

Appendix A

LIST OF TESTIMONY, EXHIBITS & APPENDICES TO BE ADMITTED

Testimony:

Pre-filed Direct Testimony of a Panel Consisting of James Parmelee, Gary J. Petschauer, Curt J. Dahl, Gregory Netti, Leonid Shmookler and Thomas Siener sponsoring pre-filed Exhibits 1 through 15

Pre-filed Direct Testimony of a Panel Consisting of Thomas J. F. Ordon and Christopher Corrado

Supplemental Direct Testimony of a Panel Consisting of James Parmelee, Gary J. Petschauer, Curt J. Dahl, Gregory Netti, Leonid Shmookler and Thomas Siener sponsoring proposed Exhibits 25 through 33, and 35

Supplemental Direct Testimony of a Panel Consisting of Thomas J. F. Ordon and Christopher Corrado sponsoring proposed Exhibit 34

Direct Testimony of Andrew C. Davis sponsoring proposed Exhibit 36

Proposed Exhibits:

Exhibit 1— Pre-filed Exhibit 1, General Information

Exhibit 2— Pre-filed Exhibit 2, Location of Facilities [as corrected by Errata dated March 3, 2005]

Exhibit 3— Pre-filed Exhibit 3, Alternatives

Exhibit 4— Pre-filed Exhibit 4, Environmental Impact (includes Application Appendices A, B [as corrected by Errata dated March 3, 2005] & D)

Exhibit 5— Pre-filed Exhibit 5, Design Drawings

Exhibit 6— Pre-filed Exhibit 6, Economic Effects of the Proposed Facility

Exhibit 7— Pre-filed Exhibit 7, Local Ordinances [as corrected by Errata dated March 3, 2005]

Exhibit 8— Pre-filed Exhibit 8, Other Pending Filings

Exhibit 9— Pre-filed Exhibit 9, Cost of Proposed Facility [as corrected by Errata dated March 3, 2005]

Exhibit 10— Pre-filed Exhibit 10 (E-1), Description of the Proposed Transmission Line

Exhibit 11— Pre-filed Exhibit 11 (E-2), Other Facilities

Exhibit 12— Pre-filed Exhibit 12 (E-3), Underground Construction

Exhibit 13— Pre-filed Exhibit 13 (E-4), Engineering Justification

Exhibit 14— Pre-filed Exhibit 14 (E-5), Effect on Communication & Electromagnetic Fields (includes Application Appendix C)

Exhibit 15— Pre-filed Exhibit 15 (E-6), Effect on Transportation

Exhibit 16— Affidavit of Witness James Parmelee

- Exhibit 17— Affidavit of Witness Gary J. Petschauer
- Exhibit 18— Affidavit of Witness Curt J. Dahl
- Exhibit 19— Affidavit of Witness Gregory Netti
- Exhibit 20— Affidavit of Witness Leonid Shmookler
- Exhibit 21— Affidavit of Witness Thomas Siener
- Exhibit 22— Affidavit of Witness Thomas J. F. Ordon
- Exhibit 23— Affidavit of Witness Christopher Corrado
- Exhibit 24— Affidavit of Witness Andrew C. Davis
- Exhibit 25— Joint Proposal, Appendix B, Description of Facility Location
- Exhibit 26— Joint Proposal, Appendix C, Proposed Findings
- Exhibit 27— Joint Proposal, Appendix D, Proposed Certificate Conditions
- Exhibit 28— Joint Proposal, Appendix E, General Guidelines for Environmental Management and Construction Plan(s)
- Exhibit 29— LIPA's responses to DPS 1-5 and 7-13
- Exhibit 30— Revision 1 to Figure 5-2, Sheet 10 of 10, dated 04/26/05
- Exhibit 31— Revision 1 to Figure 5-2, Sheet 8 of 10, dated 10/17/05
- Exhibit 32— LIPA's further response to DPS 2, dated 10/10/05
- Exhibit 33— Memorandum from Tom Siener, Ecology and Environment, Inc., to Joe Forti, regarding Noise Levels During Manhole Splicing Operations, dated August 31, 2005
- Exhibit 34— Additional EMF calculations, cross sections and maps.
- Exhibit 35— Comprehensive Analysis of Alternatives to the Prime Route in the Vicinity of the Seaford-Oyster Bay Expressway (NY135)
- Exhibit 36— SHPO letter to Andrew C. Davis

Appendix B

DESCRIPTION OF FACILITY LOCATION

The Facility consists of two major segments. The "Western Connector" will consist of a new 4-mile 345 kV underground solid dielectric cable transmission circuit between the East Garden City Substation and the Newbridge Road Substation. The "Eastern Connector" will consist of a new 9.1-mile 345 kV underground solid dielectric cable transmission circuit between the Newbridge Road Substation and the Ruland Road Substation. The terminus for the Western and Eastern Connectors will be designed and initially operated at 138 kV. At a later date, substation improvements will allow operation of the Western and Eastern Connectors at 345 kV.

WESTERN CONNECTOR

The Western Connector portion of the Facility is located entirely within the Town of Hempstead, Nassau County. A 345 kV/138 kV underground transmission transition terminal, 138 kV underground cable, 138 kV SF6 circuit breaker, instrumentation, and associated switches will be built at the East Garden City Substation. The new equipment will be connected to the 138 kV bus. From the termination structure, the Facility will exit the East Garden City Substation at its southern property line and head south across the Long Island Railroad (LIRR) right-of-way and across a single privately-owned commercial property upon which LIPA will secure an easement to the right-of-way of Commercial Avenue. At Commercial Avenue, the route of the Facility heads eastward for approximately one half (0.5) mile on the Commercial Avenue right-of-way until the right-of-way turns northerly and reaches the LIRR right-of-way. Thence it heads eastward for approximately three and one-half (3.5) miles on the LIRR right-of-way to the northern property line of the Newbridge Road Substation. Upon entering the Newbridge Road Substation, the Western Connector portion of the Facility will terminate at a 345 kV/138 kV underground transmission transition terminal. An SF6 circuit breaker rated at 138 kV with associated switches and instrumentation will be built for the new transmission line and connected to the 138 kV bus. Instrumentation at both the East Garden City and Newbridge Road Substations will be installed to provide necessary control and protection.

EASTERN CONNECTOR

The Eastern Connector portion of the Facility is located within the Towns of Hempstead and Oyster Bay, Nassau County, and the Town of Huntington, Suffolk County. A 345 kV/138 kV

underground transmission transition terminal, 138 kV underground cable, 138 kV SF6 circuit breaker, instrumentation, and associated switches will be built at the Newbridge Road Substation. The new equipment will be connected to the 138 kV bus. From the termination structure, the Facility will exit the Newbridge Road Substation in the Town of Hempstead at its northeastern property line and will be sited on the LIRR right-of-way on an alignment that extends eastward for approximately four (4) miles to the west side of the Seaford-Oyster Bay Expressway (NY135) in the Town of Oyster Bay. The Facility route crosses under the Seaford-Oyster Bay Expressway (NY135) to the grass area along the east side of the Expressway. The route then follows the eastern side of the right-of-way of the Seaford-Oyster Bay Expressway (NY135) northward a distance of approximately 1.4 miles. The route turns northeast into and through Bethpage State Park, within the right-of-way of the overhead Newbridge Road to Ruland Road 138 kV transmission line and proceeds through the northwest section of the park to a point just south of Barry Lane. Turning easterly away from the 138 kV transmission line, the route then proceeds near a narrow bike path to the west side of Round Swamp Road. Thence, the route runs south on the right-of-way of Round Swamp Road for approximately 0.3 miles to the intersection with Winding Road. The route then turns northward on the right-of-way of Winding Road for approximately 0.5 miles, and then northeast into and through a forested area on Bethpage State Park for 0.2 miles. Upon leaving the park, the route enters an open field on the Farmingdale State University campus. The route continues easterly into the Town of Huntington approximately 1.3 miles along and within the western and northern borders of the Farmingdale University campus within the right-of-way of the LIPA three (3) circuit overhead transmission line, crosses under Broadhollow Road [NYS Route 110] and continues on the LIPA-owned right-of-way for 0.3 miles, crosses a single privately-owned commercial property (upon which LIPA will secure an easement) to the westerly property line of the Ruland Road Substation. At the Ruland Road Substation, the Eastern Connector portion of the Facility will terminate at a 345 kV/138 kV underground transmission transition terminal. An SF6 circuit breaker rated at 138 kV with associated switches and instrumentation will be built for the new transmission line and connected to the 138 kV bus. Instrumentation at both the Newbridge Road and Ruland Road Substations will be installed to provide necessary control and protection.

