM&CP) will be followed. See Section 3.3.2. of Appendix F for additional information for the dewatering methods and procedures for construction of the Astoria HVDC Annex Station.

6.4 MAINTENANCE, INSPECTION, AND RECORDKEEPING

In accordance with the SWPPP (Appendix F), sediment and erosion control measures will be inspected at least once every seven days. More frequent inspections will occur as needed and defined in the SWPPP (e.g., land disturbance exceeds 5 acres). Sediment and erosion control inspections will be performed by the Environmental Inspector. All maintenance required by inspection will commence within 24 hours and be completed within 48 hours of the inspector's report. Additional details regarding the minimum required inspection and maintenance practices used to maintain erosion and sediment controls are described in the "Maintenance/Inspection Procedures" section of the SWPPP (Appendix F) as well as in Section 3.0 of this EM&CP. These procedures include inspection requirements for Owner/Operator, Qualified Inspectors, and general requirements.

7.0 SENSITIVE LAND USES

The Overhead Transmission Line and Astoria Annex was sited within an existing, disturbed, industrial site that is not open to the general public. Based on aerial imagery and multiple site visits, no sensitive agricultural or recreational land uses were identified for this segment.

8.0 VEGETATION CLEARING AND DISPOSAL

The construction of the Overhead Transmission Line and Astoria Annex will take place on a developed and previously disturbed project site with minimal vegetation. Tree and vegetation clearing is not anticipated. Table 8-1 provides the terms and definitions associated with vegetation clearing and disposal, should limited clearing be required.

Table 8-1. Terms and Definitions from BMP Document Section 5.2

Term	Definition
Clearing	the cutting and physical removal, either by hand or mechanical means, of all vegetation from the work area
Grubbing	the mechanical removal of the stump and root mass of felled woody vegetation
Slash	shrubs, saplings, and tops of trees 4 inches in diameter or less at the large end for hardwood and 6 inches in diameter or less at the large end for softwoods.
Stumps	the woody stem and fibrous root mass left in the soil after removing the trunk at the butt.
Timber/logs	trunks and limbs greater than 6 inches in diameter at the small end, with a minimum 8-foot length.

8.1 TREE AND VEGETATION CLEARING METHODS

Table 8-2 provides the terms and definitions associated with methods of clearing. No clearing is anticipated for the construction of the Overhead Transmission Line and Astoria Annex.

Table 8-2. Tree and Vegetation Clearing Methods

Method Type	Method Title	Method Description
Type I	Hand Cutting (HC)	This method employs a hand-held chain saw. It is selective but is slower and more expensive than motorized mechanical devices. Residential areas, buffer zones, wetlands, and highway screens are areas where hand cutting is typically prescribed.
Type II	Mechanical Clearing Machine (HA)	This term usually refers to a machine known as the Hydro-ax or Kershaw mower. This machine can cut trees up to 10 inches in diameter at the rate of several acres a day, depending on

Method Type	Method Title	Method Description
		stem density and terrain. It is essentially nonselective and a good device for clearing rights-of-way that are composed of young undesirable species in a relatively uniform stand.
Type III	Mowing	This technique is primarily used in areas of herbaceous vegetation. Terrain must be relatively flat with no gullies or rocks.
Type IV	Mechanical whole-tree felling equipment	This method allows controlled felling and loading of whole trees while minimizing damage to adjacent trees. Where vegetation is cleared, erosion and sediment control measures will be installed and monitored until the topsoil is stabilized and can support grassy vegetation.

9.0 ENVIRONMENTALLY SENSITIVE AREAS

This Section of the EM&CP addresses environmentally sensitive areas, specifically waterbodies and regulated wetlands, groundwater and wells, ecologically sensitive species and habitats (e.g., state and federally listed species, significant natural communities), and invasive species. Given the previous industrial usage and existing disturbance of the site, environmentally sensitive areas are very limited. CHPE chose this location for the transmission line because it is already improved for or generally suitable. This allowed the Certificate Holder to avoid and minimize impacts to ESAs resulting from the construction of the transmission line.

9.1 WATERBODIES AND REGULATED WETLANDS

Field staff conducted a walk through and field investigation for wetlands and sensitive habitat along the proposed transmission line and Astoria Annex site on February 21, 2024. No wetlands or streams were identified within the LOW for the Overhead Transmission Line and Astoria Annex

Existing site conditions consisted of heavy utility use and active construction sites. Existing habitat observed on site consisted of segmented pockets of mowed fields with existing utilities (i.e., gas lines, distribution poles and overhead utility lines) present throughout. Pockets of sparse woody vegetation exist along construction site security fence lines which are actively maintained (i.e., trimmed) to not interfere with existing overhead utility lines.

The Site has been significantly disturbed and is highly developed, consisting primarily of impervious paved and concrete surfaces. Based on the site evaluations, there are no wetlands present within the Astoria Annex Site or the proposed laydown yard. Waterbodies adjacent to the site include the East River.

9.2 GROUNDWATER AND WELLS

The Project will not impact any wells adjacent to the Project, which is located in an industrial area serviced by municipal water supply, with limited nearby residential development. The Certificate Holders performed a review of geospatial data to locate potential private and municipal wells within 200 and 400 feet of the Transmission Line, respectively. Specifically, a review of the NYSDEC's water wells dataset and a review of aerial mapping of buildings/structures (assuming that existing wells will be generally in proximity to structures) was performed, the distance to the nearest known well, per a review of publicly available data, is 2.12 miles.

