

**REVISED ENVIRONMENTAL MANAGEMENT AND
CONSRUCTION PLAN**

**STATE OF NEW YORK PUBLIC SERVICE COMMISSION
CASE NO. 11-T-0116**

**Long Island Power Authority - Certificate of Environmental
Compatibility and Public Need Pursuant to Article VII of the
Public Service Law to Increase the Design Capacity of the
Existing 10.6 Mile Wildwood to Riverhead Electric Transmission
Line from 69 kV to 138 kV**

Prepared for:



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Submitted by AKRF on behalf of LIPA

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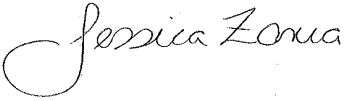
I,  , do hereby affirm that the contents of this document are true to the best of my knowledge.

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Environmental Management and Construction Plan

1.0 SITE AND PROJECT DESCRIPTION

Pursuant to the Certificate of Environmental Compatibility and Public Need (Article VII Certificate or Certificate) issued by the New York Public Service Commission (PSC) on July 12, 2012 in Case 11-T-0116, the Long Island Power Authority (LIPA) hereby submits its Environmental Management and Construction Plan (EM&CP) for the Wildwood to Riverhead Overhead Transmission Line Upgrade (the Project). The Certificate issued by PSC includes a Joint Proposal that was developed by the interested parties, including New York State Department of Public Service (DPS), LIPA, New York State Department of Environmental Conservation (DEC), and New York State Department of Agricultural and Markets (Ag & Mkts), and provides for the submission of an EM&CP to describe the measures established for the construction and operation of the Project. Appendix A includes the Certificate and Joint Proposal.

The entire length of the LIPA right-of-way and line to be upgraded is approximately 10.6 miles and runs between LIPA's Wildwood and Riverhead Substations, located in the Towns of Brookhaven and Southampton, respectively. The transmission line is designated as circuit 69-955.

To allow the line to operate at a design capacity of 138 kilovolt (kV), LIPA is authorized under the Certificate to replace all the 69 kV insulators with 138 kV insulators. Three new poles will be required at the Wildwood Substation to provide for the transition to the underground interconnection to the substation. At the Riverhead Substation, only one steel pole will be reconfigured to transition into the existing ring bus. In addition, ~~two~~ four existing wood poles (three south of the Wildwood Substation and one at the Riverhead Substation) will be removed. There is also a 138 kV underground exit cable that will be installed when the transmission line is upgraded at the Wildwood Substation. The cable will be 900 feet in length and have a 300/445/675 MVA Summer and Winter rating.¹

¹ The Article VII application proposal was to install only 300 feet of the transmission line underground from the last poles into the Wildwood Substation, subject to certain contingencies. In Exhibit 5 of the application, on drawing F21950, two notes state that the underground portion could be extended 550 feet further east to avoid or eliminate 138 kV overhead crossings. In Exhibit 4, the archaeological analysis, which is ground disturbance sensitive, included the extra underground disturbance. Since the submission of the Article VII application, LIPA has decided, for engineering and reliability reasons, to eliminate the risks associated with multiple overhead 138 kV transmission lines crossing one another. If one overhead transmission line falls onto another overhead transmission line, it would be likely that two circuits or more could be lost. The extra expense of the additional undergrounding is worthwhile to eliminate the risk of losing several transmission lines simultaneously. This change will not result in any substantial change in environmental impacts nor is the change related to contested issues decided during the Article VII proceeding. The additional length of the line occurs solely within the existing right-of-way or under Lilco Road, which is paved. There are no sensitive environmental features within this right-of-way and on this road such as wetlands, wildlife habitat, streams, or threatened, endangered, or rare vegetation.

Wildwood to Riverhead Overhead Transmission Line

According to the Certificate, the Project is a significant component of LIPA's plans to reinforce the existing transmission capacity of the North and South Forks of Long Island. The need for this upgraded transmission line is locational (i.e., specific to a particular area) because the North and South Fork of Long Island loads are served by radial lines.

1.1 THE CERTIFIED ROUTE

The existing overhead transmission route consists of three right-of-way segments. At most locations, the right-of-way is approximately 100 feet wide. Adjacent to the existing 69 kV line is a wood pole line supporting a 138 kV transmission circuit (circuit number designation 138-890). This line is approximately 50 feet from the 69 kV steel pole line. This circuit, similar to circuit 69-655, also runs from the Wildwood Substation (designated as 8DR) to the Riverhead Substation (designated as 9A). There are no plans to modify this line.

The entire right-of-way has been occupied by the 69 kV pole line, and the adjacent 138 kV pole line for a minimum of 50 years. Except for a few isolated locations as discussed below, the right-of-way is on property owned by LIPA. The line passes approximately 10 residences along the route that are less than or equal to 75 feet from the transmission line. The closest residence is approximately 50 feet from the line.

Each segment of the Project is described below:

1.1.1. SEGMENT THREE (TOWN OF RIVERHEAD & TOWN OF BROOKHAVEN) – 2.8 MILES:

This portion of the transmission line is the west end of the circuit and is closest to the Wildwood Substation (located north of NYS Route 25A and west of Randall Road in the hamlet of Shoreham in the Town of Brookhaven). The first 900 feet of the line will be an underground cable starting just outside the Wildwood Substation fence on the south side of the property and connecting into the ring bus termination equipment. The cable will extend east under Lilco Road. Additional roads traversed in this portion include: Randall Road, Gateway Drive, Dogwood Road, Overhill Road, Wading River-Manorville Road (County Road 25), North Country Road, Fairway Drive, and Sound Avenue.

1.1.2. SEGMENT TWO (TOWN OF RIVERHEAD) - 6.0 MILES:

The line proceeds east. Roads crossed include: Hulse Landing Road (Country Road 54), Fresh Pond Avenue, Edwards Avenue, Riley Avenue, Twomey Avenue, and Middle Road.

1.1.3. SEGMENT ONE (TOWN OF SOUTHAMPTON & TOWN OF RIVERHEAD) – 1.8 MILES:

The circuit continues east, crossing Old Country Road (County Road 58) and Middle Country Road (NYS Route 25). The circuit then proceeds south for 1 mile, traversing the Long Island Rail Road (LIRR) right-of-way and the Peconic River. Lastly, the circuit continues east for 0.8 miles on LIPA's right-of-way to LIPA's Riverhead Substation (located on the south side of NYS Route 25 east of Mill Road).¹

¹ LIPA is currently evaluating a proposal from a real estate developer who is looking to procure an easement on the Wildwood to Riverhead right-of-way in the vicinity of Poles 30 and 31. A new retail

1.2 ACCESS POINTS

Access to the existing 69 kV transmission line is through the existing LIPA right-of-way. Section 10 provides a list of all the roads that are crossed by the transmission line right-of-way. There will be no changes to these roads or to the access points from these roads as part of the Project.

1.3 DESIGN CRITERIA

The Project will re-insulate circuit 69-955 to operate at 138 kV. As stated, currently the line is insulated for 69 kV operations. Circuit 69-955 will have all insulators replaced with 138 kV polymer insulators. New polymer post insulators, 65 inches in length, will replace the existing polymer post insulators that are approximately 49 inches in length. This is being done to increase the Basic Insulation Level (BIL) of the circuit to be compatible to 138 kV operations. There are 173 poles on this line (all steel poles except one wood pole). The most common design of the steel poles follows LIPA Construction Standard CS-1148 (see Appendix B, Existing and Future Polymer Insulators); which is a staggered line post design. The configurations at the two terminations (at Wildwood Substation and Riverhead Substation) will be modified so that the circuit can be terminated into the new 138 kV substation racks (see drawings F-38855 and F-93960 in Appendix C, [Design Drawings]). The existing steel poles vary in size, but most are 80 foot directly embedded steel poles (70 feet above grade). Ninety foot and 100 foot directly embedded steel poles, which are 79 and 88 feet above grade respectively, were utilized at the road crossings to provide conservative clearances above the roadways in excess of the National Electric Safety Code (NESC).

Of the 173 poles, 157 are tangent (i.e., less than a 4° angle between poles). The existing steel poles will be re-drilled, with larger holes, so that the 138 kV polymer insulator can be attached to the steel poles. The remaining poles (approximately 16) are primarily turn or angled structures, which are guyed to accommodate the increased mechanical load placed upon them by the route angle. The existing insulators on these structures are fabricated from porcelain and will be replaced with polymer insulator strings (approximately 70 inches in length). The dead-end compression fittings on these structures will require replacement since a new longer insulator will be needed. See Appendix B (Existing and Future Polymer Insulators) for typical catalog cut sheets of the existing 69 kV polymer post insulators and future 138 kV polymer post insulators. To facilitate this installation, portions of the right-of-way will be mowed or trimmed to allow for vehicle access.

The existing conductor size for the circuit is 1192 kcmil ACSR. The diameter of this conductor is 1.302 inches. There is a 7#6 alumoweld static wire on all of these poles as well (diameter is 0.486 inches). There are no plans to replace the existing conductor or static wire. The insulators, only, will be replaced.

store is being built on the north side of Old Country Road (CR 58) east of Kroemer Avenue in Riverhead. The proposed easement would be approximately 30 feet wide and 255 feet long and utilized as a delivery entrance driveway to the new store. The driveway would be paved with asphalt and would generally run longitudinally within the right of way. Currently, this segment of the right-of-way is covered with grass and brush with a small stand (approximately 125 feet x 20 feet) of mature trees. Should the easement be provided to the developer, it will be necessary to remove approximately 25 - 30 trees to allow for construction of the paved driveway. The trees are common species such as pitch pine and oak and the understory is dominated by poison ivy. As there are no sensitive resources present in this area, the easement would have no significant environmental impacts on the right-of-way.

Wildwood to Riverhead Overhead Transmission Line

At the transition into the Wildwood Substation, the transmission line will consist of three cables. The underground cable will be installed within the first 900 feet of the line, just outside the Wildwood Substation fence on the south side of the property and will terminate into the ring bus termination equipment (see drawing F-93960 in Appendix C). The cable will extend to just east of Lilco Road. Each cable will be installed within a 12–inch high-density polyethylene (“HDPE”) conduit starting from an overhead to underground transition structure consisting of three steel poles, 60 feet above grade. Three single phase 138 kV solid dielectric copper cables will be installed in a 24-inch wide (at the base) and 48 inch deep trench into a set of 3 – 12 inch HDPE conduits with a trefoil (triangular) configuration with 2 conduits lying on the bottom of the trench and the third conduit resting on top. A cross section of the trench with its cable and conduits is shown on drawing F-93960 in Appendix C. The cable will be a solid dielectric design with cross-linked polyethylene insulation rated at 138,000 volts AC (138 kV). It will be constructed of 3,947 kcm (2000 mm sq), copper conductor approximately 2.15 inches in diameter, having cross linked polyethylene insulation approximately 0.85 inches thick rated at 138 kV AC. A corrugated metallic sheath will surround the insulation to provide mechanical protection and prevent water migration into the cable. An outer polyethylene jacket will encase the metallic sheath. In all, each cable will measure approximately 5.6 inches in diameter.

1.4 FULFILLMENT OF EM&CP GUIDELINE REQUIREMENTS

The Joint Proposal (JP), provided in Appendix A of this Environmental Management and Construction Plan (EM&CP), includes requirements for the content of the EM&CP in Appendix 3 of the JP, “Proposed Ordering Clauses/Certificate Conditions,” and in Appendix 4 of the JP, “Environmental Management and Construction Plan Guidelines.” Appendix 3 of the JP also includes EM&CP process requirements. Table 1 below provides a list of the guideline requirements as well as a reference to the corresponding sections of the EM&CP.

**Table 1
Guideline Requirements Addressed in the EM&CP**

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
EM&CP Contents			
13.a	Final design plans	Appendix C	
13.b.	Identification and explanation for any deviation from the location or design of structures	Section 1.0	
13.c.	Details of nearby utilities and measures to protect them	Section 14.24; Appendix C	
13.d.	Detail and design measures to protect nearby cathodic protection systems and physical conditions of nearby facilities and structures, including any underground facilities	Section 14.25	
13.e.	Detailed construction schedule	Section 7.5	
13.f.	Specify noise mitigation measures	Not Applicable	The Project will not result in a material change in background noise levels and therefore, no noise mitigation is proposed or necessary.
13.g.	Delineation of certified right-of-way and additional work areas	Appendix D	
13.g.	Specify location and acreage of needed real property or real property rights	Not Applicable	Because the Project right-of-way is owned by LIPA, no real property or real property rights are required to construct this Project.

