

# Appendix 7-A: Compliance Assurance Plan

CASE 10-T-0139 COMPLIANCE ASSURANCE PLAN

#### CASE 10-T-0139 COMPLIANCE ASSURANCE PLAN

#### **TABLE OF CONTENTS**

1.0	INTRODUCTION
2.0	INSPECTORS CONTACT INFORMATION1
3.0	QUALITY CONTROL INSPECTIONS2
	3.1 Quality Control Inspection Schedule
	3.2 Reporting & Documentation
	3.2.1 Purchasing Quality Control Audits
	3.2.2 Construction Quality Control Audits
	3.2.3 Compliance Inspections
4.0	ENVIRONMENTAL AUDITS6
	4.1 Environmental Audit Schedule
	4.2 Reporting and Documentation
5.0	POST INSTALLATION INSPECTIONS7
	5.1 Cable Location
	5.2 Damage to Infrastructure
	5.3 Schedule
	5.4 Maintenance and Emergency Action Plan
	5.4.1 Maintenance and Inspection
	5.4.1.1 Marine Transmission Cable
	5.4.1.2 Access Control and Facility Security
	5.4.1.3 Notifications – Maintenance and Repair
	5.4.1.4 Cable System Repair9
	5.4.1.5 Notifications – Equipment Failures

#### LIST OF TABLES

Table 1	Inspectors	Contact	Information
1	moperere	0 0 11 10 0 1	

#### LIST OF APPENDICES

Appendix A Resumes of Inspectors

1

# **1.0 INTRODUCTION**

As specified in Certificate Condition 160, the Certificate Holders have developed this Compliance Assurance Plan so that quality standards are followed, and environmental compliance is maintained. The Certificate Holders will implement this Compliance Assurance Plan to confirm that the Project components and tasks conform to the Certificate issued by the Public Service Commission on April 18, 2013 (as amended), and the technical specifications of the Plan & Profile Drawings as well as the procedures outlined in the sections of the EM&CP. Specifically, this Compliance Assurance Plan addresses the work associated with installing the HVDC cable system in Lake Champlain (EMCP Segment 18B).

### 1.1 Activities Covered in EM&CP Segment 18B

EM&CP Segment 18B describes the installation and preparation of underwater HVDC transmission cables in Lake Champlain. The cables will be installed along a route approximately 96.5 statute miles long, beginning at the US-Canadian border in the Village of Rouses Point, Town of Champlain, Clinton County, New York and ending at a set of horizontal directional drill installed landfall conduits in the Hamlet of Putnam Station, Town of Putnam, Washington County, New York. The cable bundle to be installed will consist of two 400 kilovolt (kV) direct current (DC) power cables and one fiber optic cable. In areas where co-located infrastructure (CI) crossing or other cable protection is needed, a polyurethane protective duct and/or pre- and post-lay concrete mattresses will be installed. Installation of the transitional HDD at Putnam Station and installation of pre-lay concrete mattresses at select CI locations are not covered by this EM&CP (refer to previously approved Segment 17 EM&CP and Segment 18A EM&CP, respectively).

## 2.0 INSPECTORS CONTACT INFORMATION

Appendix A of this Compliance Assurance Plan includes the resumes for the various field inspectors. Contact leads contact information is summarized in Table 1 below. For those positions not yet filled, names, contact information, and qualifications will be provided to DPS Staff for review two (2) weeks prior to the start of construction.

Inspector Title	Contact Name(s)	<b>Contact Information</b>
Safety Inspector	Bear Kirk	Bear.Kirk@wsp.com 302-579-9390

Table 1	Inspectors	Contact	Information

Inspector Title	Contact Name(s)	Contact Information
Quality Assurance Inspector	Eric Karlsen Fernando Gonzales	eric.karlson@WSP.com Cell.WhatApp +51 943-626-338 fernando.gonzales@wsp.com 201-951-3649
Construction Inspector	Eric Karlsen Fernando Gonzales	eric.karlson@WSP.com Cell.WhatApp +51 943-626-338 fernando.gonzales@wsp.com 201-951-3649
Environmental Inspector	Fern Hoffman Willie Keeney	Fern.Hoffman@wsp.com 714-470-4875 wkeeney@diehluxllc.com 507-637-7499
Aquatic Inspector	Fern Hoffman Willie Keeney	Fern.Hoffman@wsp.com 714-470-4875 wkeeney@diehluxllc.com 507-637-7499

Note, table to be updated prior to construction.