Equipment refueling at the Overhead Transmission Line and Astoria Annex will be located well beyond 200 feet from any adjacent residential properties and potential wells which may be present.

9.3 ECOLOGICALLY SENSITIVE SPECIES AND HABITATS

The Certificate Holders corresponded with the NYNHP in April 2022 and were provided with shapefiles of known rare, threatened, or endangered (RTE) species locations in relation to the project corridor by the NYSDEC. No state-listed RTE habitat was identified at the Transmission Line Site. The nearest known habitat was associated with a breeding zone for the Peregrine Falcon (*Falco Peregrinus*), identified approximately 3,225 feet to the southwest of the Site. Given the distance between the breeding zone and the Site and considering the extensively disturbed and industrially active nature of the surrounding area, no adverse effects to the Peregrine Falcon are anticipated.

In accordance with Section 7 of the Endangered Species Act of 1973, an official species list was requested from the USFWS Information for Planning and Consultation website (see Appendix A). The following species were identified:

- Northern Long-eared Bat (*Myotis septentrionalis*) – endangered
- Piping Plover (*Charadrius melodus*) – threatened
- Red Knot (*Calidris canutus rufa*) – threatened
- Roseate Tern (*Sterna dougallii dougallii*) – endangered
- Monarch Butterfly (*Danaus plexippus*) – candidate
- Seabeach Amaranth (*Amaranthus pumilus*) – threatened.

Of the species identified, no suitable habitat was identified on the Project Site; therefore, no impact to these species is anticipated.

The Department of Energy requested re-initiation of informal consultation pursuant to Section 7 of the Endangered Species Act in a letter dated March 17, 2021 (Appendix A). Minor route modifications and proposed relocation of the site and of the Annex Station were noted. The Department of Energy's determination in their Biological Assessment is that the Project "may affect but is not likely to adversely affect the endangered Indiana bat or the threatened northern long-eared bat critical habitat."

The USFWS responded in a letter dated March 29, 2021 (Appendix A), indicating that they concur with the above determination for Indiana bat and the northern long-eared bat. No tree clearing is proposed for the Overhead Transmission Line and Astoria Annex. However, due to the up-listing of the species to

endangered, effective March 31, 2023, the Certificate Holders will continue to coordinate with USFWS if tree clearing is required outside of the seasonal windows.

9.3.1 Unanticipated Discovery of Threatened and Endangered Species

In the event RTE species are encountered during the preconstruction or construction phases of the Project that were not identified previously, the following measures will be implemented (BMP Document Section 16.3):

- 1) The Environmental Inspector will identify the area of the sighting or encounter, flag the boundaries of the newly identified occupied habitat or locations where RTE plants have been observed to be present along the overland portions of the cable route, and record GPS locations of the likely habitat boundary.
- 2) Any unanticipated sightings of observation of RTE plants will be reported as soon as possible to DPS Staff, NYSDEC, NYNHP, or USFWS. The Certificate Holders will consult with applicable resource agencies for measures to avoid and/or minimize impacts to RTE species and their occupied habitat.
- 3) If RTE species or their occupied habitats are discovered during construction activities, the Certificate Holders and associated contractors will temporarily halt construction activities, excepting any activity required for immediate stabilization of the area, to avoid and/or minimize impacts to the species or habitat. Construction activities in the area will resume once protective measures, developed in consultation with DPS Staff, NYSDEC, or USFWS, are implemented.
- 4) If new RTE wildlife species occupied habitat is identified or RTE plants are observed and verified, EM&CP Plans will be updated to show the new TE occupied habitat(s) and locations of RTE plants. Areas of TE occupied habitat and locations of RTE plants along the overland route will also be flagged in the field.
- 5) Construction personnel will be updated on the locations of any new RTE species or occupied habitats or locations that are identified. These areas will be reported to the applicable resource agencies.

Environmental training for the Contractor and construction crews will include training on the identification of any rare, threatened, or endangered species that the NYSDEC has identified as possibly occurring within the area, especially bald eagles and peregrine falcons and location of their nests. Construction personnel will be instructed to report any sightings of potential eagle/falcon nests that were not previously identified by the NYNHP. If any previously unidentified eagle/falcon nests are discovered, the Certificate Holders will report findings to the NYNHP as soon as possible and consult with the NYSDEC and USFWS for guidance to avoid and/or minimize the potential for disturbance, if needed (BMP Document Section 16.2).

9.4 INVASIVE SPECIES MANAGEMENT

No invasive species have currently been identified at the site of the Transmission Line. Invasive species are typically nonindigenous and include both terrestrial and aquatic species that can spread rapidly in the environment, resulting in the displacement of native species, and potentially causing economic impacts. Additionally, areas that have been disturbed by human activity may provide opportunity for the colonization and spread of invasive species, which are often more disturbance-tolerant than the native communities.

The movement of vehicles, equipment, and personnel, and the transport of materials and/or construction debris to and from areas that are inhabited by invasive species could result in the unintentional spread of these species. The Certificate Holders have included BMPs to control the transport of invasive plant species from areas where they may occur. Measures such as training personnel in the identification of invasive species, inspecting and cleaning vehicles and equipment, and practices to encourage rapid stabilization, restoration, and revegetation of disturbed work areas have been incorporated to minimize any adverse impacts due to invasive species, as guided by the Environmental Energy Alliance of New York, New York Utility Company Best Management Practices for Preventing the Transportation of Invasive Species (2015).