Environmental Management & Construction Plan

**Table 1 (cont'd)
Guideline Requirements Addressed in the EM&CP**

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
13.h.	Detail street work	Not Applicable	No in-street work is proposed as part of the Project.
13.i.	Drawings delineating locations of existing and proposed access roads	Section 10; Appendix D	
13.i.	Drawings delineating locations of proposed access roads and improvements	Not Applicable	Because the Project right-of-way is existing, no new access roads or improvements to access roads are proposed as part of this Project.
13.j.	Work Zone Traffic Control Plan in conformance with MUTCD	Appendix E	
13.k.	Fuel and chemical handling procedures and a spill response and route emergency plan	Section 3.4; Section 8	
13.l.	Designation of Project construction work parking areas	Section 7.4; Appendix D	
13.m.	Plan for removal and reuse, recycling or disposal of equipment	Section 11.1	
13.n.	Soil handling and erosion control plans	Section 5; Section 14.32	
13.o.	Mowing and vegetation treatment plans, including the wetland and wetland adjacent areas where the Project crosses the Peconic River	Section 4.1; Section 4.2.1; Section 13; Appendices F & G	
13.p.	Best management practices and measures for monitoring construction and protecting water quality at or near groundwater recharge basins	Section 4.2.3; Section 5	
13.q.	Appropriate controls and protocols for weekend and/or nighttime work	Section 7.2; Section 14.27	
13.r.	An explanation of why any measures mentioned in Appendix 4 of the Joint Proposal are not applicable	Table 1 EM&CP Guidelines	
EM&CP Process			
14.	LIPA distribution of paper and electronic copies of the EM&CP	Section 14.1	
15.a.	LIPA serving written notice of filing the EM&CP on all active parties to this Project and on 275 residents along the right-of-way	Section 14.2	
15.a.	Public notice in a newspaper of general circulation in the vicinity of the Project	Section 14.2	
15.b.	LIPA examination of title for all permanent right-of-way or off right-of-way access that may be acquired	Not Applicable	Because the Project right-of-way is an existing LIPA owned right-of-way, no property would be acquired to construct the Project.
16.a.	Requirements for written and newspaper notices	Section 14.3	
16.b.	Certificate indicating whom all EM&CP notices and documents were served	Section 14.3	
17.a.	LIPA to report proposed EM&CP changes to DPS Staff	Section 1; Section 14.4	
17.b.	LIPA to notify Signatory Parties, active parties and affected property owners of proposed EM&CP changes	Section 14.4	
17.c.	LIPA to execute proposed changes to the EM&CP only after receiving approval	Section 14.4	
Notices, Reports and Consultations			
18.	Applicable provisions of the Certificate, EM&CP, and orders approving the EM&CP shall be accommodated in contracts	Section 14.5	
19.	LIPA notifications to contractors regarding penalties for violation of the Certificate	Section 14.6	
20.a.	LIPA to make available phone numbers for complaints to be made by the public	Section 12.2; Section 14.7	
20.b.	LIPA to report to DPS Staff every complaint that cannot be resolved	Section 12.2; Section 14.7	
21.a.	LIPA to provide notices preceding site preparation	Section 14.8	
21.b.	Contents of LIPA notices preceding site preparation	Section 14.8	
21.c.	Electronic copy of notices to be submitted by LIPA to the Secretary of the Commission	Section 14.8	

Wildwood to Riverhead Overhead Transmission Line

Table 1 (cont'd)

Guideline Requirements Addressed in the EM&CP

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
22.	Prohibition of use of access roads not described in the EM&CP by LIPA or its contractors	Section 14.9	
23.a.	Preconstruction meeting to be held by LIPA	Section 7.5.1; Section 14.10	
23.b.	LIPA to distribute minutes of preconstruction meeting to attendees	Section 7.5.1; Section 14.10	
23.c.	Another preconstruction meeting to be held if a new construction contractor is needed	Section 7.5.1; Section 14.10	
24.a.	LIPA notification to Commission and DPS Staff before construction commencement	Section 7.5.2; Section 14.11	
24.b.	LIPA to mail notification to residents along the line prior to construction commencement	Section 7.5.2; Section 14.11	
24.c.	LIPA to publish press release in local newspapers prior to construction commencement	Section 14.11	
25.	Delineation of rights-of-way and work areas	Section 14.12	
26.	LIPA provision of weekly status reports to DPS Staff	Section 14.13	
27.	LIPA notifications after Project is in service	Section 14.14	
28.	LIPA notifications of completion of restoration	Section 14.15	
29.	LIPA consultations with transportation agencies	Section 14.16	
30.	LIPA communications with fire departments and emergency management teams	Section 14.17	
31.	LIPA notification to DEC and DPS Staff of any fuel or chemical spills	Section 14.18	
Environmental Supervision			
32.	LIPA designation of environmental supervisory personnel	Section 2.1; Section 14.19	
33.	Conditions related to emergencies and stop-work orders	Section 2.1; Section 14.20	
34.	Site compliance audit inspections	Section 12.2; Section 14.21	
Cultural Resources			
35.	Procedures to be followed if archaeological materials are encountered during construction	Section 4.5; Section 14.22	
36.	Procedures to be followed if human remains are encountered during construction or during archaeological data recovery fieldwork	Section 4.5; Section 14.22	
Public Health and Safety			
37.	Secure storage of chemicals and waste	Section 8; Section 14.23	
38.	Compatibility with nearby infrastructure	Section 14.24	
39.	Avoidance of adverse effects on cathodic protection systems and existing structures and facilities	Section 14.25	
Electric and Magnetic Fields			
40.	Compliance with electromagnetic field standards	Section 14.26	
Waterbodies and Regulated Wetlands			
41.a.	Delineate regulated wetlands in the field and indicate on EM&CP drawings	Section 4.2; Appendix D	
41.b.	Minimize disruption to regulated wetlands during construction and operation of Project	Section 4.1.1; Section 4.2.1; Section 13.0	
41.c.	Avoid direct impacts to wetlands	Section 4.2.1	
41.d.	Equipment cleaning to avoid spread of invasive species	Section 4.1.1	
41.e.	Construction and access through wetland to be done with tracked equipment or on temporary swamp mats	Section 4.2.1; Section 13.0	
42.	Limit mowing and trimming of vegetation in or near regulated wetlands or waterbodies	Section 4.2.1	
43.	Prohibit discharge from construction activities to regulated wetlands or protected streams or waterbodies	Section 4.2.1	
44.	Prohibit equipment and machinery washing in regulated wetlands and adjacent areas	Section 4.2.1	

Environmental Management & Construction Plan

**Table 1 (cont'd)
Guideline Requirements Addressed in the EM&CP**

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
45.	Prohibit excavation and stockpiling of excavated material within 100 feet of regulated wetlands and adjacent areas and protected streams or waterbodies	Section 4.2.1	
46.	Prohibit refueling, storage mixing, and handling of open containers of pesticides, chemicals labeled toxic and petroleum products within 100 feet of regulated wetlands and adjacent areas and protected streams or waterbodies	Section 4.2.1	
47.	Work within 100 feet of the Peconic River to be performed from existing access roads.	Section 4.2.1	
Construction			
48.	Construction work hours	Section 7.2; Section 14.27	
49.	Construction schedule coordination	Section 14.28	
50.	Disposition of transmission components and equipment that are replaced	Section 11.1; Section 14.29	
51.	Minimization of fugitive dust and airborne debris	Section 14.30	
52.	Restoration of disturbed areas and ruts	Section 11.1; Section 14.31	
53.	Installation of sedimentation and erosion control devices	Section 5; Section 14.32	
54.	Prohibition of alteration or clearance outside the boundaries of the certified Project	Section 14.33	
55.	Removal of mowed or cut vegetation	Section 14.34	
56.	Post-completion assessments and plans	Section 14.35	
57.	Drawings of agricultural lands along the right-of-way	Appendix D	
58.	Procedures to minimize impacts within agricultural lands	Section 4.7	
59.	Designation of work areas outside agricultural lands	Section 4.7	
60.	Flagging of drainage systems	Section 4.7	
61.	Restoration guidelines for agricultural lands	Section 4.7	
62.	Consultation of seed mixtures, fertilizer rates and mulch on agricultural lands	Section 4.7	
63.	Prepare invasive species prevention and management plan for agricultural areas and DEC regulated wetland and adjacent areas	Section 4.1.1	
Transportation			
64.	Traffic impacts	Section 10	
65.	Avoidance of property disturbance during construction access	Section 10	
Long Term Maintenance after Construction			
66.	Long-term right-of-way management plan	Section 13; Section 14.38; Appendix G	
EM&CP Guidelines			
A.	Plan and Profile Details. A line profile and plan drawings		
1.	<i>Project Location</i>		
1.a.	Boundaries of new, existing and/or expanded right-of-way	Appendix D	
1.a.	Road boundaries if cables are to be constructed underground in streets	Appendix D	
1.a.	Areas contiguous to the right-of-way or street within which the applicant will obtain additional rights	Not Applicable	Because the Project right-of-way is an existing LIPA owned right-of-way, no property rights would be acquired to construct the Project.
1.b.	Location of each structure, structural foundation, fence, gate, down-guy anchor and any counterpoise required for the Project as well as conductors, insulators, and static wires and other components attached to Project structures	Appendices B & C	
1.c.	Existing utility or non-utility structures on the right-of-way and identification of those to be removed or relocated	Appendix C	

Wildwood to Riverhead Overhead Transmission Line

**Table 1 (cont'd)
Guideline Requirements Addressed in the EM&CP**

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
1.d.	Any relocated or underground utility or non-utility structure	Not Applicable	No underground utility or non-utility structure would be moved or relocated as part of the Project.
1.e.	Relationship of the Project to nearby fence lines, roads, airfields, property lines, hedgerows, water bodies, significant habitats, associated facilities, flowing springs, buildings or structures, major antennas, oil or gas wells, pipelines or blowdown valves	Appendix D	
1.e.	Objections raised by federal, State, or local transportation officials to the final location or manner of installation of, or access to, the certified Project	Not Applicable	No federal, State, or local transportation agencies have objected to the project. Further, the Project right-of-way is existing and thus no new access points would be installed as part of the Project.
1.f.	Location of any new or expanded switching station, substation, or other terminal or associated utility or non-utility structure. Attach plot, grading, drainage, electrical, and elevation plans	Not Applicable	No new structures are proposed as part of the Project.
1.f.	Type and expected impact of outdoor lighting	Not Applicable	No outdoor lighting is proposed as part of the Project.
1.f.	Color and finish of all structures	Appendices B & C	
1.f.	Locations of temporary or permanent access roads and parking areas	Section 7.4; Section 14.36; Appendix D	
1.f.	Locations of construction contract limit lines, property lines, designated floodways and flood-hazard area limits, buildings, sheds, and relocated structures	Appendix D	
1.f.	Plans for water service and sewage and waste disposal	Not Applicable	The Project is the upgrade of insulators on existing poles within an existing right-of-way and therefore, no new water, sewage, or waste service is proposed.
1.g.	Location and boundaries of areas to be used for fabricating, equipment parking, staging, and lay-down	Section 7.1; Section 7.4; Section 14.36; Appendix D	
1.g.	Planned fencing or screening of storage and staging areas	Not Applicable	All equipment will be stored within existing substations or at LIPA's Operation Center at 117 Doctor's Path in Riverhead and therefore, no additional screening or fencing is necessary as part of this Project.
1.g.	Justification for any access area to be located in a State-regulated wetland or protected stream or waterbody	Section 4.2.1	
1.h.	Location of right-of-way access, temporary construction and permanent maintenance roads, indicating access from other roadways	Section 10; Appendix D	
1.i.	Location of ready-mix concrete chute washout and any other cleaning activities, including control of invasive species	Section 4.1.1	
2.	<i>Right-of-Way Clearing</i>		
2.a.	Location and geographic limits of required vegetation trimming or clearing.	Section 4.1	
2.a.	Specify methods for the type and manner of cutting and disposal for cut vegetation	Section 4.1	
2.a.	Designate methods for management of cut vegetation, indicating the rationale for the method designated	Section 13	

Environmental Management & Construction Plan

Table 1 (cont'd)
Guideline Requirements Addressed in the EM&CP

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
2.b.	Location of areas where specific tree protection measures will be employed	Not Applicable	It is not expected that trees would be removed as part of this Project. Thus, no locations of specific tree to be removed has been identified.
3.	<i>Building and Structure Removals</i>	Not Applicable	No buildings or structures would be removed as part of this Project.
4.	<i>Surface Waters, Wetlands, Significant Habitats</i>		
4.a.	Indicate the name, water quality classification and location of all rivers and streams within 100 feet of, or crossed by, the Project or any off- right-of-way access road	Section 4.2.1; Appendix D	
4.a.	Indicate procedures used to inventory rivers and streams and measures to protect stability, habitat, and quality	Section 4.2.1; Appendix D	
4.b.	Show location of all potable water sources on the right-of-way or within 100 feet of the right-of-way or access roads	Not Applicable	There are no potable water sources on the right-of-way.
4.c.	Provide a table of waterbodies crossed by the Project	Section 4.2.1	
5.	<i>Wetlands</i>		
5.a.	Identify, delineate, and map the location and type of any wetland within or crossed by the right-of-way or any access road	Section 4.2.1 and Appendix D	
5.a.	Provide a table of State-regulated wetlands crossed by the Project	Section 4.2.1	
5.a.	Wetland delineation determination form	Section 4.2.1	
5.a.	Identify precautions or measures to be taken to protect wetlands	Section 4.2.1	
5.b.	Describe activities within and impacts on regulated wetlands and adjacent areas, including mitigation measures	Section 4.2.1	
5.b.	Provide plans for mitigation all unavoidable impacts	Not Applicable	There are no unavoidable adverse impacts as a result of the Project; thus, a mitigation plan is not required.
5.c.	Delineate wetland protective or buffer zone where construction activities will be restricted to minimize impacts on wetlands and describe activities to be restricted in this zone	Section 4.2.1; Appendix D	
6.	<i>Landscaping</i>	Not Applicable	Because the Project is the replacement of insulators within an existing right-of-way, no new landscaping is proposed.
7.	<i>Noise Sensitive Sites</i>		
	Show locations of noise-sensitive areas along the Project	Section 4.4; Appendix D	
	Specify procedures to minimize noise impacts	Not Applicable	The Project will not result in a material change in background noise levels and therefore, no noise mitigation is proposed or necessary.
	Indicate types of major equipment to be used in construction or Project operation	A bucket truck will be used for installation of the insulators and backhoe for the underground cable installation.	
	Indicate sound levels at which the equipment operates	Approximately 80 dBA	
	Indicate days of the week and hours of the day during which equipment will normally be operated and any exceptions to these schedules	Section 7.2; Section 14.27	

Table 1 (cont'd)