The Certificate Holders will have two aquatic inspectors assigned to Lake Champlain submarine installation activities. The inspector(s) may perform multiple roles if each is qualified to do them. The Certificate Holders have a broad bench of inspectors, however, if needed, they will hire additional qualified inspectors to fulfil duties in different areas.

# **3.0 QUALITY CONTROL INSPECTIONS**

The Quality Assurance Inspector will perform the Quality Control Audits on behalf of the Certificate Holders. The Quality Assurance Inspector will have the qualifications and responsibilities specified in Certificate Condition 53(a).

The Quality Control Inspections will include the following components:

- 1. Purchasing Quality Control Inspections, which will confirm that the Project materials, structures, equipment, and components purchased conform to the technical specifications identified in the Plan & Profile Drawings; as well as the procedures and specifications described in the EM&CP.
- 2. Construction Quality Inspections, which will document that the Project is being constructed in accordance with the design and technical specifications for the Project. The Certificate Holders will notify the DPS Staff representative of when the field reviews will occur.
- 3. Compliance Inspections, which will document that the Certificate Holders are in compliance with the Article VII Certificate and the requirements of the Certificate Conditions.

## 3.1 Quality Control Inspection Schedule

Quality Control Inspections will be completed at least monthly during the pre-construction, and construction phases. The Inspections will also be performed annually during the first two years of the post construction phase. Regular marine surveys along the cable route will be carried out to ensure the cables are still located as placed. Pursuant to the terms of the USACE Permit and Article VII Certificate, Certificate Holder will inspect at least every five years.

# 3.2 Reporting & Documentation

After each Quality Control Inspection, the Quality Assurance Inspector will alert the Certificate Holders of areas of non-conformance with the construction plans or non-compliance associated with the Certificate Conditions that were observed during the Inspection. If areas of non-conformance require immediate attention, such as those that impact the safety of Project personnel, work will be halted immediately, and the Quality Assurance Inspector will alert the person supervising the construction and the Certificate Holders immediately. The Certificate Holders will collaborate with their team to determine the most appropriate course of action within the requirements of Certificate Conditions and the standard of care for the of the industry and then perform the actions necessary to resolve the issue as quickly as possible. If immediate actions are not required, the Certificate Holders will prepare a report that documents the corrective and preventative actions to address the issues observed by the Quality Assurance Inspector. This report will be completed in a prompt manner consistent with the issues it is addressing and filed with the Certificate Holders and DPS Staff if applicable.

For issues brought to the attention of the Quality Assurance Inspector or the Certificate Holders by CI owners whose property has been damaged in a material way as a result of the construction, the Certificate Holders will prepare a similar report with the guidance of the Quality Assurance Inspector, applicable utility owners, and agencies as needed. This report will document the corrective and preventative actions to address damages that have occurred or have the potential to occur. This report will be completed in a prompt manner consistent with the issues it is addressing and filed with the Certificate Holders and DPS Staff if applicable.

#### 3.2.1 Purchasing Quality Control Audits

Within five (5) business days following completion of each Purchasing Quality Control Audit, the Certificate Holders will provide to the DPS Staff Representative a report of such audit that includes: (i) a description of the results of the audit, particularly with respect to results that identify that one or more structures or components the Certificate Holders purchased for installation in the Project

did not conform to the specification for structures or components described in the approved EM&CP; and, (ii) notes pertinent to the subject matter of such audit which were made at audit meetings by the Certificate Holders' personnel and contractors who performed the audit.