Appendix C
PROPOSED FINDINGS

1. The Facility is necessary to accommodate the receipt, transmission and distribution of power from generation resources in the territory of the PJM Interconnection regional transmission organization (RTO) *via* the Neptune Regional Transmission System. The Facility will enhance the reliability of the Long Island system by providing a pathway for new capacity and energy for Long Island that will help LIPA satisfy locational and statewide installed capacity requirements, satisfy projected growth in load, diversify the resources available to serve loads, and access economically priced power. There is a public need for a longitudinal placement of the Facility in the shoulder area of the Seaford-Oyster Bay Expressway (NY135) so as to avoid significant interferences with other subsurface gas, water and sewer utility facilities, the removal of mature trees along roadways near a State park, the physical disruption of numerous properties in residential use, the full and temporary closure of travel lanes in public streets, the full and temporary closure of access to numerous homes and businesses, and the general disruption of business in dense commercial areas, that would be indicated by relocation of the Facility onto alternate routes.

2. The nature of the probable environmental impacts include ordinary construction impacts from clearing, excavation, installation and restoration activities along the route. The impacts will include permanent clearance of approximately 5.4 acres of forested vegetation, temporary construction noise, temporary lane closures along secondary roadways, temporary disturbance of lands adjacent to golf courses at Nassau County's Eisenhower Park and Bethpage State Park, temporary off-season disturbance to a roadway and bike path at the Bethpage State Park, and temporary disturbance to the area between the edge of the shoulder and the limit of the right-of-way of the Seaford-Oyster Bay Expressway (NY135).

3. The Facility, as proposed by the parties, represents the minimum adverse environmental impact, considering the state of available technology and the nature and economics of the various alternatives, and other considerations such as the effects on agricultural lands, wetlands, visual impacts, river corridors, and residential areas.

4. The entire Facility shall be located underground except for certain above-ground electrical equipment within the existing substations.

5. Construction of the Facility is consistent with the most recent New York State Energy Plan which sets forth the State's energy policies and long-range planning objectives and strategies, and the Long Island Power Authority Energy Plan.

6. Location of the Facility, as proposed by the parties, conforms to applicable State and local laws and regulations issued thereunder, except the operation of machinery noise prohibitions of Chapter 144 of the Code of the Town of Hempstead and the construction activity prohibitions of Chapter 141 of the Code of the Town of Huntington, to the degree that such prohibitions would prohibit LIPA from conducting manhole splicing operations on a 24 hour basis. As to those local prohibitions, the Commission refuses to apply them as they are unreasonably restrictive for reasons of existing technology as the technology of splicing electric transmission cables is such that, once commenced, it must continue on a 24 hour basis until completed and the running of a generator and air conditioning unit continuously is necessary while conducting manhole splicing operations.

7. Need has been demonstrated in this proceeding for the acquisition of additional real property or real property rights at the following locations:

RIGHT-OF-WAY - WESTERN CONNECTOR

- a. Long Island Railroad (LIRR) Right-of-Way
 - Crossing south of East Garden City Substation near Station 258
 - From approximately Station 288 to Station 370
 - From approximately Station 370 to Station 460
- b. Private Property between LIRR and Commercial Avenue near Station 259
- c. Eisenhower Park Building Bypass near Station 370 (Nassau County)

RIGHT-OF-WAY - EASTERN CONNECTOR

- a. Long Island Railroad Right-of-Way from approximately Station 465 to Station 645
- b. Seaford–Oyster Bay Expressway (NY135) from approximately Station 0 to Station 55
- c. Bethpage State Park
 - From approximately Station 55 to Station 105
 - From approximately Station 115 to Station 123
 - From approximately Station 167 to Station 178
- d. State University at Farmingdale
 - From approximately Station 179 to Station 203
 - From approximately Station 210 to Station 243
- e. Private Property (Tax Lot 55.3) near Stations 251 & 252

OFF-RIGHT-OF-WAY ACCESS

- a. New off-ROW access to Seaford–Oyster Bay Expressway (NY135) from the east at a staging area south of Central Avenue near Station 15

[Note: Station numbers refer to design drawings in Exhibits 5, 30, 31, & 32.]

The specific location and acreage of all needed real property or real property rights will be determined in the Environmental Management & Construction Plan phase of this proceeding. No other need has been demonstrated in this proceeding for the acquisition of additional real property or real property rights of any kind.

8. The Facility will serve the public interest, convenience and necessity.

Appendix D

PROPOSED CERTIFICATE CONDITIONS

The Commission orders:

1. Subject to the conditions set forth in this Opinion and Order, Long Island Power Authority (LIPA) is granted a Certificate of Environmental Compatibility and Public Need (Certificate) authorizing construction and operation of a 4-mile 345 kV underground solid dielectric cable transmission circuit between the East Garden City Substation and the Newbridge Road Substation and a 9.1-mile 345 kV underground solid dielectric cable transmission circuit between the Newbridge Road Substation and the Ruland Road Substation, and related substation equipment (Facility), to be located within the Towns of Hempstead and Oyster Bay, Nassau County, and the Town of Huntington, Suffolk County, along the route detailed herein. The Facility will initially be operated at 138 kV. At a later date, substation improvements will allow operation of the Facility at 345 kV.

2. LIPA shall, within 30 days after the issuance of the Certificate, submit to the Commission either a petition for rehearing or a verified statement that it accepts and will comply with the Certificate. Failure to comply with this condition shall invalidate the Certificate.

3. If construction of the Facility hereby certified is not commenced within 18 months, the Certificate may be vacated with notice to LIPA.

4. Construction shall not commence on any segment of the Facility until construction has actually commenced on the Neptune Regional Transmission System major electric transmission facility approved in Case 02-T-0036.

5. Construction shall not commence on any segment of the Facility until LIPA has obtained such right-of-way or off-right-of-way access (whether obtained through a conveyance, consent, permit or other approval, or by the filing of a condemnation order and acquisition map) as are necessary for such construction for such segment.

6. LIPA shall promptly notify the Commission in writing should it decide not to complete construction of all or any portions of this project and shall serve a copy of such notice upon all parties.

7. LIPA shall integrate and coordinate maintenance of the certified Facility with that of adjacent utility facilities.

Description of Route

8. The proposed location of the Facility is approved as set forth in Appendix B entitled "Description of Facility Location" attached to the Joint Proposal. The route includes a minor reconfiguration from that proposed in the application to avoid crossing private property near Stations 177 and 203 of the Newbridge Road-Ruland Road portion of the Facility (Eastern Connector).