Guideline Requirements Addressed in the EM&CP

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
	Indicate measures to be taken to reduce audible noise levels	Not Applicable	The Project will not result in a material change in audible noise levels and therefore, no noise mitigation is proposed or necessary.
8.	<i>Other Environmentally Sensitive Areas</i>		
8.a.	Indicate the general locations of known ecologically and environmentally sensitive sites within or near the Project	Section 4.2.1; Section 4.8; Appendix D	
8.a.	Indicate how such resources were identified and measures to be taken to protect these resources	Section 4.1; Section 4.2.1; Section 4.2. 3; Section 4.8;	
8.b.	Indicate the location and identification of sensitive land uses and resources that may be affected by construction of the Project or by construction-related traffic. Specify measures to minimize impacts.	Section 4.3; Section 10 and Appendix D	
9.	<i>Recreational Areas</i>	Section 4.3	
10.	<i>Agricultural Areas</i>	Section 4.7	
10. a-c.	Indicate the locations of prime, unique and significant agricultural lands as well as sites in active agricultural use and vulnerable agricultural soils near the Project	Section 4.7 and Appendix D	
10.d.	Indicate the location of all land and water management features including subsurface drainage, surface drainage, diversion terraces, buried water lines, and water supplies	Not Applicable	No such features exist within the right-of-way.
10.e.	Identify site-specific techniques to minimize or avoid impacts to agricultural resources	Section 4.7	
B.	Description and Statement of Objectives, Techniques, Procedures and Requirements		
1.	<i>Erosion Control</i>		
1.a.	Describe temporary and permanent measures to be taken during construction to stabilize and restore soils, control erosion, and preserve natural drainage patterns in areas where significant soil disturbances are proposed.	Section 4.7; Section 5; Section 14.31	
1.b.	In coastal erosion hazard areas, demonstrate compliance with standards required by 6 NYCRR Part 505	Not Applicable	The Project is not located within a coastal erosion hazard area.
2.	<i>Fuel and Chemical Handling Procedures</i>		
2.a.	Provide a plan for the storage, handling, transportation, and disposal of fuels, oils, chemicals, hazardous substances and other potentially harmful substances during and after construction of the Project. Describe precautions and measures to be taken to avoid spills and improper storage and application in the vicinity of any wetland, river, creek, stream, lake, reservoir, spring, well, or other ecologically sensitive site	Not Applicable	No storage, handling, transportation or disposal of fuels will take place within the right-of-way or staging areas.
2.b.	Provide a plan for responding to and remediating the effects of any spill in accordance with federal, State, and local regulations and guidelines.	Section 8.0	
3.	<i>Environmental Supervision</i>		
3.a.	Describe protocols for supervising demolition, vegetation clearing, construction and site restoration activities	Section 3.0	
3.b.	Specify the titles and qualifications of personnel proposed to be responsible for ensuring minimization of environmental impact throughout the demolition, clearing, construction and restoration phases	Section 2.1	
3.b.	Indicate the amount of time each supervisor is expected to devote to the Project specifically related to the amount of time they will be in the field	Section 2.1	
3.c.	Explain how environmental protection provisions will be incorporated into contractual specifications, and communicated to employees or contractors engaged in demolition, clearing, construction or restoration	Section 2.0; Section 3.0	

Environmental Management & Construction Plan

Table 1 (cont'd)
Guideline Requirements Addressed in the EM&CP

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
3.d.	Describe procedures to "stop work" in the event of a certificate violation	Section 2.1.4	
3.d.	Identify the designated contact, including phone number, for assuring overall compliance with certificate conditions	Section 2.1.2	
4.	<i>Clean-up and Restoration</i>		
4.a.	Describe the program for removal of any temporary roads; restoration of laydown or staging areas; finish grading of any scarified or rutted areas, and removal of waste materials or equipment	Section 11.0	
4.b.	Describe plans, standards, and a schedule for the restoration of vegetative cover	Section 11.2	
4.c.	Describe plans to prevent unauthorized access to and along the right-of-way, if deemed necessary	Section 14.9	
5.	<i>Herbicides</i>		
5.a.	Specify locations where herbicides are to be applied, site conditions, and the choice of herbicide formulation, application method and timing	Not Applicable	No herbicides will be applied during installation of the Project.
5.b.	Provide comparative analysis of proposed herbicide applications using criteria of selectivity, efficacy, toxicity, persistence and cost-effectiveness	Not Applicable	No herbicides will be applied during installation of the Project.
5.c.	Describe procedures that will be followed during herbicide application to protect non-target areas on or near the right-of-way	Not Applicable	No herbicides will be applied during installation of the Project.
5.d.	Confirm herbicide application posting and notification procedures	Not Applicable	No herbicides will be applied during installation of the Project.
5.e.	Provide a comprehensive list of herbicides and method of application for use in right-of-way	Not Applicable	No herbicides will be applied during installation of the Project.
6.	<i>Agricultural Areas</i>		
6.a.	Describe the program, policies, and procedures to mitigate agricultural impacts. List locations where such procedures have been and will be followed by Project construction and restoration	Section 4.7	
6.b.	Indicate specific techniques and references to appropriate agricultural protection measures recommended by the NYS Department of Agriculture and Markets	Sections 4.7	
7.	<i>Access Roads</i>		
7.a.	Discuss the necessity for access to the right-of-way	Section 10	
7.a.	Discuss the nature of access improvements	Not Applicable	No access improvements are necessary.
7.a.	Discuss equipment constraints	Not Applicable	There are no foreseeable equipment constraints.
7.a.	Discuss vehicles to be used for construction and maintenance	Section 7.1	
7.a.	Discuss the duration of access needs through restoration and maintenance of the facility	Section 13	
7.b.	Delineate on maps the location of existing, temporary and permanent access roads	Appendix D	
7.c.	Identify the types of access to be used and the rationale for using them.	Section 10	
7.c.	Provide a figure or diagram for temporary and permanent access showing typical installation. For existing access ways, indicate provisions for upgrading to meet appropriate standards	Not Applicable	No new access ways are proposed and no upgrades to existing access ways are proposed.
7.d.	Indicate drainage and erosion control features to be used for access road construction and maintenance	Section 5	
7.e.	Indicate the type of stream crossing method to be used in conjunction with access road construction	Not Applicable	No access road construction is proposed.

**Table 1 (cont'd)
Guideline Requirements Addressed in the EM&CP**

Ordering Clauses/Certificate Conditions			
#	Explanation of Condition	Document Location	Notes
7.f.	Existing fords shall be upgraded to bridges, culverts, or other permanent crossings that are approved by New York State Department of Public Service Staff	Not Applicable	No changes to crossings are proposed.
7.g.	All diagrams should include type and size of material to be placed in stream and on stream approaches	Not Applicable	No material will be placed in stream.
8	<i>Right-of-Way Management Plans</i>		
8.a.	Describe the extent of right-of-way clearing required for construction and operation of the Project	Not Applicable	No right-of-way clearing is proposed.
8.b.	Describe the manner of disposition of cleared vegetation and spoils and any excess concrete	Not Applicable	No right-of-way clearing is proposed.
8.c.	Identify the factors upon which the Certificate Holder's removal of merchantable logs for the Project will be based	Not Applicable	No removal of merchantable logs is proposed.
8.d.	Describe the herbicide use plan for all vegetation clearing	Not Applicable	No herbicides will be applied during installation of the Project.
8.e.	Identify the sites requiring vegetation clearing and the geographic limits of such clearing	Not Applicable	No right-of-way clearing is proposed.
8.e.	Designate methods for management of vegetation to be cut or removed at each site, indicating the rationale for the method designated.	Section 13	No right-of-way clearing is proposed.
8.f.	Identify locations where specific tree protection measures shall be employed	Not Applicable	It is not expected that trees would be removed as part of this Project. Thus, no specific tree protection measures have been identified. Further, no trees are located close enough to the poles where new insulators will be placed and thus, it is not expected the Project would adversely impact trees.
8.g.	Describe the interim right-of-way vegetation management plan for the Project from beginning of vegetative clearing until the comprehensive site-specific long-range right-of-way management plan is submitted	Not Applicable	No right-of-way clearing is proposed.
8.h.	Describe the interim right-of-way management plans and standards for securing, stabilizing, monitoring and addressing right-of-way access roads, facility maintenance and analysis of compliance with post-restoration requirements	Section 11; Section 14.15	
9.	<i>Certification</i>		
	Provide a certification that the EM&CP has been organized and developed in accordance with these guidelines and certificate conditions.	Section 1.4	
Notes:	All construction plans will be certified by a Professional Engineer that is licensed and currently registered in New York State.		
Sources:	Joint Proposal dated March 16, 2012.		

2.0 PROJECT ENVIRONMENTAL SUPERVISION

In accordance with the guidelines provided in Appendix A, personnel and procedures are identified herein to assign responsibilities for minimization of environmental impact and compliance with the environmental protection provisions specified by the Article VII Certificate.

2.1 PERSONNEL

The following personnel will have assigned duties during the installation of the Project.

2.1.1. PROJECT MANAGER

The Project Manager will have overall responsibility for the Project including engineering, design, construction, and coordination of the various construction-related activities. The Project Manager will be responsible for ensuring that construction is in conformance with the Project schedule, the authorized budget, the design and contract documents, and the EM&CP. The Project Manager will have stop-work authority in the event of a violation of the Certificate provisions.

The Project Manager will be assisted in the implementation of the EM&CP by the Environmental Supervisor/Environmental Monitor and Construction Inspector.

2.1.1.1. PROJECT MANAGER NAME, TITLE AND PHONE NUMBER:

Mr. Robert Parkinson
Project Manager
Construction Delivery
(631) 548-7235

2.1.2. ENVIRONMENTAL SUPERVISOR/ENVIRONMENTAL MONITOR

The Environmental Supervisor/Environmental Monitor will be responsible for ensuring minimization of environmental impact; compliance with the provisions specified by the Certificate, applicable sections of the Public Service Law, traffic safety measures, and the EM&CP; and adherence to health and safety plans. The Environmental Supervisor/Environmental Monitor will communicate the environmental protection criteria of the Certificate and the EM&CP to Project Management and Contractor personnel, and will be available throughout the period of construction to provide guidance and interpretation related to those criteria. The Environmental Supervisor/Environmental Monitor will be available as needed but at a minimum will be on-site when work is conducted in environmentally sensitive areas, i.e., the Peconic River, regulated freshwater wetlands, and adjacent areas, in the vicinity of the Wildwood Substation, and in agricultural fields. In addition to overseeing the protection of agricultural lands during construction, the Environmental Supervisor/Environmental Monitor will also be responsible for restoration of any disturbed agricultural land and follow-up restoration, if required. The Environmental Supervisor/Environmental Monitor will provide site-specific agricultural information, as necessary, through both field review and direct contact with affected farmers, Ag & Mkts, and DPS Staff. The Environmental Supervisor/Environmental Monitor will also maintain regular contact with the affected farmers and Ag & Mkts concerning farm resources and management matters related to agricultural operations and site-specific implementation of the EM&CP.

The Environmental Supervisor/Environmental Monitor will report to the Project Manager and will have stop-work authority.

Wildwood to Riverhead Overhead Transmission Line

2.1.2.1. ENVIRONMENTAL SUPERVISOR/ENVIRONMENTAL MONITOR NAME, TITLE AND PHONE NUMBER:

Mr. Adam Yablonsky
Environmental Management
(516) 545-2581

2.1.3. CONSTRUCTION INSPECTOR

The full-time Construction Inspector will be available throughout all construction phases of the Project to assist the Environmental Supervisor/Environmental Monitor in ensuring implementation of environmental protection provisions specified by the Certificate for construction and site-restoration activities, if necessary. The Construction Inspector will be on-site regularly to provide oversight for the Project, have stop-work authority, and be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor contractor compliance with the provisions of the Certificate, applicable sections of the Public Service Law, and the EM&CP.

2.1.3.1. CONSTRUCTION INSPECTOR NAME, TITLE AND PHONE NUMBER:

Mr. James Ruthinoski
Construction Superintendent
Construction Delivery
(516) 545-5575

2.1.4. NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE STAFF

DPS Staff will serve as PSC's representatives in the field during installation of the Project. In the event of an emergency resulting from the specific construction activities that may violate the terms of the Certificate, such DPS Staff representatives may issue a stop-work order for that location or activity. The stop-work order will expire in 24 hours unless confirmed by a single PSC Commissioner. If a stop-work order is confirmed, LIPA 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 PSC, the stop-work order will be lifted. If the emergency has not been satisfactorily resolved, the stop-work order will remain in effect.

DPS Staff stop-work authority will be exercised sparingly and with due regard for the potential economic costs involved and possible impact on construction activities. Before exercising such authority, DPS Staff representatives will consult, whenever practicable, with LIPA representatives possessing comparable authority. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be immediately brought to the attention of the Project Manager and the DPS Chief of the Office of Energy Efficiency and the Environment. In the event that a DPS Staff representative issues a stop-work order, neither LIPA nor the Contractor will be prevented from undertaking any such safety-related activities as they deem necessary and appropriate under the circumstances.

3.0 PROJECT PROCEDURES

The following construction site safety and environmental impact minimization procedures are applicable to the upgrade of the existing transmission line between the Wildwood and Riverhead Substations.

3.1 TRAFFIC SAFETY

Replacing the insulators will take place at the poles, and as none of the poles are in the roadway, the effects on roadway traffic will be minimal. Maintenance and protection of traffic for all construction will comply with rules and regulations included in the New York State Manual of Uniform Traffic Control Devices (MUTCD). In the Project area, minimal pedestrian traffic exists. However, LIPA will implement a Work Zone Traffic Control Plan (WZTCP), provided as Appendix E, for the 3 - 4 locations of the right-of-way along public roadways. In the Joint Proposal, this document was referred to as the Maintenance and Protection of Traffic (MPT) Plan. In the interim period between the filing of the Joint Proposal and the preparation of the EM&CP, New York State Department of Transportation (DOT) has changed the nomenclature. The contents of the two documents are the same. The purpose of the WZTCP is to ensure safe and adequate traffic operations on the affected roads and streets. Suffolk County Department of Public Works will be contacted to ensure continued safe operation of County roads in the vicinity of the transmission line. The Towns of Brookhaven and Riverhead will also be contacted when work would occur in the vicinity of local roadways. The WZTCP indicates temporary signage and barriers expected during the construction activity. As such, safety signage, and traffic control personnel as necessary, will be employed to ensure safe and adequate traffic flow when secondary roadways are affected by construction. Appropriate safety practices, including temporary barricades to prevent pedestrians from entering the construction area or the active roadway, will be implemented as identified in the WZTCP. As discussed in Section 4.3, there is one school that is located next to the Project. Project construction will not occur while school is in session and will be coordinated with school personnel so any work does not take place during school activities.

The WZTCP conforms to the latest standards of the American Association of State Highway and Transportation Officials and MUTCD. These measures minimize any temporary disruptions to roadway traffic.

Construction worker parking will be designated within the existing substation areas or the LIPA Operation Center at 117 Doctor's Path, Riverhead and therefore will not interfere with the normal flow of traffic, or cause a safety hazard or interfere with existing land uses.

Access roads and traffic control are described in Section 10.0 and Appendix D of this EM&CP, respectively.

