NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

RECOMMENDED DECISION BY
PRESIDING EXAMINER ROBERT R. GARLIN
and
ASSOCIATE EXAMINER KEVIN J. CASUTTO

CASE 01-F-0761 - Application by KeySpan Energy for a Certificate of Environmental Compatibility and Public Need to Construct and Operate a 250 Megawatt Combined Cycle Electric Generating Facility to be Developed in the Town of Huntington, Suffolk County.

DEC CASE NO. 1-4726-01500/00001 - In the Matter of Application for a State Pollutant Discharge Elimination System Permit Pursuant to Environmental Conservation Law (ECL) Article 17 and Title 6 of the Official Compilation of Codes, Rules and Regulations of the State of New York (6 NYCRR) Parts 750 et seq., and Air Pollution Control permits consisting of a Preconstruction Permit and a Certificate to Operate, Pursuant to ECL Article 19 and 6 NYCRR Parts 200 et seq.

NOTICE OF SCHEDULE FOR FILING EXCEPTIONS

(Issued February 4, 2003)

Attached is the Recommended Decision of Presiding Examiner Robert R. Garlin and Associate Examiner Kevin J. Casutto, together with a copy of the Public Service Commission's rules governing the procedures to be followed. Pursuant to 16 NYCRR §4.10(b), the due date for in-hand service of briefs on exceptions is February 18, 2003, and the due date for in-hand service of briefs opposing exceptions is February 25, 2003. Twenty-five copies of each brief shall be filed with the Secretary, and a copy shall be served on each party. Pursuant to 16 NYCRR §4.10(c)(4), a limitation of 50 pages shall apply to each party's brief on exceptions and brief opposing exceptions.

JANET HAND DEIXLER
Secretary

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APPEARANCES: See Appendix A

ROBERT R. GARLIN, Presiding Examiner and
KEVIN J. CASUTTO, Associate Examiner:

I. INTRODUCTION

A. Description of the Proposed Facility

On January 28, 2002, KeySpan Energy Development Corporation (KEDC or the applicant) filed an application for a Certificate of Environmental Compatibility and Public Need to construct and operate a 250 megawatt (MW) combined cycle electric generating facility (the proposed facility) on a 31.7-acre owned by KEDC and located along the south side of Spagnoli Road in the Town of Huntington, Suffolk County near the boundary between Nassau and Suffolk Counties. The proposed facility would consist of one combustion turbine generator, a heat recovery steam generator (HRSG) with a single exhaust stack standing 195 feet above grade, and a steam turbine with an air-cooled condenser. The combustion turbine generator would have a capacity of 170 MW, and the steam turbine generator would produce an additional 80 MW. The combustion turbine generator, HRSG, and steam turbine

generator would be housed in a single building designed to appear like a commercial facility.

The proposed facility would use only natural gas for fuel. To control emissions of nitrogen oxide (NO_x), the proposed facility would have dry low-NO_x combustion technology and post-combustion treatment with a selective catalytic reduction system. An oxidation catalyst would be used to control carbon monoxide (CO). The exhaust stack would be equipped with a continuous emissions monitoring system (CEMS) to track concentrations of NO_x, CO, and oxygen (O_2).

The primary electrical interconnection for the proposed facility would be the Long Island Power Authority (LIPA) 138 kilovolt (kV) switchyard at the Ruland Road substation located approximately 4,000 feet to the east. The interconnection would consist of two 3-phase 138kV cable circuits housed in underground ducts. Natural gas would be supplied through a new 6,400-foot, 16-inch diameter pipeline with an interconnection to an existing natural gas pipeline south of the proposed facility's site. A Certificate of Environmental Compatibility and Public Need was issued for the pipeline on May 13, 2002.[1]

The proposed facility's site was a sand mine until it was acquired by Long Island Lighting Company (LILCO) in 1976. The parcel was conveyed to KeySpan Generation LLC (Genco), who, in turn, conveyed it to KEDC. The terrain at the site is relatively flat with an average elevation of approximately 115 feet above mean sea level (MSL). A ridgeline with an elevation of approximately 155 feet above MSL rises along the southern property boundary. The site is covered with grass and light brush, except for areas used by KEDC's affiliates for excavation equipment training. Currently, two trailers are

[1] Public Service Commission (PSC) Case 02-T-0335, Application of KeySpan Gas East Corporation d/b/a KeySpan Energy Delivery Long Island, Order Granting Certificate of Environmental Compatibility and Public Need (issued May 13, 2002).

located at the site for use as offices and for training activities. A utility pole training area features installed utility poles for practice climbing. An equipment yard is used for training operators of heavy equipment.

Neighboring land uses include commercial and industrial buildings; an active sand mine and construction and demolition (C&D) debris landfill; an asphalt plant; the Town of Oyster Bay's landfill and retired incinerator; high-voltage overhead electric transmission lines; the campus of the State University of New York at Farmingdale (SUNY); a rifle range; a United States Postal Service distribution facility; an electrical substation (at Ruland Road); and a cement plant.[2] At or near the intersection of Spagnoli Road and Route 110 are two hotels operated by Hilton and Extended Stay America (ESA). The nearest permanent residence would be approximately 3,800 feet from the proposed facility. Tall structures visible from the project site (and neighboring properties) include transmission line towers standing 175 feet above grade and as high as 285 feet above MSL; exhaust stacks at the retired Town of Oyster Bay incinerator; and a sand elevator. When capped, the elevation of the C&D landfill will be 286 feet above MSL. Development of the proposed facility would result in the introduction of an exhaust stack rising to 305 feet above MSL (195 feet above grade), the HRSG (110 feet above grade), the air-cooled condenser (90 feet above grade), and the turbine building (75 feet above grade).[3]

B. Procedural History

Prior to filing its application in January 2002, KEDC followed the pre-application procedures outlined in Public Service Law (PSL) §163 to encourage public participation and to

[2] Town of Huntington's Reply Brief, pp. 2-3.

[3] Exhibit 1, §4.6.1 and Figure 4-2b; Exhibit 4; Exhibits 22-24 and 57; and hearing transcript pages (Tr.) 897, 1458, and 1911.

obtain input from state agencies. Consistent with the public participation requirements, KEDC held meetings with municipal parties, other local parties, and residents beginning in May 2001 and continuing since the application was filed.

KEDC filed a preliminary scoping statement and draft stipulations with the Siting Board on May 31, 2001. KEDC responded to comments on the draft stipulations in September 2001, and a public meeting was held on November 15, 2001. In January 2002, KEDC reached an agreement on final pre-application stipulations with the staffs of the Department of Environmental Conservation (DEC Staff), the Department of Health (DOH Staff), and the Department of Public Service (DPS Staff).

When KEDC filed its application with the Siting Board in January 2002, it also duly filed copies with the parties identified in PSL §164(2)(a) and 16 NYCRR §1000.5. In addition, the applicant published legal notices, as required by PSL §164(2)(b) and 16 NYCRR §1000.6, in various local newspapers.

By letter dated March 28, 2002, Chairman Helmer found, pursuant to PSL §165(1), that the application complied with the PSL §164 requirements. The Chairman, however, required KEDC to submit additional information on (1) the cost advantages of developing the proposed facility at the Spagnoli Road site instead of the Northport generating station site owned by Genco and also located in the Town of Huntington, and (2) KEDC's decision not to pursue using one of Genco's existing generating station sites, at Shoreham/Wading River, E.F. Barrett, or Port Jefferson, as the site for the proposed facility. The Chairman also fixed May 7, 2002 as the date for the commencement of public hearings. KEDC submitted the additional information required by the Chairman in two separate filings in April 2002.

Pursuant to notices issued by the Secretary to the Siting Board and the DEC Office of Hearings and Mediation Services, joint legislative/public statement hearings were convened at 1:00 p.m. and 7:00 p.m. on May 7, 2001 at the

auditorium at Old Bethpage Village. In the afternoon, between 70 and 90 persons were in attendance. Out of the 19 speakers (not counting KEDC's and DEC Staff's project managers), ten spoke in favor of the proposed facility and nine spoke in opposition. In the evening, between 160 and 170 persons were in attendance. Out of the 31 speakers, 11 spoke in favor of the proposed facility and 20 spoke in opposition. At the public hearing sessions, written statements and petitions were presented to the examiners.

An initial prehearing conference was held on May 1, 2002 at the Public Service Commission's New York City office. The purpose of that conference was to address intervenor funding requests and various procedural matters. On May 10, 2002, pursuant to the public notices, a joint conference concerning DEC air and water permitting issues, PSL Article X issues, and the schedule for this proceeding was held at the Public Service Commission's New York office. The Examiners issued an order specifying Article X issues[4] on May 15, 2002, and the Associate Examiner issued a ruling on air and water permit issues[5] on June 21, 2002.

Consistent with the requirements outlined in 16 NYCRR §3.9, KEDC duly published, on June 10, 2002, a notice of settlement discussions. On July 29, 2002, KEDC distributed to the parties draft stipulations on 12 topic agreements.[6] Final joint stipulations were submitted to the Secretary of the Siting Board on November 18, 2002. Joining KEDC in those stipulations, in whole or in part, are DEC Staff, DOH Staff, DPS Staff, Suffolk County, and the Town of Huntington.

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[4] PSL §165(2).

[5] 6 NYCRR §624.4(b)(5).

[6] See Exhibit 27.

Pursuant to a notice of evidentiary hearing dated July 1, 2002, hearings were convened at the Public Service Commission's New York office on August 12, 2002 and continued through August 22, 2002. On August 20, the examiners and representatives of some of the parties visited the Spagnoli Road site (and neighboring properties) and the Northport generating station. At the hearings, a record consisting of 114 exhibits and 2,559 pages of transcript was compiled.[7] After the hearings, seven more exhibits were added to the record.[8]

Timely post-hearing briefs and reply briefs were filed by KEDC, DEC Staff, DOH Staff (initial brief only), DPS Staff, the Town of Huntington, and intervenor South Huntington Alliance for Responsible Energy Development (SHARED).[9] Intervenors Suffolk County and Town of Oyster Bay participated in the hearings but did not file post-hearing briefs. Intervenor Dennis Buzzelli did not participate in either the joint issues

[7] The entire transcript for this proceeding is 3,008 pages long.

[8] Case 01-F-0761, Procedural Ruling (issued September 13, 2002).

[9] SHARED's briefs have been filed on its own behalf and on behalf of three members, Arrow Electronics, Inc., Gilbert Displays, Inc., and Marchon Eyewear, Inc.

conference or the evidentiary hearings but did submit a late-filed initial brief.[10]

On November 15, 2002, DEC Commissioner Crotty issued an Interim Decision upholding the determination of the associate examiner, following the conference pertaining to DEC permitting issues, that the adequacy of the applicant's analysis of five specified alternative sites may be adjudicated.[11] A conference call among the examiners and the parties to the DEC permit proceeding was held on November 26, 2002. Following that call, the associate examiner granted SHARED's request to conduct limited additional discovery and set a deadline of December 6, 2002 for the completion of discovery. Following a subsequent (December 12, 2002) conference call among the examiners, the parties to the DEC proceeding and DPS Staff were allowed to file supplemental briefs (on January 3, 2003) and supplemental reply briefs (on January 10, 2003) addressing the applicant's alternative sites analysis. The parties were also requested to

[10] For the most part, intervenor Buzzelli's late-filed brief addresses issues that were not held to be adjudicable in either the May 15, 2002 Article X issues ruling or the June 21, 2002 DEC issues ruling that followed the May 10, 2002 joint issues conference. Moreover, the portion of the brief that does address an adjudicable issue (fine particulate emissions) poses rhetorical questions that could, and should, have been raised at the hearings. The intervenor's professed lack of awareness of procedural dates and deadlines in this case is not convincing. According to records at the Department of Public Service, which include sworn affidavits of service, the intervenor was served a copy of every procedural ruling and notice setting forth dates and deadlines (March 15, 2002 Ruling on Party Status; March 29, 2002 Notices of Public Statement Hearing, Initial Prehearing Conference, and Issues Conference; May 21, 2002 Procedural Ruling; and July 1, 2002 Notice of Evidentiary Hearing). The intervenor has failed to fulfill the obligation of every party to "be prepared to proceed in an expeditious manner at the hearing so that it may proceed regularly until completion" [PSL §165(3)]. Accordingly, we are not specifically addressing the contentions raised in the intervenor's brief, and DEC Staff's request to reply to those contentions is moot.

[11] 6 NYCRR §231-2.4(a)(2)(ii).

address specifically the threshold question, under PSL Article X, of whether the identified sites are actually available to the applicant for construction of a generation plant that would be a substitute for the proposed facility. Supplemental briefs and reply briefs were filed by the applicant, DEC Staff, DPS Staff, and SHARED.

C. Summary of the Joint Stipulations

The joint stipulations consist of 12 separate topic agreements: air resources; water resources; terrestrial ecology; soils, geology, seismology and tsunami occurrence; visual and cultural resources; traffic and transportation; noise; land use, local laws and decommissioning; electric transmission facilities; gas supply and transmission; reasonable alternatives; and public interest. The topic agreements identify the nature of the probable environmental impacts of the proposed facility, provide proposed certificate conditions related to the topic, and discuss how the proposed certificate conditions will minimize adverse impacts as required by PSL §168. The topic agreements include stipulated facts with references to exhibits that provide the evidentiary basis for the agreements.

The discussion that follows reviews the topic agreements; the motion of KEDC, filed with its application, seeking a determination that the proposed facility has been selected pursuant to an approved procurement process; and the briefs of the parties addressing the contested issues. In general, the joint stipulations thoroughly address all topic areas identified in PSL §168. The evidentiary record compiled in this proceeding is comprehensive, supports the terms of the joint stipulations, and provides a factual basis sufficient for the Siting Board to determine whether the proposed facility should be certificated.

D. Required Findings of the Siting Board

Article X allows the Siting Board either to grant or deny the application as filed, or to certificate a facility "upon such terms, conditions, limitations or modifications of the construction or operation of the facility as [it] may deem appropriate."[12] In order to grant a certificate, the Siting Board must find:

- That the facility is reasonably consistent with the policies and long-range planning objectives and strategies of the most recent state energy plan, or that "the facility was selected pursuant to an approved procurement process."[13]

- The nature of the probable environmental impact, specifying predictable adverse and beneficial effects on (a) the normal environment and ecology, (b) public health and safety, (c) aesthetics, scenic, historic, and recreational values, (d) forest and parks, (e) air and water quality, and (f) fish and other marine life and wildlife.[14]

- That the facility minimizes adverse environmental impacts, considering (a) the state of available technology, (b) the nature and economics of reasonable alternatives required to be considered under PSL §164(1)(b), and (c) the interest of the state respecting aesthetics, preservation of historic sites, forest and parks, fish and wildlife, viable agricultural lands, and "other pertinent considerations."[15]

- That the facility is compatible with public health and safety.[16]

- That the facility will not discharge any effluent in contravention of DEC standards or, where no classification has been made of the receiving waters,

[12] PSL §168(2).

[13] PSL §168(2)(a).

[14] PSL §168(2)(b).

[15] PSL §168(2)(c)(i).