Laws and Regulations

9. a) LIPA's motion for a waiver of the application requirements of 16 NYCRR Sections 86.3(a)(1)(iii) and 86.3(b)(2) regarding mapping requirements and aerial photographs is granted in the manner requested in the motion, except as to Figure 5-2, Sheet 10 of 10 which was revised on April 26, 2005. LIPA's motion for a waiver of the application requirements of 16 NYCRR Section 86.10(a) regarding cost is denied as moot as such information has been submitted.

b) Each substantive Federal, State and local law, regulation, code and ordinance applicable to the Facility authorized by the Certificate shall apply, except any substantive local law or regulation which the Public Service Commission (Commission) has refused to apply as being unreasonably restrictive as discussed herein.

c) The Commission has refused to apply the operation of machinery noise prohibitions of Chapter 144 of the Code of the Town of Hempstead and the construction activity prohibitions of Chapter 141 of the Code of the Town of Huntington, to the degree that such prohibitions would prohibit LIPA from conducting manhole splicing operations on a 24 hour basis. No other provisions of the Codes of the

Towns of Hempstead, Oyster Bay and Huntington or the Counties of Nassau and Suffolk have been found by the Commission to be unreasonably restrictive.

d) No State or local legal provision purporting to require any approval, consent, permit, certificate or other condition for the construction or operation of the Facility authorized by the Certificate shall apply, except (i) those of the Public Service Law and regulations and orders adopted thereunder, (ii) those provided by otherwise applicable State law for the protection of employees engaged in the construction and operation of the facilities, (iii) those permits issued under a federally delegated environmental permitting program, and (iv) those referenced in Condition 10 below.

e) LIPA shall construct the Facility in a manner that conforms to all standards of the American National Standards Institute (ANSI) including, without limitation, the National Electric Safety Code (NESC) [including Institute of Electrical and Electronics Engineers (IEEE) Standard IEEE C2-2002] and any stricter standards adopted by LIPA.

f) LIPA shall construct the Facility in a manner that conforms to all applicable requirements of the New York State Uniform Fire Prevention and Building Code.

g) LIPA shall operate the Facility in conformance with Federal Energy Regulatory Commission (FERC) approved tariffs, market rules, and operating procedures of the respective independent system operators (ISO's).

10. Nothing herein shall preclude LIPA from voluntarily subjecting itself to any State or local approval, consent, permit, certificate or other condition for the construction or operation of the Facility.

a) As stated in the Joint Proposal, LIPA shall subject itself to building plan review and obtain building permits, inspections, and certificates of occupancy, if required, upon the inspection and completion of construction from the New York State Office of General Services to the degree that the subject matter of the New York State Uniform Fire Prevention and Building Code applies to the Facility, subject to the Commission's ongoing jurisdiction.

b) To the extent required in connection with the delivery of oversized components, LIPA or its suppliers shall obtain any necessary permits from the local or State agencies, subject to the Commission's ongoing jurisdiction.

c) As stated in the Joint proposal, LIPA shall subject itself to highway work permit and use and occupancy permit review and obtain a highway work permit and use and occupancy permit from NYSDOT pursuant to 17 NYCRR, Part 131 for the construction and operation of the Facility in the right-of-way of the Seaford-Oyster Bay Expressway (NY135), subject to the Commission's ongoing jurisdiction. LIPA shall coordinate with the New York State Department of Transportation for all work to be performed in the right-of-way of State highways, subject to the Commission's ongoing jurisdiction. Prior to submitting its construction plans for the Seaford-Oyster Bay Expressway (NY135) segment, LIPA will provide to NYSDOT a preliminary design marked to avoid conflicts with the following potential future transportation projects that NYSDOT may seek to undertake in the future: an extension of the Bethpage Parkway, noise walls, an additional travel lane, foundations for overhead sign structures, guide rail and highway lighting installations, and shall offer to consult with NYSDOT concerning any comments it may offer and will use reasonable efforts to accommodate any NYSDOT concerns.

d) All work within State Highway rights-of-way shall be designed and performed according to the traffic and safety standards and other substantive requirements contained in 17 NYCRR Part 131, entitled *Accommodation of Utilities Within State Highway Right-of-Way*, applicable design standards of the American Association of State Highway and Transportation Officials (AASHTO), the *Manual of Uniform Traffic Control Devices* (MUTCD), the *Highway Design Manual*, the *Policy and Standards for Entrances to State Highways*, the *Requirements for the Design and Construction of Underground Utility Installations within the State Highway ROW*, the *Accommodation Plan*, and the *NYSDOT 2002 Standard Specifications*.

e) LIPA shall coordinate all work to be performed in the right-of-way of city, town and county highways with the respective highway departments for such highways, subject to the Commission's ongoing jurisdiction.

f) LIPA shall comply with the requirements for the protection of underground facilities set forth in 16 NYCRR Part 753 "Duties of Excavators".

g) A copy of each permit or approval received from the issuing agencies, if any, shall be provided to Staff of the Department of Public Service (DPS Staff) by LIPA promptly after receipt by LIPA of such permit or approval and before commencement of construction across the affected area.

h) If LIPA believes that any action taken, or determination made, by a State or local agency in furtherance of such agency's review of the permits and approvals referenced herein, is unreasonable or unreasonably delayed, LIPA may petition the Commission, upon reasonable notice to that agency, to seek a resolution of any such unreasonable or unreasonably delayed requirement. The permitting agency may respond to the petition, within three business days, to address the reasonableness of any requirement or delay.

Environmental Management and Construction Plan

11. LIPA shall not begin site preparation or construction with respect to any portion of the Facility (except for surveying, soils testing and such other related activities as are necessary to prepare final design plans) and shall not commence any proceedings under the Eminent Domain Procedure Law (EDPL) to acquire permanent right-of-way or off-right-of-way access before it has submitted to the Commission and the parties, and the Commission has approved, an Environmental Management and Construction Plan ("EM&CP") for the relevant portion of the project.

12. The EM&CP shall be prepared in accordance with the EM&CP guidelines attached as Appendix E to the Joint Proposal. All construction plans shall be certified by a Professional Engineer that is licensed and currently registered in New York State.

13. Except where this Certificate requires otherwise, the terms of the Joint Proposal (to the extent not superceded in this Certificate) and the environmental protection measures contained in the Application shall be incorporated into the EM&CP. These measures shall be applied during construction, operation and maintenance of the certified Facility.

14. Deviation from the certified centerline, as reasonably necessary, shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a provision of the Joint Proposal or the Order would be created.

15. Deviation from the design height and location of structures shall be allowed for appropriate environmental or engineering reasons, except where a conflict with a provision of the Joint Proposal or the Order would be created.

16. LIPA shall coordinate and schedule construction and maintenance activities to minimize or avoid, to the extent practicable, disturbance to use of the designated bikeways in Bethpage State Park and Wantagh State Parkway.

EM&CP Contents

17. LIPA shall provide, as a part of the EM&CP:

a) A final design plan that reflects conformance of the Facility design with the Commission Certificate, applicable Federal and State requirements, and local substantive requirements (including, but not limited to, applicable regulations, including those of the Bureau of Alcohol, Tobacco and Firearms, Occupational Safety and Health Administration, NYS Department of Labor, the Uniform New York State Fire Prevention and Building Code, chemical and waste-storage use and handling regulations).

b) An explanation for any proposed deviation from the certified centerline, with supporting documentation.

c) An explanation for any proposed deviation from the design height and location of structures, with supporting documentation.

d) Details of nearby electric, gas, telecommunication, water, sewer, and related facilities and measures to protect the integrity, operation, and maintenance of those facilities.