9.4.1 Invasive Species Within Transmission Line

The Transmission Line is sited on a previously disturbed site. Any potential work within areas containing invasive species will be completed in accordance with the Invasive Species Control Plan (Appendix K).

9.4.2 Measures to Prevent or Control the Transport of Invasive Species

On a Project-wide basis, the Certificate Holders will perform the following measures (BMP Document Section 21.1.1) to prevent or control the transport of invasive species in accordance with applicable regulations and guidance from the NYSDEC and the New York Invasive Species Council. Measures are also specified under the Environmental Energy Alliance of New York, New York Utility Company Best Management Practices for Preventing the Transportation of Invasive Species (2015) (Appendix K):

- 1) Prior to construction, training will be conducted to educate the Project contractor(s) and subcontractor(s) on identifying invasive plant species and the site-specific protocol for preventing or controlling their transport throughout or out of the Transmission Line ROW. These protocols include the various cleaning or decontamination methods to be used for the Project. In addition, the contractors will be instructed to stay within access paths and work areas that are designated on the Site Plan and Construction Drawings (Appendix C) to minimize ground disturbance.
- 2) Sediment and erosion control devices (Appendix F) will be installed across the construction right-of way on slopes leading into wetlands and along the edge of the construction ROW to prevent

spoil from migrating into these areas. This will also help to prevent the dispersion of seeds from invasive plant species into un-infested wetlands during construction.

- 3) Vehicles (including trailers) machinery, equipment, and materials (including swamp mats) will be inspected for, and cleaned of, any visible soils, vegetation, and debris before bringing them to the Site or moving them to the next wetland along the construction right-of-way. As specified under NYSDEC's General Permit for Routine ROW Maintenance Activities, DEC No. 0-0000-01147/00001:
 - a. Equipment used in areas containing invasive plant species will be mechanically brushed before leaving the invasive infested area or Facility ROW for another project, to prevent the spread of seeds, roots or other viable plant parts. The debris will not be discharged within 100 feet of any stream, existing or proposed wetland or adjacent area, or stormwater conveyance (ditch, catch basin, etc.).
 - b. Loose plant and soil material that has been removed from clothing, boots and equipment, or generated from cleaning operations will be rendered incapable of any growth or reproduction, disposed of off-site, or handled as follows: If upon completion of work, the area remains infested with invasive plant species, the invasive material cleaned from equipment used within the same construction area may remain within the infested area, provided that no filling of a wetland will occur.
 - c. If disposed of off-site, the plant and soil material will be transported in a secure manner. Any off-site disposal must occur at either a landfill-incinerator or a state-approved disposal facility.
- 4) Disturbed areas will be backfilled and the area recontoured to its original grade. Segregated topsoil will be replaced, and natural drainage patterns restored to facilitate natural re-establishment of native vegetation.
- 5) The restored ROW will be seeded with an invasive species free seed mix and mulched (See Appendix F) immediately after final regrading to create a rapid cover over the disturbed ROW and help to prevent establishment of invasive species which typically colonize disturbed sites.
- 6) Expediting construction in and around wetlands and limiting the amount of equipment and construction activities within wetlands will reduce the amount and duration of disturbances. In addition, equipment used will be tracked or balloon-tired, operating on top of timber mats or corduroy. This will minimize the amount of heavily disturbed soils in which invasive species might colonize.
- 7) To the extent practicable, water for dust control and other uses will come from municipal water supplies or other potable sources. If surface waters are used, equipment will be disinfected afterwards.
- 8) To the extent practicable, the movement of invasive-plant-infested soils, gravel, rock, and other fill materials to relatively-invasive-plant-free locations will be avoided. Soil, gravel, rock, and other fill material will come from invasive-plant-free sources on and off the Site, if such sources are available.
- 9) Where the NYSDEC has identified the presence of Rock Snot or Didymo (*Didymosphenia geminata*), any footwear used in streams or waterbodies will be soaked in a 1 percent solution of Virkon®

Aquatic for 10 minutes before leaving the area adjacent to the affected waterbody (BMP Document Section 21.3).

The Asian longhorned beetle (*Anoplophora glabripennis*) and the emerald ash borer (*Agrilus planipennis*) are two invasive insects that the NYSDEC has identified as a potential problem to native trees and vegetation. If, during construction, these insects are found, they will be reported to the NYSDEC regional forester. In addition, prior to construction, training will be conducted to teach Project Contractor(s) and subcontractor(s) to identify invasive insect species and the Project-wide protocol for reporting to the NYSDEC regional forester. Unmerchantable timber will be provided as firewood to interested parties pursuant to the substantive requirements of the NYSDEC's firewood restrictions found in 6 New York Codes, Rules, and Regulations (NYCRR) Part 192.5 to protect forests from invasive species (BMP Document Section 21.2).

10.0 NOISE, LIGHTING, AND VISUAL MITIGATION

Construction of the Transmission Line is anticipated to cause a temporary increase in noise levels consistent with general construction activities, and consistent with the general industrial usage and character of the sites upon which they are to be located. The Project will not result in any permanent increases to noise levels or visual impacts to the surrounding areas. The sections below summarize the noise and visual characteristics of the Transmission Line and outline the noise control and mitigation measures to be implemented.