3.2 WORKSITE HEALTH AND SAFETY

Measures will be taken by the Contractor to protect the health and safety of all construction workers and the traveling public throughout the duration of the Project. Training, instruction, and periodic briefings as appropriate will be provided to all construction personnel to ensure that health and safety precautions and measures are followed during construction. Detailed worksite health and safety procedures are described in Section 7.3 of this EM&CP.

3.3 VEGETATION MAINTENANCE

An underground cable will be installed within the first 900 feet of the line immediately south of the Wildwood Substation within the existing right-of-way. Vegetation disturbance would be minimal (about 0.06 acres) because the trench would be constructed within an existing and maintained right-of-way. The trench would be backfilled with soils removed to dig the trench for the cable installation.

Since the transmission line to be upgraded is an existing line, no vegetation will need to be removed. Further, since the existing transmission line is located within a maintained right-of-way, vegetation will not be materially disturbed during the replacement of the insulators. However, it is likely that limited brush and grass mowing or trimming of existing vegetation will be needed to provide truck access to certain poles as well as an adequate and safe workspace around each pole. In addition, limited tree trimming may be required at a few pole locations. As such, all work will be performed in accordance with the Natural Resource Protection Guidelines provided in Appendix F. Section 4.1 below provides more detail on the vegetation management while Section 13.0 provides information on the long-term maintenance of the right-of-way.

3.4 SPILL PREVENTION AND RESPONSE

The Project primarily consists of the replacement of insulators as well as installation of the cable immediately south of the Wildwood Substation, which involves only inert material that have no liquid or leachable constituents. Thus, the focus of spill prevention and response measures will be on the minimization of potential impacts related to release of fuels and lubricants from construction equipment. Such equipment will be positioned proximate to sensitive environmental resources for the least practicable amount of time. Construction personnel will be trained in spill response protocols, and spill containment materials will be available near construction vehicles throughout the duration of the Project. Spill prevention and response measures are described in Section 8.0 of this EM&CP.

4.0 ENVIRONMENTAL PROTECTION AND MITIGATION

The Environmental Supervisor/Environmental Monitor, in conjunction with the Project Manager and Construction Inspector, will be responsible for ensuring that the requirements of this EM&CP are adhered to during construction of the Project.

Environmental protection measures have been developed for the Project as discussed below.

4.1 PLANT AND ANIMAL MANAGEMENT

Because the Project is located within an existing and maintained right-of-way, there will be a minimal amount of vegetation disturbance, including turf grass, agricultural fields, and other ground cover, if any. No trees will be removed as part of this Project. Access roads to the existing right-of-way are already present and thus, no additional vegetation will be removed to accommodate construction vehicles. However, limited mowing and trimming of vegetation within the right-of-way may be required to accommodate construction vehicles. For example, within the right-of-way, north of the Peconic River, pruning of trees will be necessary for access to work at Pole 17. Table 2 below presents the areas where expected mowing would occur. Should it be necessary to trim brush and branches, all woody debris will be chipped and spread on the right-of-way. No woodchips will be stored or spread in parklands, wetlands, active agricultural fields, or within 50 feet of floodplains, streams, or drainages.

**Table 2
Areas to be Mowed**

Pole Numbers	Access Points	Expected Mowing
9A.14 - 16	right-of-way west side of Riverhead Substation	None
17-18	right-of-way south side of Route 25 (River Road)	Mow brush and install swamp mats
19	right-of-way north side of West Main Street via a private business road.	None
20-28	right-of-way south side of County Road 58	None
29-43	right-of-way east of Middle Road and/or west of Kroemer Avenue or north side of County Road 58	Mow brush
44-49	right-of-way east of Twomey Avenue and/or west of Middle Road	None
50	right-of-way west of Twomey Avenue (parking lot)	None
51-63	right-of-way east of Riley Avenue	None
64-67	right-of-way east of Edwards Avenue and/or west of Riley Avenue	None
68-70	Farm field west of Edwards Avenue or from a dirt farm road south of the right-of-way and west of Edwards Avenue	None
71-92	Orchard entrance east of Fresh Pond Avenue (if farmer gives permission as in past) or right-of-way west of Edwards Avenue	Mow base of Pole 71
		Poles 75-76 N/A
		Mow brush between Poles 77 and 81
93-113	right-of-way east of Hulse Landing Road and/or west of Fresh Pond Avenue	Mow brush west of Fresh Pond Avenue up to farm fields (Poles 93-103)
114-124	right-of-way via dirt farm road south of Sound Avenue and/or west of Hulse Landing Road	Mow brush (Pole 118)
125-128	right-of-way via dirt farm road north of Sound Avenue in non-cultivated field adjacent to orchard	None
129-130	right-of-way via Private Road in trailer park north of Sound Avenue	Mow grass
131	right-of-way west of Fairway Drive	Restoration of grass under transmission line
132-137	right-of-way via private nursery driveway on north side of North Country Road	Mow brush (Nursery encroaching on right-of-way access)
138-140	right-of-way south side of North Country Road	Mow brush
141-143	Access from south side of North Country Road	Mow brush at base of poles
144-151	right-of-way east of Wading River Manor Road	Mow grass; mow brush at base of Poles 144 – 146 and trim tree at Pole 144
152-156	right-of-way east of Dogwood Drive and/or west of Wading River Manor Road	Mow grass
157-159	right-of-way east of Gateway Drive	Mow grass
159.5-167	right-of-way east of Randall Road and/or west of Gateway Drive	Mow brush and grass
168	right-of-way west of Randall Road	Mow brush
169	Lilco Road (Wildwood Substation driveway)	None
169.5-170	right-of-way at Wildwood Substation	Mow grass

Note: See Section 10 and Appendix H for additional information on access points, including permission letters from property owners where LIPA will use private driveways for access to the right-of-way and poles.

Consistent with best management practices, construction activities will be confined to the smallest practicable area required for safe and efficient installation of the insulators and underground cable. If the existing access road width is insufficient, brush will be mowed to provide a 15 foot wide path as needed. In addition, a work space including a 20 foot radius will be mowed around each pole as needed. The specified brush mowing device will be a horizontal-shaft

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brush hog (Fecon or equivalent) to minimize cut stubble and stumps, which might present a tripping hazard and cause tire damage. Any mowing or trimming will be performed in accordance with the Natural Resource Protection Guidelines provided in Appendix F. Storing of equipment on unpaved areas will be permitted only in pre-designated areas at the direction and/or with the approval of the Environmental Supervisor/Environmental Monitor and/or Construction Inspector. Pre-designated areas for staging of construction equipment will take place at the Wildwood and Riverhead Substations.

On June 12 and June 19, 2012, the entire right-of-way was surveyed for specimen trees, hedgerows, and wetlands. One specimen tree, a 26 diameter breast height black locust (*Robinia pseudo-acacia*) was identified approximately 20 feet from pole 156, just east of Dogwood Drive. Black locust is an early successional species typical of disturbed sites, has minimal wildlife value, and is not a rare or valuable tree species. Therefore, it was determined that the black locust tree identified within the inspection area is not a significant tree or specimen tree for purposes of environmental impact assessment.

Hedgerows identified during the field survey are shown on drawings provided as Appendix D. No hedgerows would be trimmed, cleared, or removed during or after construction of the Project.

Because the occurrence of threatened and endangered species could change in the time period from the approval of the EM&CP and the start of construction, a survey for threatened and endangered species will be done approximately three to nine months before the start of construction. The results will be sent to DEC and DPS Staff, and if any threatened and endangered species are identified, appropriate mitigation measures will be developed at that time.

4.1.1. INVASIVE SPECIES

Appendix D does not currently depict the location of identified invasive species within and near agricultural and DEC regulated freshwater wetlands and adjacent areas or list invasive species to be encountered during construction of this Project since the occurrence and/or prevalence of invasive species could change in the time period from the approval of the EM&CP and the start of construction. Thus, a survey for invasive species will be completed approximately three to nine months before the start of construction. It is noted that the survey will be conducted in the appropriate season to detect invasive species (i.e., not during the winter months). The results will be sent to DEC, Ag & Mkts, and DPS Staff, and if any invasive species are identified, appropriate mitigation measures will be developed at that time. Consistent with the best management practices previously approved by PSC (see Appendix A), LIPA will implement the following best management practices to prevent the transport and spread of invasive species during soil disturbance, vegetation management, transport of materials, and landscaping/revegetation. It should be noted that soil disturbance will be limited to the installation of the cable south of the Wildwood Substation within the right-of-way and vegetation disturbance would also be limited and only include mowing and trimming. As such, little, if any, revegetation or landscaping would be required.

- Soil disturbance will be minimized by reducing work areas to the smallest size practical. Work will only occur within work areas as shown on the drawings provided in Appendix D.
- Bare soils will be re-vegetated as soon as practical to minimize possible establishment of invasive species. Soil components and mulches used to re-vegetate bare soils will come from

non-invasive plant sources. Seed and other plant materials that have been checked and certified as noxious-weed-free sources will be utilized.

- All vehicles, equipment, and materials, including swamp mats, will be inspected for and cleaned, as necessary, of any visible soils, vegetation, and debris before bringing them into the project area.
- All equipment, including swamp mats, vehicles, trailers, machinery, and tools, will be cleaned of loose soil and vegetative matter prior to the equipment leaving one agricultural field or DEC regulated freshwater wetland and adjacent area and moving to another field or DEC regulated freshwater and adjacent area wetland or returning to the work yard. Once the invasive species survey is complete, cleaning locations will be shown on the drawings provided in Appendix D and submitted to DEC, Ag & Mkts, and DPS Staff.
- Soil material generated from cleaning will be placed in plastic bags and properly disposed of off-site or used within the same construction area that is infested, provided that no filling of any wetlands or adjacent areas will occur as a result.
- The field cleaning will be done within designated work areas and not within 100 feet of any water body or wetland and the regulated adjacent area.
- The cleaning methods will be brush and broom, or high pressure air.
- No staging or laydown areas will be within agricultural fields or DEC regulated wetlands and their regulated adjacent areas.
- All field management personnel as well as project contractors and subcontractors will be trained and educated in the identification of invasive species, implementing best management practices, and cleaning methods to prevent and/or control the transport of invasive species throughout and off the project site.
- Any cuttings of invasive species will be left in place.
- It is not expected that soil will be removed from the right-of-way as part of this Project. Should fill material be needed, it will come from invasive free sources either on-site or off-site.

4.2 WATER RESOURCES

The protection of water bodies, wetlands, and groundwater resources is an objective of this EM&CP. Specific protection measures are discussed in the following subsections.

4.2.1 SURFACE WATER RESOURCES

The existing transmission line where the Project will replace insulators currently crosses the Peconic River in the Town of Riverhead. The Peconic River has been mapped by the United States Fish and Wildlife Service's (USFWS) National Wetlands Inventory (NWI) as "L1UBHh: Lacustrine limnetic, unconsolidated bottom, permanently flooded, diked/impounded". This mapping has been confirmed in the field on February 10 and June 12, 2012. The NYSDEC has mapped the Peconic River as wetland R-5 in the vicinity of the Project and has designated it a Class "C" waterbody best suited for fishing and primary and secondary contact recreation. See Table 3 for the water quality classification and identification for the Peconic River.

Table 3
Wetlands and Waterbodies in the Immediate Vicinity of the Project

Waterbody	Surface Waters		
	Peconic River	Freshwater Wetland	Freshwater Wetland
Town	Brookhaven, Riverhead, and Southampton	Riverhead (Vicinity of Pole 17)	Riverhead (Vicinity of Pole 16)
Field/Map Identification Name	Peconic River	Freshwater Wetland	Freshwater Wetland
Stream Name	Peconic	N/A	N/A
GPS coordinates (decimal degrees)	-72.704, 40.914	-72 42.24, 40 54.89	-72 42.22, 40 54.81
Water Index No ¹	FB3-112 portion as described including P 550	N/A	N/A
Wetland Type	Freshwater/Estuary	Freshwater	Freshwater
NYSDEC Wetland ID Classification Code	R-5	R-5	R-5
NYSDEC Classification Code	1	1	1
NWI Classification	L1UBHh	PEM1Eh	PFO1Eh/PSS1Eh
Perennial (P) or Intermittent (I) ²	P	P	P
New York Stream Classification	C	N/A	N/A
Existing Structure Span	+/- 370 feet	NA	NA
Tangent Structures in DEC Wetlands	<u>N/A</u>	1	2
Dead End Structures in DEC Wetlands	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Area Crossed by Project	+/- 42 feet	+/- 252 feet	+/- 76 feet
Proposed Crossing Method and Length	N/A	N/A	N/A
Proposed Structure Located within Wetland (Y/N)	<u>N/ANo</u>	<u>N/ANo</u>	<u>N/ANo</u>
Total Area of Temporary Disturbance/Impact	N/A	15-20 feet	15-20 feet
Total Area of Permanent Disturbance in DEC Wetland	N/A	N/A	N/A
Conversion of forested Wetland	N/A	N/A	N/A
Sources: 1: http://www.dec.ny.gov/docs/lands_forests_pdf/sfsmzbuffers.pdf accessed on July 5, 2012 2: http://www.dec.ny.gov/regs/4532.html accessed on July 5, 2012			

In addition to the Peconic River, freshwater wetlands extend north and south from the river in the vicinity of the Project. As shown in Appendix D, wetlands within the vicinity of Pole 17 (north of the river) and Pole 16 (south of the river), are mapped by NWI as “PEM1Eh: Palustrine emergent, persistent, seasonally flooded/saturated, diked/impounded”; “PFO1Eh: Palustrine forested, broad-leaved deciduous, seasonally flooded/saturated, diked/impounded”; and “PSS1Eh: Palustrine scrub-shrub, broad-leaved deciduous, seasonally flooded/saturated, diked/impounded” wetlands. Site inspection confirms these wetland types. Two other NWI mapped wetlands are in the vicinity of the existing transmission line and within the right-of-way. However, they are more than 30 feet from any pole to be upgraded (the area within a 20 foot radius around each pole is the maximum area of disturbance to install the new insulators) and thus, would not be disturbed by the construction activities. No other mapped wetlands or surface waters are located within the mapped right-of-way.