[16] PSL §168(2)(c)(ii).

that it will not discharge effluent unduly injurious to fish and wildlife, the industrial development of the state, and the public health and public enjoyment of the receiving waters.[17]

- That the facility will not emit any air pollutants in contravention of applicable air emission control requirements or air quality standards.[18]

- That the facility will control the runoff and leachate from any solid waste disposal facility.[19]

- That the facility will control the disposal of any hazardous waste.[20]

- That the facility will operate in compliance with all applicable state and local laws and associated regulations, except that the Board may refuse to apply specific local laws, ordinances, regulations, or requirements it regards as unduly restrictive.[21]

- That the construction and operation of the facility is in the public interest, considering its environmental impact and the reasonable alternatives identified pursuant to PSL §164(1)(b).[22]

As noted above, the Siting Board must find that the proposed facility will not discharge any effluent that will be in contravention of the standards adopted by the department of environmental conservation,[23] and will not emit any pollutants to the air that will be in contravention of applicable air emission control requirements or air quality standards.[24] Certain of the effluent standards and air quality standards, with which

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[17] PSL §168(2)(c)(iii).

[18] PSL §168(2)(c)(iv).

[19] PSL §168(2)(c)(v).

[20] PSL §168(2)(c)(vi).

[21] PSL §168(2)(d).

[22] PSL §168(2)(e).

[23] PSL §168(2)(c)(iii).

[24] PSL §168(2)(c)(iv).

Article X charges the Siting Board to find an applicant would be in compliance, find their genesis in the federal laws referred to in PSL §168(3).

PSL Article X and relevant sections of the Environmental Conservation Law (ECL) recognize that DEC has been delegated the authority to issue the requisite air quality and water quality permits. DEC is expected to issue those environmental permits in the near future. Therefore, as required by PSL §172(1), the DEC Commissioner should be able to "provide these permits to the Siting Board prior to its determination whether or not to issue a certificate."[25] Once the DEC Commissioner's requirement is fulfilled, the Board will be able to make the findings required by PSL §§168(2)(c)(iii) and (iv), and render a final decision.[26]

PSL §168(2)(d) and §172(1) provide the Board with preemptive authority over other necessary state and local approvals. The Board may refuse to apply any local ordinance that would otherwise be applicable if the Board finds that the ordinance, as applied to a proposed facility, would be unreasonably restrictive. Before the Board decides not to require compliance with a local ordinance, however, the affected municipality must be given an opportunity to present evidence in support of the ordinance. And even if the Board requires compliance with the substantive provisions of a local ordinance, the municipality may not require an applicant to obtain a permit or other approval under that ordinance without the Board's authorization.

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[25] PSL §172(1).

[26] The Siting Board's decision is final irrespective of whether the applicant still needs to obtain related permits. Indeed, in the air quality area, the Siting Board's certificate is part of the preconstruction review under the Clean Air Act; and yet the Siting Board must determine in advance of issuing a certificate that the facility will be able to comply with Title V requirements.

II. THE REQUIRED FINDINGS

A. Air Quality

Under PSL Article X, the Siting Board must make findings specifically with regard to the impact of construction and operation of the facility on air resources.[27] These findings are based upon compliance with the federal Clean Air Act (CAA or the Act) and ECL Article 19, as well as their respective implementing regulations.

The CAA and ECL Article 19 establish the criteria air pollutants that are governed by the health-based National Ambient Air Quality Standards (NAAQS).[28] These pollutants are: oxides of nitrogen (NO_x), ozone (O_3),[29] carbon monoxide (CO), sulfur dioxide (SO_2), lead (Pb), and particulates that are 10 microns in diameter or less (PM_{10}). New York's ambient air quality standards are similar and also include beryllium, hydrogen sulfide (H_2S) and fluorides.[30] The main responsibility for implementation of the CAA resides with the states.[31] This is accomplished through each state's development of a state implementation plan (SIP) that provides for control measures and strategies. Through air quality monitoring, development of emission inventories, regulation of sources, and permitting of

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[27] Applicable here are the required findings on the nature of the probable adverse and beneficial effects on air quality (§168(2)(b)); that the facility is compatible with public health and safety (§168(2)(c)(ii)); and that the facility would not emit any pollutants to the air that will be in contravention of applicable air emission control requirements or air quality standards (§168(2)(c)(iv)).

[28] CAA §109; 40 CFR Part 50.

[29] Ozone is created by the interaction of volatile organic compounds (VOCs) and NO_x in combination with sunlight and is commonly known as smog.

[30] 6 NYCRR Part 257.

[31] CAA §§101, 116.

new sources, the states work to achieve the NAAQS and/or to prevent attainment areas from losing that status.

For new sources of air pollution, the principal means by which the states, including New York, pursue this goal is through the prevention of significant deterioration (PSD) program to maintain attainment and new source review for those pollutants for which the relevant area is in non-attainment.[32] The Spagnoli Road project site is located in Suffolk County, which is in severe non-attainment for ozone. This classification is based upon monitoring data obtained by DEC's Bureau of Air Surveillance, which operates air quality monitors for SO_2, NO_x, CO, PM_{10}, total suspended particulates (PM), ozone, lead, sulfates, and nitrates.[33] A table indicating the background concentrations for the NAAQS is provided in the application.[34] Table 5.2 provides a comparison of the NAAQS and the New York State Ambient Air Quality Standards.[35] In addition to this regulatory framework, the proposed facility is also subject to federal New Source Performance Standards (NSPS) (CAA §111), DEC's Regulations and Policy (Part 201 et seq. of 6 NYCRR), Air Quality Impacts Analysis Requirements, the Federal Acid Rain Program (Title IV of the Act), and the NO_x Budget Program Requirements (6 NYCRR Part 204).[36]

1. Prevention of Significant Deterioration and New Source Review

The proposed facility will not be a major new source, based upon the potential emission of criteria pollutants that exceed U.S. Environmental Protection Agency (EPA) thresholds, and

[32] 6 NYCRR Part 231 and 40 CFR 51.166.

[33] Exhibit 1, §5.2.3.

[34] Exhibit 1, Table 5.1.

[35] Exhibit 1, Table 5.2.

[36] Exhibit 1, §5.

is not subject to PSD review. Nevertheless, KEDC performed PSD analyses for NO_x and PM/PM_{10}.[37] PSD requirements mandate that the facility control these pollutants with the best available control technology (BACT). For the proposed facility, the use of natural gas is BACT for control of particulates and NO_x.[38]

Because the facility is in a severe non-attainment area for ozone, the ozone precursor NO_x is subject to the lowest achievable emission rate (LAER) requirement in the New Source Review criteria.[39] To meet LAER for control of NO_x, the proposed facility will use a dry low-NO_x technology combustion turbine and a selective catalytic reduction system that will further reduce NO_x emissions. In addition to meeting LAER for the control of NO_x, KEDC is required to provide offsetting emission reduction credits (ERCs) from other sources whose emissions could affect ozone levels in this area. KEDC has purchased ERCs for emissions of 75 tons per year of NO_x, removing this pollutant from the air at a ratio of 1.3 tons removed for every 1 ton emitted from the proposed facility.[40]

2. New Source Performance Standards

Federal New Source Performance Standards (NSPS) are technology-based and are applicable to new and modified stationary sources. One subpart of these standards is applicable: Standards of Performance for Stationary Gas Turbines (40 CFR Part 60, Subpart GG). Subpart GG limits flue gas concentrations of NO_x to 75 ppm and SO_2 to 150 ppm (or 0.8% sulfur in fuel). The proposed facility's emissions are below

[37] Exhibit 1, Tables 5.3 and 5.4.

[38] Exhibit 1, §5.3.4.

[39] Exhibit 1, §5.3.5.

[40] Exhibit 1, Appendix 5B, Table 5-1.

those thresholds. Monitoring of fuel sulfur and nitrogen content is also part of these regulatory requirements.[41]

3. NYSDEC Regulations and Policy

Part 202-1 of 6 NYCRR provides that DEC may require stack testing by a permittee, and DEC is likely to require this action. Part 202-2 requires permittees to submit annual emission statements for VOCs and NO_x, and KEDC will make those reports as required. Part 211.3 provides opacity limits for sources of air pollution; however, Part 227-1.3 sets more stringent limits for stationary combustion units, and it is the latter limits that will apply to the proposed facility. Part 227-2 sets reasonably available control technology (RACT) requirements for NO_x, but the NO_x emissions limits for the proposed facility under LAER are more restrictive.[42]

New York State is part of the Ozone Transport Commission (OTC) that, among other things, adopted an agreement requiring signatory states to develop region-wide NO_x emissions reductions in 1999 and 2003. This program sets a cap for emissions during the “ozone season,” allocates emissions among sources and allows trading. New York’s program is contained in 6 NYCRR Part 204. The proposed facility will be part of the Phase 3 budget pool and will have allowances allocated to it according to a formula applied to other sources. In addition, the facility will identify an Authorized Account Representative who will maintain a NO_x Allowance Trading Account. Additionally, KEDC will be subject to monitoring requirements, and, because the facility is also subject to such requirements for compliance with 40 CFR Part 75 under the Acid Rain program, the same technology will be utilized.[43]

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[41] Exhibit 1, §5.3.1; 40 CFR Part 60, Subpart GG.

[42] Exhibit 1, §5.3.2.

[43] Exhibit 1, §5.3.6.

4. Acid Rain Permit; Title V Requirements; CAA §112 Requirements

KEDC has applied for a CAA Title IV Acid Rain Permit and a Title V Operating Permit and has agreed to operate the proposed facility pursuant to the requirements associated with those permits. In addition, the applicant will utilize aqueous ammonia at a concentration of less than 20%, which is below the threshold that would subject it to CAA §112 requirements for a risk management plan.[44]

5. Construction Emissions

KEDC examined the potential impact of air emissions from construction activities. Because there will be no road closures or detours resulting from this work, no analysis was required for this aspect. Construction vehicles will emit criteria pollutants but impacts are expected to be minimal because there will be no demolition and relatively little grading required. KEDC will employ several measures to ensure that dust suspension is kept low.[45]

6. Non-Criteria Pollutants

KEDC performed an analysis of impacts of non-criteria pollutants with guidance from the Department of Health. Tables 5.20 and 5.21 of Exhibit 1 present the results of the non-criteria pollutant modeling and comparisons with DEC's short-term and annual concentration guidelines. The analysis shows that none of the potentially emitted non-criteria pollutants from the proposed facility is near or above its concentration guideline.[46]

[44] Exhibit 1, §5.4.6.

[45] Exhibit 1, §5.4.6.

[46] Exhibit 1, §5.5.

7. Fine Particulate Emissions

a. Introduction

The examiners identified the evaluation of the impacts of emissions of fine particles with an aerodynamic diameter of 2.5 microns or less ($PM_{2.5}$) emissions an issue for adjudication in the PSL Article X proceeding. The $PM_{2.5}$ adjudication primarily focused upon the requirements of PSL §168(2)(c) that the Siting Board may not grant a certificate unless it first finds and determines that a proposed facility minimizes adverse environmental impacts, considering the state of available technology, and is compatible with public health and safety.

An assessment of the proposed facility's $PM_{2.5}$ impacts was set forth in KEDC's application.[47] KEDC submitted a supplemental filing on April 4, 2002 containing a report on the assessment of $PM_{2.5}$ impacts and the direct testimony of its witness Main (dated March 2002). Prepared direct testimony was filed by DEC Staff and SHARED, and rebuttal testimony was filed by DEC Staff, SHARED, and KEDC.

The record developed with respect to $PM_{2.5}$ is addressed in this part of the recommended decision. Also included is a discussion addressing how projected emissions of $PM_{2.5}$ from the proposed facility are evaluated in the context of the environmental impact review required pursuant to PSL §168.

b. Record Developed on Fine Particulate Matter

The hearings and the submissions of the parties provide a full record for the Siting Board to evaluate $PM_{2.5}$ impacts. However, the record shows that no published data exists on the composition of PM emitted from gas-fired turbines. The following is a brief summary of the hearing record in this matter.

[47] Exhibit 1, §5.7.

i. Characteristics of Fine Particulates

A. Sources and Chemical Composition

$PM_{2.5}$ refers to thousands of different forms of inhalable particles, both natural and man-made, with different physical, chemical, and biological properties. Some particles are emitted directly from a source (primary PM), while others are formed in the atmosphere (secondary PM) through chemical and physical transformations of precursor gases and aerosols.

The standard characterizations of $PM_{2.5}$ species include sulfates, nitrates, organic compounds, elemental carbon, crustal material, and "other." These characterizations are very general, because species such as sulfates and organics are diverse in terms of structure, known or expected toxicity, solubility, and/or expected effects on respiratory function. Elemental carbon and crustal material are primary particles. Organic carbon can be primary or secondary, while sulfates and nitrates frequently are secondary particles formed from precursor gaseous pollutants (respectively, SO_2 and NO_x) that may have been emitted at a considerable distance upwind.

DEC Staff and KEDC agree that where secondary $PM_{2.5}$ is a significant constituent of the total mass level, the distribution of the mass level throughout an urban or regional area is expected to be relatively even (compared with PM_{10} emissions, the levels of which are more highly influenced by local sources). DEC Staff reports that its speciated sample monitor in Queens shows a chemical composition of $PM_{2.5}$ that includes 33% sulfate, 30% organic carbon, 14% ammonium, 12% nitrate, 6% elemental carbon, and 5% metals (other than sulfur).[48] DEC Staff's filing also indicates that data from a series of continuous monitors it has installed can be used to study the effects of local contributions, such as mobile sources, on $PM_{2.5}$ levels. For example, DEC Staff explains, it would be possible to plot hourly

[48] Exhibit 81, LS-2.

concentrations of $PM_{2.5}$ along with "marker" pollutants known to be emitted by mobile sources (e.g., NO_x and CO) to determine whether there is any correlation between or among them. DEC Staff goes on to note that data from its Queens College monitor, acquired during the second half of 2001, suggest a correlation between morning rush hour traffic and $PM_{2.5}$ levels.[49]

B. Regional Transport

There is no dispute in the record that the current knowledge indicates that $PM_{2.5}$ is a regional transport pollutant. The testimony on the record reveals the transport nature of $PM_{2.5}$, as compared with pollutants consisting of coarse-mode particles. $PM_{2.5}$, with its fine-mode particles, is capable of traveling 100 to 1,000 kilometers with an atmospheric half-life of days to weeks, in contrast to the traveling capacity of less than one to 10 kilometers and the minutes to hours half-life of other pollutants.

C. Measurement of Emissions and Dispersions

DEC Staff notes that in general, EPA has recognized that there are limitations in technical approaches to the proper calculation of source emissions and project-specific impacts. EPA also has stated that a specific concern is the lack of necessary tools to calculate emissions of $PM_{2.5}$ and related precursors and a project's ambient air quality impacts. DEC Staff reports EPA's advice that "until these deficiencies are corrected, sources should continue to meet [new source review] requirements for [PM_{10}] which can, in the interim, serve as a surrogate approach to reducing $PM_{2.5}$ emissions and protecting air quality."[50] Similarly, KEDC's April 4, 2002 Report states that KEDC was constrained to adopt the conservative assumption that

[49] Exhibit 81, LS-2.

[50] Exhibit 81, LS-2, Part I, p. 4.

all PM_{10} emissions from the proposed facility would be $PM_{2.5}$ emissions.

Moreover, EPA has not yet proposed any dispersion model for estimating concentrations of $PM_{2.5}$ resulting from emissions from a single source. To measure concentrations at Suffolk County receptors, KEDC and SHARED used models employed for estimating the dispersion of PM_{10}. SHARED contends that a cumulative $PM_{2.5}$ assessment is necessary and the sole means to determine total concentrations in the community surrounding the KEDC Spagnoli project site. But DEC Staff disputes SHARED's contention, noting that this contention is both unsupported and unfounded.[51]

ii. Impacts of Fine Particulates

A. Health Impacts

At present, there is a considerable body of published epidemiological and toxicological research discussing the state of the science and the impact of fine particulate matter on public health. This hearing record provides a sampling of that information offered by the parties for the Siting Board's review. Preliminarily, it can be stated that based upon review of the currently available scientific literature, the parties do not dispute that fine particulate matter can have adverse health impacts.