10.1 NOISE MITIGATION PLAN

Transmission Line construction and usage requires a wide range of construction activities and equipment that generate temporary noise increases. Table 10-1 summarizes the types of equipment and activities that are anticipated during construction of the Project as well as their typical associated noise level. Some of the equipment listed may have multiple uses during the construction phase but is listed under its primary use.

Table 10-1. Noise Impact Summary

Use	Type of Equipment	Equipment Noise Level at 50 feet, dBA
Site clearing and earth moving operations	Bulldozer	86
	Loader	78
	Excavator	80
	Dump Trucks	84
Compaction during earth moving operations	Vibratory Drum Compactor	73
Pile installation	Drill Rig	90
Vegetation and tree clearing	Kershaw mower	85
	Mower	75
	Hydro-ax	85
	Chainsaw	85
Resurfacing	Crawler Tractor	82
	Sandblaster	85
	Asphalt paver	85
Cable and conduit installation	Backhoe	80
	Cable puller	85

Data are compiled from FHWA 2006 Handbook.

Note: Data are provided for illustrative purposes only and may not be representative of final equipment used during Project construction.

The work is not anticipated to result in new noise sources. Temporary noise impacts will be minimal given that the Overhead Transmission Line and Astoria Annex construction and activities will generally occur more than ½ mile from nearest residential receptors, within an existing, controlled-access energy complex with ongoing industrial uses. The Certificate Holders will implement measures to minimize such impacts during construction including the use of appropriate sound-muffling devices (e.g., Original Equipment Manufacturer [OEM] or better) when needed, always maintaining equipment in good operating condition, and limiting high-noise construction activities to daylight hours (i.e., 7 a.m. to 7 p.m.) if issues are identified concerning the closest sensitive noise receptors.

10.2 NOISE CONTROL MEASURES

10.2.1 Noise Control Measures for Equipment

Noise control measures for general construction activities that the Certificate Holders will implement include the following (BMP Document Section 25.2.1):

- Locate equipment yards and marshalling areas away from sensitive noise receptors as practical.
- Install improved mufflers on heavy construction equipment when used within 100 feet of sensitive noise receptors.
- Utilize low-noise technologies (e.g., vibratory pile drivers), as appropriate.
- Limit high noise level construction activities (e.g., wood chipping, pile driving, rock drilling, blasting, excavation and loading) to daylight hours as much as possible when construction is conducted in proximity to noise-sensitive receptors.

10.2.2 Noise Control Measures for Point Source Producers

Noise control measures for point sources (e.g., HDD, or other activities that remain in a single location for an extended time) include the following (BMP Document Section 25.2.2):

- Limit construction to daylight hours (i.e., 7 a.m. to 7 p.m.) as much as possible when construction is conducted within 100 feet of noise-sensitive receptors.⁷

10.3 LIGHTING PLAN AND CONTROL MEASURES

No permanent lighting is proposed for the Transmission Line Facility; any permanent lighting at the Astoria Annex Substation falls under the responsibility and control of NYPA, the substation owner, and/or ConEd,

⁷ There may be instances when construction will be required outside of these working hours for safety or operational purposes. The Certificate Holders and/or Contractor will inform the DPS and local municipalities 24 hours in advance of these activities to the maximum extent practicable. However, the Annex Station is located over 2,000 feet from the nearest residence, so noise impacts to sensitive noise receptors are anticipated to be minimal.

the substation operator. Construction worksites will be illuminated with temporary generator-powered area lighting or temporary light fixtures connected from an existing power source to ensure worker safety and site security as needed. Appropriate mitigation measures will be employed to minimize impacts to abutters and nearby sensitive receptors (though the nearest residential receptors are over 0.5 miles from this Segment). Lighting will be positioned and oriented to avoid and minimize impacts to nearby sensitive receptors to the greatest extent feasible (e.g., light towers or fixtures will be set up to illuminate the work site but not shine light directly onto adjacent properties).

11.0 CULTURAL RESOURCES

Cultural resources include archaeological and historic architectural resources that are listed on, eligible, or potentially eligible for listing on the National Registry of Historic Places.

Table 11-1 summarizes the generalized locations of cultural resources and the protection measures that will be implemented for the construction of the Annex Station. All impacts to cultural resources identified within the Annex Station site as well as associated protection and mitigation measures are described in the Cultural Resource Management Plan (CRMP) included in Appendix L (BMP Document, Section 17). On August 16, 2024 and September 9, 2024, OPRHP issued letters stating that no significant impacts to cultural resources are anticipated.

Table 11-1. Overhead Transmission Line and Astoria Annex Cultural Resources

Cultural Resource Name	Location	Impact	Protection Measure
New York State Museum (NYSM) Area 4539	Encompasses APE	None anticipated.	None required.
NYSM Area 4532	1,420 feet south of the undertaking	None anticipated.	None required.
Berrian-Remsen Family Cemetery	At the Astoria Annex substation, but area is heavily developed. Location on CRIS appears to be mis-mapped	None anticipated.	None required.
Lawrence Family Cemetery (Astoria)	2,615 feet southwest of the Astoria Annex Substation	None anticipated.	None required.
NRE Berrian Boulevard Shaft Head House	1808 Steinway Street in Queens, approximately 2,075 feet southeast of the Astoria Annex Substation	None anticipated.	None required.
NRL Steinway House	41st Street in Queens, approximately 2,565	None anticipated.	None required.