The wetlands adjacent to the Peconic River on the Project site were delineated in accordance with Federal and State methodology¹ on February 10th and June 12th, 2012. Outside of the boundary of the existing transmission line right-of-way, forested red maple-dominated wetlands occur. Beneath the transmission line, maintenance clearing has kept the wetland in an early successional state with a mix of herbaceous and shrub-dominated wetlands. These two wetland types form one contiguous wetland that crosses the existing transmission line easement and extends to the banks of the Peconic River. The onsite wetlands have been flagged and their boundaries surveyed as shown in Appendix D.

Positive wetland indicators (vegetation, soils, and hydrology) identified onsite are listed below:

4.2.1.1. VEGETATION

Dominant plant species within the herbaceous/shrub portion of the wetlands beneath the transmission line include common reed (*Phragmites australis*) FACW, highbush blueberry (*Vaccinium corymbosum*) FACW-, bayberry (*Morella pensylvanica*) FAC, chokeberry (*Aronia arbutifolia*) FACW, sweet pepperbush (*Clethra alnifolia*) FAC+, huckleberry (*Gaylussacia frondosa*) FAC, pussy willow (*Salix discolor*) FACW, sheep laurel (*Kalmia angustifolia*) FAC, Canada rush (*Juncus canadensis*) OBL, soft rush (*Juncus effusus*) FACW+, cinnamon fern (*Osmunda cinnamomea*) FACW, and eastern star sedge (*Carex radiata*) NI. Dominant plants within the forested portions of the wetlands include red maple (*Acer rubrum*) FAC, black gum (*Nyssa sylvatica*) FAC, skunk cabbage (*Symplocarpus foetidus*) OBL, and sphagnum moss (*Sphagnum sp.*) NL.

The adjacent uplands on the north side of the Peconic River are controlled by sandy berms dominated by Japanese knotweed (*Polygonum cuspidatum*) FACU- and bare soil. Adjacent uplands on the south side of the river contain a pitch pine (*Pinus rigida*) forest within Peconic Bog County Park. In this region, upland areas within the cleared portions of the transmission line easement contain expanses of scrub oak (*Quercus ilicifolia*) NL, black huckleberry (*Gaylussacia baccata*) FACU, bearberry (*Arctostaphylos uva-ursi*) NI, lowbush blueberry (*Vaccinium pallidum*) NI, and broom sedge (*Andropogon virginicus*) FACU.

4.2.1.2. SOILS

Soils meet several hydric soil indicators, including S8: *Polyvalue Below Surface*, S5: *Sandy Redox*, S1: *Sandy Mucky Mineral*, and A3: *Black Histic*. Fibric/sapric soil material at the surface is predominantly closest to the shore and within the adjacent, red maple-dominated wetland area where the soil consists of a true histosol in places, satisfying indicator A1:*Histosol*. Elsewhere, at the margins of the red maple wetland and within cleared portions beneath the powerline easement, soils are uniformly sandy with portions of the solum masked by organic matter and other portions stripped of organic matter displaying the low chroma and high value of the sandy parent material.

¹ Environmental Laboratory. 1987. "Corps of Engineers Wetlands Delineation Manual," Technical Report Y-87-1, US Army Engineer Waterways Experiment Station, Vicksburg, Miss.;

U.S. Army Corps of Engineers. 2009. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-09-19. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

NYSDEC Freshwater Wetlands Delineation Manual (revised July 1995)

4.2.1.3. HYDROLOGY

Hydrology supporting the onsite wetlands consists of saturated soils and a shallow groundwater table adjacent to the Peconic River. Soil saturation in close proximity to the Peconic River extends upslope from the Peconic River edge by capillary action. Periodic riverbank flooding and stormwater runoff also contribute to the sustained wetland hydrology that supports the fringe of wetlands (forested and herbaceous) bordering the Peconic River up and down its length. Specific Federal wetland hydrology indicators documented onsite during the delineation include A2: High Water Table, A3: Saturation, and C7: Thin Muck Surface. Soils were saturated to within several inches of the surface throughout most of the wetland areas onsite. A water table within several inches of the surface was observed closest to the Peconic River. The adjacent wooded wetlands, both north and south of the Peconic River, and portions of the herbaceous/shrub wetland beneath the powerlines show secondary hydrology indicators including most commonly D4: Microtopographic Relief where tussocks of graminoid vegetation occur.

4.2.2. CONSTRUCTION ACCESS AND PRACTICES IN WETLAND AREAS

Both Poles 16 and 17 are set back from the Peconic River and can be accessed from the existing right-of-way under the transmission line. No in-water work or access will be necessary. However, since Poles 16 and 17 are located within wetlands, temporary swamp mats will be utilized to mitigate any potential impact to the wetland areas. The access roads that lead to Poles 16 and 17 are too far from the poles for a truck to safely reach the poles to replace the insulators and thus, equipment needs to enter the wetland adjacent area. If feasible, work on Poles 16 and 17 would be performed from the access road if a truck can reach the pole without entering the right-of-way. Prior to construction at these two poles, silt fencing and/or straw bales will be installed along the banks of the Peconic River; and DEC will be contacted to identify acceptable locations for mat placement. All mats will be cleaned prior to entry and use in the area and prior to their removal from freshwater wetlands and adjacent areas. Brush mowing will be kept to the immediate area necessary to access the poles and will be conducted with cleaned equipment before the swamp mats are laid. Prior to any construction activity in or near the Peconic River and related wetlands, equipment will be appropriately cleaned and dried to protect the spread of invasive species. The following prohibitions will be followed during construction of the Project:

- Vehicle or equipment refueling, storage mixing, or handling of open containers of pesticides, chemicals labeled “toxic”, or petroleum products will not take place within the right-of-way or 100 feet of wetlands and adjacent areas;
- No pesticides or herbicides will be applied during the installation of the Project, and none would be used in the maintenance of the Project within any DEC regulated wetlands and their regulated adjacent areas;
- No excavation or stockpiling of excavated materials within 100 feet of wetlands and adjacent areas will be permitted;
- No woodchips will be stored or spread in wetlands or within 50 feet of floodplains, streams or drainages;
- No discharges into the Peconic River or wetlands will be permitted; and
- No rinsing or washing out of equipment will be permitted in areas that drain to the Peconic River or related wetlands.

Any work performed in the vicinity of the Peconic River and related wetlands will follow the Natural Resource Protection Guidelines provided in Appendix F.

4.2.3. GROUNDWATER AND DEWATERING

It is not anticipated that any dewatering will be required while digging the trench for the cable to be installed within the first 900 feet of the transmission line. In the unlikely event that dewatering is required, the Environmental Supervisor/Environmental Monitor will be notified prior to any dewatering, which will likely be performed by use of submersible pumps. Groundwater will be pumped from the excavation, settled and/or filtered through sediment filter bags and discharged into storm drains or other existing drainage systems. If no storm drains or other drainage systems are available, water may be discharged to the ground, provided the discharge location is down gradient from the excavation area.

The existing right-of-way is located within the Central Suffolk Special Groundwater Protection Area (SGPA), described below in Section 4.9. The potential for environmental impacts to the aquifer below the existing transmission line and to surface waters that groundwater discharge are minimal given the Project is the replacement of insulators and installation of a 900 foot cable and three poles as well as the removal of ~~two~~ four existing poles (three south of the Wildwood Substation and one at the Riverhead each sSubstation). Soil removed to dig the trench would be used as backfill to close the trench. Similarly, excess soils removed to dig the holes for the new poles will be used to backfill the holes left by removing the existing poles.

4.3 SENSITIVE LAND USES

Sensitive land uses were identified in the Article VII application for the Project. Sensitive land uses include schools, hospitals, and emergency (police, fire, and ambulance) facilities. There is only one sensitive land use located adjacent to the right-of-way—Wading River School located at 1900 Wading River Manor Road, Wading River, Town of Riverhead, see Drawing D-3 in Appendix D. When construction takes place in the vicinity of this identified sensitive land use, all vehicle access will be maintained to ensure public health and safety. Vehicle access roads will be managed in a manner that will have no adverse impacts to this sensitive land use.

Recreation areas traversed by the route are also considered sensitive land uses. Recreation areas located adjacent to the transmission line and right-of-way are Great Rock Golf Club located at 141 Fairway Drive, Wading River, Town of Riverhead, a preserve associated with a residential subdivision adjacent to the east of Riley Avenue, and a Suffolk County owned park north of Nugent Drive and South of the Peconic River. Since these recreation areas are not located within the right-of-way, construction work will not impede vehicular or pedestrian access to these resources, see drawings provided in Appendix D. It should be noted that the Peconic River, in the vicinity of the Project, is designated as a Recreational River pursuant to the New York State Wild, Scenic and Recreational Rivers System Act. This segment of the Peconic River is used for boating (small watercraft) and fishing.

4.4 NOISE-SENSITIVE AREAS

Residential areas immediately adjacent to the right-of-way, as well as the residential areas within the right-of-way both east and west of Deer Run in the Town of Riverhead are generally considered noise-sensitive, although ambient noise levels may vary by neighborhood depending on location and proximity to routes with high levels of vehicular traffic. Religious institutions and schools are also considered noise-sensitive uses. The Wading River Assembly of God,

located at 29 Dogwood Drive, is immediately adjacent to the right-of-way. Anticipated noise impacts due to construction activities are directly related to the type of equipment required (magnitude) and the average length of construction time (duration). Since a bucket truck is the extent of construction equipment to be used within the areas where noise-sensitive uses are located, including residences, these uses will not be disrupted by the Project, thus no noise mitigation measures have been proposed. Further, the Project is expected to meet the noise code ordinances within the Towns of Brookhaven, Riverhead, and Southampton as described in the Article VII Certificate.

4.5 CULTURAL RESOURCES

No previously identified or potential architectural resources are located along the transmission right-of-way or within the immediate area. The New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) in a letter dated March 1, 2011 stated that they have no concerns regarding architectural resources within the study area. Furthermore, as determined in the Certificate, the Project will result in no visual or contextual changes because the replacement of insulators along the transmission line will not result in a noticeable visual difference and the replacement poles at the Wildwood Substation will not be visible from public roadways. In the same March 1, 2011 letter, OPRHP stated that they have no concerns regarding archaeological resources along the Project. Thus, no mitigation measures are warranted during construction of the Project to protect cultural resources. However, if archaeological materials, human remains, or evidence of human burials are encountered during construction of the Project, LIPA will stabilize the area and cease construction activities in the immediate vicinity of the find and protect the same from further damage. Within 24 hours of such discovery, LIPA will notify DPS Staff and OPRHP Field Services Bureau to determine the best course of action. No construction activities will be permitted in the vicinity of the find until such time as the significance of the resource has been evaluated and the need for and scope of impact mitigation has been determined. All archaeological or burial encounters and their handling will be reported in the status reports summarizing construction activities and reviewed in the site compliance audit inspections.

4.6 RECREATIONAL AREAS

Existing recreational areas will not be impacted by this construction project since the Project will utilize the existing right-of-way. The Peconic River is a Recreational River under New York State Wild, Scenic, and Recreational Rivers System Act. The Project will have no effect on the recreational use of the Peconic River, both during construction and operation. During construction, boaters and other watercraft users will be able to traverse the Peconic River, because all construction will be on the river banks. The Project will have no in the water work or blockages of the river. During operations, the transmission line will look the same as it does currently. Therefore, the recreational use of the Peconic River will not be impeded or impaired during or after construction of the Project.

4.7 AGRICULTURAL AREAS

The existing transmission line route for the Project is located within LIPA's right-of-way, with the exception of a small residential area east and west of Deer Run in the Town of Riverhead. However, the Project's right-of-way traverses agricultural lands. The Project's right-of-way also runs along two designated agricultural districts. Specifically, Suffolk County Agricultural District 3 in the Town of Brookhaven runs along the beginning of the Project right-of-way for

about 0.2 miles while approximately three quarters of a mile of designated Suffolk County Agricultural District 6 in the Town of Riverhead runs along the right-of-way in at the approximate half way point along the Project line, see Appendix D. Many agricultural activities currently take place on fee-owned right-of-way and are expected to continue upon the completion of construction. Active farming, including cropland and specialty crops (e.g. nurseries, orchards or Christmas tree farms), currently occurs within and adjacent to many areas on the existing right-of-way and demonstrates the compatible co-existence of active farming and transmission line operation. Agricultural areas will not be affected along the existing right-of-way. However, to minimize the potential for soil compaction and mixing, low-impact equipment will be used in areas of active farming and; trucks and vehicles equipped with standard tires will be restricted from agricultural fields during wet weather when rutting may occur. Disturbed areas and ruts will be restored to original grades and conditions with permanent re-vegetation. All equipment, including vehicles, trailers, machinery, and tools, will be cleaned of loose soil and dirt prior to the equipment leaving one agricultural field and moving to another field or returning to the work yard. This measure will minimize the potential to spread agricultural pests.

Field cleaning will be done within the work area and not near any water body. The cleaning methods will be brush and broom or high pressure air. No staging or laydown areas will be allowed within agricultural fields. All parking areas, construction-staging areas, and other temporary and permanent support facilities will be located outside of active agricultural fields. The boundaries of all right-of-way and work areas will be identified, as necessary, with temporary markers to keep equipment from going off the approved right-of-way and work areas. No vehicular activity will be allowed outside the marked area. The following standard guidelines will be applied during construction within agricultural lands to the extent practicable.

- Installation of the new insulators will only be done in agricultural lands during the non-growing season (November 15 to March 15).
- All access ways across active agricultural lands will be limited to the existing width or a width of 15 feet maximum and, will follow hedge rows, right-of-ways, and field edges, when practicable, to minimize impacts to agricultural land.
- All parking areas, construction-staging areas, and other temporary support facilities will be located outside of active agricultural fields.
- Disturbance of surface and subsurface drainage features will be avoided to the maximum extent practicable. Any drainage features disturbed by construction will be repaired or replaced to “like-new” conditions.
- Prior to traversing, farm roads to be used for access will be improved as required. To provide stable access, such improvements could include the installation of geotextile fabric and crushed stone.
- LIPA will work with farmers employing rotating method of crop growth to minimize or avoid impacts on their plans.

The locations of agricultural lands within and adjacent to the right-of-way where insulator installation is to be performed are shown on relevant the drawings (Appendix D).