The research literature describes these adverse impacts as including decreased lung function, more frequent asthma symptoms, increased instances of asthma and heart attacks, and increased emergency room and hospital admissions. Fine particles can bypass the defensive mechanisms protecting the lung, become lodged in the lung, and cause health problems. Fine particulate air pollution and ozone are associated with increased cardiovascular events.

[51] Tr. 2498.

Long-term exposure to combustion-related fine particulate air pollution is an important environmental risk factor for cardiopulmonary and lung cancer mortality. The harmful effects of elevation of ambient concentrations of particulate matter are well-documented in studies of hospital admissions and emergency department visits for respiratory diseases. However, although numerous epidemiological studies have found associations between ambient concentrations of fine particulate matter and instances of changes in respiratory endpoints, these associations vary in strength.

While increased levels of ambient fine particulate matter are associated with increased risks, definitive conclusions attributing health effects to specific components of fine particulate matter cannot be drawn; the literature has not identified a threshold concentration below which no effects are observed. Attributing health effects to specific components of fine particulate matter is tentative. The magnitude of the estimates of incremental increases in risk varies, and the risk estimates are based upon relatively large concentrations of fine particulate matter.

B. Personal Exposure Risks

In setting an urban/regional scale NAAQS for $PM_{2.5}$, the federal Environmental Protection Agency (EPA) rejected arguments that "epidemiological studies must use personal exposure monitoring to be considered for regulatory purposes."[52] EPA noted that its panels of independent scientific experts, through the years and again in 1997, endorsed general PM standards based primarily on the results of community epidemiological studies.[53]

Neither the record before us, nor the state of scientific understanding of health effects and risks associated

[52] 62 Fed. Reg. 38659.

[53] 62 Fed. Reg. 38659.

with $PM_{2.5}$ emissions generally, provides a basis for any determinations about the predictable and probable impacts on sub-populations within the community-wide population of $PM_{2.5}$ emissions at the levels expected from the proposed facility. The testimonies of SHARED witness Berlin and KEDC witness Green provide general statements on the topic but do not support specific findings.

iii. Fine Particulates and the Proposed Facility

A. Concentrations in the Vicinity

DEC Staff's ongoing effort in designing and implementing a $PM_{2.5}$ monitoring network in New York is a necessary component in understanding the local and regional levels of $PM_{2.5}$ in the state. Given the ongoing nature of such efforts, the measured concentration levels believed to be representative of concentrations in the area of the facility are preliminary, based upon the information collected to date. These measured concentration levels are not sufficient to determine the final areas of attainment and non-attainment for $PM_{2.5}$ that will be designated by DEC and EPA after the full three years' data have been collected.

DEC Staff's June 28, 2002 filing reports that the range of data collected to date from the monitoring network varies over the relevant monitoring sites in this Long Island area, from a quarterly average low of 11.23 $\mu g/m^3$ at Hempstead-Lawrence High School to a quarterly average high of 14.04 $\mu g/m^3$ at the Roslyn Heights monitoring station.[54] Specifically, the ranges of concentrations recorded at monitors relatively near to the proposed facility, namely the Babylon monitoring station, vary from a quarterly average low of 12.95 $\mu g/m^3$ to a high of 13.02 $\mu g/m^3$. These variations were anticipated when the decision was made to establish the requirement that three full years'

[54] Exhibit 81, LS-3.

monitoring data be obtained. The averaging assumes that levels will vary over time and it is the average concentrations in an area that are critical with respect to protecting public health.

B. Attainment/Non-Attainment Status

The development of an EPA-approved monitoring plan based upon data for three full years is critical to determining the ambient concentrations in the area of the proposed facility, as well as the significance of those concentrations.[55]

As of June 28, 2002, DEC Staff had released monitoring data for 2000 and all four quarters of 2001 for most sites on Long Island.[56] KEDC took the position that the relevant measure of ambient air quality, for purposes of this proceeding, would be derived from data collected at the Babylon FRM monitor. In 2000 and in 2001, neither the annual average NAAQS of 15 $\mu g/m^3$ nor the 24-hour NAAQS of 65 $\mu g/m^3$ was exceeded at the Babylon monitor.[57] DEC Staff agrees with KEDC's analysis, reiterating the proviso that data for the full three years will not be available until the first quarter of 2003 (when validated data for the year 2002 become available), and thus, any determinations of standards compliance are premature.[58] DEC Staff did not require a $PM_{2.5}$ cumulative impact analysis both because no Article X Siting Board has required it and at present technical limitations exist on modeling incremental impacts from one source.[59] Moreover, DEC Staff's proviso makes clear that substantial uncertainty remains about the significance of the $PM_{2.5}$ levels in the area of the proposed facility.

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[55] The plan would include the installation of monitors meeting EPA's detailed specifications ("federal reference method" or "FRM" monitors).

[56] Exhibit 81, LS-3.

[57] Exhibit 81, LS-3.

[58] Tr. 2486.

[59] Tr. 2513-2514.

KEDC witness Main testified that the project's cumulative impacts of PM_{10} (now assumed to be $PM_{2.5}$) should be added to the $PM_{2.5}$ background information from the monitor (12.8 $\mu g/m^3$ + 1.9 $\mu g/m^3$ = 14.7 $\mu g/m^3$), which is less than the NAAQS (15 $\mu g/m^3$).[60]

In contrast to the positions of DEC Staff and KEDC, SHARED witness Rasor calculated an exceedance of the annual $PM_{2.5}$ standard, using an observed background concentration of 13.8 $\mu g/m^3$ (from KEDC's April 4, 2002 report) and adding this value to the 1.9 $\mu g/m^3$ maximum PM_{10} (as a surrogate for $PM_{2.5}$), arriving at a value of 15.7 $\mu g/m^3$. However, as DEC Staff observed:

> [B]oth of the concentrations used in this derivation are inappropriate. First, as noted by Ms. Rasor, the 13.8 $\mu g/m^3$ concentration represents an average of only three quarters of data for the year 2001 from the Babylon monitor and is clearly inappropriate for the determination of a calendar year average value. The correct annual average values for the Briarcliffe and Babylon monitors are provided in [Exhibit 81, LS-3] of my direct testimony and average 12.4 and 12.8 $\mu g/m^3$, respectively, for the two calendar years of available data. With respect to the maximum 1.9 $\mu g/m^3$ PM_{10} impact, Ms. Rasor has apparently not reviewed the modeling files which provide details on the location of this impact and contributing sources. . . . A review of the computer files indicates that the 1.9 $\mu g/m^3$ impact is due exclusively to the sources modeled at 110 Sand Company with zero contribution from the Spagnoli Road project. Furthermore, the impact occurs on the property of 110 Sand and, therefore, based on EPA's definition at 40 CFR 50.1(e), does not constitute ambient air to which the public has access and therefore the ambient air standards are not applicable. The maximum modeled annual concentrations off the 110 Sand property (which is still controlled by that facility's operation) is less than 1.5 $\mu g/m^3$ and, thus, no numerical "exceedances" of the [NAAQS] standard are indicated.[61]

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[60] Tr. 2226-2227.

[61] Tr. 2503.

C. Assessment of the Proposed Facility's Impacts

While an extensive record has been developed on the nature of $PM_{2.5}$ and its impacts on public health, it is clear that much about $PM_{2.5}$ remains unknown. More scientific research on the composition, transport, fate, and other impacts of $PM_{2.5}$ is needed.

The record also reveals that the ability to define clearly the chemical composition of $PM_{2.5}$ and to determine and assess the $PM_{2.5}$ levels in a specific geographic area, such as the area where the proposed facility would be located, is currently an inexact science. Empirical information gathered by DEC Staff on the chemical composition of $PM_{2.5}$, differs in many respects from EPA's initial estimates and illustrates the state of continuing development of knowledge on $PM_{2.5}$.

Additionally, as noted earlier, there is nothing in the record that provides certainty whether the potential $PM_{2.5}$ emissions from the proposed facility would be in violation of the NAAQS. In addition, DEC Staff believes any discussion about what measurements or monitors would be relevant to a determination of "attainment" or "non-attainment" areas for $PM_{2.5}$ in the vicinity of the project is premature.

Finally, both DEC and EPA recognize that there are currently no tools to calculate emissions of $PM_{2.5}$ and related precursors and project ambient air quality impacts, nor are there dispersion models available to estimate concentrations of $PM_{2.5}$ resulting from the emissions of a single source.

However, despite the uncertainty surrounding the assessment of $PM_{2.5}$ impacts, EPA has established NAAQS for $PM_{2.5}$ that are health-based. The NAAQS reflect the best and most tested method for assessing the significance of $PM_{2.5}$ currently available. EPA established the annual NAAQS for $PM_{2.5}$ of 15 $\mu g/m^3$ after determining that the annual mean $PM_{2.5}$ concentrations in the epidemiological studies considered most probative ranged between 16 $\mu g/m^3$ and 21 $\mu g/m^3$. In other words, the NAAQS was established

with an adequate margin of public health safety. Thus, an assessment of a proposed facility's emissions relative to ambient concentrations of pollutants and in comparison to the NAAQS is relevant to the Siting Board's findings regarding the facility's predictable adverse and beneficial effects on the normal environment and ecology, public health and safety, and air quality.[62]

The record does not contain any probative evidence showing a physical causal connection between the proposed facility's projected emissions and specific probable and predictable adverse impacts. The record shows that, based upon the current state of science, DEC Staff and DOH Staff, agencies with expertise in this field, conclude that this facility's relatively small contributions of $PM_{2.5}$ emissions should be deemed to be insignificant to public health. Noting that the proposed facility's maximum 24-hour and annual average contributions of $PM_{2.5}$ would be about 4.98 $\mu g/m^3$ and 0.5 $\mu g/m^3$, DEC Staff witness Sedefian testified that "[t]hese maxima are predicted to occur within 400 [meters] of the stack location, due southeast and northeast directions for the 24 hour and annual impacts, respectively. . . . It is noteworthy that when EPA revised the particulate matter standard in 1987 from Total Suspended Particulates (TSP) to PM_{10}, it retained the TSP significance levels of 5 $\mu g/m^3$ and 1 $\mu g/m^3$ for the 24 hour and annual averages, respectively. If these levels are also used to determine the significance of the project's $PM_{2.5}$ impacts, then the maximum worst case projected $PM_{2.5}$ levels of 4.98 $\mu g/m^3$ and 0.5 $\mu g/m^3$ are below significance."[63]

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[62] PSL §168(2)(b).

[63] Tr. 2492-2493.

8. Recommended Findings

With respect to air quality, the record demonstrates that the Siting Board cab find that the proposed facility would minimize adverse environmental impacts, as required by PSL §168(2)(c)(i), and that the proposed facility is compatible with the public health and safety pursuant to PSL §168(2)(c)(ii). Moreover, the record further demonstrates that the Siting Board can find that the proposed facility would not emit any pollutants in contravention of applicable air emission control requirements or air quality standards, as required by PSL §168(2)(c)(iv).

B. Water Resources

1. Introduction

Under Article X, the Siting Board must make findings specifically with regard to the impact of construction and operation of the facility on water resources and aquatic wildlife.[64] Generally, these findings subsume compliance with a number of federal and state law and regulations. This part of the recommended decision begins with a brief description of the proposed facility's water needs, followed by discussions of the wastewater and storm water that would be discharged from the proposed facility. Storm water discharges are regulated pursuant to the federal CWA and, as explained above, the Siting Board has relied in the past on the DEC Commissioner's decision to issue

[64] Applicable here are the required findings on the nature of the probable "adverse and beneficial effects on ". . .water quality," (PSL §168(2)(b); and the required finding that the facility "minimizes adverse environmental impacts, considering the state of available technology . . . with respect to . . . fish and wildlife . . . and other pertinent considerations" (PSL §168(2)(c)(i)), and that the facility "will not discharge any effluent that will be in contravention of the standards adopted by [DEC], or in case no classification has been made of the receiving waters associated with the facility, will no discharge any effluent that will be unduly injurious to the propagation and protection of fish and wildlife,. . ." (PSL §168(2)(c)(iii)).

permits as evidence that impacts from storm water discharges have been minimized. The concluding discussion addresses potential impacts to groundwater.

2. Project Water Requirements

All water used at the proposed facility would be purchased from the South Huntington Water District public water supply system and would be delivered through an existing 12-inch water supply line adjacent to the project site.[65] On average, the proposed facility would use 29 gallons per minute (gpm) during fall, winter and spring operations (without inlet air cooling) and approximately 54 gpm during summer operations (with inlet air cooling). The proposed facility's maximum water use would be 0.078 million gallons per day (gpd).[66] The facility's annual average total water demand would be 49,680 gpd. The major water uses would be for power production and potable water.

High quality (demineralized) water would be required for HRSG makeup, inlet air cooler makeup (during inlet air cooling), HRSG washes and on-line and off-line compressor washes to limit scale formation and corrosion of internal system components. Demineralized water would be stored on site for subsequent use in a 500,000 gallon demineralized storage tank.

On average, the proposed facility would discharge 17 gpm to the Bergen Point Sewage Treatment Plant. The proposed facility would minimize adverse water-related impacts through the use of a closed-loop, air-cooled condensing system for cooling purposes.

[65] Exhibit 1, §7.1.

[66] Exhibit 1, §§7.1 and 7.1.4.

3. The Federal Clean Water Act and ECL Article 17

The purpose of the Clean Water Act (CWA)[67] is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."[68] To accomplish this goal, the CWA authorizes the development of national water quality standards and establishes a permit program referred to as the National Pollutant Discharge Elimination System (NPDES) program. The U.S. Environmental Protection Agency (EPA) administers the NPDES permit program. This program regulates the daily wastewater discharges from a facility.

The CWA also provides for the delegation of the national permit program to the states.[69] Under the delegation, EPA suspends its issuance of permits, but retains residual enforcement authority and may oppose the decision by a state to grant a permit. Since 1975, New York has had a federally approved permit program, established pursuant to ECL Article 17, Title 8,[70] to control wastewater and storm water discharges to the state's surface and ground waters. DEC administers the SPDES program, consistent with the requirements of the CWA.[71]

a. Discharges to Sewage Treatment Plant

As discussed above, all discharges from the proposed facility would be routed to the Bergen Point Sewage Treatment Plant. Therefore, because there would be no discharges to either surface water or groundwater, no SPDES permit is required.

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[67] 33 USC §§1251 to 1387, formally known as the Federal Water Pollution Control Act (FWPCA).

[68] 33 USC §1251(a).

[69] 33 USC §1342(b); 40 CFR Part 123.

[70] Water Pollution Control - State Pollutant Discharge Elimination System (SPDES).

[71] The regulations that implement the SPDES program are 6 NYCRR Parts 750-758.

b. Storm Water Management

KEDC does need an Industrial SPDES Permit from DEC for storm water runoff.[72] The applicant will maintain a permanent storm water collection and treatment system.[73] Prior to the start of construction, a "Storm Water Pollution Prevention and Erosion Control Plan" will be implemented. This plan details how storm water and storm surges will be managed. The plan minimizes contaminants and sediment loads released via storm water to the abutting surface water.