If a Purchasing Quality Control Audit conducted by the Certificate Holders confirms that one or more structures or components the Certificate Holders purchased for installation in the Project did not conform to the specification for structures and components described in the approved EM&CP, the Certificate Holders will: (i) provide written notification to the Secretary within 24 hours of the Certificate Holder's confirmation of such non-conformity; and (ii) describe the steps the Certificate Holders will take to correct the non-conformity, including whether the components must be dismantled and sent back to the manufacturer, as well as a detailed estimate of costs and expected delays in construction resulting from such non-conformity.

### **3.2.2** Construction Quality Control Audits

After reviewing the active construction work areas, purchased construction equipment and materials, and design plans, the Construction Inspector, with the help of other inspectors as applicable, will prepare a written report of the findings on whether the Project is being constructed in accordance with the design for the Project. This construction quality control audit may also involve discussions and meetings with the design engineer, construction contractor, and construction personnel as needed. This written report will be generated every month during construction of the Project and submitted to the Certificate Holder. The Certificate Holders will provide a copy of each such report to the DPS Staff Representative within three (3) business days after the report is generated.

If materials, structures, or components are installed that do not conform to those specified in the EM&CP, the Certificate Holder, within one (1) month after becoming aware of such incident, will prepare and deliver to the DPS Staff Representative a summary report detailing the incident, the steps to be taken to rectify the non-conformance, the material and labor costs associated with addressing the issue, and the manner in which such costs will be accounted for separately from the Certificate Holder's other Project costs.

### **3.2.3** Compliance Inspections

Compliance inspections and oversight will be conducted daily by the designated compliance inspector(s) for the cable laying activities. The duration of inspections and oversight of the compliance inspectors will be dependent on activity type, location, or otherwise required by Certificate Condition(s). The Certificate Holders will provide to DPS Staff a weekly schedule of

the Environmental Inspector(s) and the Construction Inspector(s) and their cell phone numbers. The Environmental Inspectors and Construction Inspectors will be properly equipped to effectively monitor each Contractors' compliance with the provisions of the Certificate and applicable sections of the Public Service Law ("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 for each segment of the Project.

The Aquatic Inspector will be available 24 hours a day / 7 days a week for consultation by CHPE on-site vessel representatives, or on site, during underwater installation procedures. They will be on call and available for consultation, or on site at the start of each field operation and during environmentally sensitive phases of installation. It is the Aquatic Inspectors' role to provide guidance and monitor for compliance with regulatory and permit requirements for installation activities. They will remain informed, provide guidance, and monitor construction activities on, above, or below the State's waters. The Aquatic inspector will immediately alert the person supervising construction if the installation activities appear to be in violation or other issues of non-compliance with the Certificate conditions, so that appropriate action may be taken.

These Compliance inspections will be recorded daily using standardized forms (Daily Reports) for each type of compliance inspection. These forms will include components of the work matters to inspect for compliance, specific items and locations inspected will be recorded along with the inspection method employed and acceptability criteria. During the work, if an inspector identifies an item of noncompliance with construction plans or with the Certificate Conditions, the Inspector will alert the person supervising the construction where the noncompliance was observed immediately so that they can take appropriate corrective action. The Inspector will document noncompliance matters and their corrective action in the Daily Report which will be provided to Certificate Holders within a centralized data sharing platform.

The Certificate Holders will 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 (Certificate Condition 51(a)).

The Certificate Holders will promptly notify DPS Staff, NYSDEC and the United States Fish and Wildlife Service ("USFWS") or National Marine Fisheries Service ("NMFS") (if applicable) if threatened or endangered wildlife species under 6 N.Y.C.R.R. Part 182 ("TE species") or rare, threatened or endangered plant species under 6 N.Y.C.R.R. Part 193 ("RTE plants") are observed to be present in the area of cable installation 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 Project area and cease construction in the immediate area of the threatened or endangered species until DPS Staff have determined that appropriate protective measures have been implemented (Certificate Condition 52).