LIPA will minimize any short-term disruption to farming activities through scheduling, planning, and the use of protection measures prescribed on a site-by-site basis during construction and in consultation with farmers. Specifically, construction will take place during winter months to avoid harvest, low-impact equipment will be used, when necessary, and

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vehicles with standard tires will be restricted from active agricultural areas during wet conditions.

The Environmental Supervisor/Environmental Monitor will be responsible for overseeing the protection of agricultural lands during construction. His responsibilities will also include oversight of initial restoration of any disturbed agricultural land and follow-up restoration. The Environmental Supervisor/Environmental Monitor will provide site-specific agricultural information as necessary through both field review and direct contact with affected farm operators, Ag & Mkts and DPS Staff. The Environmental Supervisor/Environmental Monitor will also maintain regular contact with the affected farmers and Ag & Mkts concerning farm resources and management matters pertinent to the agricultural operations and the site-specific implementation of the EM&CP.

To the extent possible, the locations of subsurface drain tiles will be identified prior to construction. Since grading and topsoil stripping are not required as part of the Project, it is not expected that drain tiles will be damaged. However, when in the field, the Environmental Supervisor/Environmental Monitor will mark exposed or damaged tiles if any are found. If required, a site-specific plan will be prepared for the replacement of drainage systems damaged during construction.

The Environmental Supervisor/Environmental Monitor will determine when suitable weather and soil moisture conditions exist to allow for final restoration activities should any be required. Although the restoration activities in agricultural lands may vary, the following guidelines will apply:

- Excess gravel or fill will be removed from access roads and around structures.
- If determined necessary, compacted soils will be de-compacted. Since LIPA has committed to working within agricultural lands outside of the growing season, it is not expected that construction would cause soils to be compacted. However, on active agricultural fields, where it will be necessary to traverse cultivated land during the growing season, penetrometer readings will be collected immediately prior to and after construction activities. Penetrometer readings will be taken every 100 feet. Should post-construction readings indicate compacted soils resulting from construction activities, LIPA will confer with the landowner to determine the need for de-compaction. If the impacted land will be cultivated as part of normal farming practices, LIPA will defer to the landowner.
- Soil de-compaction will not be performed after October 1 or prior to May 1, unless approved on a site-specific basis.
- All access roads will be re-graded as necessary to create a smooth travel surface, to allow crossing by farm equipment, and to prevent interruption of surface drainage.
- Any surface or subsurface drainage features damaged during construction will be repaired or replaced as necessary.
- Upon completion of restoration, all construction debris will be removed and disposed of off-site.
- Damaged fencing or gating will be restored to “like new” condition in its original location following construction. The base of all new posts will be secured to a reasonable depth below the surface to prevent frost heave.

Seed mixtures for use on agricultural lands will be determined in consultation with the Soil and Water Conservation District as well as the landowner. Lime and fertilizer rates will be chosen in the same manner. If mulching is necessary, only straw mulch will be used over seedbeds.

4.8 CRITICAL ENVIRONMENTAL AREAS

Portions of the existing right-of-way are located within the Central Pine Barrens Core Preservation Area (CPA) and Compatible Growth Area (CGA) while the majority of the right-of-way is located within the Central Suffolk SGPA, see Appendix D.

4.8.1. CENTRAL PINE BARRENS

Approximately 3,500 feet of the existing transmission line west of Fresh Pond Avenue is located within the Central Pine Barrens CGA. Approximately 5,500 feet of the existing transmission line, south of the Peconic River, is located within the CPA. There will be no vegetation removal within either the CGA or CPA as part of the Project. However, as stated, limited mowing and/or trimming will occur in select areas within the right-of-way. See Section 4.1 on measures that will be utilized to minimize vegetative disturbance within the right-of-way.

4.8.2. SPECIAL GROUNDWATER PROTECTION AREA

The portion of the existing transmission line just east of Forest Hollow Lane to just south of Old Country Road (County Road 58) and then south of the Peconic River is located within the Central Suffolk SGPA, see Appendix D. As noted in Section 4.2.3 above, the potential for environmental impacts to groundwater in the aquifer that underlies most of the existing transmission line route will be minimal due to the characteristics of the construction work to be performed as part of the Project.

5.0 SOIL EROSION AND SEDIMENT CONTROL

Soil excavation for the Project will be limited to trenching for approximately 900 feet at the beginning of the line just south of the Wildwood Substation property line. The trench will be backfilled with soils removed to dig the trench for installation of the cable. Applicable erosion and sediment control practices and methods outlined in Appendix F, will be followed during Project construction and restoration. These guidelines will be strictly enforced during the construction period to prevent any impacts on nearby resources and natural vegetation. Sedimentation/erosion control devices will be installed prior to construction and maintained in place until final vegetative restoration, if necessary, has occurred. Sedimentation/erosion control devices will be inspected periodically and immediately following any storm event and will be repaired or replaced immediately, as necessary. Erosion control devices will be utilized around the area to be trenched as well as within agricultural areas and within the vicinity of the Peconic River to prevent soil erosion during construction. Erosion control measures would include:

- Facilities and equipment for implementation of erosion and sediment control would be maintained in proper working order throughout construction.
- At the beginning and end of each work day, all erosion control devices would be inspected to ensure proper functioning, and be repaired as necessary.
- Staked straw bale or check dam (for ditches or stabilization of topsoil);
- Silt fencing; and

- Limiting the exposure time of stockpiled material.

A minimal construction area will be maintained. Excavation will occur immediately before cable placement to minimize potential runoff. To minimize wind erosion and dispersion of dust, soil stockpiles will be sprayed with water or covered with tarps as necessary. Disturbed areas, including areas where the ground surface has been rutted by the movement of construction equipment, will be protected with mulch where necessary.

6.0 BUILDING AND STRUCTURES REMOVAL

No buildings or structures are to be acquired, demolished, relocated, or removed for the installation of the Project. However, afour wood poles (three south of at both the Wildwood Substation and one at the Riverhead Substations) would be removed.

7.0 STANDARD CONSTRUCTION PRACTICES

Installation of the Project will be carried out in accordance with the detailed construction documents consisting of plans and specifications, which are included by reference in this EM&CP. The right-of-way is shown on the drawings provided as Appendix D. Work area limits are defined as the area within a 20 foot radius of each pole.

7.1 CONSTRUCTION EQUIPMENT AND STAGING

Typical vehicle(s) to be utilized for insulator replacement or hole drilling:

- Bucket truck: Condor CTA-104-I Aerial Device – working height: 100 ft. (or similar)

Typical vehicle(s) to be utilized for pole setting (if required):

- Pole setting truck: Telelect Digger/Derrick – Commander 4040 (or similar)
- Pole trailers: Butler BP-1000 Pole Trailer (or similar)

Typical vehicle(s) to be utilized for cable installation:

- Cable reel trailer
- Backhoe

The first step in replacing the insulators will be to support the conductor on the existing pole. Working from an elevated bucket on a truck, the conductor will be attached to the pole using wire grips and slings to hold the conductor. This equipment will be of sufficient size and strength to safely support the weight of the conductor. The conductor then will be detached from the existing insulator, and the load transferred to the pole. The existing insulator will be removed and lowered to the ground using a pulley system of block and tackle. Holes of the proper size to hold the new insulator will be drilled, and the new insulator will be lifted using block and tackle and installed. In the final step, the conductor will be attached to the insulator and detached from the pole.

The transmission line from east of Lilco Road to the Wildwood Substation will be installed underground. For the majority of the approximately 900-foot distance, the installation will be conventional cut and cover trenching. A backhoe will be used to dig a trench to hold the cables, and the excavated soil stockpiled to refill the trench. An electrical warning tape will be installed 6 inches below the ground surface as a warning to anyone digging in the vicinity of the transmission line. The trench could have sloping sides or a self digging box could be used to

have vertical sides to the trench. In either case, the trench would be backfilled from the stockpiled soil immediately after the conduits are installed, and the ground surface graded back to a level condition.

The surface of Lilco Road would be repaired with asphalt to a level condition if trenching across Lilco Road is selected. Although conventional trenching is the preferred method of installing cables, the contractor may elect to use horizontal directional drilling (HDD) under Lilco Road to avoid disturbing the surface of Lilco Road. In the HDD technique, pits are dug on both sides of the road, and a drill is used to open a tunnel of sufficient diameter to be able to pull the conduits through the tunnel. After the conduits are installed under the road, the pits are filled, and the ground surface leveled.

Pre-designated construction staging areas will be within the existing Wildwood and Riverhead Substations.

7.2 CONSTRUCTION TIME RESTRICTIONS

Generally, construction activities will occur from 7 AM to 6 PM Mondays through Fridays, consistent with local noise codes. Extended work hours beyond 6 PM to complete work at a particular site along the right-of-way will be permitted, and DPS Staff will be notified within 24 hours of the event with an explanation of why extended work hours were required. No evening/night-time or weekend work is expected. However, if work within these time periods becomes necessary, DPS Staff will be notified at least 48 hours in advance. Moreover, if necessary, LIPA will make arrangements for extension of work hours and/or days with appropriate local agencies in compliance with local ordinances.

In noise-sensitive areas, construction activities will be limited to those hours when the sensitive uses are not in session (i.e., during school hours in the vicinity of Wading River School).

7.3 WORKSITE SAFETY

All construction work areas will be maintained in an orderly manner, free from hazards that could cause accidents and annoyances. The contractor will be responsible for properly fastening or protecting all equipment that could, under conditions of storm and/or darkness, be the cause of accidents, service interruptions, and conflict with the operation of existing utilities, or which could endanger persons or property. The contractor will provide and maintain all worksite security including signs, lights, barricades, and warning devices to minimize hazards to the general public and to maintain the movement of vehicular and pedestrian traffic.

Measures will be taken by the contractor to assure the health and safety of all construction workers for the Project. Occupational Safety and Health Administration (OSHA)-approved fire and first aid equipment will be provided by the contractor's Site Health and Safety Officer for the Project. Emergency police, fire and hospital phone numbers and locations will be posted at all field locations.

At least five days prior to construction, notice will be sent to all local emergency services such as fire departments, police departments, and hospitals. Although road closures are not expected as a result of this Project, this advance notice will provide sufficient information for the public and local emergency services to plan alternate routes to avoid the active construction area and potential traffic congestion. Additionally, sufficient information will be provided so that adequate response can be made to the worksite in the event of a medical or fire emergency. In all

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instances, access to fire hydrants and emergency vehicle access will be maintained on all roadways within the project area.

Training, instruction, and periodic briefings will be provided to all construction workers to ensure that worksite safety measures are followed during construction.

7.4 CONSTRUCTION WORKER PARKING AREAS

The designated parking areas will be within the existing substations (Wildwood Substation and Riverhead Substation) or the LIPA Operation Center at 117 Doctor's Path, which will not interfere with the normal flow of traffic, cause safety hazards, or interfere with existing land uses.

7.5 CONSTRUCTION SCHEDULE

It is anticipated that construction will begin early 2015.

7.5.1. PRECONSTRUCTION MEETING

At least two weeks prior to the start of construction, LIPA will hold a preconstruction meeting with an agenda, location, and attendee list to be agreed upon by DPS Staff and LIPA. At a minimum, DEC, Ag & Mkts, and DPS staff will be invited. LIPA will supply draft minutes from this meeting to all attendees, who may offer corrections and comments. LIPA will issue final meeting minutes to all attendees.

If, for any reason, the Contractor cannot finish construction of the Project, and a new Contractor is designated, another preconstruction meeting will be held, with the format noted above.

7.5.2. BEFORE CONSTRUCTION

LIPA will inform the Secretary to the PSC and DPS Staff at least five days before commencing construction. The 275 homeowners located along the transmission line will be notified of planned construction activities and schedules before construction commences, and will be notified in writing at least three weeks before commencement of construction in their areas. Written notification will include a LIPA contact e-mail address and phone number.

7.5.3. DURING CONSTRUCTION

Throughout the period of construction, LIPA will provide DPS Staff with weekly status reports summarizing construction undertaken in the previous week and identifying construction activities and locations scheduled for the next two weeks.

7.5.4. AFTER CONSTRUCTION

Within ten days after construction is complete, LIPA will notify the Secretary to the PSC with a copy to DPS Staff.

7.5.5. CONSTRUCTION SCHEDULE RESTRICTIONS

Installation of the new insulators will only be conducted in active agricultural lands during the non-growing season (November 15 to March 15). Installation of the Project will also be restricted in the vicinity of the Wading River School to those times when school is not in

session. Construction near the school will be coordinated with school personnel so any work does not take place during school activities.

8.0 FUEL, OIL, AND CHEMICAL STORAGE AND HANDLING

No containers used for dispensing fuels, oils, lubricants, chemicals, or other potentially harmful substances that may be required during construction will be stored in the work or staging areas during Project construction or restoration. Further, no fueling of vehicles or equipment will occur in the work area or staging areas. Fueling of vehicles and equipment will only take place at LIPA's Operation Center at 117 Doctor's Path, Riverhead. Any equipment observed to be leaking will be immediately taken out of service and replaced. All equipment will receive regular preventive maintenance to reduce the risk of leakage. Construction vehicles will be parked at least 100 feet from environmentally sensitive areas whenever practicable.

LIPA will keep local fire department and emergency management teams apprised of chemicals and waste materials on the construction site. Such notifications will be provided at least 48 hours prior to the commencement of construction activities within the jurisdictions of the various fire departments and emergency management entities.

Should any potentially harmful materials be accidentally spilled on the right-of-way, the Contractor will take immediate action to contain and recover the spilled materials. Immediate notification will be made to the Construction Inspector and/or Project Manager who will be responsible to notify the LIPA 24-Hour Spill Response Program by means of the designated Spill Pager. Notification will be made to the DEC by the designated LIPA spill response personnel. Notification will also be made to the Environmental Supervisor/Environmental Monitor. Depending on the severity of the spill, emergency response procedures will be undertaken immediately by Hazardous Materials Responders or designated Spill Response Contractors.

9.0 PESTICIDES AND HERBICIDES

No pesticides or herbicides will be applied during installation of the Project. Installation of the Project will observe the Best Management Practices identified in the Natural Resource Protection guidelines provided in Appendix F of this EM&CP. Any maintenance required within the right-of-way after the installation of the Project will be consistent with the Environmental Guidance provided in Appendix F of this EM&CP.