For operation, all storm water would be routed through a drainage system discharging to a refurbished infiltration basin located directly adjacent to the proposed facility's site. Because the refurbished infiltration basin (wider than deep) is not considered a Class V injection well (deeper than wide) as defined in EPA's Underground Injection Control Program (40 CFR 144.3), KEDC is not required to obtain an Underground Injection Control Permit from the EPA to discharge storm water from the secondary containment to the refurbished infiltration basin.

The draft SPDES permit for storm water management has been released, and the public review process is complete. The Siting Board can expect issuance of this permit without significant change.

4. Groundwater

The proposed facility would not use any groundwater for consumptive purposes. Potential impacts on groundwater would be limited to the construction of the proposed facility.[74]

For the temporary construction period, Best Management Practices (BMPs) including, but not limited to, silt fences, hay barriers, and temporary/permanent seeding would be implemented to

[72] Exhibit 1, §7.2.3.

[73] Exhibit 1, §7.5.1.

[74] Exhibit 1, §7.1.

ensure that run-off from construction areas is minimized and does not leave the proposed development site or affect neighboring properties. As required by Certificate Condition XII.4, KEDC will prepare a Storm Water Pollution Prevention Plan (SWPP Plan) for the construction of the proposed Facility that includes a monitoring and maintenance program.

5. Recommended Findings

Because the proposed facility would not use surface water for cooling, there will be no aquatic impacts such as entrainment and impingement. The applicant has agreed to measures to minimize impacts from storm water related to construction and from any spills from potential contaminants. Accordingly, the proposed facility would minimize adverse environmental impacts to aquatic resources of the state as required by PSL §168(2)(c)(i), and the proposed facility would be compatible with public health and safety pursuant to PSL §168(2)(c)(ii). The record demonstrates that the proposed facility would not contravene either any applicable water quality standards or be inconsistent with applicable regulations of DEC, as required by PSL §168(2)(c)(iii). And, pursuant to PSL §168(2)(d), the proposed facility would be designed to operate in compliance with applicable state and local laws and regulations related to water resources, as well as public health and safety.

C. Other Environmental Issues

1. Terrestrial Ecology

This section considers the potential environmental impacts associated with the construction of the proposed facility on plants and wildlife. The discussion identifies the applicable legal requirements and ecological resources, and then discusses the potential impacts to plants and wildlife.

a. Legal Requirements

Under PSL Article X, the Siting Board must make findings specifically with regard to the impact of construction and operation of the proposed facility on the environment, ecology and wildlife.[75] These findings subsume compliance with applicable state and federal laws and regulations related to the protection of (1) threatened or endangered plant and wildlife species,[76] (2) freshwater wetlands, and (3) coastal resources.

The federal Endangered Species Act protects certain species of plants and wildlife. ECL §11-0535 enables New York to enforce the endangered and threatened species lists maintained by the Secretary of the Interior, as well as New York's lists set forth in 6 NYCRR §182.6. A list of protected plants is provided in 6 NYCRR §193.3.

b. Ecological Resources

The proposed facility's site consists of a 31.7-acre parcel that was a sand mine until 1976. The terrain at the site is relatively flat with an average elevation of approximately 115 feet above mean sea level (MSL). A ridgeline with an elevation of approximately 155 feet above MSL rises along the southern property boundary. The site is covered with grass and light brush, except for areas used by KEDC's affiliates for excavation equipment training. Currently, two trailers are located at the

[75] Applicable here are the required findings on the nature of the probable adverse and beneficial effects on the normal environment, ecology, and wildlife (§168(2)(b)); and that the facility minimizes adverse environmental impacts with respect to wildlife" (§168(2)(c)(i)).

[76] 16 USC §§1531-1544 (U.S. Endangered Species Act), ECL §9-1503 (Removal of Protected Plants), ECL §11-0535 (Endangered and Threatened Species), and implementing regulations outlined, respectively, in 50 CFR Part 17 (Endangered and Threatened Wildlife and Plants), 6 NYCRR Part 193 (Trees and Plants), and 6 NYCRR Part 182 (Endangered and Threatened Species of Fish and Wildlife; Species of Special Concern).

site for use as offices and for training activities. A utility pole training area has installed utility poles for practice climbing. An equipment yard is used for training operators of heavy equipment.

The application reports that no endangered, threatened, or rare species of wildlife have been documented to occur on the proposed facility's site, nor were any identified during site inspections.[77] Facility structures would be located on the more developed and altered areas of the site. Successional old field and successional shrubland plant communities that would be affected by construction are located on formerly heavily-disturbed acreage and are neither unusual or particulary diverse. The portion of the site having successional shrubland with the greatest vertical structural diversity would lie within the setback from the site's southern boundary.[78]

c. Impacts to Wetlands

The application reports that the proposed facility's site and the routes of the electric and gas interconnections were assessed for wetland conditions pursuant to the U.S. Army Corps of Engineers (ACOE) Wetlands Delineation Manual. The manual uses three parameters to identify and delineate wetland boundaries: (i) evidence of wetland hydrology; (ii) presence of hydric soils; and (iii) predominance of hydrophytic plant species.[79]

No wetlands were identified by KEDC within or adjacent to the site during site inspections, nor were any identifed within the interconnection routes. KEDC noted that there are small isolated depressions containing common reed and other vegetation, including upland plant species, within the northern

[77] Exhibit 1, §9.1.

[78] Exhibit 1, §9.2.2.

[79] Exhibit 1, §9.1.

portion of the site, but it found no indicators of wetland hydrology or hydric soils.[80]

At KEDC's request, ACOE conducted an inspection of the proposed facility's site on July 17, 2002 to determine whether it contains any federal jurisdictional wetlands. ACOE reported that the site is not connected to jurisdictional waters of the United States and lacks both hydric soils and wetland hydrology according to criteria established in the ACOE Manual.[81]

DEC has determined that there are no state-regulated wetlands at the proposed facility's site. The New York State Freshwater Wetlands Map does not show any wetlands in the area.[82] Following a field visit to the site on July 30, 2002, DEC witness Lorence found that "[a]lthough a few wetland indicator plants were observed to be sparsely scattered in some small portions of the property, the vegetation on the property was not configured in a way that would establish a plant community that would warrant mapping pursuant to Article 24 of the ECL." Mr. Lorence went on to observe that "the highest level of any perched water was a minimum of 5'9" below the ground surface," and that "it would be virtually impossible for a freshwater wetland plant community to exist at this location." Mr. Lorence concluded that the "site does not contain freshwater wetlands as described by [ECL] Article 24."[83]

SHARED witness Bontje submitted the only testimony suggesting a contrary conclusion. Mr. Bontje testified that "my conclusions are that areas with the characteristics of freshwater wetlands and potential endangered species related to vernal systems occur on the Spagnoli site." Mr. Bontje asserted in

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[80] Exhibit 1, §9.3.1.

[81] Exhibit 37.

[82] Exhibit 35. Under State law, "freshwater wetlands" are defined as "lands and waters of the state as shown on the freshwater wetlands map" [ECL § 24-0107(1)].

[83] Exhibit 50.

addition that "[a]lthough it appears that a portion of the Spagnoli power plant development footprint would result in the placement of fill in these wetland areas, no acknowledgement of this potential resource was provided in the applicant's submissions and no delineation has been conducted."[84] In response to information requests, Mr. Bontje stated that "the wetland indicator species I found were on the site's southwestern areas and along the south-central to southeastern border,"[85] and that "it appears very likely that some wetland fill will occur on the sites south-central to southeastern boundary and perhaps to the southwest of a location staked on site as 'stack.'"[86]

Even if it is assumed, against the weight of the evidence, that there are state-jurisdictional wetlands on the proposed facility's 31.7-acre site, it does not follow that development of the proposed facility would adversely affect them. Within the main power block area, there would be 86,279 cubic yards of cut and only 205 cubic yards of fill.[87] KEDC's plan is to lower the base elevation of the plant itself from 115 feet above MSL to 110 feet above MSL and to grade the cut material to the west to raise the elevation at that part of the site to 120 feet above MSL.[88] Given Mr. Bontje's description of the location of "wetland indicator species," the worst case of potential impact could be avoided simply by changing the site's grading.[89]

We find, however, that Mr. Bontje's testimony is unconvincing and insufficient to overcome the weight of the

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[84] Tr. 1658; see also Tr. 1699.

[85] Exhibit 43.

[86] Exhibit 56.

[87] Exhibit 1, §6.4.

[88] Tr. 1016.

[89] KEDC plans to undertake a geotechnical investigation before building foundations are designed (Exhibit 1, §6.2); the investigation will gather additional site-specific information regarding subsurface conditions, load bearing capacities and depth to groundwater (Exhibit 1, §6.4).

contrary evidence. Indeed, there is reason to question whether SHARED is entirely convinced by that testimony. SHARED's cross-examination of KEDC witnesses Corrado and Wolfgang suggested some interest in having the applicant construct "a berm, or some other more topographic feature that might shield the view of the facility from the western boundary edge."[90] SHARED is also pursuing a visual impact assessment of a sound attenuation barrier--a wall--that would be constructed along a portion of the site's western boundary pursuant to the joint stipulations. Either a berm or a wall, or both, would give rise to the risk of "the placement of fill in . . . wetland areas," were one of Mr. Bontje's site assessments correct,[91] but SHARED has yet to make that argument. Moreover, one of Mr. Bontje's other locations of potential wetlands coincides in large part with the portion of the site that is zoned for residential use.[92] If that is the case, SHARED's professed concerns about adverse impacts on wetlands would contradict its arguments against construction of the proposed facility based on the fact that part of the site is zoned for residential use.

We agree with DEC Staff's view that although there is no reason to question Mr. Bontje's observations, "[t]o contradict the substantial evidence offered during [KEDC's] direct case, SHARED needed to affirmatively demonstrate that greater than 50% of the dominant species were obligate, facultative wetland or facultative plants and for federal criteria, that hydric soils and sufficient hydrology exists on the site to sustain wetlands."[93] We concur as well with DEC Staff's conclusion that because DEC witness Lorence is

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[90] Tr. 1015.

[91] Tr. 1794-1795; cf. Exhibits 43 and 56.

[92] Exhibit 1, Figure 4-16; Exhibit 43.

[93] DEC Staff's Initial Brief, p. 9.

> a representative of the State agency responsible for management of freshwater wetlands, Mr. Lorence's opinion was persuasive, was based on sound Department policy and should be given due deference. The fact that SHARED argues so strenuously that Spagnoli Road contains wetlands worthy of state protection falls flat since they failed to ever contact the DEC about a map amendment and or even request that DEC make a jurisdictional determination for Spagnoli Road despite the fact that DEC action to protect state wetlands is indispensable. (See also, Tr. p. 1775, line 20) SHARED insinuates on cross-examination that the official freshwater wetland map is not dispositive of this issue since mapping can be conducted in the field[;] however, no field mapping was [ever] requested by SHARED. Nevertheless, even if such a request was made, the Department has made clear that the site is not worthy of mapping under ECL Article 24. (Tr. p.1800)[94]

On the basis of the foregoing, we conclude that the Siting Board can find that the proposed facility will have no adverse impact on wetlands.

d. Recommended Findings

The proposed facility will not have any adverse ecological impacts because it would not disturb wetlands, wildlife habitats, forests, or other natural areas. In addition, the proposed facility would not adversely affect any endangered or threatened plant or animal species. Therefore, the proposed facility would minimize adverse environmental impacts considering the interest of the state with respect to forest, parks, and wildlife in compliance with PSL §168(2)(c)(i).

Furthermore, construction and operation of the proposed facility would have no adverse impacts on resources regulated by state and local laws that protect biological resources and vegetation, such as the Fish and Wildlife Law, the Natural Heritage Program, the Listing of Protected Plants, and the federal Endangered Species Act. Pursuant to PSL §168(2)(d), the

[94] Id., pp. 13-14.

proposed facility would comply with applicable state and local environmental laws and regulations.

2. Soils, Geology, Seismology and Tsunami Occurrence

a. Application and Stipulation

Section 6 of the application (Exhibit 1) describes the existing characteristics of the soils, geology, and seismology of the site, and evaluates the potential impacts and design considerations associated with those characteristics. Although geological and other earth resource characteristics do not generally trigger specific regulatory measures, the Siting Board is required to find whether the proposed facility would minimize environmental impacts with respect to soils, geology and seismology.[95]

The soils at the proposed facility's site consist of sand and gravel, silty sands, and clayey sands. The soils can support foundation loads from 1.0 to 1.5 tons per square foot. Additional soil characteristics will be determined during a geotechnical investigation conduct before the building foundations are designed. The applicant does not expect to engage in dewatering of perched water, but will be prepared to direct it to the adjacent detention basin pursuant to the SWPP Plan.

The project site is located within Seismic Zone C, which applies to a region of intermediate seismic hazard. The region is an area of low earthquake frequency. Nevertheless, the proposed facility will be designed to withstand the expected effects of a seismic event with an effective peak acceleration of Z = 0.15 g.[96]

A tsunami is considered to be a low risk phenomenon along the east coast of the United States. The average elevation

[95] PSL §168(2)(b), and 16 NYCRR §1001.3(b).

[96] Exhibit 1, §6.5.1.

of the proposed facility's site is 115 feet above MSL, and is located several miles inland from the Long Island shoreline. Therefore, tsunamis are not expected to be a concern for the proposed facility.

b. Recommended Findings

As conditioned, the proposed facility would minimize adverse environmental impacts and would be compatible with public health and safety as required by PSL §168(2)(c)(ii). In addition, the record shows that the proposed facility is designed to operate in compliance with applicable state and local laws and regulations concerning the environment, and public health and safety as required by PSL §168(2)(d).

3. Visual and Cultural Resources

PSL Article X requires the Siting Board to find that the proposed facility "minimizes adverse environmental impacts, considering the state of available technology, . . . the interest of the state with respect to aesthetics, preservation of historic sites, . . . and other pertinent considerations."[97] In addition, New York's Parks, Recreation and Historic Preservation Law (PRHPL) includes provisions relating to approval of a private project by a state agency, "if it appears that any aspect of the project may or will cause any change, beneficial or adverse, in the quality of any historic, architectural, archeological, or cultural property that is listed on the national register of historic places or property listed on the state register, or is determined to be eligible to be listed on the state register by the commissioner [of Parks, Recreation, and Historic Preservation.]"[98] The proposed facility's visual impacts and the

[97] PSL §168(2)(c)(i).

[98] PRHPL §14.09.

applicant's proposals to minimize potential adverse impacts are discussed in turn.

a. Setting

Land uses at locations neighboring the proposed facility's site include commercial and industrial buildings, a sand mine and C&D debris landfill, an asphalt plant, the Town of Oyster Bay's landfill and retired incinerator, high-voltage overhead electric transmission lines, the SUNY campus, a rifle range, a Postal Service distribution facility, an electrical substation, and a cement plant.[99] The nearest permanent residence would be approximately 3,800 feet from the proposed facility. Tall structures visible from the project site (and neighboring properties) include transmission line towers standing 175 feet above grade and as high as 285 feet above MSL, exhaust stacks at the retired Town of Oyster Bay incinerator, and a sand elevator. When capped, the elevation of the C&D landfill will be 286 feet above MSL. Development of the proposed facility would result in the introduction of an exhaust stack rising to 305 feet above MSL (195 feet above grade), the HRSG (110 feet above grade), the air-cooled condenser (90 feet above grade), and the turbine building (75 feet above grade).[100]

b. Visual Impacts

The parties agree that construction of the proposed facility would result in visual impacts at certain viewpoints in

[99] Town of Huntington's Reply Brief, pp. 2-3.