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

f) A detailed construction schedule as part of each segment of the EM&CP, indicating limitations on access, construction, wire pulling, and restoration within any distinct areas such as parklands, residential areas, highway right-of-way etc. Specific references shall include:

(1) schedule and measures to minimize disturbance of recreational use at the Eisenhower Park golf courses and administrative facilities (Station 347 through Station 425);

(2) schedule and plans for converting the right-of-way vegetation between Station 86+00 and Station 101+00 within Bethpage State Park from tall-growing forest species to native grass and shrub meadow, including a screen planting at Station 86+00 designed using shrub and small tree species appropriate for placement beneath the existing overhead transmission line, and installed as part of facility restoration, implementation to be subject to approval by Bethpage State Park officials;

(3) schedule and measures to minimize disturbance of recreational use at the Bethpage State Park trails and golf course (Station 59 through 123 and Station 168 through 178), which schedule shall include full restoration of all bike paths by May 20th of any construction year; and

(4) schedule and measures for protection of the Claremont Polychem Superfund Site and adjacent remediation equipment including details required by EPA, or its agent, for protection of the Claremont site (Station 168 through 205).

g) The specification of noise mitigation procedures.

h) The delineation of certified right-of-way and additional work areas to which LIPA shall confine construction and subsequent maintenance activities, depicting property rights, clearing rights, access rights, and such other matters as appropriate to address the site and environmental conditions and property interests of affected landowners and relevant conditions and requirements of the EM&CP. The delineation shall include the specific location and acreage of all needed real property or real property rights.

i) Details of street work, including provisions for minimizing the duration and extent of open excavation, traffic disruptions, and work within and adjoining public streets and rights-of-way.

j) Drawings delineating the locations of existing and proposed access roads. Proposed access road improvements shall be indicated, including measures for environmental impact minimization and access control.

k) The information necessary to respond to the requirements of 17 NYCRR Part 131, entitled *Accommodation of Utilities Within State Highway Right-of-Way*, applicable design standards of AASHTO, the *Highway Design Manual*, the *Policy and Standards for Entrances to State Highways*, the *Requirements for the Design and Construction of Underground Utility Installations within the State Highway ROW* and the *Accommodation Plan*, including the provision of NYSDOT Standard Details and Standard Item Numbers.

l) A traffic control plan for all roadways directly affected by construction activities prepared in conformance with the MUTCD, including a separate traffic control plan for activities in the right-of-way of the Seaford-Oyster Bay Expressway (NY135).

m) A plan for access to construct the Facility in the right-of-way of the Seaford-Oyster Bay Expressway (NY135) clearly defining all access locations and rights.

n) A plan for access to the Facility on the right-of-way of the Seaford-Oyster Bay Expressway (NY135) for operation and maintenance including a traffic control plan in conformance with the MUTCD.

o) Fuel and chemical handling procedures, and a spill response and route emergency plan. This plan shall provide proposed methods of handling spills of petroleum products and any hazardous or controlled substance which may be stored or utilized during construction, operation or maintenance of the Facility.

p) The designation of Facility construction worker parking areas.

- q) A plan for removal and reuse, recycling or disposal of equipment.
- r) Detailed soil handling and erosion control plans including details on the installation of sedimentation/erosion control devices around areas to be disturbed and any stockpiled soils, temporary seeding, and re-vegetation to prevent erosion during construction.
- s) Clearing and vegetation treatment plans.
- t) Best management practices and measures for monitoring construction and protecting water quality at or near groundwater recharge basins.
- u) Appropriate controls and protocols for week-end and/or night-time work if otherwise allowed, including but not limited to noise controls and lighting controls.
- v) Location and construction details for the conduit to accommodate the future upgrade of the Facility to 345 kV operation around the northern perimeter of the Newbridge Road Substation.

EM&CP Process

18. LIPA shall submit four copies of the EM&CP to the Commission, one copy to the Commissioner of the New York State Office of Parks, Recreation and Historic Preservation (“OPRHP”); one copy to any other New York State agency (and its relevant regional offices) which requests the document; twelve copies to the NYSDOT Region 10 office in Hauppauge; and one copy to active parties on the service list who request the document. LIPA shall also place copies for inspection by the public in at least one public library or other convenient location in each municipality in which construction will take place. Contemporaneously with the submission and service of the EM&CP, LIPA shall provide notice, in the manner specified below, that the EM&CP has been filed.

19. a) LIPA shall serve written notice(s) of filing the EM&CP on all active parties to this proceeding, on each person on the Commission’s service list considered potentially affected by the subject matter in the EM&CP, and on all statutory parties to this proceeding, and shall attach a copy of the notice to each copy of the EM&CP. Further, LIPA shall publish the notice(s) in a newspaper or newspapers of general circulation in the vicinity of the Facility.

b) For all permanent right-of-way or off-right-of-way access to be acquired for the Facility, LIPA shall cause an examination of title (title search) to be conducted in the same manner as would be conducted by a reputable title insurance company to identify all, of record, owners, mortgagees, lienholders, leaseholders or others with an interest in such property rights to be acquired. LIPA shall serve written notice(s) of filing the EM&CP on each such person identified, 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 Facility.

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

- (1) a statement that the EM&CP has been filed;
- (2) a general description of the Facility, the need for the Facility, the alternatives considered, and of the EM&CP;
- (3) only for the written notice(s) for identified persons with a record interest in property to be acquired, a specific description of the permanent right-of-way or off-right-of-way access to be acquired for the Facility;
- (4) a listing of the locations where the EM&CP is available for public inspection;
- (5) a statement that any person desiring additional information about a specific geographical location or specific subject may request it from LIPA;
- (6) the name, address, and telephone numbers of LIPA’s representative;
- (7) the address of the Commission; and
- (8) a statement that any person may be heard by the Commission on any matter or objection regarding the EM&CP by filing written comments with the Commission and LIPA within 30 days of the filing date with the Commission of the EM&CP (or within 30 days of the date of the newspapers notice, whichever is later).

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

21. a) LIPA shall report any proposed changes to the EM&CP to DPS Staff. DPS Staff will refer to the Secretary of the Commission (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 the Commission for approval. Any proposed change affecting State highways will be referred to the Commission.

b) Upon being advised that DPS Staff will refer a proposed change to the Commission, LIPA shall notify all 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 shall: (1) describe the original conditions and the requested change; (2) state that documents supporting the request are available for inspection at specified locations, and (3) state that persons may comment by writing or calling (followed by written confirmation) to the Commission within 15 days of the notification date. Any delay in receipt of written confirmation will not delay Commission action on the proposed change.

c) LIPA shall 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.

Notices, Reports and Consultations

22. Applicable provisions of the Certificate, EM&CP, and orders approving the EM&CP shall be accommodated in any design, construction, ownership or maintenance contracts associated with the Facility. LIPA shall 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 shall be provided to the contractors prior to execution of such contracts.

23. LIPA shall notify all construction contractors that the Commission may seek to recover penalties for violation of the 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.

24. a) LIPA shall 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 the Commission's Environmental Compliance Section, shall also be provided.

b) LIPA shall 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).

25. a) No less than two weeks before commencing site preparation, LIPA shall:

- (1) provide notice to local officials and emergency personnel;
- (2) 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);
- (3) provide notice to NYSDOT.

b) The notice shall contain:

- (1) a map and a description of the Facility in the local area;
- (2) the anticipated date for start of construction;
- (3) the name, address and local or toll- free telephone number of an employee or agent of LIPA;
- (4) a statement that the project is under the jurisdiction of the New York State Public Service Commission, which is responsible for enforcing compliance with

environmental and construction conditions, and which may be contacted at an address and telephone number to be provided in the notice;

(5) the notice will be written in language reasonably understandable to the average person.

c) Upon distribution, a copy shall be submitted to the Secretary of the Commission.

26. Neither LIPA nor any contractors in its employ shall construct, improve or use any access roads not described in the EM&CP. Should the need arise for additional off right-of-way access, LIPA shall submit a request to DPS Staff; the request will be considered consistent with the provisions of Condition 21 above and if the change may involve a site listed or eligible for listing on the State or National Register of Historic Places, DPS Staff will consult with OPRHP.

27. a) At least two weeks prior to the start of construction, LIPA shall hold a preconstruction meeting. An agenda, location and attendee list shall be agreed upon between DPS Staff and LIPA. NYSDOT shall be invited.

b) LIPA shall supply draft minutes from this meeting to all attendees, the attendees may offer corrections or comments and LIPA shall issue the finalized meeting minutes to all attendees.

c) 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.