Cultural Resource Name	Location	Impact	Protection Measure
	feet southeast of the Astoria Annex Substation		
Steinway & Sons	18-1 Steinway Place in Ditmars/Steinway, approximately 2,450 feet southeast of Astoria Annex Substation	None anticipated.	None required.
Modern Art Foundry Inc.	18-10 41st Street in Queens, approximately 1,710 feet southeast of Astoria Annex Substation	None anticipated.	None required.

11.1 IMPACT AVOIDANCE

The CRMP (Appendix L) includes provisions for identifying traditional cultural properties in consultation with Native Americans whose ancestral land may potentially be affected by Project construction or operation. The procedures for determining the appropriate treatment, avoidance, or mitigation of Project effects on these resources have been developed in consultation with the affected Native Americans, the New York State Historic Preservation Office (NYSHPO), and the other Consulted Parties, as appropriate. The project wide CRMP (Appendix L) has been approved by the NYSHPO.

The Certificate Holders will avoid creating adverse impacts on heritage resource sites, archeological sites, historic structures, and underwater cultural resources in the vicinity of the Project by implementing location, design, vegetation management, resource protection, and construction scheduling measures as specified in the CRMP (Appendix L) and Certificate Condition 107.

11.2 CONSULTING ARCHAEOLOGIST

Hartgen Archeological Associates will act as the Consulting Archeologists (CA) and will work closely with the Project Preservation Officer (PPO). The CA will be responsible for training the PPO construction personnel on the identification of archaeological remains and the procedures for notification of the PPO when archaeological remains have been discovered or are believed to have been uncovered. The CA will develop a mandatory, hands-on workshop to familiarize construction personnel with examples of the types

of artifacts that may be uncovered in the ground. The PPO and the construction team will understand cultural resources present in different areas as well as an understanding for the potential of unknown cultural deposits.

Per the CRMP (Appendix L), the PPO will be present for all ground disturbing activities and will have “stop work” authority as described in Section 3. The PPO will have the authority to cease excavation or construction work. In the event of encountering cultural materials or human remains, it is the responsibility of the PPO to halt construction activities and contact and coordinate with the CA to visit the location of the discoveries as quickly as possible. In the event of these discoveries, the CA will have up to three workdays to excavate and remove cultural material before the construction continues. The Consulting Archaeologist, in consultation with the PPO and the NYSHPO, may request additional archeological field assistance to complete the necessary work in a timely manner. It is the responsibility of the PPO to work with the appropriately trained archeologists to ensure that the survey and assessment of any change in the APE is completed prior to construction taking place.

The Certificate Holders will refrain from undertaking construction in areas where archeological surveys have not been completed and until such time as the appropriate authorities, including NYSHPO and DPS Staff, have reviewed the results of any additional historic properties and archeological surveys that are required (CC 108).

11.3 UNANTICIPATED DISCOVERY OF ARCHAEOLOGICAL RESOURCES

The specific procedures for the unanticipated discovery of archaeological resources during the Project’s construction were developed in consultation with the necessary state, federal, and local agencies and described in the CRMP (Appendix L). As specified in the CRMP, should archeological materials be encountered during constructions, the Certificate Holders will stabilize the area and cease all construction activities in the immediate vicinity of the find, and protect the site from further damage (BMP Document Section 17.1).

As stated in the BMP Document, typically, measures and barriers to avoid known archaeological sites include installation of temporary fencing, and site delineation of Facility maps. Where needed Specific control measures and barriers will be developed in consultation with the NYSHPO and other Consulted Parties, as appropriate. In addition, cultural resources sensitivity training will be provided to all contractors and others that will be working on the project in a capacity that has the potential to cause ground disturbing activities in areas of known historic properties or areas where construction preparation work is being conducted prior to archaeological assessment of the area (BMP Document Section 17.1).

Within 24 hours of an unanticipated archaeological discovery, the Certificate Holders will notify and seek to consult with DPS Staff and OPRHP Field Services Bureau to determine the best course of action. The Project PPO must be notified immediately upon discovery of cultural resources and the PPO must notify the CA. No ground-disturbing activities will be permitted in the 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 have been determined (CC 110).

11.4 UNANTICIPATED DISCOVERY OF HUMAN REMAINS

As described in the CRMP (Appendix L), should human remains or evidence of human burials be encountered during the conduct of archeological data recovery fieldwork or during construction, all work in the vicinity of the find will be halted immediately and the site will be protected from further disturbance. Within 24 hours of any such discovery, the Certificate Holders will notify DPS Staff and the NYSHPO Field Services Bureau. Treatment and disposition of any human remains that may be discovered will be managed in a manner consistent with the Native American Graves Protection and Repatriation Act (NAGPRA); the Advisory Council on Historic Preservation's Policy Statement Regarding Treatment of Burial Sites, Human Remains, any Funerary Objects (February 2007); and the NYSHPO's Human Remains Discovery Protocol. All archaeological or remains-related encounters and their handling will be further reported in the status reports summarizing construction activities and reviewed in the site-compliance audit inspections (CC 111).