[100] Exhibit 1, §4.6.1 and Figure 4-2b; Exhibit 4; Exhibits 22-24 and 57; and Tr. 897, 1458, and 1911.

the near field.[101] However, there has been no substantive contradiction of KEDC's conclusion that there would be no significant adverse impacts.[102] Although SHARED witnesses Bristol and Allen offered criticisms of the content of KEDC's application,[103] the academic credentials of the analysts who performed the applicant's visual impact assessment,[104] and the procedures the analysts employed,[105] the witnesses, when questioned directly, did not identify any visually critical receptors that were not addressed in the application.[106] While expressing concern about the potential for illumination of night-time exhaust stack plumes, the witnesses (as of the date they were examined) had not conducted night visits to the properties of the three neighboring businesses that form the core of SHARED (Arrow Electronics, Gilbert Displays, and Marchon Eyewear). The witnesses had not discussed visual impacts with persons in charge of Bethpage State Park's landmark Black Golf Course or SUNY. And the witnesses were unaware that the state Office of Parks, Recreation and Historic Preservation (OPRHP) does not oppose

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[101] For purposes of this discussion, "visual impact occurs when the mitigating effects of perspective do not reduce the visibility of an object to insignificant levels. Beauty plays no role in this concept. A visual impact may also be considered in the context of contrast." DEC Program Policy "Assessing and Mitigating Visual Impacts" (DEC Visual Policy), p. 10.

[102] For purposes of this discussion, "significant adverse visual impact" equates to the definition of "aesthetic impact" in the DEC Visual Policy (p. 9): "Aesthetic impact occurs when there is a detrimental effect on the perceived beauty of a place or structure. Mere visibility, even startling visibility of a project proposal, should not be a threshold for decision making."

[103] See SHARED's Initial Brief, pp. 63-65 (concerning exhaust stack plume assessment, architectural and site design treatment, and landscape plan).

[104] Id., pp. 58-60.

[105] Id., pp. 61-62.

[106] Tr. 1087.

construction of the proposed facility and that the president of SUNY supports it.[107] In short, SHARED, the only active opponent of KEDC's proposal, has not introduced substantive evidence showing that adverse visual impacts would result from the facility's construction and operation.

KEDC prepared two viewshed maps, produced by computer modeling, showing the visibility of the proposed facility after taking into account both terrain alone and the screening effect of vegetation and development.[108] KEDC supplemented the computer modeling with field observations of a six-foot diameter balloon tethered at the proposed facility's site and rising to the height of the exhaust stack. KEDC's analysts visited numerous viewpoints, especially within a three-mile radius of the site, to confirm the accuracy of the viewshed mapping. KEDC used viewshed mapping to determine sensitive viewing areas and locations of viewer groups in the vicinity of the proposed facility. KEDC studied recreational areas, residences, businesses, cultural and historic sites and resources, travelers' viewpoints, and potential public vantage points.[109] KEDC's studies identified 53 viewpoints that required review, and, after determining the proposed facility's visibility, selected eight viewpoints for detailed assessment.[110]

Computerized visualizations of the proposed facility were prepared for those eight viewpoints. At one of the viewpoints, the historically significant M. Baylis House, the proposed facility would not be visible. Our assessment of the

[107] Tr. 1087-1092.

[108] Exhibit 1, Figures 8-4a and 8-4b.

[109] Exhibit 1, §8.4.1.

[110] Exhibit 1, §8.4.3.

other visualizations,[111] taking into account the projected scientific perspective,[112] is as follows:

- SUNY campus, Thompson Hall. This historically significant building is located at the center of the campus. The proposed facility would be to the north of the campus, and the top of proposed facility's stack and cooling structure would be visible above a treeline. From Thompson Hall, the visible elements would be framed by trees, buildings, and other man-made structures. The visibility of the proposed facility from this viewpoint would not be significant.[113]

- Bethpage State Park, Black Golf Course. The visualization from the tee area of the 9th hole shows that the facility's stack would be visible above a treeline, albeit at some distance, and that the cooling structure would not be completely screened by the trees in leaf-off seasons. One of the electric transmission line towers would be much nearer than the proposed facility to an observor from this viewpoint, and the visible elements of the facility would be framed by trees in the foreground. Golfers would face away from the facility when teeing off. Although visibility of the facility as depicted in the application would not be significant,[114] KEDC will consult with DPS Staff, Bethpage State Park, and SUNY and propose an off-site planting plan to screen views of the facility from the 8th and 9th tees.[115]

- Bethpage State Park, Bridle Trail. Visibility of the proposed facility from this viewpoint would be significant, albeit at a distance. The facility would be separated from the park by an open field on the SUNY campus and would be mostly unscreened. KEDC will consult with DPS Staff, Bethpage State Park, and SUNY and propose an off-site planting plan to

[111] Exhibit 1, Figures 8-6a through 8-6f.

[112] DEC Visual Policy (p. 10) defines "scientific perspective" as the "reduction in the apparent size of objects as the distance from the observor increases."

[113] Exhibit 10, ACD-1.

[114] Id.

[115] Proposed Condition XI.4.ii.

screen views of the facility from this viewpoint.[116]

- Long Island National Cemetery. The proposed facility's stack and cooling structure would be visible, from a great distance, through a small gap in a treeline. This visibility would not be significant.[117]

- Long Island Expressway, Exit 49S Access Road. From this viewpoint, the location at which the expressway would be closest to the proposed facility, the top of the stack would be visible above a treeline screening the rest of the facility. This visibility would not be significant.

- Hilton Hotel, Route 110 and Spagnoli Road. All tall components of the facility would be significantly visible from this near-field viewpoint located to the east. The facility would provide moderate scale contrast with other structures visible from this viewpoint. KEDC proposes "employing architectural treatment and façade materials, including neutral paint colors and non-reflective architectural materials, to enhance visual appearance and compatibility."[118] The depiction of the facility in the visualization from this viewpoint shows minimal color contrast with existing buildings.

- Spagnoli Road near Hub Drive. All tall components of the facility would be significantly visible from this near-field viewpoint located to the west. The facility would provide moderate scale contrast with other structures visible from this viewpoint. The depiction of the facility in the visualization from this viewpoint shows minimal color contrast with existing buildings.

KEDC prepared two visual simulations of exhaust stack plumes from viewpoints at the Black Golf Course and Old Bethpage Village under conditions of worst case visibility, namely, daylight hours on a cloudless day. The applicant noted that visible exhaust plumes from combustion turbines are typically

[116] Id.

[117] Exhibit 10, ACD-1.

[118] KEDC's Initial Brief, p. 71.

wispy and translucent, and it estimated that climate conditions giving rise to potentially visible condensed vapor plumes would occur during 685 hours per year, or 8% of total annual hours. The applicant further estimated that conditions of worst case visibility would occur during 114 hours per year.

On brief, SHARED faults KEDC for not depicting stack plumes under non-worst-case conditions, arguing that KEDC's contention that the visibility of stack plumes in cloudy or rainy weather would not be significant is undocumented.[119] But later in the same brief, in an argument alleging adverse impacts on aviation safety, SHARED concedes that stack plumes "would not be visible except for an annual average of 141 hours."[120] We find no shortcomings in the applicant's assessment of stack plume visibility.

SHARED acknowledges that KEDC's exterior lighting would not illuminate nighttime plumes, but faults the applicant for not properly assessing illumination from off-site sources. KEDC points out in response that "SHARED's highlighting the extent of security lighting actually indicates the lack of population in the surrounding area at night; consequently, the significance of any visible nighttime plume is greatly diminished."[121]

SHARED argues generally that the verbal description of the architectural and site design treatment in the application is inadequate, and it objects to the fact that a landscape plan remains to be developed. In SHARED's view, "[t]he renderings in the Application are no more than conceptual drawings, and do not reflect the actual treatments that would be incorporated into the final design for the Proposed Facility or require Keyspan to design the facility in any particular way."[122] SHARED asserts

[119] SHARED's Initial Brief, p. 63.

[120] Id., p. 77.

[121] SHARED's Initial Brief, p. 44.

[122] Id., p. 65.

that final design plans should be submitted before the proposed facility is certificated.

KEDC and DPS Staff oppose SHARED's position. KEDC argues that it would be impractical to require detailed engineering and design work before certification, because such a requirement would make it more difficult and costly to develop design changes in response to proposals submitted during the Article X process. KEDC notes further that "[t]he precedent established in previous Article X proceedings, as articulated through numerous Siting Board decisions, affirms the use of conceptual design information for the assessment of potential impacts with the provision of final design information submitted through post-certificate compliance filings."[123] DPS Staff concurs, noting that the applicant has committed itself to implement the proposed design as depicted in the application. DPS Staff explains further that details such as architectural finish, surface treatments, and measures to maintain facility appearance will be submitted in compliance filings that are subject to review and comment.[124]

SHARED complains, finally, that there has been no visual impact assessment of the eight-foot to ten-foot sound attenuation barrier wall that the joint stipulations contemplate will be built near the western boundary of the proposed facility's site. DPS Staff responds that details about location, height, design, and architectural finish and surface treatments will be submitted in a compliance filing. DPS Staff goes on to point out that the visibility of such a wall should be no different from the visibility of a fence or wall installed for site access control or screening, a structure that is allowed by

[123] KEDC's Reply Brief, pp. 45-46.

[124] As noted by DPS Staff, SHARED should indicate to the Siting Board that it wishes to receive compliance filings [16 NYCRR §1003.3(c)].

zoning regulations and could be required by Town Law §198-12 but for PSL Article X.[125]

As KEDC and DPS Staff correctly point out, the examiners and the Siting Board can base a finding that construction and operation of a proposed facility will not result in significant adverse visual impacts on conceptual drawings, visual simulations, and certificate conditions. The post-certification compliance process assures either that conditions approved by the Siting Board are implemented, or that project revisions resulting in different visual impacts will be reviewed in additional hearings.[126]

c. Visibility Minimization Measures

KEDC and the parties to the joint stipulations have proposed several conditions whose implementation would minimize the visibility of the proposed facility. Those conditions require the following:

(1) The use of low-glare, neutral colored architectural materials.

(2) No use of signs or identification markings other than as required by Federal Aviation Administration (FAA) regulations or other safety regulations.

(3) A lighting plan that will include (a) measures to prevent off-site glare from exterior area lights by using full cut-off fixtures; (b) use of task-lighting; (c) a demonstration that illumination design conforms to worker safety requirements for work-area lighting while minimizing off-site lighting impacts; and (d) proper implementation of FAA lighting requirements.

(4) A landscaping plan that includes (a) tree planting and replacement specifications; (b) a requirement that trees planted in Town of

[125] DPS Staff's Reply Brief, p. 14.

[126] 16 NYCRR §1000.15.

Huntington street rights of way be selected from the Town's list of approved trees; (c) an off-site planting plan to screen views of the facility from the Bethpage State Park Black Golf Course and bridle path; (d) provision for elimination of existing, invasive Ailanthus vegetation from the site; and (e) consultations with the Long Island Power Authority (LIPA)[127] about vegetation maintenance and management near the electric transmission line.

d. Recommended Findings

The Siting Board can find that the proposed facility "minimizes adverse environmental impacts, considering the state of available technology, . . . the interest of the state with respect to aesthetics, preservation of historic sites, . . . and other pertinent considerations."[128] The proposed facility's potential visibility and effects on cultural resources, mitigated as described above, are minimal and would comply with the requirements of PSL Article X and other applicable laws and regulations.

D. Public Health and Safety

1. Traffic and Transportation

a. Surface Traffic

The record on surface traffic conditions and impacts consists solely of materials in the application, as this issue was not litigated. The application considers existing traffic conditions in the location of the proposed facility's site, primary access routes to and from the site area, and major

[127] It is recognized that the load-serving entity "LIPA" is a wholly-owned subsidiary corporation of the Long Island Power Authority, which is a governmental agency. However, the trustees of the Authority and the directors of the corporation are identical. Accordingly, this recommended decision refers to both entities, interchangeably, as "LIPA."

[128] PSL §168(2)(c)(i).

roadways and intersection likely to be used in facility-generated trips.[129]

Traffic generated by the peak construction workforce and material deliveries would not change any intersection's overall level of service and would not result in any significant traffic impacts, even with the conservative assumption that 50% of construction workers will arrive and depart during the peak morning and afternoon/evening roadway hours. Because all facility construction work would take place within the site, no significant disruption of traffic is anticipated as a result of that construction. All construction worker parking and equipment laydown areas would be provided on the site.

Construction of the underground electric transmission interconnection would take place in the Spagnoli Road and Route 110 rights of way. Construction along Spagnoli Road would require temporary closure of one eastbound lane, but Spagnoli Road is sufficiently wide to permit traffic to flow eastbound and westbound simultaneously, and to permit necessary turn movements at the intersection with Route 110, while the lane is closed. The Route 110 crossing would be installed using directional drilling, so there would be no disruption of traffic along Route 110. Construction within the Spagnoli Road and Route 110 rights of way would be performed in accordance with the Environmental Management and Construction Standards and Practices ("EM&CS&P"), and federal, state and local regulations. Traffic impacts during the construction period would be further minimized by scheduling any large truck deliveries during off-peak hours.

Traffic impacts associated with operation of the proposed facility would be negligible. Plant operations would require about 25 employees working three shifts to support continuous 24-hour operation of the facility. There would be no adverse traffic impacts from the transportation of hazardous

[129] Exhibit 1, §13.

materials, because few chemicals and hazardous materials would be required to support facility operations. Moreover, any potential traffic impacts attributable to facility-related parking needs would be minimized, because on-site parking would be provided for employees and visitors. Thus, the existing surface transportation infrastructure serving the facility would not be adversely affected by its operation.

b. Farmingdale Republic Airport

Before the Federal Aviation Administration (FAA), SHARED constituent Arrow Electronics contended that the proposed facility's exhaust stack and turbulence created by stack emissions would constitute a hazard to aviation, specifically, general (non-commercial) aviation traffic that includes a significant presence of student pilots using Farmingdale Republic Airport (hereinafter referred to by its FAA code "FRG"). After KEDC decided not to rely on liquid fuel as a back-up to the proposed facility's natural gas supply, it reduced the proposed height of its exhaust stack from 260 feet above grade to 195 feet above grade. FAA determined that the stack height reduction obviated any adjustment to FRG runway minimum approach altitudes, rejected the claim about a stack emission turbulence hazard, and admonished that pilots in command of student pilots are responsible for the students' safe operation of their aircraft. Accordingly, FAA issued a determination of no hazard (DNH). The DNH was upheld on discretionary review.[130]

SHARED has decided to continue pursuing, in this proceeding, the claim that the proposed facility's exhaust stack and stack emissions would constitute a hazard to aviation at FRG. KEDC argues in response that the Siting Board should defer to FAA's DNH. We agree with KEDC, and the remainder of this

[130] Exhibit 31, SY-2.

discussion explains, for the record, our recommendation that the Board defer to FAA's determination.