# 4.0 ENVIRONMENTAL AUDITS

Environmental audits will be conducted during the construction phase of the Project. These environmental audits will be performed by the Environmental Inspector with the help of the Quality Assurance Inspector and Aquatic Inspector (CC 53[a]) for Marine portions of the Project.

### 4.1 Environmental Audit Schedule

Environmental audits will be conducted during marine work in accordance with CC 53(a)(i) of the Project. Additionally, annual environmental audits will be conducted as part of the overall transmission cable inspection every five (5) years of the operation of the Project. The Certificate Holders will inform DPS Staff, NYSDEC, and affected state and municipal agencies of the schedule for these audits and the submission of their findings at least 30 days prior to the audit. Upon completion of the audits, DPS and DEC will be provided with a written explanation of the problem(s) signed by the independent inspectors and an authorized representative of the Certificate Holders, together with the audit checklists. Further details on the specific checklists to be used for these annual audits will be developed in consultation with the independent inspectors.

## 4.2 Reporting and Documentation

The environmental audits will address the environmental concerns identified by the Environmental Inspector after consulting with the other inspectors, Project personnel, and others observing construction of the Project. The Environmental Inspector will prepare a report that documents the concerns or areas of non-compliance identified during the inspection. This report will be signed by the Environmental Inspector and submitted to the Certificate Holders or their authorized representative, DPS Staff and NYSDEC. The Certificate Holders will consult with their team, DPS and NYSDEC to determine the corrective and preventative actions to address the identified non-compliance and then implement such actions.

# 5.0 POST INSTALLATION INSPECTIONS

An Immediate Post-Installation Inspection will be performed by the Certificate Holders after each segment is completed with the help of their inspectors as needed. The Immediate Post-Installation Inspection plan is included in Appendix 7-F of the Segment 18B EM&CP.

# 5.1 Cable Location

Installation of the cable facility will be overseen by Certificate Holders' Installation Contractor to verify cable location, depth of lowering, Good Utility Practices, that Co-located Infrastructure owner requirements are met, and that damage to any pre-existing facility and/or infrastructure during installation is promptly repaired. If any locations are identified where the cable depth of lowering is less than the design depth, additional burial and/or protection efforts will be performed as determined by the Certificate Holders Engineer and any relevant agencies that may be consulted. Refer to the Immediate Post-Installation Inspection Plan (Appendix 7-F of the Segment 18B EM&CP). The installed cable facility locations and elevations will be recorded as part of the Facility operational plans and records.

## 5.2 Damage to Infrastructure

Working daily during construction with the Quality Assurance Inspector and applicable CI owners, the Certificate Holders will determine if damage has occurred to pre-existing infrastructure as a result of the cable installation process. If damage is found, the Certificate Holders will immediately notify the CI owners and operators of the nature of such damage and other known facts relating to the cause the damage. Repairs will be made in accordance with the Certificate, CI owner requirements, and with their direct consultation.

In situations involving imminent risk to health, safety, property, or the environment requiring the Certificate Holders to cross CI to address the emergency, the Certificate Holders will notify the CI owners and operators as soon as possible. Such notice will include instances when transport or travel over or under CI would be subject to special approval by state and/or local authorities due to the size or weight of load(s) transported.

## 5.3 Schedule

Immediate post-installation inspections will be carried out by the installation contractor following the cable installation works, generally within four (4) days. Details of the inspection methods and

schedule is further defined in the Immediate Post-Installation Inspection Plan (Appendix 7-F of the Segment 18B EM&CP).

Post energization, periodic verifications of facility location and burial depths along with any areas of concern identified during the Immediate Post-Installation Inspections or by preceding inspections will be performed by the Certificate Holders. Pursuant to the terms of the USACE Permit and Article VII Certificate, Permittee will inspect at least every five (5) years.