The following measures will be implemented in accordance with the BMP Document (BMP Document Section 17.3):

- 1) Any human remains discovered will be treated with the utmost dignity and respect.
- 2) Work in the general area will stop immediately, and the area will be physically secured and a barrier prohibiting vehicles, equipment, and unauthorized persons from accessing the discovery site will be put in place. The site will be protected from damage and disturbance to the fullest extent possible.
- 3) Human remains and associated artifacts will be left *in situ* and not disturbed. No human remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place.
- 4) The Certificate Holders will contact local law enforcement, the county coroner's office, the NYSHPO, and Native tribes, as appropriate. Local law enforcement officials, and the county coroner's office will examine the remains to determine if the remains are forensic or archaeological.
- 5) Within 24 hours of any such discovery, the Certificate Holders will notify the DPS Staff and OPRHP Field Services Bureau/NYSHPO. Treatment and disposition of any human remains that may be discovered will be managed in a manner consistent with the Native American Graves Protection

and Repatriation Act ("NAGPRA"); the Council's Policy Statement Regarding Treatment of Burial Sites, Human Remains, and Funerary Objects (February 2007); and OPRHP/NYSHPO's Human Remains Discovery Protocol. All archaeological or remains-related encounters and their handling will be reported in the status reports summarizing construction activities and reviewed in the site compliance audit inspections.

- 6) If the remains are determined to be Native American, the remains will be left *in situ* and protected from disturbance until a plan for their protection or removal can be generated. The Certificate Holders will notify the NYSHPO and Native tribes within 24 hours (during normal business hours) or as soon as possible after the discovery has been determined to be archaeological rather than forensic. The Certificate Holders will consult with the NYSHPO and Native tribes to develop a plan of action, consistent with the guidance provided in the NAGPRA, the Council's 2007 Policy Statement, and the OPRHP/NYSHPO's Human Remains Discovery Protocol. Avoiding further disturbance of the remains is the preferred option.
- 7) If the human remains are determined to be non-Native American, the remains will be left *in situ* and protected from disturbance until a plan for their avoidance or removal can be generated. The Certificate Holders will consult with the NYSHPO and other appropriate parties to determine a plan of action.
- 8) Work will resume only after the completion of the necessary consultation and treatment.

The Certificate Holders will respond promptly to any complaints of negative archeological impacts during the Project's construction and will consult with the NYSHPO, the Advisory Council on Historic Preservation (ACHP), Native Americans, and other appropriate parties identified in the CRMP to resolve adverse effects on historic properties and determine the appropriate avoidance, treatment, or mitigation measure (CC 112).

12.0 TRANSPORTATION AND PERMITTING

Minor and temporary impacts to existing local roadways may need to occur in and around the Overhead Transmission Line and Astoria Annex in connection with construction of this Segment. These impacts will be mostly due to construction vehicles entering and exiting the Astoria Complex to access the Overhead Transmission Line and Astoria Annex ROW, material deliveries, and equipment deliveries. The Certificate Holders will continue coordinating with local authorities and private roadway owners within the Astoria Complex when developing the construction schedule for the Project in order to avoid any construction conflicts, to minimize disruption of existing features to the greatest extent possible, and to identify any issues with traffic or road improvements needed in relation to this work. Section 4.0 summarizes the various construction methods that will be utilized during Project construction.

12.1 CONSTRUCTION PERMITTING

All anticipated general work permits that have been or will be applied for are described in Table 12-1 (CC 18). The permits listed are obtained in coordination with the CNY permits described in Section 4.1.3.

Table 12-1. Astoria 345 kV HVAC Transmission Line General Work Permits

Description	Agency	Status	Anticipated Approval	Notes
Construction Permit - building	NYC Department of Buildings (DOB)	See Table 4.1 for DOB permits	January 2025	Obtained after all other applications are approved
Construction Trailer Permit - per trailer	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Obtained after all other applications are approved
Special Hauling Oversize/Overweight Load Permit	NYS Department of Transportation (DOT)	Not yet Submitted	April 2025	Required for transport of relay buildings
Site Mobilization Permit	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Obtained after all other applications are approved and construction is

Description	Agency	Status	Anticipated Approval	Notes
				ready to commence
Site Preparation Permit	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Obtained after all other applications are approved and construction is ready to commence
Crane and Derricks Permit	NYC Department of Buildings (DOB) - Crane and Derrick	Not yet Submitted	May 2025	Obtained when construction is ready to commence
Hot Work Permit	Fire Department of New York	Not yet Submitted	March 2025	Obtained when construction is ready to commence
Excavation Permit	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Obtained when construction is ready to commence
Shoring Permit	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Obtained when construction is ready to commence
Concrete Permit	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Obtained when construction is ready to commence
Flood Zone Requirement Permit	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Only Special Inspection needed for flood zone
Building Foundation Permit(s)	NYC Department of Buildings (DOB)	Not yet Submitted	January 2025	Obtained when construction is ready to commence

Description	Agency	Status	Anticipated Approval	Notes
Fire Protection System Permit - Permanent	NYC Department of Buildings (DOB) + Fire Department of New York	Not yet Submitted	May 2025	Obtained after Job applications are approved by FDNY. Refer to table 4-1.
Fire Alarm System Permit - Permanent	NYC Department of Buildings (DOB) + Fire Department of New York	Not yet Submitted	May 2025	Obtained after Job applications are approved by FDNY. Refer to table 4-1.
Mechanical Installation Permit	NYC Department of Buildings (DOB)	Not yet Submitted	May 2025	Obtained after Job applications are approved by DOB. Refer to table 4-1.
Operating Permit	NYC Department of Buildings (DOB)	Not yet Submitted	November 2025	Obtained when construction is ready to commence
Commissioning Permit	NYC Department of Buildings (DOB)	Not yet Submitted	November 2025	Obtained at end of the job
FAA Determination of No Hazard	Federal Aviation Administration	Submitted	July 2024	Approval Obtained. See Appendix A