SHARED witness Gordon contended that the exhaust stack, which would be located 2.1 miles from the intersection of the two runways at FRG, could "[q]uite possibly" pose a hazard to aviation, "particularly if the cloud ceiling was low and a pilot decided to bend the rules and descended below pattern altitude in an effort to maintain ground contact to land or was operating under special flight rules."[131] This is an unacceptable rationale for denying certification to the proposed facility. FAA's federal aviation regulations (FARs) require, from private pilots, "[r]ecognition of critical weather situations from the ground and in flight, windshear avoidance, and the procurement and use of aeronautical weather reports and forecasts."[132] The presence of student pilots does not change this requirement.[133]

SHARED contends in addition that planes taking off from or descending to FRG might pass through stack plumes that would create an oxygen-deficient condition leading to engine failure and crashes. It is not apparent whether this contention was raised by Arrow Electronics in the FAA review, but we presume it was considered by FAA Staff.[134] There is no evidence on the record in this proceeding that such crashes have ever occurred.[135] If SHARED has any evidence that such a hazard might result from operation of the proposed facility, it may bring this evidence to the attention of FAA.[136] In the alternative, SHARED could ask FAA

[131] Tr. 1448 (emphasis supplied).

[132] FAR [14 CFR §] 61.105.

[133] FAA Order 8700.1, Volume 2, p. 11-5.

[134] See FAA Order 7400.2E, Chapter 7, Section 1, ¶7-1-2.

[135] Tr. 1438-1441.

[136] FAA Order 7400.2E, Chapter 7, Section 3, ¶7-3-1.

to enter additional information on its Form 5010-1 (Airport Master Record) for FRG.[137]

On the basis of the best evidence before us, FAA's DNH, we conclude that construction and operation of the proposed facility would not result in a hazard to operations at FRG or any other airport in the vicinity of the facility.

2. Noise

The pre-application stipulations entered into by the applicant and various parties, including DPS Staff, required the applicant to install noise attenuation equipment and materials, and to take other measures to limit the noise impacts of the proposed facility's construction and operation at nearby sensitive receptors. The receptors identified in the stipulations are Drexel Avenue, Point of Woods Road, Fairway Drive, Carnation Drive, the SUNY campus, Ruland Road, and Bethpage State Park.[138] The applicant later added an assessment of impacts at the ESA hotel on Spagnoli Road.

In the application, KEDC stated that it would reduce the proposed facility's operating noise by installing tuned HRSG stack silencers; a turbine air inlet silencer; enclosures of condensate pumps, boiler water feed pumps, the combustion turbine, the HRSG, and the gas compressor; an acoustically treated turbine building; a lower-noise cooling tower; and safety valve silencers. Later in the proceeding, KEDC committed itself to installing a fourth barrier wall to reduce transformer noise; a low-noise transformer; "stealth" blades in the air-cooled condenser; and a noise barrier wall near the western boundary of the facility site. To reduce construction-period noise, KEDC

[137] The current Form 5010-1 for FRG includes remarks warning about (1) numerous flocks of birds on and in the vicinity of the airport; (2) avoiding a noise-sensitive area one mile northwest of the airport; and (3) not confusing FRG with the airfield at Bethpage.

[138] Exhibit 1, Appendix 2B, p. 26.

would engage in proper maintenance of, and install proper mufflers on, construction equipment, and would use a temporary vent silencer on the steam blow vent during pipe clean-out. KEDC has also stated that pile driving, contemplated in the application, would not occur during construction.[139]

The pre-application stipulations provided that the applicant would use computer modeling of major noise sources at the proposed facility to determine noise impacts. The stipulations required KEDC to use the NOISECALC computer model developed by DPS, but did not limit the applicant to using only that model.[140] The stipulations contemplated that "noise modeling will be used as a design tool in order to determine the degree of silencing required on individual noise sources within the Facility." Thus, the stipulations continued, "several modeling runs will likely be made, with noise control added as required, until the required design goals are achieved."[141]

The stipulations required KEDC to achieve a rating of "C" under the Composite Noise Rating (CNR) method[142] at the identified receptors. The CNR method assigns a sound impact rating by taking into account expected sound levels from the proposed facility, existing sound levels, the character of the noise, the duration of the noise, the time of day and year of the noise, and other factors. A "C" rating means that a listener at a receptor would have "no reaction although noise is noticeable."[143]

Before taking mitigation measures into account, KEDC's modeling suggested that the CNR rating at the nearest sensitive receptor, the SUNY campus, would be "F." With mitigation, a

[139] KEDC's Initial Brief, pp. 80-81.

[140] Exhibit 1, Appendix 2B, pp. 28-29.

[141] Exhibit 1, Appendix 2B, p. 29.

[142] The CNR method is described in Exhibit 25, AAS-3.

[143] Exhibit 1, Appendix 2B, p. 28.

rating of “C” was achieved, and the projected sound level would be 40 decibels on the A-weighted scale (dBA),[144] lower than the 42 dBA design goal for a “C” rating. The CNR ratings at the other receptors studied in the application would be “C” or better.[145] NOISECALC modeling for the additional receptor at the ESA hotel suggested a “D” rating, but KEDC contended that the modeling “did not account for any barrier effects, or other measures or factors that would result in lower noise levels at the [ESA hotel] than are presented in the application.”[146] On rebuttal, KEDC introduced a noise impact assessment based on the CadnaA computer model showing that CNR ratings at SUNY and Fairway Drive would be “C” and that the ratings at the other studied receptors, including the ESA hotel, would be “B” or “A.”[147] SHARED has objected to the applicant’s use of the CadnaA model, but the applicant’s witnesses explained that the difference between CadnaA and NOISECALC is that the former automatically takes into account the effects of buildings and structures on sound, while the NOISECALC model requires individual side calculations.[148]

In its direct case, SHARED presented testimony to the effect that there is an insufficient safety margin to assure a “C” rating at dormitories on the SUNY campus; that the rating at the ESA hotel would be “D”; and that “noise levels from pile driving during construction would be greater than reported by the

[144] Sound pressure is measured in decibels (dB). The A-weighted scale gives greater weight to sound frequencies to which the human ear is most sensitive, namely, 20 to 20,000 Hz [DEC Program Policy, “Assessing and Mitigating Noise Impacts” (DEC Noise Policy), p. 7].

[145] Exhibit 1, §11.5. The acoustic design goals at the studied receptors, set forth in Exhibit 1, Table 11-3, are proposed in the joint stipulations as certificate requirements.

[146] Tr. 1336.

[147] Exhibit 25.

[148] Tr. 1369-1370.

Applicant."[149] KEDC has convincingly answered the first two contentions and is no longer planning on using pile drivers during construction.

On brief, SHARED raises two new arguments. SHARED notes that even if CNR "C" ratings can be achieved at the studied receptors, "those locations are more distant from the Proposed Facility than the property line or the nearest office buildings." In SHARED's view, the noise impact objective established in the pre-application stipulations "fails to provide any protection to the neighboring commercial landowners."[150]

SHARED's allegation is unsupported. The record shows that noise generated by the proposed facility would, at worst, exceed existing daytime average ("L_{eq}")noise levels at points along the boundary of the site nearest to SHARED constituents Arrow Electronics, Gilbert Displays, and Marchon Eyewear by 4 dBA.[151] Increases in noise levels from three to six dB would result in adverse impacts only where sensitive receptors are present.[152] There is no evidence that there are noise-sensitive uses adjacent to the boundaries of the facility site, and any potential noise impacts on employees working indoors at neighboring commercial facilities would be attenuated by both distance and building buffers.[153]

In addition, SHARED argues that the noise compliance test report required by proposed Certificate Condition VII.8 should be filed before the proposed facility begins operating, instead of six months after commercial operations. According to SHARED, such a requirement is necessary to assure "that the contractor would in fact meet the project noise limits before

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[149] Tr. 1385.

[150] SHARED's Initial Brief, p. 37.

[151] Exhibit 1, Table 11-10 and Appendix 11A, Tables A-28 through A-40.

[152] DEC Noise Policy, p. 13.

[153] Id., pp. 8; Exhibit 1, §11.6.

concluding its work and moving on to another job."[154] There is no basis for SHARED's proposal, which was introduced on brief, because there is no evidence that actual noise impacts following six months of commercial operation could be determined before commercial operation began.

3. Recommended Findings

The record demonstrates that the proposed facility would minimize any adverse environmental impacts associated with facility-related surface traffic. The record demonstrates further that construction and operation of the proposed facility would not result in a hazard to aviation. With the implementation of the proposed certificate conditions set forth in the joint stipulations, potential noise impacts related to the construction and operation of the proposed facility would be minimized, as required by PSL §168(2)(b) and §168(2)(c)(i). Accordingly, the proposed facility would be compatible with public health and safety pursuant to PSL §168(2)(c)(ii).

E. Land Use, Local Laws, and Decommissioning

1. Land Use

Land uses at locations neighboring the proposed facility's site include commercial and industrial buildings, a sand mine and C&D landfill, an asphalt plant, the Town of Oyster Bay's landfill and retired incinerator, high-voltage overhead electric transmission lines, the SUNY campus, a rifle range, a Postal Service distribution facility, an electrical substation, and a cement plant.[155] The nearest permanent residence would be approximately 3,800 feet from the proposed facility. Tall structures visible from the project site (and neighboring properties) include transmission line towers standing 175 feet

[154] SHARED's Initial Brief, p. 39.

[155] Town of Huntington's Reply Brief, pp. 2-3.

above grade and as high as 285 feet above MSL, exhaust stacks at the retired Town of Oyster Bay incinerator, and a sand elevator. When capped, the elevation of the C&D landfill will be 286 feet above MSL. Development of the proposed facility would result in the introduction of an exhaust stack rising to 305 feet above MSL (195 feet above grade), the HRSG (110 feet above grade), the air-cooled condenser (90 feet above grade), and the turbine building (75 feet above grade).[156]

Using differing notions of the term "area," the parties disagree about whether the proposed facility would be consistent with existing land uses. According to SHARED, KEDC has overemphasized neighboring uses that do not conform with zoning classifications, such as the sand mine, asphalt plant, and C&D landfill. Except for those non-conforming uses, SHARED argues, "the area is characterized by residential, commercial and light industrial uses, rather than heavy industrial uses." SHARED notes that "the Spagnoli Road area is designated by the Town's planning documents for offices and light industry," and contends that "construction of the plant would materially change the character of the area."[157] Citing a land options report and generic environmental impact statement (GEIS) prepared in 1988 for the Melville area, SHARED contends that the Town of Huntington's plans for Spagnoli Road properties include medium to high-density residential development. SHARED also points to passages in the Town's 1993 Comprehensive Plan, referring to (to cite one example) "the efficiency, accessibility and 'campus' appearance of development in the Melville/Route 110 area," as militating against development of the proposed facility.[158] According to SHARED's witnesses Shapiro and Koppelman, development of the proposed facility would have a dampening

[156] Exhibit 1, §4.6.1 and Figure 4-2b; Exhibit 4; Exhibits 22-24 and 57; and Tr. 897, 1458, and 1911.

[157] SHARED's Initial Brief, pp. 14, 15.

[158] Id., pp. 20, 22.

effect on investment in offices, hotels, and housing "in the area," and on the efforts of neighboring businesses to attract professional employees.[159] SHARED asserts that KEDC "has not demonstrated the justification for disruption of the established land use in the area, the evisceration of the Town's well-thought-out zoning, or the expectations of residents and the investments of owners in reliance upon the Town's duly promulgated planning documents as implemented by existing zoning codes."[160]

KEDC argues, on the other hand, that the proposed facility would be "(i) surrounded by an infrastructure corridor, and heavy industrial, industrial, commercial and institutional uses, (ii) located in an area with multiple heavy industrial and industrial facilities, [and] (iii) separated by a substantial buffer from the nearest residence (about ¾ mile)."[161] DPS Staff argues as well that the proposed facility would be compatible with the sand mine, landfill, asphalt plant, and existing commercial buildings.[162] KEDC notes that Spagnoli Road already has a high volume of heavy truck traffic to and from the sand mine, the landfill, a waste transfer station, and other nearby uses, which was apparent during the August 20, 2002 site visit, and that the Town of Huntington's Zoning Board of Appeals has characterized the vicinity of the facility site as a commercial and industrial area.[163]

KEDC and DPS Staff contend that the proposed facility's consistency with the objectives of the Town of Huntington's latest (1993) Comprehensive Plan would be greater than suggested by SHARED's arguments. The parties argue similarly that the Plan

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[159] Id., p. 14.

[160] Id., p. 26.

[161] KEDC's Initial Brief, pp. 19-20.

[162] DPS Staff's Initial Brief, p. 29.

[163] KEDC's Initial Brief, pp. 25, 96.

identified, as a principal concern, "the ever-increasing levels of traffic being generated by office development in the area," and proposed, as an objective, the promotion of "industrial development over office development in order to minimize additional traffic generation."[164]

KEDC and the Town of Huntington disagree with SHARED's suggestion that residential development might be contemplated by Town planners for the sand mine's or proposed facility's sites. KEDC points out that housing on the sand mine's site was depicted in the 1989 Melville GEIS, but not in the 1993 Comprehensive Plan. The Town of Huntington adds that "[t]he suggestion in the Melville GEIS that the Keyspan and sand mine properties eventually be used for dense housing has never been adopted by the Town Board by way of a zone change," and that "[t]he viability of locating 'affordable' housing on a road which carries so much truck and tractor-trailer traffic is questionable."[165] KEDC notes further that the Town has not taken any of the actions available to it to discourage the nearby non-conforming uses from continuing their operations.

KEDC and DPS Staff dispute SHARED's contention that development of the proposed facility would lead to the discouragement of new investment, the closing of existing businesses, or difficulties in attracting employees, arguing that the contention is speculative and undocumented. KEDC notes that residential development has occurred near power plants on Long Island after they were built, and that there is no basis for the assumption that business development would be deterred by the

[164] Exhibit 5, JS-6, p. 12.

[165] Town of Huntington's Reply Brief, p. 2. The Town observes that SHARED's witness contended that "it is not desirable or appropriate to locate offices housing a lot of white-collar employees next to heavy industrial installations" [Tr. 730], and argues that the witness apparently would not have the same reservations about blue-collar and paraprofessional workers living near such installations (Town of Huntington's Reply Brief, p. 3).

proposed facility.[166] DPS Staff points out that both the Hilton hotel and the ESA hotel were built along Spagnoli Road long after the sand mine, adjacent to their properties, was operating, and adds that no representative of either hotel has appeared in this proceeding to oppose the application. Moreover, DPS Staff continues, none of SHARED's witnesses from its constituent businesses (Arrow Electronics, Gilbert Displays, and Marchon Eyewear) could affirmatively state that he or she knew of any employees who would leave their positions, were the facility constructed.[167]

On the basis of the foregoing, we conclude that the record supports a finding by the Siting Board that construction and operation of the proposed facility would have no adverse impacts on local land uses. As discussed earlier in this decision, the visibility of the facility would not adversely affect any adjacent neighboring land use (and the applicant has agreed to consult with DPS Staff and Bethpage State Park to develop a planting plan to screen views of the facility from the park), nor would noise generated by the facility adversely affect any noise-sensitive uses. For these reasons, we conclude that the facility, when operating, would be similar to, and compatible with, existing land uses. Arguments claiming some subjective sense of incompatibility have not been supported by evidence. Moreover, construction of the facility would not adversely affect surface access to neighboring sites; and the structure itself would not encroach on, or otherwise affect, neighboring land uses, because the structure would occupy about four acres of a 31.7-acre parcel and would be well set back from the site's boundaries.[168]

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[166] KEDC's Initial Brief, pp. 23-28.

[167] DPS Staff's Initial Brief, pp. 28-29.

[168] Exhibit 1, Figure 4-16.