28. a) LIPA shall inform the Commission and DPS Staff (and NYSDOT when State highways are affected) at least five days before commencing construction or clearing.

b) Affected and nearby homeowners will be notified of planned construction activities and schedules before construction commences.

c) LIPA shall notify operators of commercial and public recreational facilities (Bethpage State Park, Eisenhower County Park, riding stables at Winding Road) of pending work and potential for recreational disruption at least one week prior to entering parklands for construction.

d) LIPA shall implement measures to notify users of bike paths of pending work and potential for recreational disruption at least one week prior to entering parklands for construction.

29. Before Facility construction begins, both edges of the Facility right-of-way shall be delineated and marked. Also, LIPA shall stake and flag all off-right-of-way access roads and extra workroom areas.

30. LIPA shall provide DPS Staff (and NYSDOT when State highways are affected) with weekly status reports summarizing construction, and indicating construction activities and locations scheduled for the next two weeks.

31. Within ten days after the Facility is in service, LIPA shall notify the Commission and NYSDOT of that fact.

32. Within ten days of the completion of final restoration, LIPA shall notify the Commission and NYSDOT that all restoration has been completed in compliance with this Certificate and the EM&CP.

33. LIPA shall periodically consult with State and local highway transportation agencies about traffic conditions near the project site and shall 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. LIPA shall regularly consult with NYSDOT about traffic conditions near work in the right-of-way of the Seaford-Oyster Bay Expressway (NY135).

34. LIPA shall keep local fire department and emergency management teams apprised of chemicals and waste on site.

35. LIPA shall immediately notify DEC of any fuel or chemical spills.

Environmental Supervision

36. LIPA shall designate a full-time supervisor, inspector and environmental monitor with stop work authority over all aspects of this project; the supervisor shall be on site during all phases of

construction and restoration. The environmental monitor(s) and construction inspector(s) shall be equipped with sufficient documentation, transportation and communication equipment to effectively monitor contractor compliance with the provisions of this Certificate, applicable sections of the Public Service Law, and the EM&CP. The name and qualifications of the supervisor, inspectors and environmental monitor(s) shall be submitted to DPS Staff at least two weeks prior to the start of construction. NYSDOT shall have authority to place inspectors on site to monitor and observe LIPA's activities on State highways, and/or to request the presence of state or local police to assure the safety of freeway travelers, at such times and for such periods as NYSDOT deems appropriate. All costs thereof shall be borne by LIPA.

37. The authority granted in the Certificate and any subsequent order(s) in this proceeding is subject to the following conditions necessary to ensure compliance with such order(s):

a) LIPA shall regard DPS Staff representatives (certified pursuant to Public Service Law Section 8) as the Commission's designated representatives in the field. In the event of any emergency resulting from the specific construction or maintenance activities that violate or may violate the terms of the Certificate or any other order in this proceeding, such DPS Staff representatives may issue a stop-work order for that location or activity;

b) A stop-work order shall 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 the whole Commission. If the emergency prompting the issuance of a stop-work order is resolved to the satisfaction of the Commissioner or the Commission, the stop-work order will be lifted. If the emergency has not been satisfactorily resolved, the stop-work order will remain in effect.

c) Stop-work authority shall 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 shall consult (wherever practicable) with LIPA representatives possessing comparable authority. Within reasonable time constraints, all attempts shall be made to address any issue and resolve any dispute in the field. In the event the dispute cannot be resolved, the matter shall be immediately brought to the attention of LIPA, Project Manager and the Department of Public Service Chief, Energy Resources 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;

d) If a DPS Staff representative discovers a specific activity that is a significant environmental threat that is or may immediately become a violation of the Certificate or any other Order in this proceeding, the 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 Staff representative shall immediately thereafter inform the Construction Supervisor and/or Environmental Coordinator of the action taken. The stop-work directive may be lifted by the Staff Representative if the situation prompting its issuance is resolved;

e) If the DPS Staff representative determines that a significant threat exists such that protection of the public or the environment at a particular location requires the immediate implementation of specific measures, the Staff representative may, in the absence of responsible LIPA supervisory personnel, or in the presence of such personnel who, after consultation with the 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 shall comply with the DPS Staff representative directive immediately. The DPS Staff representative shall immediately thereafter inform LIPA's construction supervisor and/or environmental monitor of the action taken.

38. LIPA shall organize and conduct site compliance audit inspections for DPS Staff as needed, but not less frequently than once per month during the site preparation, construction, and restoration phases of the Project, and at least annually for two years after the Facility is operational.

a) The monthly inspection shall include a review of the status of compliance with all certification conditions, requirements, and commitments, as well as a field review of the Facility site, if necessary. The inspection may also include:

- (1) review of all complaints received, and their proposed or actual resolutions;
- (2) review of any significant comments, concerns or suggestions made by the public, local governments, or other agencies;
- (3) review of the status of the project in relation to the overall schedule established prior to the commencement of construction; and
- (4) other items LIPA or DPS Staff consider appropriate;

b) LIPA shall provide a written record of the results of the inspection, including resolution of issues and additional measures to be taken, to agencies involved in the inspection audit.

Cultural Resources

39. LIPA shall not undertake construction in areas where Phase I cultural resource surveys have not been completed and until such time as the results of any additional cultural resource surveys that are required (Phase II or more) have been reviewed by the appropriate authorities, including OPRHP and DPS, and EM&CP details for resource protection or recovery are approved.

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

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

Public Health and Safety

42. All chemicals and waste shall be secured in a locked and controlled area.

43. LIPA shall engineer and construct the Facility to be fully compatible with the operation and maintenance of nearby electric, gas, telecommunication, water, sewer, and related facilities.

44. The Facility shall be designed and constructed to avoid adverse effects on the cathodic protection system and physical conditions of existing structures and facilities, including any underground facilities.

Electric and Magnetic Fields

45. LIPA shall design, engineer and construct the Facility such that its operation shall comply with the electromagnetic field ("EMF") standards established by the Commission 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.

46. To possibly further minimize magnetic fields, the following mitigation measures shall be fully investigated during construction design for the affected segment of the Facility, analyzed and documented in the EM&CP, including a calculation of anticipated average magnetic field levels with the proposed Facility in operation, and, implemented if determined to be feasible and appropriate as low-cost measures of "prudent avoidance" of magnetic fields and result in a meaningful reduction:

a) Moving the proposed route of the Facility in the vicinity of Locations 1 & 2 in the EMF study more to the center of the right-of-way (moved more to the South).

b) Removal of the railroad tracks in the vicinity of Locations 1 & 2 in the EMF study so as to provide room in the right-of-way to move the proposed route of the Facility more to the center of the right-of-way (moved more to the South).

c) Moving the proposed route of the Facility in the vicinity of Location 4 in the EMF study more to the center of the right-of-way (moved more to the North).

d) Re-phasing of the circuits in the right-of-way in the vicinity of Locations 1 & 2 in the EMF study to further minimize magnetic field levels,.

e) Re-phasing of the circuits in the right-of-way in the vicinity of Location 4 in the EMF study to further minimize magnetic field levels.

f) Re-phasing of the circuits in the right-of-way in the vicinity of Location 5 in the EMF study to further minimize magnetic field levels.

g) Moving the proposed route of the Facility further away from the building at the southeast corner of the intersection of Newbridge Road and Carnation Road.

h) Moving the proposed route of the Facility in the vicinity of Location 11 in the EMF study more to the South.

i) LIPA will provide calculations of the magnetic field levels projected for the areas surrounding the respective property lines of East Garden City Substation, the Newbridge Road Substation, and the Ruland Road Substation, and the edges of the rights-of-way for transmission lines (overhead and underground) entering the respective substations. Thereafter, LIPA agrees to consult with DPS Staff about the need for, if any, together with the feasibility and cost-effectiveness of mitigation measures appropriate as low-cost measures of "prudent avoidance" of magnetic fields which would result in a meaningful reduction of such levels. Any disputes shall be brought to the Commission for final resolution.