12.2 MAINTENANCE AND PROTECTION OF TRAFFIC PLAN, ACCESS, AND TRUCK ROUTING

The maintenance and protection of traffic plan for the 345 kV HVAC Transmission Line utilizes normal use and operation of the private roadways within the Astoria Complex; because the complex is closed to the traveling public, potential traffic-related impacts or public safety concerns arising from movement around the Astoria Complex are expected to be limited. Construction vehicles will enter and exit the construction site and laydown areas via the existing private roads within the Astoria Complex. Vehicles will leave the Astoria Complex and enter the public right-of-way onto 20th Avenue at 31st Street and adhere to the normal traffic patterns. Trucks and commercial vehicles accessing the Annex Station will follow the New York City Truck Route maps and adhere to all New York City Traffic and Highway rules to minimize impacts on traffic.

13.0 CO-LOCATED INFRASTRUCTURE

During Project construction, minor and temporary impacts to existing utilities and/or Co-located Infrastructure (CI) may occur where they will be crossed or paralleled by the Project. CI consists of electric, gas, telecommunication, water, wastewater, sewer, and steam infrastructure, appurtenant facilities, and associated equipment, whether above ground, below ground, or submerged that are located within the Construction Zone approved in this EM&CP (CC 27abc). Due to the historical use of the site for power generation, the vast majority of on-site CI is owned by Con Ed and NYPA. Because these projects are connecting to Astoria Annex substation, both utility companies have been directly involved with each design submission and participate in weekly coordination meetings. Eastern Generation and Astoria Energy have also been identified as having limited infrastructure near Segment 21 and were provided plans in connection with this EM&CP.

The project has identified 28-30 co-located infrastructure assets within the construction zone of this Segment. See Table 13-1 for co-located infrastructure consultation summary.

13.1 Co-Located Infrastructure Consultations

The Certificate Holders have consulted with all applicable CI owners and representatives when developing the construction schedule for the Project (CC 28b). Section 13.1.2 and Appendix M summarize the outreach and consultation efforts that have been performed by the Certificate Holders.

The Certificate Holders' Construction Contractor will join "UDig NY" and NY811 and will coordinate with them for any underground construction work (BMP Document Section 10.0). The Certificate Holders will comply with all procedures identified by the CI owners and representatives including but not limited to obtaining relevant rights and permissions where applicable.

13.1.1 Pre-Installation Outreach of Co-located Infrastructure

The Certificate Holders have conducted a pre-installation survey that has documented the location and condition of CI within the transmission line ROW and identified the parties owning and operating such CI and the agencies exercising regulatory jurisdiction over the same. The physical condition of CI within the transmission line ROW will be further evaluated prior to construction, during potholing in the area of each CI. The procedures that will be followed to avoid damage to the CI documented are described in the sections below.

13.1.2 Summary of Consultations with Co-Located Infrastructure

The Certificate Holders notified owners of CI of its plans to develop detailed construction plans for this EM&CP. **Error! Reference source not found.** below lists the CI owners that were identified. CI owners were identified through a variety of methods including Dig Safe record requests, computer search of available records and discussions with known and potential CI owners. Documentation showing CI owner coordination is provided in Appendix M.

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Since the initial notification, the Certificate Holders' representatives have had additional telephone and email communications with CI owners to discuss their processes and requirements for engaging in the review of the Project's construction plans, initial conditions for crossing the respective CI owner's infrastructure, providing as-built drawings, and fees for engaging in the review process. A summary of those activities, sample engagement materials, and documentation of CI consultation and associated correspondence are included in Appendix M (CC 162)).

13.1.3 Reimbursement of Costs to Co-located Infrastructure

The Certificate Holders will reimburse owners and/or operators of CI for the reasonable costs they incur in the following activities (CC 29a):

1. Consulting with Certificate Holders as described in Section 13.1.2.
2. Reviewing pre-construction activities, designs, construction methods, maintenance and repair protocols, and means of gaining access to Potential CI or CI proposed by Certificate Holders.
3. Reviewing studies and design proposals described by Certificate Condition 28d and 162.
4. Conducting or preparing such additional studies and designs as may be agreed to by Certificate Holders or approved by the Commission.
5. Coordinating with and monitoring the activities of the Certificate Holders during pre-construction activities, construction, maintenance and repair of the Project.
6. Conducting maintenance and repair work on CI property or facilities, but only to the extent of increases in such costs that result from the presence of the Project.
7. Repairing damage to CI or associated property caused by Certificate Holders or their representatives in connection with any studies, surveys, testing, sampling, preliminary engineering, pre-construction activities, construction, operation, maintenance or repair of the Project.
8. Scheduling and implementing electric system outages required by any studies, surveys, testing, sampling, preliminary engineering, preconstruction activities, construction, operation, maintenance, or repair of the Project.