2. Local Laws

PSL §168(2)(d) requires the Siting Board to find that a proposed facility "is designed to operate in compliance with applicable state and local laws and regulations issued thereunder concerning, among other matters, the environment, public health and safety." This provision goes on to state, however, that the Siting Board "may refuse to apply any local ordinance, law, resolution or other action or any regulation issued thereunder or any local standard or requirement which would otherwise be applicable if it finds that as applied to the proposed facility such is unreasonably restrictive in view of the existing technology or the needs of or costs to ratepayers whether located inside or outside of such municipality."

The proposed facility would largely comply with the applicable requirements of Suffolk County's and the Town of Huntington's laws. The proposed certificate includes a condition providing that the Siting Board will authorize Suffolk County, pursuant to PSL §172(1), to require KEDC to obtain all applicable permits, approvals, and consents set forth in Suffolk County Sanitary Code Article 12 for construction and operation of the proposed facility. The condition provides further that the Town of Huntington (as well as the state Department of Transportation) may require the applicant to obtain all applicable permits, approvals, and consents for in-street construction of the electric transmission interconnection.[169] The proposed certificate would require the applicant to confer with the Town before submitting compliance filings setting forth the facility lighting plan, the plan for the sound barrier wall, the landscaping plan, the environmental compliance plan, and information demonstrating compliance with the substantive provisions of the Town Code pertaining to building permits, certificates of occupancy, fire prevention permits, and after-

[169] Proposed Certificate Condition VI.4.

hours construction permits.[170] In addition, the proposed certificate requires compliance with the New York State Uniform Fire Prevention and Building Code and any related provisions of the Town Code.[171]

The joint stipulations state that KEDC requires, and should be granted, four waivers from the Town Code in order to construct the proposed facility. The requirements in question specify the provision of parking spaces, restrict the height of buildings and structures, limit noise levels at property lines, and prohibit the issuance of a special use permit for an electric generating facility in certain zoning districts.

a. Parking Requirements

Town Code §198-45(B), which would apply to the proposed facility were it considered a manufacturing establishment, requires one parking space for every 500 square feet of industrial gross floor area and one space for every 300 square feet of office space. Under this formula, KEDC would be required to install a 93-space parking lot at the proposed facility, despite the fact that the facility operations would require 25 employees, divided among three shifts, to support continuous (24-hour) electricity production. KEDC estimates that the maximum parking requirement for plant employees at any one time would be 20 spaces, and it proposes to install a total of 35 spaces.[172]

KEDC has requested the Siting Board to exempt the proposed facility from the Town Code's formulaic parking space requirement, arguing that the exemption would be environmentally beneficial because it would result in reduced storm water run-off from paved surfaces and allow KEDC to landscape the area of the

[170] Proposed Certificate Condition VI.6.

[171] Proposed Certificate Condition VI.7.

[172] Exhibit 1, §4.6.1.

site that might otherwise be required for unnecessary parking spaces. KEDC's request is meritorious, and we recommend that the Siting Board grant the exemption, should it issue a certificate for the proposed facility. There is no apparent need for enforcement of the parking requirement from the standpoint of public health and safety, and an exemption from the requirement would not result in any apparent adverse environmental impacts. Therefore, application of the requirement to the proposed facility would unreasonably restrict the applicant's ability to develop a facility that minimizes environmental impacts.

b. Height Restriction

The proposed facility's 31.7-acre site lies mostly within a "light industry" (I-2) zoning district (25.4 acres); a narrow, wedge-shaped portion of the site extending along its southern boundary (6.3 acres) lies within a district zoned for residential use. All of the proposed facility's structures would be constructed within the portion of the site zoned I-2.[173]

Town Code §198-55 restricts the maximum height of a building in an I-2 district to 45 feet. Town Code §198-56 provides that appurtenant structures such as exhaust stacks, cooling towers, and heating and air conditioning equipment may exceed the maximum building height by 25 feet. Taller appurtenant structures may be approved by the Town Board if it finds that (i) they are reasonably necessary for conduct of the use at the building, (ii) public health, safety, and welfare would be adequately protected, and (iii) such structures would not adversely affect the character of the neighborhood.[174]

Development of the proposed facility would result in the introduction of an exhaust stack rising to 305 feet above MSL (195 feet above grade), the HRSG (110 feet above grade), the air-

[173] Exhibit 1, Figure 4-16.

[174] Exhibit 1, 4.6.1.

cooled condenser (90 feet above grade), and the turbine building (75 feet above grade).[175] The applicant contends, and no party disagrees, that given the state of combined-cycle generation technology, it would not be possible to construct the buildings, or permissible to construct the stack, within the Town's height limitations. The Town, a party to this proceeding, is not insisting that the proposed facility comply with those limitations. Accordingly, KEDC requests the Siting Board to exempt it from compliance with the limitations.

KEDC notes that the height restrictions in the Town Code are not absolute. Apart from the potential exemption for appurtenant structures, the Code authorizes, in an I-2 district, antennas and radio towers taller than the limit if they are designed to fall within the boundaries of the properties on which they stand. Such towers can exceed 250 feet in height.[176] Moreover, a municipal water tower may be built in any district at any height, so long as the tower's setbacks from the lot lines exceed its height.[177] And the Town's own incinerator has an exhaust stack standing 312 feet tall although its site lies in zoning districts to which the height limit applies.[178]

Tall structures visible from the project site (and neighboring properties) include transmission line towers, eligible for a special use permit, standing 175 feet above grade and as high as 285 feet above MSL;[179] exhaust stacks at the retired Town of Oyster Bay incinerator located in that town;[180] and the elevator at the sand mine, a non-conforming use in operation before the I-2 zoning restrictions applied to the

[175] Exhibit 1, §4.6.1 and Figure 4-2b; Exhibit 4; Exhibits 22-24 and 57; and Tr. 897, 1458, and 1911.

[176] Tr. 501.

[177] Tr. 501.

[178] Tr. 495.

[179] Exhibits 22 and 23; Tr. 1911.

[180] Exhibits 23 and 57.

Spagnoli Road area.[181] When capped, the elevation of the C&D landfill at the sand mine's site will be 286 feet above MSL.[182]

KEDC has demonstrated that an exemption from the standard height limit applicable to the I-2 district is necessary for safe and environmentally compatible operation of the proposed facility. The height of the turbine building is determined, in part, by the need for a sliding crane over the turbine equipment, the height of the cooling structure is determined by the need for adequate air circulation, and the height of the exhaust stack is determined by the need for proper dispersion of stack emissions. Meanwhile, the record shows that an exemption from the limit would not adversely affect public health, safety, welfare, or the character of the Spagnoli Road neighborhood. Accordingly, we conclude that application of the limit to the proposed facility would unreasonably restrict the applicant's ability to develop and operate a facility that minimizes environmental impacts and protects public health, safety, and welfare.

c. Noise Standard

Town Code §198-89(B) provides that the sound pressure level (dB) radiating from an establishment between 10:00 p.m. and 7:00 a.m., as measured at the boundaries of the establishment's site, may not exceed specified dB levels at various octave bands (frequencies or Hz). The pre-application stipulation on noise issues states that the Town's dB limits at the various frequencies correspond to 47 dBA,[183] while the application itself states the corresponding level is 45 dBA.[184]

Earlier in this decision, noise impacts at various sensitive receptors were considered, and we concluded that the

[181] Exhibit 24.

[182] Tr. 897.

[183] Exhibit 1, Appendix 2B, p. 28.

[184] Exhibit 1, Table 11-10.

record supports a finding that the noise resulting from operation of the proposed facility would not adversely affect public health and safety. The Town Code addresses noise in different terms, namely, measurements of noise levels at the boundary of the site occupied by the source of the noise. Thus, the Town Code provision is best characterized as a performance standard, and is not necessarily a local ordinance concerning "the environment, public health and safety."[185]

On December 5, 2001, KEDC measured actual daytime and nighttime noise levels at 13 points along the boundary of the proposed facility's site.[186] The record shows that the 45 dBA standard is not currently being met, on average (as depicted by the nighttime L_{eq}) at any of the points along the northern boundary (at or near Spagnoli Road), including the point nearest to SHARED constituent Gilbert Displays. Actual noise levels are just below the Town standard at three of the points nearest to the facilities of Arrow Electronics and Marchon Eyewear and just above the standard at the fourth point. KEDC took additional measurements of existing nighttime noise levels at certain locations on June 4, 2002, that is, under late spring/summer season conditions. The averages of the measurements at Arrow's building and Marchon's office building were 46 dBA and 48 dBA, respectively.[187]

SHARED provided no evidence about the extent to which the Arrow Electronics and Marchon Eyewear facilities are used during the nighttime, or whether such uses are noise-sensitive and occur outdoors along or near the western boundary of the

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[185] PSL §168(2)(d).

[186] Exhibit 1, Appendix 11-A, Tables A-28 through A-40. KEDC performed facility noise assessments at 14 points along the boundary; the point not included in the actual measurements lies on the southern boundary between two points where measurements were taken.

[187] Exhibit 25, AAS-2, Appendix A. The average nighttime noise level at the ESA hotel was 47 dBA.

proposed facility's site. Observations during the August 20, 2002 visit to the site and its vicinity revealed no daytime outdoor activities near that boundary except employee parking.[188] Assuming, in the absence of evidence to the contrary, that any nighttime activities at Arrow and Marchon would occur indoors, the western boundary noise levels generated by the proposed facility, after taking into account distance and building attenuation, would not affect indoor activities, even those requiring very quiet conditions.[189]

KEDC requested that the proposed facility be exempted from the Town's performance standard. KEDC acknowledges that the Town's performance standard's noise level is "not inappropriate" for residential receptors, but is "exceptionally strict for a commercial receiving property" when compared with noise standards in other Long Island municipalities' noise ordinances.[190] KEDC argues that most noise regulations in other Long Island suburban communities and communities throughout the state "specify acceptable sound levels at the potentially impacted receiving property, and not at the emitter's property line."[191] KEDC points out in addition that boundary noise measurements at the site of the Town's incinerator exceed the Town's standard.[192]

The Town does not oppose KEDC's request for an exemption from its performance standard. SHARED opposes the request, alleging that the proposed facility would not be able to meet the Town's noise performance standard simply because it is a "large industrial facility proposed to be built and operated on a

[188] Daytime average noise levels at three of the four points on the western boundary exceed 45 dBA; at the fourth, which is nearest to Marchon Eyewear's warehouse, the Town standard is not exceeded in the daytime (and would not be exceeded in the nighttime with the proposed facility in operation).

[189] DEC Noise Policy, pp. 8, 19; Exhibit 1, §11.6.

[190] Tr. 1293.

[191] Tr. 1296.

[192] Tr. 1296-1297.

small site."[193] SHARED argues in the alternative that the Siting Board should not waive the Town's performance standard without "substitut[ing] for those standards the levels that [KEDC] has demonstrated it could meet utilizing additional control measures."[194] Responding to the latter argument, KEDC contends that "[t]he noise levels that SHARED has elected to base its proposed 'standards' on are early-run (pre-Application) trial modeling results . . . that reflect assumptions about equipment, including equipment location, before actual data concerning technical feasibility and design decisions were in hand."[195]

As acknowledged by the applicant, a boundary-line noise performance standard of 45 dBA might make sense in a district zoned for residential use, as a blunt-edged means of assuring the quiet enjoyment of property. Even so, the standard, which applies to exterior places, seems overly conservative even for a residential zone.[196] But insistence that the proposed facility comply with a 45 dBA standard would be unreasonable, given the fact that the standard is not being met at many points along the boundary of the facility's site in its current condition--a largely vacant lot. Neighboring properties are not currently benefiting from compliance with or enforcement of the standard, and, indeed, they themselves appear to be responsible, at least in part, for the "excessive" noise levels at the site's boundary. It was observed, during the additional noise monitoring occurring during late spring/summer conditions, that the noise levels exceeding the standard are attributable to "background noise levels, principally other industrial uses, traffic and existing

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[193] SHARED's Initial Brief, p. 31.

[194] Id., p.37.

[195] KEDC's Reply Brief, p. 32.

[196] According to the DEC Noise Policy (at p. 19), a sound pressure level of 40 dBA is typical of a living room or bedroom, and a level of 50 dBA is generated by light traffic at a distance of 50 feet.

HVAC units." KEDC's witnesses testified that "[t]he same would likely be true for other nearby properties such as Arrow and Marchon Eyewear, which contain these HVAC units."[197]

SHARED's alternative proposal, which would have the Siting Board set new performance standards at the 14 monitoring points along the proposed facility site's boundary, is unfounded. The Board's authority to refuse to apply unreasonably restrictive local laws, conferred by the Legislature, is unaccompanied by any authorization to rewrite local laws. Moreover, a certificate condition establishing SHARED's proposed standards as requirements would be unnecessary, as the proposed standards are insignificantly different from the sound levels suggested by refined noise modeling.[198] Given our conclusion that the record supports a finding that the proposed facility would not generate adverse noise impacts at any sensitive receptor, we conclude that a requirement that the proposed facility comply with the Town's currently unmet boundary line noise performance standard would be unreasonably restrictive.

d. Use Restriction

Town Code §198-35(A) provides that permitted uses in the I-2 district are limited to those allowed in the I-1 Light Industrial district. Several permitted uses are specified by the Code, such as farms, laboratories, offices, banks, storage and warehouse buildings, and facilities for the production and manufacture of consumer goods. The Code allows as well "any manufacturing use of the same general character as those specifically permitted herein when authorized as a special

[197] Tr. 1296.

[198] Cf. Exhibit 25, AAS-2, Table 6 and SHARED's Initial Brief, p. 38. The DEC Noise Policy explains (at p. 13) that increases in sound pressure level of 3 dB to 6 dB "may have potential for adverse noise impact only in cases where the most sensitive of receptors are present."

exception by the [zoning] Board of Appeals."[199] KEDC interpreted these provisions as prohibiting an electric generating facility in an I-2 district, and it has requested that the Siting Board exempt the proposed facility from compliance with them.

KEDC argues, first, that an exemption is warranted because the proposed facility would comply with all substantive requirements of the I-2 zoning classification except the building height restriction. KEDC points out in particular that the facility would have much less of an impact on traffic conditions than many of the permitted uses in the I-2 district, as discussed in the Town's 1993 Comprehensive Plan. KEDC contends that the I-2 use restriction is an artifact stemming from the creation of the isolated I-6 electric generation zoning district (at Northport) in 1956, when most electric generation stations were coal- or oil-fired; required large fuel storage tanks or coal piles; required boiler washing with storage ponds for wash water; required water access for deliveries by fuel barges and for cooling water; and were not constructed with sophisticated noise mitigation.[200] Modern generation facilities do not require such separation from lighter industrial and residential uses, the applicant argues, pointing to the Town's incinerator and 25 MW generating station that was constructed at a site straddling general industrial (I-5) and residential (R-20) zoning districts which are subject to the same use restriction as applies to the I-2 district.[201] Therefore, KEDC asserts, the use restriction is unreasonably restrictive in light of the existing technology for electric generation.

KEDC argues, second, that compliance with the Town's use restriction would be unreasonably restrictive in light of the

[199] Exhibit 1, §4.6.1. Town Code §198-14(A) sets forth the corresponding restriction applicable to the portion of the proposed facility's site zoned for residential use.

[200] Tr. 1912-1913.