Construction

47. Equipment and component delivery, horizontal directional drilling, trenching, backfilling, and transformer and cable installation shall only take place between 7:00 A.M. and 6:00 P.M. on weekdays, except that for State highways NYSDOT may require night-time operations if warranted by high traffic volumes during the day. Nothing herein shall preclude LIPA from making the necessary arrangements for the extension of work hours with appropriate local agencies in compliance with local ordinances. DPS Staff shall be notified at least 48 hours in advance if planned weekend, evening or holiday construction becomes necessary.

48. The construction schedule shall be coordinated so as to minimize outages of the existing circuits adjacent to the Facility, outages of the substations and interconnected transmission facilities, and the full or temporary closure of roads, travel lanes and access driveways, and to minimize simultaneous closures of north/south routes.

49. Existing transmission facility components replaced as part of construction of this Facility shall be removed from the right-of-way to appropriate destinations and handled appropriately for re-use as available based on conditions (transformers, wood poles, conductors, etc.).

50. Appropriate measures shall be taken to minimize fugitive dust and airborne debris from construction activity.

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

52. Sedimentation/erosion control devices shall be installed around areas to be disturbed and any stockpiled soils to prevent soil erosion during construction. These erosion control devices shall be installed prior to construction and shall be maintained in place until the right-of-way has been revegetated and/or stabilized in accordance with pre-existing conditions.

53. For excavation on lands formerly in agricultural production (SUNY property and west side of Ruland Road Site), the topsoil shall be segregated from the subsoil and stockpiled until it can be reinstalled during site restoration.

54. The clearing and vegetation treatment plans shall minimize the clearing of vegetation to that necessary to allow construction and operation of the Facility. Directional drilling will be used at all areas so designated in the application as well as such additional areas that may be designated in the EM&CP.

55. All merchantable logs resulting from clearing the right-of-way shall be removed from the right-of-way, unless otherwise noted on the construction drawings and approved by DPS Staff. All non-merchantable woody debris resulting from clearing the right-of-way shall be chipped, unless noted on the EM&CP and approved by DPS Staff, or removed from the right-of-way. No chips shall be stored in park lands, wetlands, active agricultural fields, or within 50 feet of streams or drainages.

56. Neither LIPA nor any contractors in its employ shall clear or alter any areas outside the boundaries of the certified Facility, except off right-of-way access roads designated in the EM&CP.

57. All trees over two inches diameter breast height (DBH) or shrubs over four feet in height damaged or destroyed by activities during construction, operation, or maintenance, regardless of where located, shall be replaced within the following year by LIPA with the equivalent type trees or shrubs, except if:

- a) permitted by the approved EM&CP;
- b) equivalent-type replacement trees or shrubs would interfere with the proper clearing, construction, operations, or maintenance of the certified Transmission Facility;
- c) replacement would be contrary to sound right-of-way management practices, or to any approved long-range right-of-way management plan applicable to the Transmission Facility or adjoining transmission facilities; or
- d) the owner of land where the damaged or destroyed trees or shrubs were located (other than LIPA) declines replacement (or other recorded easement or license holder with the right to control replacement declines replacement).

58. LIPA shall, on completion of the Facility:

- a) provide an assessment of the need for landscape improvements, including vegetation planting, earthwork or installed features to screen or landscape the Facility, or existing utility structures made more visible by clearing for the Facility, particularly the need for screening for the benefit of residential properties;
- b) prepare plans for any visual mitigation found necessary; removal, rearrangement and supplementation of existing landscape improvements or plantings should be considered, as appropriate;
- c) consult with DPS Staff (and with NYSDOT for the Seaford-Oyster Bay Expressway (NY135) segment) on the content and execution of its assessment, resultant landscaping plan specifications and materials list; details shall include measures for maintenance and for controlling third party or wildlife damage to any landscape and vegetation plantings;
- d) such assessments and plans shall be presented for DPS Staff review within one year of the date the Facility is placed in service and shall be implemented as soon thereafter as practicable; and
- e) LIPA shall provide to DPS Staff (and for Facility segments on State highways, to NYSDOT) as-built drawings of the Facility certified by a Professional Engineer that is licensed and currently registered in New York State.

Transportation

59. a) LIPA shall minimize the impact of the construction of the Facility on traffic circulation. Traffic control personnel and safety signage will be employed to ensure safe and adequate traffic flow when secondary roadways are affected by construction.

b) As set forth in the Joint Proposal, LIPA shall undertake the following offsets:

- (1) Coordinate with the United States Postal Service to study the feasibility of installing and if feasible, install, an electric truck idling station at the regional postal facility adjacent to the Ruland Road Substation;

- (2) Explore the feasibility of installing, and if feasible, install solar chargers or conduct a gas to electric conversion program at Eisenhower Park and Bethpage State Park golf courses for golf carts;
- (3) Consult with the Metropolitan Transportation Authority and municipal officials concerning the feasibility and desirability of installing a bus shelter near Newbridge Road Substation, and install one if found to be feasible and desirable.
- (4) Coordinate with NYSDOT for studying feasibility of using LIPA property adjoining the Ruland Road Substation for a Long Island Rapid Commute Vehicle (RCV) Station (see NYSDOT & others, Long Island Transportation Plan 2000); and
- (5) Install two 4" conduits and pullboxes in a trench along the Seaford-Oyster Bay Expressway (NY135) for future Intelligent Transportation System (ITS) use by NYSDOT as per NYSDOT detailed design drawings showing joint occupancy of 4" conduits and 345 kV cable.

60. Facility construction worker parking shall be in designated areas which do not interfere with normal traffic, cause a safety hazard or interfere with existing land uses.

61. Direct disturbance to properties shall be avoided by accessing the right-of-way from existing roadways or approved off-right-of-way access roads. Construction access to the right-of-way of limited access highways shall be provided from off-highway locations. An off-right-of-way access to the Seaford-Oyster Bay Expressway (NY135) from the east, at the staging area south of Central Avenue, shall be added.

Newbridge Road Substation

64. A conduit to accommodate the future upgrade of the Facility to 345 kV operation shall be installed as part of the Facility so as to eliminate the need for further disturbance of the landscaping around the northern perimeter of the Newbridge Road Substation.

65. Upon completion of the Neptune and LIPA transmission facilities at the Newbridge Road Substation (including the new spare 345 kV conduit), LIPA will prepare for DPS Staff review a visual assessment and landscaping/mitigation plan for the area around the Substation which shall include measures regarding removal of oversize trees or undesirable vegetation, landscaping, drainage, grading, measures to contain pedestrians and control litter including restoring or replacing fences and sidewalks, including restoration or replacement of sidewalks along Salisbury Park Drive adjacent to the Facility right-of-way and the installation of a bus shelter, and such other mitigation measures as are appropriate. Provision for the consultation with other interested stakeholders, if appropriate, will be included. Upon approval by DPS Staff, the landscaping/mitigation plan shall be implemented.