Cost shall be deemed to be reasonable if in the case of each separate review of a study or design proposal described below, the total cost to be borne by the Certificate Holders is \$5,000 or less (CC29b). Any CI owners or operators who intend to incur costs as described above must provide the Certificate Holders with a written description of the scope of the planned studies or activities and a good faith estimate of the expected costs, except where such studies or activities are undertaken in a situation involving unscheduled electric outages or an imminent risk to health, safety, property, or the environment, in which case Certificate Holders' reimbursement obligations shall be limited to reasonably incurred costs. Within 60 days of the expenditure by the owners and/or operators of affected CI of any funds which are eligible for reimbursement by the Certificate Holders under this Certificate, the CI owner or operator shall present the Certificate Holders with a final invoice for the actual costs incurred, but not to exceed 25 percent over the good faith estimate unless approved by Certificate Holders in advance in writing or, in the case of a dispute between the Certificate Holders and the CI owners or operators, by the Commission. Certificate Holders shall pay the authorized invoice amount within 30 days of receipt (CC 29c).

To date, there have been no disputes concerning the Certificate Holders' cost reimbursement responsibility. Any that arise will be brought to the PSC for resolution. The time required to resolve any dispute arising will not be counted for the purpose of any limitation on the time available for commencement or completion of construction of the Project (CC 29d).

13.2 UTILITY CROSSINGS

All known utilities such as water, sewer, electric, and telecommunications facilities and infrastructure that occur within the construction zone for this Segment are indicated on the Site Plans in Appendix C. The procedures that will be followed to minimize impacts on any utilities that may be crossed are described in the sections below.

Existing utility owners have been contacted and will continue to be consulted throughout the construction process. Consultations will include protection measures and specifications for existing utility facilities.

13.2.1 Utility Crossings and Parallel Subsurface Utilities

This Segment involves installation of Overhead Transmission infrastructure. The Project site was surveyed for the presence of existing underground utilities to be crossed or run parallel to, and the results of this survey are included on the Site Plan drawings in Appendix C.

Whether CI is privately or publicly owned, standards for "Good Engineering Practices" will be followed and levels of investigative Subsurface Utility Engineering (SUE) efforts performed per ASCE 38-02 and as set

forth in 16 NYCRR Part 753, entitled "Protection of Underground Facilities." The basis of design for paralleling or crossing any CI by the proposed Overhead Transmission line is based on:

- 1) CI owner specific requirements
- 2) Site conditions
- 3) Utility condition
- 4) Material compatibilities.

In general, and as shown on Typical Separation Details presented on the design drawings (Appendix C), the horizontal and vertical separation standards used within the proposed design is 5 feet (H) and 2 feet (V). The established process and continued communications with CI owners continue to involve any utility-specific crossing guidelines to be provided and included within the developed Plan and Profile Drawings. Separations proposed outside these standards will be highlighted on the Plans (Appendix C) and conditions warranting a variance from standard guidelines will be documented, if any are proposed.

At least 30 days prior to construction, CI owners will be contacted and will be given all reasonable opportunity to be present during excavation and construction (BMP Document 10.3.2). The CI owners will identify and mark their facilities in the field.

14.0 CLEANUP AND RESTORATION

14.1 CLEANUP STANDARDS AND PRACTICES

In accordance with the BMP Document, clean-up, restoration, and revegetation procedures will be ongoing during construction. During construction, road and construction ROWs will be kept free of debris and discarded material to the greatest extent possible. As construction continues, each Segment of the ROW will be thoroughly cleaned after construction is completed on that section. Vegetation clearing and disposal methods are summarized in Section 8.0 of this EM&CP. While vegetation clearing for this Segment will be minimal, any cleared vegetation will be disposed of in accordance with the appropriate disposal techniques described in Section 8.0 (BMP Document Section 11.1).

At the end of all construction, the construction ROWs and respective work areas will be thoroughly cleared of debris such as nuts, bolts, spikes, wire, pieces of steel, and other assorted items (CC 88). All man-made debris including piping, fencing, wiring, and any other materials used during construction, will be disposed of at an approved disposal site in compliance with all appropriate environmental regulations. No man-made debris will be burned or buried, and all trucks leaving the construction area will be loaded and covered in accordance with applicable regulations as needed (BMP Document, Section 11.1).

14.2 RESTORATION AND PLANTING

The final stage of construction will consist of restoring disturbed areas to their original condition and character to the extent practicable, unless doing so would interfere with the safe or reliable operation and maintenance of the Project. Restoration activities may vary with the specific area to be restored but will consist predominantly of restoring topography to original gradients and reseeding excavated areas over the trench as identified herein (BMP Document, Section 11.2).

The work within Segment 21 is limited to an area within an existing, industrialized, controlled-access energy complex owned and maintained by utility companies. As such, restoration work will be conducted in accordance with the Certificate Holders' easement agreement with the landowner and will be appropriate for the industrial setting in which the work is conducted.

As noted elsewhere in this EM&CP, Segment 21 involves minimal ground disturbance within the Astoria Complex, and vegetation clearing will be minimal, if any. Disturbed groundcover will be restored as appropriate, such as by spreading topsoil, planting of native grass mixtures, and replacement of any damaged extant vegetation, if necessary (BMP Document Section 11.2.2).

SWPPP inspections will be performed by the Environmental Inspector on a weekly basis until all disturbed areas have achieved the 80% revegetation required for final restoration. Following final restoration, erosion and sediment control measures will be removed from the site and disposed of appropriately.