No pesticides or herbicides would be used in the maintenance of the Project along roadsides, in populated areas, near wetlands and environmentally sensitive areas or in agricultural fields. However, herbicides have been and will continue to be used during long-term maintenance at the following locations:

- Between poles 139 to 128: East of residences to Forest Hollow Lane
- Between poles 113 to 109: Hulse Landing Road to agricultural field edge
- Between poles 103 to 93: Forest edge to Fresh Pond Avenue
- Between poles 82 to 77: Fresh Pond Avenue to Edwards Avenue (forest edge to field edge)
- Between poles 43 to 19: Middle Road to NYS Route 25

Chemicals that have been and will continue to be employed on this right-of-way for long-term maintenance include active ingredients as follows:

Wildwood to Riverhead Overhead Transmission Line

- Glyphosate (Accord)
- Metsulfuron methyl (Escort)
- Imazapyr (Arsenal)
- Fosamine ammonium (Krenite)

All chemicals are applied in accordance with New York State approved labeling and limited to approved usages and dosages. Brush areas along the right-of-way will be maintained with selective chemical methods on a four to five year cycle. The primary technique to be employed is low-volume foliar application, with limited high-volume foliar treatment as needed for denser stands. Treatments are performed in late summer to optimize translocation and reduce visible browning-out.

10.0 ACCESS ROADS AND TRAFFIC CONTROL PLAN

Table 4 shows the location, classification, and jurisdiction of the roadways that the right-of-way and transmission circuit currently cross. No changes will occur to the right-of-way route or access roadways.

**Table 4
Roadway Crossings**

Road Name	Classification	Jurisdiction	Comments
Middle Country Road	Primary	New York State	Access to Riverhead
Old Country Road	Primary	Suffolk County	Access to Riverhead
Middle Road	Light duty	Riverhead	Farmland
Twomey Avenue	Secondary	Riverhead	Farmland
Manor Road	Light duty	Riverhead	Parallel for 3,000 feet
Riley Avenue	Secondary	Riverhead	Farmland
Edwards Avenue	Secondary	Riverhead	Farmland
Fresh Pond Avenue	Light duty	Riverhead	Farmland
Hulse Landing Road	Light duty	Riverhead	Farmland
Sound Avenue	Secondary	Riverhead	Farmland
Fairway Drive	Light duty	Riverhead	Residential
North Country Road	Secondary	Riverhead	Parallel for 1,800 feet
Wading River - Manorville Road	Secondary	Suffolk County	Commercial/Residential
Charles Street	Light duty	Riverhead	Parallel for 1,000 feet
Overhill Road	Light duty	Riverhead	Residential
Dogwood Drive	Light duty	Riverhead	Residential
Gateway Drive	Light duty	Brookhaven	Residential
Zophar Mills Road	Light duty	Brookhaven	Parallel for 2,100 feet
Randall Road	Light duty	Brookhaven	Residential
Notes: USGS road classification			
Sources: USGS topographic maps and National Grid surveys			

The right-of-way crosses or is parallel to 2 Town of Brookhaven roads, 13 Town of Riverhead roads, 2 Suffolk County roads, and 1 New York State road. Maintenance and protection of traffic for all construction will comply with rules and regulations included in the MUTCD. The

WZTCP, provided as Appendix E, includes general guidelines that will be followed during construction of the Project.

No road closures are anticipated as part of the Project. Construction vehicle access to the existing right-of-way will use existing access points. Appendix H provides correspondence from property owners where existing access is from private roads and driveways. These letters give LIPA permission to access these roads and driveways specifically for the Project. As such, direct disturbance to properties will be avoided by accessing the right-of-way from existing roadways and access roads. LIPA will stake and flag all off-right-of-way access roads and working and staging areas. No upgrades are needed at the access roads for construction of this Project. Should the need arise for off- right-of-way access, LIPA will submit a request to DPS Staff.

11.0 CLEAN-UP AND RESTORATION

Clean-up of the existing right-of-way where construction will occur will take place as each stage of the installation is completed. Disturbed areas, ruts, and rills if any, will be restored to original grades and conditions with permanent re-vegetation and erosion controls appropriate for those locations.

11.1 REMOVAL OF CONSTRUCTION MATERIALS

No equipment, tools, sheathing, signs, lights, barriers, or debris will be left at a completed section of the Project. Existing transmission facility components replaced as part of the Project will be removed from the right-of-way to appropriate destinations and handled appropriately for re-use as available.

11.2 RESTORATION OF VEGETATION

Because the Project would only mow or trim select vegetation, it is not expected that vegetative restoration would be required. No trees will be removed as part of this Project. However, if restoration of shrubs, ground cover, plants, or turf grass is necessary, planting will occur as soon as practicable after Project completion.

12.0 COMMUNITY RELATIONS

The following notification and complaint resolution procedures will be followed.

12.1 PUBLIC NOTIFICATION

Public notification will be made prior to the commencement of the Project. Eight weeks prior to the start of construction, LIPA will mail a summary of the Project to local newspapers, including Riverhead News Review, The Village Beacon Record, and Newsday, in the form of a press release. That press release will also contain the address of the libraries (i.e., Riverhead Free Library and North Shore Public Library) where the EM&CP has been placed for residents to obtain further information. Further, approximately 275 residents along the Project right-of-way will receive a postcard prior to construction that contains a LIPA contact phone number and e-mail address for complaints or concerns.

These notices will enable the public and emergency services to plan alternate routes and permit services indirectly affected by construction to mitigate the impact, such as rerouting emergency routes to avoid the construction area and detour congestion. Each local department or agency

normally having jurisdiction over the roads in the Project vicinity will be notified at least five days in advance of the approximate date construction will begin. Arrangements will be made to accommodate individual needs such as maintaining continuous access to businesses and private properties during construction.

12.2 COMPLAINT RESOLUTION PROCEDURES

Adjoining property owners, community officials and other identified stakeholders along the proposed construction route will receive notification of the anticipated start of construction approximately three weeks prior to construction. This notification will also include the location of LIPA's Operations Center at 117 Doctor's Path.

Through the press release described above in Section 12.1, LIPA will make available to the public a toll-free or local phone number of an agent or employee where complaints may be received 24 hours a day and 7 days per week during the construction of the Project. In addition, the phone number of the Secretary and the Commission's Environmental Compliance Section will be provided. Complaints concerning the Project construction will be routed to LIPA's Community Relations Office, which will discuss the nature of the complaint with the complainant. Thereupon, LIPA will investigate the problem and the course of action necessary to address the situation. LIPA will report to DPS Staff every complaint that cannot be resolved after reasonable attempts to do so, or within 30 days after receipt of the complaint (whichever comes first). Upon completion of all actions with respect to the complaint, the Environmental Supervisor/Environmental Monitor will record the outcome of the investigation as well as the resolution program, and file a summary with DPS Staff upon Project completion.

LIPA will organize and conduct site compliance audits during Project site preparation and construction phases, and site restoration, if necessary. These audits will be held along the Project route on a monthly basis and at least annually for two years after the Project is fully energized. In addition to a field review of the Project, the audit agenda will include a review of all complaints received and their proposed or actual resolution. Any substantive comments, concerns, or suggestions made by the public, local governments or State agencies will also be reviewed at the monthly audits. See Section 14.7 for additional information on public compliant procedures.

13.0 LONG-TERM RIGHT-OF-WAY MAINTENANCE

Currently, regular mowing is used on LIPA owned property (right-of-ways) in areas with higher population density. The right-of-way, where the Project is located, is mowed three days per year in residential areas, typically in late May, mid-July, and late-September. Trash and debris cleanup is also performed during mowing operations. Equipment includes tractor/flail mowers, and additional small mowers and trimmers to maintain the highly visible street crossings. Brush areas along the right-of-way are maintained with selective chemical methods on a four to five year cycle taking approximately two weeks per cycle. The primary technique employed is low-volume foliar application, with limited high-volume foliar treatment as needed for denser stands. Treatments are performed in late summer to optimize translocation and reduce visible browning-out. Because cultivation of croplands largely eliminates interference with conductors, no overall right-of-way treatments are performed in these areas. Limited maintenance activity at pole locations in these agricultural areas may include mechanical and targeted spot chemical treatments as needed, primarily to control climbing vines.

In keeping with the preferred shrubby vegetation cover sought for New York State right-of-ways, spot brush hogging is sometimes required to improve access to forest edges when tree trimming is to be performed. Brush hogging and/or selective removal of pitch pines is the primary method of right-of-way maintenance south of the Peconic River crossing, continuing east to the Riverhead Substation. Soil is a very dry, Plymouth-Carver Association type in this area, characterized by pitch pine and scrub oak cover. This vegetation recovers very slowly after treatment, allowing for return cycles of six to eight years. In areas where the right-of-way is located within the front yards of residences, largely in the western portion of the Project, long-term maintenance includes tree trimming and mechanical pole clearing only.

Since the Project is simply the replacement of insulators on the steel poles within an existing right-of-way, long-term maintenance will not differ significantly from those practices followed over the last 50 or more years. Thus, vegetation management for the maintenance of this right-of-way consists primarily of limited brush and grass mowing, to provide truck access to each pole, and an adequate, safe workspace around each pole.

Limited tree trimming may be required at a few pole locations. Where the existing access road width is insufficient, brush will be mowed to provide a 15 foot wide path as needed. In addition, a work space including a 30 foot radius will be mowed around each pole as needed. The specified brush mowing device will be a horizontal-shaft brush hog (Fecon or equivalent) to minimize cut stubble and stumpage, which might present a tripping hazard and cause tire damage. Chemical treatments may be applied at selected areas along the right-of-way. Maintenance of the right-of-way through regulated wetlands will be done by crews on foot with tracked equipment or on temporary swamp mats and will be restricted to access roads.

The long-term right-of-way maintenance will follow the Environmental Guidance provided in Appendix F of this EM&CP. Further, Appendix G provides specific long-term maintenance techniques that are utilized for the right-of-way where the Project is located.

14.0 EM&CP PROCESS

This EM&CP will be implemented in accordance with the approved Certificate and procedures identified by PSC as well as Appendix 3 of the Joint Proposal (see Appendix A).

14.1 DISTRIBUTION OF THE EM&CP

LIPA will submit five hard copies and one electronic copy of the EM&CP documents to PSC, one hard copy and two electronic copies to the DEC and AG & Mkts, and one copy to active parties on the service list who request the document. LIPA will also place copies for inspection by the public in the Riverhead Free Library and the North Shore Public Library. Contemporaneously with the submission and service of the EM&CP, LIPA will provide notice, in the manner specified below, that the EM&CP has been filed.

14.2 WRITTEN NOTICE OF FILING THE EM&CP

LIPA served written notice(s) of filing the EM&CP on all active parties to the Project proceedings, on all statutory parties to the Project proceedings, and on the 275 residents along the line, see Appendix I for a Certificate of Service listing the residents that written notices were sent to. Further, LIPA will submit for publication the notice(s) in a newspaper or newspapers of general circulation in the vicinity of the Project within seven days after filing the EM&CP.

There is no need to acquire permanent right-of-way or off-right-of-way access since access already exists. LIPA will serve written notice(s) of filing the EM&CP on each person owning the underlying land right to an existing easement being used and on each person currently leasing a portion of any right-of-way to be used for the Project.

14.3 CONTENTS OF WRITTEN NOTICES

The written notice(s) and the newspaper notice(s) will contain, at a minimum, the following:

- A statement that the EM&CP has been filed;
- A general description of the Project, the need for the Project, the alternatives considered, and of the EM&CP;
- A listing of the locations where the EM&CP is available for public inspection;
- A statement that any person desiring additional information about a specific geographical location or specific subject may request it from LIPA;
- The name, address, and telephone numbers of LIPA's representative;
- The address of PSC; and
- A statement that any person may be heard by PSC on any matter or objection regarding the EM&CP by filing written comments with PSC and LIPA within 30 days of the filing date with PSC of the EM&CP (or within 30 days of the date of the newspaper notice, whichever is later).

A certificate of service indicating upon whom all EM&CP notices and documents were served and a copy of the written notice will be submitted to PSC at the time the EM&CP is filed, and will be a condition precedent to approval of the EM&CP.

14.4 CHANGES TO THE EM&CP

LIPA will report any proposed changes to the EM&CP to DPS Staff; DPS Staff will refer to the Secretary of PSC (or a designee) reports of any proposed changes that do not cause substantial change in environmental impact or are not related to contested issues decided during the proceeding. DPS Staff will refer all other proposed changes in the EM&CP to PSC for approval.

Upon being advised that DPS Staff will refer a proposed change to PSC, LIPA will notify all Signatory Parties and active parties that have requested (before the approval of the EM&CP) to be so notified, as well as property owners or lessees whose property is affected by the proposed change. The notice will:

- Describe the original conditions and the requested change;
- State that documents supporting the request are available for inspection at specified locations;
- State that persons may comment by writing or calling (followed by written confirmation) to the Secretary of PSC within 15 days of the notification date; and
- Provide the Secretary's electronic mail address, phone number, and mailing address.

Any delay in receipt of written confirmation will not delay PSC action on the proposed change.

LIPA will not execute any proposed change until it receives oral or written approval, except in emergency situations threatening personal injury, property damage, or severe adverse environmental impact, or as specified in the EM&CP.

14.5 AVAILABILITY OF DOCUMENTS

Applicable provisions of the Certificate, EM&CP, and orders approving the EM&CP will be accommodated in any design, construction, ownership, or maintenance contracts associated with the Project. LIPA will provide construction contractors with complete copies of the Certificate, approved EM&CP, updated construction drawings, and any site specific plans. 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 execution of such contracts.

14.6 PENALTIES AND FINES

LIPA will notify all construction contractors that PSC may seek to recover penalties for violations of the Article VII Certificate, not only from LIPA, but also from its construction contractors, and that construction contractors may also be liable for other fines, penalties, and environmental damage.

14.7 PUBLIC COMPLAINTS

LIPA will make available to the public a toll-free or local phone number of an agent or employee where complaints may be received during the construction of the certified facilities. In addition, the phone number of the Secretary and the phone number of PSC's Environmental Compliance Section will be provided.

LIPA will report to DPS Staff every complaint that cannot be resolved after reasonable attempts to do so, or within 30 days after receipt of the complaint (whichever comes first).