Maintenance

66. LIPA shall submit to the Commission for approval prior to operation of the Facility, and provide a copy to NYSDOT and any party so requesting, a long-term right-of-way management plan for the Facility. The plan shall:

- a) contain a list of residential areas and environmentally significant features (including as a minimum any stream-crossings, wetlands, vegetation planting areas, important wildlife habitats, parks, officially-designated trails and visual screens) and provisions to minimize maintenance impacts on those areas and features;
- b) contain a vegetation and land-use inventory for the first and each subsequent treatment (the vegetation inventory shall include the right-of-way location, vegetation type, height, density and treatment technique);
- c) contain a list of potential undesirable right-of-way uses (e.g., trash dumping, trespass or encroachment) and policy to remedy or control such uses;
- d) describe the treatment techniques and chemicals proposed for use, and limit chemical use to approved usages and dosages; and
- e) describe a LIPA policy on surveillance, posting and installation of deterrents to adverse access;

f) describe Facility management including Facility monitoring, patrols, marking and maintenance of facilities, coordination of activities with underlying landowners or land managers, and maintenance of erosion control features, access roads, landscape plantings and vegetation;

g) describe how the Facility maintenance and management is integrated into applicable LIPA system-wide management plans; and

h) provide that NYSDOT shall maintain the right-of-way of the segment of the Facility on the Seaford-Oyster Bay Expressway (NY135), including the management of encroachments.

Upgrade to 345 kV

67. The Facility will initially be operated at 138 kV.

68. LIPA will conduct a pre-operational 345 kV upgrade noise study and post-operational noise study. Although the 345 kV upgrade is not expected to cause a noticeable increase in ambient noise levels that exist before operation of the 345 kV upgrade, LIPA will study the impact of the upgrade on ambient noise levels. If the incremental impact of the 345 kV upgrade does not create a noticeable increase in ambient noise levels at sensitive noise receptors, no further studies on mitigation will be necessary. If there is such a noticeable incremental impact, LIPA will take appropriate measures to mitigate that impact. If the aforementioned mitigation measures are not successful in mitigating any incremental, noticeable noise impact from the 345 kV upgrade at sensitive noise receptors, then LIPA will perform a cost benefit analysis concerning possible available noise reducing measures, such as noise control features, noise cancellation technology, and other measures or equipment in the Newbridge Road Substation and provide such analysis to Staff. LIPA shall consult with Staff concerning what further action could be warranted or appropriate. Any disputes shall be brought to the Commission for final resolution.

69. Upon determining that it intends to upgrade and operate the Facility at 345 kV, LIPA shall notify the Commission of such determination and indicate the date by which LIPA intends to upgrade and operate the Facility at 345 kV. A copy of the notice shall be provided to NYSDOT. The notice shall include a plan by LIPA of any mitigation measures determined to be necessary to offset potential adverse noise impacts from the proposed 345 kV upgrade as determined in accordance with Certificate Condition 68 above based on expected or actual operational characteristics. Any noise mitigation plan shall be prepared in the form of supplemental analyses and site plans for the Newbridge Road Substation. There shall be no prominent pure tones emanating from the Substation due to Facility operation.

70. Prior to operating the Facility at 345 kV, LIPA shall implement the noise mitigation plan.

71. Prior to operating the Facility at 345 kV, a System Reliability Impact Study (SRIS) shall have been approved by the New York Independent System Operator (NYISO) for the upgrade and operation of the Facility at 345 kV, and all other related NYISO review, planning, and approval processes for the upgrade and operation of the Facility at 345 kV shall have been completed.

72. Prior to operating the Facility at 345 kV, LIPA shall certify to the Commission that all requirements of this Certificate have been fulfilled.

Appendix E

GENERAL GUIDELINES FOR ENVIRONMENTAL MANAGEMENT AND CONSTRUCTION PLAN(S)

The environmental management and construction plans (EM&CP), consisting of appropriate maps, charts, illustrations, and text, shall include, but need not be limited to, the following information.

- A. Plan and Profile Details. A Line Profile¹ (at an appropriate scale) and plan drawings (scale minimum 1 inch = 200 feet)² showing:
1. Facility Location
 - a. The boundaries of any new, existing and/or expanded right-of-way (ROW)³ or road boundaries if cables are to be constructed underground in streets; plus areas contiguous to the ROW or street within which the applicant will obtain additional rights; and an explanation of the need for those additional rights.
 - b. The location of each facility structure (showing its size, material and type and indicating the GSA—595A Federal standard color designation or manufacturers color specification to be used for painted structures), structural foundation, fence, gate, down-guy anchor, and any counterpoise (typical counterpoise drawings will suffice) required for the proposed facility; conductors, insulators and static wires and other components attached to facility structures.
 - c. Existing utility or non-utility structures on the ROW, and indicate those to be removed or relocated (include circuit arrangements where new structures will accommodate existing circuits, indicate methods

¹ The lowest conductor of an overhead design should be shown in relation to ground at the maximum permissible conductor temperature for which the line is designed to operate, i.e., normally the shorttime emergency loading temperature specified by the New York ISO. If a lesser conductor temperature is used for the line profile, the maximum sag increase between the conductor temperature and the maximum conductor temperature shall be indicated for each ruling span. For underground facility design, show relation of facility to final surface grade, indicating design depth-of-cover.

² Contour lines (preferably at 5-foot intervals) are desirable on the photostrip map if they can be added without obscuring the required information.

³ The term "ROW" in these *Guidelines* includes property to be used for substations, disposal sites, underground terminals, storage yards, and other associated facilities. Where such properties cannot reasonably be shown on the same plan or photo-strip, maps or plan drawings used for the transmission line, additional maps or drawings at convenient scales should be used.

of removal of existing facilities, and show the new locations, types and configurations of relocated facilities).

d. Any relocated or underground facility.

e. The relationship of the proposed facility to nearby fence lines, roads, railways, airfields, property lines, hedgerows, waterbodies, associated facilities, flowing water springs, nearby buildings or structures, major antennas, oil or gas wells, and pipelines or blowdown valves. State any objections raised by Federal, State or local transportation (highways, waterways, or aviation) officials to the final location or manner of installation of, or access to, the Certified facilities.

f. The location of any proposed new or expanded switching station, substation, or other terminal or associated facility (attach plan⁴ - plot, grading, drainage, and electrical - and elevation views with architectural details at appropriate scales). Indicate the type and expected impact of outdoor lighting, including design features to avoid off-site illumination and minimize glare; the color and finish of all structures; the locations of temporary or permanent access roads, parking areas, construction contract limit lines, property lines, designated floodways and flood-hazard area limits, buildings, sheds, relocated structures, and any plans for water service and sewage and waste disposal.

g. The location and boundaries of any areas whether located on- or off- ROW proposed to be used for fabrication, designated equipment parking, staging, lay-down and conductor pulling. Indicate also any planned fencing or screening of storage and staging areas.

h. The proposed location of all on- or off-ROW access, temporary construction and permanent maintenance roads, indicating access from other roadways.

2. ROW Clearing

a. The locations of sites, if any, requiring trimming or clearing of vegetation and the geographic limits of such trimming or clearing. Indicate in text and on the drawings the specific methods for the type and manner of cutting, and disposition or disposal method for cut vegetation (i.e., chip; cut and pile; salvage merchantable timber, etc.). Designate methods for management of vegetation to be cut or removed at each site, indicating the rationale for the method designated. Sites should be based on an initial ROW vegetation inventory conducted prior to clearing and access road construction, and should be distinguished by criteria such as:

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

(1) any geographical area bounded by distinctly different cover types requiring different cut-vegetation management methods, or

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

(3) different property-owners requesting specific vegetation treatment or disposal methods.

(4) delineation and protection of desirable vegetation species.

(5) indication of areas requiring (off-ROW) danger tree removal.

b. The location of any areas where specific tree protection measures will be employed to avoid damage to specimen trees, stands of desirable species, important screening trees or hedgerows. Details of specific measures should be specified in text and site plans.

3. Building and Structure Removals

Indicate the locations of any buildings or structures to be acquired, demolished, moved or removed. In text, provide the rationale for the acquisition and removal of buildings or structures.