## 5.4 Maintenance and Emergency Action Plan

The transmission system, including the cables to be installed in accordance with this EM&CP, is designed to be relatively maintenance-free and operate within the specified working conditions. In addition, while not anticipated, it is possible that over their lifespan, they could be damaged, either by human activity or natural processes.

A Maintenance and Emergency Action Plan will be included in the overall Facility Operation and Maintenance Plan (Plan) to be compiled during construction and prior to operations. This Plan will include processes and actions that meet the requirements of Certificate Condition 161 (b).

The following provides an overview of key activities that will be included in the Plan. In general, the Plan will integrate and coordinate maintenance of the Facility with that of adjacent facilities, structures, and property to the extent practicable, in accordance with Certificate Condition 14.

#### 5.4.1 Maintenance and Inspection

#### 5.4.1.1 Marine Transmission Cable

Regular marine surveys along the cable route will be carried out to verify the facility location and to ensure the cable protection is still in place.

Pursuant to the terms of the USACE Permit and Article VII Certificate, Permittee will inspect at least every five (5) years to:

- perform inspections on the subaqueous cable to verify the horizontal and vertical location;
- perform inspections of all non-buried cable locations to determine the durability of protective cover (e.g., concrete mattresses and articulated pipe protection); and
- determine whether maintenance is required, reburial and/or added protection measures are necessary.

An inspection report, which will be submitted to the USACE and USCG, will contain evaluations and supporting documents demonstrating that the cable pair, in its then-existing condition, is still protected by the required minimum burial depths and/or that the authorized concrete mattress armament will continue to prevent anchor strikes from vessel traffic. An inspection report summarizing the results of the periodic verifications will be provided to DPS Staff in accordance with Certificate Condition 161(b).

#### 5.4.1.2 Access Control and Facility Security

Access to marine portions of the facility will be controlled by burial in sediments and by being submerged.

#### 5.4.1.3 Notifications – Maintenance and Repair

Prior to commencing planned repair, construction, operation, or maintenance activity relating to the operator's CI, the Certificate Holders will advise owner(s) and operator(s) of CI as well as operators of Public Water Systems at least thirty (30) days in advance, 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 will 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 two hundred (200) feet thereof and with respect to all other CI will mean all areas within one hundred (100) feet thereof.

When planning and performing maintenance on the Facility in the vicinity of CI and Public Water Supply (PW) facilities, the Certificate Holders will conduct such repairs in accordance with protocols agreed to for initial construction.

#### 5.4.1.4 Cable System Repair

In the event of a marine transmission cable fault or failure the control system will shut down the HVDC transmission cable. The cable monitoring system would identify the nature and location of the failure. Crews of qualified repair personnel would be dispatched to the work location. A portion of the transmission cable would be raised to the surface, the damaged portion of the cable cut, and a new cable section would be spliced in place by specialized jointing personnel. Once repairs were

completed, the transmission cable would be reburied or protected using articulated concrete mattresses as required.

In the event that the cable system is damaged during replacement and/or during cable placement and requires repair, the Certificate Holder will develop an Aquatic Safety and Communications Plan that will meet regulatory permit conditions and requirements, including OSHA 29 CFR 1926.106, as applicable. The Permittee will follow USCG regulations for safely operating vessels and will coordinate with USCG Waterways Management and Vessel Traffic Services.

#### 5.4.1.5 Notifications – Equipment Failures

In the event of an equipment failure during operations, the Certificate Holders will promptly notify appropriate state regulators as follows:

- The Certificate Holders will report theft of materials related to the Facility with a value in excess of ten thousand dollars (\$10,000) to the DPS Representative within one (1) business day of the time when the theft comes to the attention of the Certificate Holders. The Certificate Holders will provide the DPS Representative with a list of the stolen items to the extent known and a copy of the police report (Certificate Condition 137).
- Notify the owners or operators of CI or Potential CI as soon as possible in the event of a 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 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 in, over, or under public waterways 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 (Certificate Condition 28(g)).

# Appendix A Resumes of Inspectors