14.8 CONSTRUCTION NOTICES

No less than two weeks before commencing site preparation, LIPA will:

- Provide notice to local officials and emergency personnel;
- 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

The notice will contain:

- A map and description of the Project;
- The anticipated date for start of construction;
- The name, address and local or toll-free telephone number of an employee or agent of LIPA;
- A statement that the Project is under the jurisdiction of PSC, 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; and
- The notice will be written in language reasonably understandable to the average person.

Upon distribution, an electronic copy will be submitted to the Secretary of PSC.

14.9 ADDITIONAL ACCESS

Neither LIPA nor any contractors in its employ will construct, improve or use any access roads not described in this EM&CP. Should the need arise for additional right-of-way access, LIPA will submit a request to DPS Staff. The request will be considered consistent with the provisions listed above and if the change may involve a site listed or eligible for listing on the State or National Register of Historic Places, Staff will consult with OPRHP.

14.10 PRECONSTRUCTION MEETING

At least two weeks prior to the start of construction, LIPA will hold a preconstruction meeting. An agenda, location, and attendee list will be agreed upon between Staff and LIPA. DEC and Ag & Mkts will be invited.

LIPA will supply draft minutes from this meeting to all attendees. The attendees may offer corrections or comments and LIPA will issue the finalized meeting minutes to all attendees.

If, for any reason, the construction contractor cannot finish the construction of this Project, and a new construction contractor is needed, there will be another preconstruction meeting with the same format as outlined above.

14.11 CONSTRUCTION NOTIFICATIONS

LIPA will inform PSC and DPS Staff (and NYSDOT when state roadways are affected) at least five days before commencing construction. Each of the 275 residents along the right-of-way will be notified of planned construction activities and schedules before construction commences. Each of the 275 residents along the right-of-way will be notified of construction activities in their areas in writing approximately three weeks before commencement of construction in those areas. The notification will include the estimated dates and times of construction and a LIPA contact email address and telephone number so residents can contact the Company via email, text or phone. Eight weeks prior to the start of construction, LIPA will mail a summary of the project to local newspapers in the form of a press release. The press release will contain information on the location of libraries where the EM&CP has been placed in order for residents and interested individuals to obtain information on the Project.

14.12 DELINEATION OF RIGHTS-OF-WAY AND WORK AREAS

Temporary and permanent support facilities will be located outside of active agricultural fields. The boundaries of all right-of-way, work, and staging areas will be identified, as necessary, with temporary markers to keep equipment from going off the approved right-of-way, work, and staging areas. No vehicular activity will be allowed outside the marked area. Appendix D provides a map of the delineated right-of-way.

14.13 WEEKLY STATUS REPORTS

During construction LIPA will provide DPS Staff with weekly status reports summarizing construction, and indicating construction activities and locations scheduled for the next two weeks.

14.14 IN-SERVICE NOTIFICATION

Within ten days after the Project is in service, LIPA will notify PSC of that fact.

14.15 RESTORATION NOTIFICATION

Within ten days of the completion of final restoration that may be necessary, LIPA will notify the Commission and all Signatory Parties that all restoration has been completed in compliance with this Certificate and the EM&CP

14.16 CONSULTATION WITH TRANSPORTATION AGENCIES

During construction, LIPA will periodically consult with State and local highway transportation agencies about traffic conditions near the project site and will notify each such transportation agency of the approximate date work will begin using access points that take direct access from the highways under their respective jurisdictions.

14.17 CHEMICALS AND WASTE

LIPA will keep local fire department and emergency management teams apprised if any chemicals and waste are on-site.

14.18 FUEL OR CHEMICAL SPILLS

Should a spill occur, immediate notification will be made to the Construction Inspector and/or Project Manager who will be responsible to notify the ~~National Grid, its successor entity, or~~ LIPA 24-Hour Spill Response Program by means of the designated Spill Pager. Notification will be made to the DEC by the designated LIPA spill response personnel. Notification will also be made to the Environmental Supervisor/Environmental Monitor. Depending on the severity of the spill, emergency response procedures will be undertaken immediately by LIPA, Hazardous Materials Responders or designated Spill Response Contractors.

14.19 ENVIRONMENTAL SUPERVISION

LIPA will designate the Construction Inspector as the full-time personnel with stop-work authority over all aspects of this Project; the Construction Inspector will be on site during all phases of construction. As mentioned in Section 2.1 above, the Environmental Supervisor/Environmental Monitor and Construction Inspector will be equipped with sufficient documentation, transportation, and communication equipment to effectively monitor contractor compliance with the provisions of the Certificate, applicable sections of the Public Service Law, and the EM&CP. The name and qualifications of the Environmental Supervisor/Environmental Monitor and Construction Inspector, if different from those personal identified above, will be submitted to DPS Staff at least two weeks prior to the start of construction.

14.20 AUTHORITY IS SUBJECT TO CONDITIONS

The authority granted in the Article VII Certificate and any subsequent order(s) regarding the Project is subject to the following conditions necessary to ensure compliance with such order(s).

LIPA will regard DPS Staff representatives (certified pursuant to Public Service Law Section 8) as 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 or any other order in this proceeding, such DPS Staff representatives may issue a stop-work order for that location or activity.

A stop-work order will expire in 24 hours unless confirmed by a single Commissioner. If a stop-work order is confirmed, LIPA may seek reconsideration from the confirming Commissioner or PSC. If the emergency prompting the issuance of a stop-work order is resolved to the satisfaction of the Commissioner or PSC, the stop-work order will be lifted. If the emergency has not been satisfactorily resolved, the stop-work order will remain in effect.

Stop-work authority will be exercised sparingly and with due regard to the potential economic costs involved and possible impact on construction activities. Before exercising such authority, DPS Staff representatives will consult (wherever practicable) with LIPA representatives possessing comparable authority. Within reasonable time constraints, all attempts will be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter will be immediately brought to the attention of LIPA, the Project Manager, and DPS Chief of the Office of Energy Efficiency and the Environment. In the event that a DPS Staff representative issues a stop-work order, neither LIPA nor the contractor will be prevented from undertaking any such safety-related activities as they deem necessary and appropriate under the circumstances. Stop-work or implementation of measures, as described below, may be directed at the sole discretion of the DPS Staff representative during these discussions.

If a DPS Staff representative discovers that a specific activity is a significant environmental threat that is, or may immediately become, a violation of the Certificate or any other order in this proceeding, the DPS Staff representative may—in the absence of responsible LIPA supervisory personnel or the presence of such personnel who, after consultation with the Staff representative, refuse to take appropriate action—direct the field crews to stop the specific environmentally harmful activity immediately. If responsible LIPA personnel are not on site, the DPS Staff representative will immediately thereafter inform the Environmental Supervisor/Environmental Monitor and/or Construction Inspector of the action taken. The DPS Staff representative may lift the stop-work directive if the situation prompting its issuance is resolved. DEC Region 1 Staff will be immediately notified of any significant environmental threats and stop-work directives.

If the DPS Staff representative determines that a significant threat exists such that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, the DPS Staff representative may, in the absence of responsible LIPA supervisory personnel, or in the presence of such personnel who, after consultation with the DPS Staff representative, refuse to take appropriate action, direct LIPA or its contractors to implement the corrective measures identified in the EM&CP. The field crews will comply with the DPS Staff representative's directive immediately. The DPS Staff representative will immediately thereafter inform LIPA's Environmental Supervisor/Environmental Monitor and/or Construction Inspection of the action taken.

14.21 SITE COMPLIANCE AUDIT INSPECTIONS

LIPA 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 and construction phases of the Project, and at least annually for two years after the Project is operational.

The monthly inspection will include a review of the status of compliance with all certification conditions, requirements, and commitments, as well as a field review of the project site, if necessary. The inspection report will also include:

- Review of all complaints received, and their proposed or actual resolution(s);

- Review of any significant comments, concerns or suggestions made by the public, local governments, or other agencies;
- Review of the status of the Project in relation to the overall schedule established prior to the commencement of construction; and
- Other items LIPA or DPS Staff consider appropriate.

LIPA will 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.

14.22 CULTURAL RESOURCES

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

Should human remains or evidence of human burials be encountered during the conduct of archaeological data recovery fieldwork or during construction, all work in the vicinity of the find will be immediately halted and the remains will be protected from further damage. Within 24 hours of any such discovery, LIPA will notify DPS Staff and the OPRHP Field Services Bureau. All archaeological or burial encounters and their handling will be reported in the status reports summarizing construction activities and reviewed in the site compliance audit inspections.

14.23 SECURING OF CHEMICALS AND WASTE

All chemicals and waste will be secured in a locked and controlled area within LIPA's Operation Center at 117 Doctor's Path, Riverhead.

14.24 COMPATIBILITY WITH NEARBY INFRASTRUCTURE

Since the Project is an existing transmission line, it is compatible with the operation and maintenance of existing nearby electric, gas, telecommunication, water, sewer, and related facilities. To eliminate the risks associated with multiple overhead 138 kV transmission lines crossing one another, the underground cable would extend 900 feet to just east of Lilco Road. The installation of the underground cable within the first 900 feet of the line would be engineered and constructed to be fully compatible with existing nearby infrastructure by not interfering with the operation of these existing utilities. The cable will be constructed in accordance with all applicable codes and existing LIPA Construction Standards. The cable route would avoid crossing any existing underground infrastructure and would be installed within a 48 inch deep trench using open trench methods. A red plastic caution tape would be placed above the cable during trench backfill. The cable would be designed to operate continuously at 138kV and meet the ampacity rating of the Overhead Conductor.

14.25 CATHODIC PROTECTION SYSTEMS

Because the Project is the replacement of insulators on an existing transmission line and would not involve subsurface disturbance, with the exception of the 900 foot cable to be placed at the beginning of the line just outside of the Wildwood Substation, the Project will avoid adverse effects on the cathodic protection system.

14.26 ELECTRIC AND MAGNETIC FIELDS

As provided in the Article VII Certificate, the Project will comply with the electromagnetic field (“EMF”) standards established by PSC in Opinion No. 78-13 (issued on June 19, 1978) and the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued September 11, 1990), respectively. Based on an evaluation performed for the Project, it was concluded that the Project would be well within the standards established by PSC.

14.27 CONSTRUCTION HOURS OF OPERATION

Equipment and component delivery, trenching, backfilling, and transformer and cable installation will only take place between 7 AM and 6 PM on weekdays. Extended work hours beyond 6 PM to complete work at a particular site along the route or in the event unforeseen circumstances occur, will be permitted upon LIPA’s request to DPS for permission and approval to conduct construction activities during the extended hours requested. Nothing therein will preclude LIPA from making the necessary arrangements for the extension of work hours with appropriate local agencies. DPS Staff will be notified at least 48 hours in advance if planned weekend, evening, or holiday construction should become necessary.

14.28 CONSTRUCTION SCHEDULE COORDINATION

The construction schedule will be coordinated so as to minimize outages of the existing circuits adjacent to the Project, outages of the substations and interconnected transmission facilities.

14.29 REMOVAL OF EQUIPMENT

Existing transmission facility components replaced as part of Project construction will be removed from the right-of-way to appropriate destinations and handled appropriately for re-use or recycling based on the insulators’ condition. DPS Staff will be notified if any major equipment is removed and/or replaced.

14.30 FUGITIVE DUST AND AIRBORNE DEBRIS

Appropriate measures will be taken to minimize fugitive dust and airborne debris from construction activity. These measures may include, where applicable and necessary: watering of exposed areas, dust covers for trucks, maintenance of low construction vehicle speeds, minimized duration of stockpiling of trench soils, minimized height of soil piles, application of water or other approved surfactants on stockpiles during dry periods, and restoration of disturbed areas to their pre-construction conditions as soon as practicable.

14.31 RESTORATION OF DISTURBED AREAS

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

14.32 EROSION CONTROL DEVICES

Sedimentation/erosion control devices will be installed prior to construction, as necessary, around areas to be disturbed and any stockpiled soils to prevent soil erosion during construction and will be maintained in place until the right-of-way has been revegetated and/or stabilized in

accordance with pre-existing conditions. Sedimentation/erosion control devices will be inspected periodically and immediately following any storm event and will be repaired or replaced immediately, as necessary.

14.33 PROHIBITION OF UNAUTHORIZED CLEARING

No tree or vegetation clearing is expected during the construction of this Project. However, mowing of the right-of-way in select areas, such as north of the Peconic River to access a pole, will be required. Neither LIPA nor any contractors in its employ will clear or alter any areas outside the boundaries of the certified Project.

14.34 VEGETATION REMOVAL

Should it be necessary to trim brush and branches, all woody debris will be chipped and spread on the right-of-way. No woodchips will be stored or spread in parklands, wetlands, active agricultural fields, or within 50 feet of floodplains, streams, or drainages.

14.35 POST-COMPLETION ASSESSMENTS AND PLANS

LIPA will, upon completion of the Project:

- Provide an assessment of the need for landscape improvements, including vegetation planting, earthwork or installed features to screen or landscape the Project;
- Consult with DPS Staff on the content and execution of its assessment, resultant landscaping plan specifications and materials list (details will include measures for maintenance and for controlling third party or wildlife damage to any landscape and vegetation plantings);
- Such assessments and plans will be presented for DPS Staff review within one year of the date the Project is placed in service and will be implemented as soon thereafter as practicable; and
- Within 75 days of the completion of all construction and restoration activities, LIPA will provide to DPS Staff as-built drawings of the Project certified by a Professional Engineer who is licensed and currently registered in New York State.

14.36 CONSTRUCTION WORKER PARKING

Facility construction worker parking will be in designated areas within the existing substations facilities or at LIPA's Operation Center at 117 Doctor's Path, Riverhead, which would not interfere with normal traffic, cause a safety hazard, or interfere with existing land uses specified in the EM&CP.

14.37 AVOIDANCE OF PROPERTY DISTURBANCE

Direct disturbance to properties will be avoided by accessing the right-of-way from existing roadways or access roads.

14.38 LONG-TERM RIGHT-OF-WAY MANAGEMENT PLAN

The maintenance of the existing right-of-way that has occurred for more than 50 years will continue after the installation of the Project. In accordance with the Joint Proposal, a long-term right-of-way maintenance plan is provided as Appendix G. *