4. Waterbodies

a. Indicate the name, water quality classification and location of all rivers and streams (whether perennial and intermittent) within 100 feet of, or crossed by, the proposed ROW or any off-ROW access road constructed, improved or maintained for this facility. Indicate the procedures that were followed to inventory such resources and provide copies of any resulting data sheets and summary reports. Describe the measures to be taken in each location to protect streambank stability, stream habitat, and water quality including, but not limited to: crossing technique; crossing structure type; timing restriction; and other site-specific measures appropriate to the location for impact minimization, resource protection, and facility construction management. On the plan maps, indicate:

(1) stream crossing method and delineate any designated streamside "protective or buffer zone" in which construction activities will be restricted to the extent necessary to minimize impacts on rivers and streams;

(2) the activities to be restricted in such zones;

(3) delineate any designated floodways or flood hazard areas to be traversed by the proposed facility or access roads, or otherwise used for facility construction or the site of associated facilities.

b. Show the location of all potable water sources including springs and wells on the ROW or within 100 feet of the ROW or access roads indicating on a site-by-site basis, precautionary measures to be taken to protect each water source.

5. Wetlands

Indicate the location and type of any wetland (e.g., marsh, meadow, bog, or scrub-shrub or forested swamp) within or adjoining the ROW or any access road, as determined by site investigation and delineation. Indicate in text, and on plans as appropriate, on a site-by-site basis the precautions or measures to be take to protect such wetlands, associated drainage patterns, and wetland functions.

6. Landscaping

Show locations of existing or proposed vegetative plantings, earthwork, or installed features to screen or landscape substations or other facility components. Describe in text and on detailed drawings, any screening or landscaping plans proposed.

7. Noise Sensitive Sites

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

8. Other Environmentally Sensitive Areas

a. Indicate the general locations of any known ecologically and environmentally sensitive sites (including rare and endangered species or habitats, deer winter yards, and archaeological sites), within or nearby the proposed ROW or along the general alignment of any access roads to be constructed, improved or maintained for this facility. Indicate the procedures that were followed to identify such resources and specify the measures that will be taken to protect or preserve these resources. Reports prepared to identify and analyze such sites shall be made available to Staff upon request.

b. Indicate the location and identification of sensitive land uses and resources that may be affected by construction of the facilities or by construction-related traffic (i.e., hospitals, emergency services, sanctuaries, schools, residential areas, etc.). Specify measures to minimize impacts on these resources.

9. Recreational Areas

Indicate the locations where existing or planned recreational uses, if known to the applicant at the time of the submission of the EM&CP, would affect or be affected by facility location, construction or other ROW preparation. Explain in text how these recreational uses or plans were (or can be) accommodated in facility construction operation and maintenance.

10. Agricultural Areas

Indicate the locations of prime, unique and significant agricultural lands, vulnerable soils, and underground drainage systems and the locations of sites under cultivation or in active agricultural use, where structures, access roads, counterpoise wires, lay-down areas or wire stringing operations will be located. Designate the site-specific techniques to be implemented to minimize or avoid construction-related impacts to agricultural resources.

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

1. Erosion Control

a. Describe the temporary and permanent measures to be taken during all construction phases to stabilize and restore soils, control erosion, and preserve natural drainage patterns in areas where significant soil disturbances (including removal of vegetative cover, grading or excavation) are proposed. Include standards, practices, erosion control measures and techniques to address construction management, communications, planning, monitoring and reporting requirements as appropriate for conformance with Storm Water Pollution Prevention Plan details.

b. In areas of Coastal erosion hazard, include plans to demonstrate compliance with the standards for coastal erosion hazard protection as required by 6 NYCRR Part 505.

2. Fuel and Chemical Handling Procedures

Describe precautions and measures to be followed during clearing, construction and site restoration:

a. to control the storage, handling, transporting and disposal of fuels, oil, chemicals, and other potentially harmful substances; and

b. to avoid spills and improper storage or application in the vicinity of any wetland, river, creek, stream, lake, reservoir, spring, well or other ecologically sensitive site, or existing recreational area along the facility ROW and access roads.

3. Environmental Supervision

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

4. Clean-up and Restoration

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

- a. the removal of any temporary roads; restoration of lay-down or staging areas; the finish grading of any scarified or rutted areas; the removal of waste, scrap metals, surplus or extraneous materials or equipment used;
- b. plans, standards and a schedule for the restoration of vegetative cover; include specifications to address:
 - (1) design standards for ground cover:
 - (a) species mixes and application rates by site;
 - (b) site preparation requirements (soil amendments, stone removal, subsoil treatment or drainage measures);
 - (c) acceptable final cover % by cover type;
 - (2) planting installation specifications and follow-up responsibilities;
 - (3) a schedule or projected dates of any seeding and/or planting.

5. Herbicides

- a. Specify the locations where herbicides are to be applied. Provide a general discussion of the site conditions (e.g., land use, target and non-target vegetation species composition, height and density) and the choice of herbicide, formulation, application method and timing.
- b. Provide a general comparative analysis of any proposed herbicide applications using the following selection criteria: selectivity, efficacy, toxicity, persistence, and cost-effectiveness.
- c. Describe the procedures that will be followed during application to protect non-target vegetation, streams, wetlands, potable waters and other waterbodies, and residential areas and recreational users on or near the ROW.
- d. The ROW and adjoining properties shall be posted and notified by using the DEC-approved format (ECL Part 33 and 6 NYCRR Part 325); or as may be implemented subject to interim utility guidance, if issued.

6. Agricultural Areas

- a. Describe the program, policies and procedures to mitigate agricultural impacts, and explain how construction plans avoid or minimize soil compaction, crop production losses, and potentially wet agricultural soils. Also, list locations where such procedures have been and will be followed in facility construction and restoration.
- b. Indicate specific techniques and references to appropriate Agricultural Protection Measures recommended by the NYS Department of Agriculture and Markets, as available.

7. Access Roads

- a. Discuss the necessity for access to the ROW, including the areas where temporary or permanent access is required; and the nature of access improvements based on natural features, equipment constraints and vehicles to be used for construction and maintenance, and the duration of access needs through restoration and the maintenance of the facility.
- b. Identify the types of access which will be used and the rationale for employing that type of access including consideration of:
 - (1) temporary installations (i.e., over-land provisions, corduroy, mat and fill, earthen road, geotextile underlayment, gravel surface, etc.);
 - (2) permanent installations (i.e., cut and fill earthen road, geotextile under-layment, gravel surface, paved surface, etc.);

- (3) use of roads, driveways, farm lanes , rail beds, etc.;
- (4) other access, such as helicopter or barge placement.

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

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

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

d. Indicate the type of stream crossing method to be used in conjunction with access road construction. Provide diagrams and specifications (include plan and side view with appropriate dimensions) for each crossing device and rationale for their use. Stream crossing devices may include but not be limited to:

- (1) ford (with or without gravel);
- (2) ford with sill;
- (3) timber mat;
- (4) culverts including headwalls;
- (5) bridges (either temporary or permanent).

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

8. ROW Management Plans

a. Describe the interim ROW vegetation management plan to be used for the proposed facility from the beginning of vegetative clearing until the comprehensive site-specific long-range ROW management plan is submitted. Include a description of the initial and follow-up vegetation treatment techniques; and the proposed contents of any post-construction and long-range ROW management plans. Such plans, when submitted, shall describe the goals and objectives and include supporting inventories and analyses, proposed and alternative techniques (including consideration of vegetative screening and buffer areas at locations such as stream crossings, public roadways, and residential areas), schedules, and other important environmental information deemed necessary.

b. Describe interim ROW management plans and standards for securing, stabilizing, monitoring and addressing ROW access roads, facility maintenance, and analysis of compliance with any post-restoration requirements.

9. Organization of Document

The document should include appropriate cross-references, indicating where the plan addresses specific requirements including:

a. These *Environmental Management and Construction Plan Guidelines*;

b. The Commission Article VII Certificate conditions and describing the procedures followed or that will be followed to comply with those requirements.

c. If any particular requirements of these documents are not applicable, so indicate.