[201] Exhibit 1, §4.6.1.

needs of and costs to electricity consumers (or, in the words of PSL §168(2)(d), "ratepayers whether located inside or outside of such municipality"). KEDC explains that a concentrated load center, with a demand of 340 MW in 2001 and an expected demand of 355 MW by 2005, lies within a four-mile radius centered on the proposed facility, and that the Ruland Road substation, to which the facility would be connected, is the "backbone of the LIPA electric system in the Nassau/Suffolk border area."[202] In its application, KEDC contended that construction of the proposed facility near to the load center would improve system reliability, reduce costs, and benefit the environment by minimizing outage risks, construction costs, and transmission line losses.

As noted earlier, the Chairman's letter of March 28, 2002, which stated that KEDC's application complied with the requirements of PSL §164, directed KEDC to submit additional information about the cost advantages of developing the proposed facility at the Spagnoli Road site instead of the Northport generating station site where there would be no use restriction. In response to that directive, KEDC submitted evidence showing that construction of a generation station equivalent to the proposed facility at Northport would require more extensive, and more expensive, connections to LIPA's electric transmission system and the existing gas transmission system on Long Island.[203]

SHARED contends on brief that the requested exemption from the I-2 use restriction should be viewed as a zoning amendment, and it argues that "zoning amendments may not stand if, rather than calculated to benefit the community as a whole, instead benefit individuals or a group of individuals." SHARED argues further that "the local zoning authority must be able to articulate what conditions have changed in the community to

[202] Exhibit 1, §4.6.1.

[203] Exhibit 1, §4.6.1.

warrant a departure from the existing zoning and comprehensive plan."[204] KEDC argues in response that SHARED's position is "curious . . . given that the local and state organizations charged with protecting the general welfare of the community all support the Project, while SHARED, representing a narrow group of businesses, is the only active party challenging the Project."[205]

DPS Staff points out that "[t]he nature of the industry has changed with the progression of power engineering," because "[t]oday, facilities can be constructed relying on 100% natural gas, which eliminates the need for large oil tanks, coal piles and coal ash storage facilities, or access to water."[206] Given these developments, DPS Staff asserts, the 46-year-old use restriction should be found unreasonable given the state of existing technology.

DPS Staff notes further that because there are transmission constraints on Long Island at several substations, the island can be divided into east, central, and west service areas. The central area has the greatest demand for electricity, with demand for 2004 projected to be 2,350 MW. Meanwhile, generation capacity within the central area totals 2,100 MW. Therefore, to keep pace with central area load growth while demand grows throughout the island, LIPA would be required either to fortify its transmission system or arrange for the addition of generation capacity within the central area. DPS Staff observes that siting the proposed facility at Spagnoli Road, which is in the central area, would assist in satisfying the need for additional electricity in the central area. Moreover, DPS Staff continues, locating the facility near a load center would enhance reliability "by reducing the chances for transmission failure to

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[204] SHARED's Initial Brief, pp. 9-10, citing Asian Americans for Equality v. Koch, 72 N.Y.2d 121 (1988).

[205] KEDC's Reply Brief, p. 20.

[206] DPS Staff's Initial Brief, p. 25.

interrupt the flow of electricity to the central area."[207] Thus, DPS Staff concludes, the construction and operation of the proposed facility would meet the needs of ratepayers, and applicability of the use restriction would be unreasonable.

DPS Staff argues, finally, that KEDC's Multi-Area Production Simulation (MAPS) analysis demonstrates that operation of the proposed facility at Spagnoli Road would result in a decrease in the wholesale price of electricity on Long Island. Thus, DPS Staff concludes, the facility would have a beneficial effect on the costs of electricity incurred by ratepayers, and enforcement of the use restriction would be unreasonable.[208]

As noted above, PSL §168(2)(d) authorizes the Siting Board to "refuse to apply any local ordinance, law, resolution or other action or any regulation issued thereunder or any local standard or requirement which would be otherwise applicable if it finds that as applied to the proposed facility such is unreasonably restrictive in view of the existing technology or the needs of or costs to ratepayers whether located inside or outside of such municipality."

The Town of Huntington's Comprehensive Plan recognizes the extent of development in the vicinity of the proposed facility, especially office facilities. The plan sets forth an objective of promoting industrial development over office development in order to minimize traffic generation (which is a "principal concern"). Development of the proposed facility would be consistent with that objective.

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[207] Id., p. 26.

[208] Id., pp. 26-27. The conclusion drawn from the MAPS analysis is confirmed in LIPA's Draft Energy Plan, released October 17, 2002 (LIPA Plan), where it is observed that there are transmission constraints across the internal interfaces that prevent delivery of economical power to the Eastern Nassau/Western Suffolk load center, where close to 50% of LIPA's load is located, under certain system conditions (LIPA Plan, Volume 2, p. 3-5 and p. 6-16).

New York State Town Law §272-a(1)(f) sets forth the Legislature's finding and determination that "[t]he town comprehensive plan is a means to promote the health, safety and general welfare of the people of the town and to give due consideration to the needs of the people of the region of which the town is a part." Town Law §272-a(3) goes on to provide that the comprehensive plan "may include . . . [c]onsideration of regional needs and the official plans of other governmental units and agencies within the region" and "[e]xisting and proposed general location of public and private utilities and infrastructure." The Town's Comprehensive Plan does not address energy requirements, but it is clear that the development in the vicinity of the proposed facility coincides with its becoming a significant load center on LIPA's system.[209] Meeting growing energy requirements is an essential infrastructure function. The applicant and LIPA have both recognized that development of the proposed facility would meet this infrastructure requirement on a least-cost, high-reliability basis.[210] The Town does not disagree, but the I-2 use restriction in the Town Law would not allow that development.

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[209] Indeed, SHARED's testimony shows the extent to which just one company expanded its computer facilities at a time when other businesses, and governments, were undertaking similar upgrades. SHARED constituent Arrow Electronics purchased its facility "in August 1993 at a cost of approximately $6.8 million, and since then the facility has received numerous upgrades to the tune of $5 million, which included a state-of-the-art computerized training facility, built in 1995, at a cost of approximately $480,000. We have a large data center on-site that houses the mainframes and network servers that support all of our North American and Asian businesses. In 2001, we completed an expansion of the data center at a cost in excess of $3 million" (Tr. 1163). Arrow's experience is not atypical (see United States Department of Energy, Energy Information Administration, "Annual Energy Outlook 2003," p. 59).

[210] LIPA Plan, Volume 2, p. 6-15; LIPA Board of Trustees Meeting Minutes (LIPA Minutes), June 27, 2002, p. 11.

The use restriction is, as KEDC and DPS Staff argue, an artifact from an era when baseload electric generation facilities were necessarily large and required significant amounts of space for fuel storage and handling. Breakthroughs in electric generation technology have been noted by the PSC[211] but have not been taken into account in the Town's zoning laws, even though there are no environmental or public safety reasons for retaining the restriction against granting a special use permit for modern electric generation facilities in a light industrial zone. In a number of jurisdictions, blanket restrictions against special use permits for modern generation facilities have not been adopted,[212] and in others there are ordinances that eschew itemized definitions of permitted uses in favor of general definitions of light industry that can accommodate modern generation facilities.[213]

As recently noted by the Siting Board, electric generation siting is a statewide concern,[214] and the siting of modern, environmentally compatible facilities that would be needed by electricity consumers at locations on the network where they would be most beneficial should not should precluded by use restrictions resting on archaic notions about the nature of those uses. That would not be consistent with a sound state energy policy. Article X both requires that the PSC's definition of "approved procurement process" refer to the State Energy Plan

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[211] PSC Case 94-E-0952, Competitive Opportunities Regarding Electric Service, Opinion No. 96-12 (issued May 20, 1996), pp. 29-30.

[212] See Case 00-F-0566, Brookhaven Energy Limited Partnership, Opinion and Order Granting Certificate of Environmental Compatibility and Public Need (issued August 14, 2002), p. 18.

[213] See Case 97-F-1563, Athens Generating Company, L.P., Opinion and Order Granting Certificate of Environmental Compatibility and Public Need (issued June 15, 2000), pp. 82, 85-86.

[214] Case 00-F-0566, supra, p. 13; Order Denying Petition for Rehearing and Granting Petition for Clarification (issued October 24, 2002), p. 36.

(§160(7)) and then permits the Siting Board to override local laws that would unreasonably restrict the development of facilities that would be acquired pursuant to an approved procurement process (§168(2)(d)).[215]

The Town did not insist on adherence to its use restriction (nor to the height restriction or noise standard) when its own incinerator/generation facility was developed, presumably because such adherence would have been unreasonable and unnecessary under the circumstances. The Town's ordinances might be useful as setting standards of broad applicability throughout the municipality. But it is clear that they have not guided a substantial amount of the development at the existing setting on Spagnoli Road, and that there are no environmental or public safety reasons for insisting, inconsistently, that they be applied to the proposed facility.[216] Accordingly, we conclude that applicability of the use restriction to the proposed facility would be unreasonably restrictive in view of the existing technology, the needs of electricity consumers, especially those located in the same transmission zone as the proposed facility, and the costs to electricity consumers of locating the proposed facility at a more remote location.

3. Decommissioning

The Siting Board's regulations require an applicant to describe the financial resources available for restoration of any

[215] As discussed below, we are recommending that the Siting Board find the proposed facility to be selected pursuant to an approved procurement process.

[216] Moreover, it bears noting that the proposed facility would burn only natural gas, and its emissions would be exhausted through a stack standing 195 feet above grade. Meanwhile, at the street level, existing uses, including permitted uses, are generating a large volume of vehicular traffic, including large diesel-powered trucks whose emissions have been specifically identified as harmful. See EPA/600/8-90/057F, "Health Assessment Document for Diesel Engine Exhaust" (May 2002).

disturbed areas in the event a proposed project cannot be completed, or after decommissioning of a facility. The application must also include a decommissioning plan.[217] Such a plan was set forth in § 3.13 of KEDC's application.

The joint stipulations propose a certificate condition requiring KEDC to file with the Secretary a parent guarantee from KeySpan Corporation to assure funding for the restoration of any disturbed areas, in the event that the plant is not completed, before commencing any construction. Should the tangible net worth of KeySpan Corporation fall below $1 billion, or should KeySpan Corporation experience a downgrading or be placed on a credit watch for possible downgrading of its senior debt below investment grade, before completion of the proposed facility, KEDC would be required to notify the Siting Board promptly in writing of such event and to provide other, or additional, financial assurance as might be required by the Board to demonstrate its ability to restore the facility site.[218]

Another certificate condition proposed in the joint stipulations would require KEDC to file with the Secretary evidence that sufficient funds are available to cover the cost of decommissioning, dismantling, closing or reusing the plant when it has reached the end of its service life. Such evidence would be provided in the form of a performance bond, escrow, letter of credit or other financial instrument, or satisfaction of a financial test, with renewal provisions. KEDC would not commence commercial operation of the facility until the PSC determined that the financial instrument provided was appropriate and sufficient to cover the cost of decommissioning.[219]

No party opposes the proposed conditions, which are similar to those approved by the Siting Board in the KeySpan-

[217] 16 N.Y.C.R.R. §1001.7(b).

[218] Proposed Certificate Condition XIII.1.

[219] Proposed Certificate Condition XIII.2.

Ravenswood Article X proceeding.[220] Accordingly, we recommend that they be approved by the Siting Board.

4. Recommended Findings

With respect to land uses, the record demonstrates that the proposed facility would minimize adverse environmental impacts considering the interest of the state as required by PSL §168(2)(c)(i), and that the proposed facility is compatible with the public health and safety pursuant to PSL §168(2)(c)(ii). The record further demonstrates that, pursuant to PSL §168(2)(d), the proposed facility is designed to operate in compliance with most applicable state and local laws, and that a requirement of compliance with the Town of Huntington's parking requirement, height restriction, noise performance standard, and use restriction would be unreasonably restrictive, taking into account the state of electric generation technology and the needs of and costs to electricity consumers. We recommend that the Siting Board exercise its authority under PSL §172(1) to authorize the issuance of permits by Suffolk County and the Town of Huntington, to the extent discussed above, while retaining its own jurisdiction to issue any necessary permits and approvals upon petition by the applicant.

F. Transmission Interconnections

1. Electric System

The primary electrical interconnection for the proposed facility would run to LIPA's 138 kV switchyard at the Ruland Road substation located approximately 4,000 feet to the east of the facility site. The interconnection would consist of two 3-phase 138 kV cable circuits housed in underground ducts. Routing the

[220] Case 99-F-1625, Application of KeySpan Energy, Opinion and Order Granting Certificate of Environmental Compatibility and Public Need (issued September 7, 2001), Certificate Conditions VII.A and VII.B.

interconnection through underground ducts would minimize any additional electric and magnetic fields created by the proposed facility.[221] Impacts to community land uses from the interconnection would be minimal, because the route for the new circuits would lie in existing private and public rights of way, and they would not interfere with other utility facilities currently located within those rights of way.[222] The applicant would follow stringent safety and environmental protections and other sound construction management practices to assure that the effects of the installation of the interconnection circuit on the community and on the environment are minimized.[223] The route chosen for the interconnection circuit would minimize environment impacts because it is the shortest route and would entail minimal construction difficulty.[224]

The joint stipulations propose several certificate conditions requiring KEDC to design its electric transmission system interconnection and operate the proposed facility and its interconnection facilities in accordance with the requirements of LIPA, the New York Independent System Operator (NYISO), various reliability organizations, and any respective successor organizations.[225] In addition, there is a proposed condition requiring KEDC to file a compliance filing that sets forth detailed construction plans and includes the permits it intends to seek from the state Department of Transportation and the Town of Huntington.[226]

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[221] Exhibit 1, §3.7.

[222] Exhibit 1, §14.1.2.c.

[223] Exhibit 1, §14.1.2.c.

[224] Exhibit 1, §14.1.3.

[225] Proposed Certificate Conditions IV.1 through IV.8.

[226] Proposed Certificate Condition IV.9.

2. Gas System

Natural gas would be supplied through a new 6,400-foot, 16-inch diameter pipeline with an interconnection to an existing KeySpan Energy Delivery - Long Island (KEDLI) natural gas pipeline south of the proposed facility's site. A Certificate of Environmental Compatibility and Public Need was issued for the pipeline by the PSC on May 13, 2002.[227]

The KEDLI system receives natural gas through interconnections with the Iroquois and Transco pipelines. KEDC prepared a hydraulic analysis evaluating the impact of the proposed facility's operation on the KEDLI system. The analysis shows that there is adequate gas transmission system capacity to transport gas to the facility, that the facility's proximity to the Iroquois pipeline interconnection at Commack would allow for gas to be delivered with no detrimental effect on system pressures or flows, and that gas supply should be able to flow through the full range of temperature swings.[228]

3. Recommended Findings

The applicant has committed to construct the proposed facility's electric transmission interconnection in accordance with applicable regulatory requirements, and its proposed gas transmission interconnection was reviewed and certificated by the PSC. Accordingly, the proposed facility's electric and gas interconnections would minimize adverse impacts and would be compatible with public health and safety in compliance with PSL §168(2)(b), (c)(i) and (c)(ii).

[227] PSC Case 02-T-0335, supra.

[228] Exhibit 1, §15.2.5.

G. Public Interest

1. Approved Procurement Process

a. Introduction

Accompanying KEDC's application was a "motion for declaratory ruling" to the effect that the proposed facility has been selected pursuant to an approved procurement process. KEDC pointed out in the motion that the PSC has held that competition in the electricity supply market is an approved procurement process because it is an electric capacity procurement process approved by the PSC as reasonably consistent with the 1998 State Energy Plan.

During the course of this proceeding, in June 2002, the State Energy Planning Board issued a new State Energy Plan (2002 SEP). Following the issuance of the 2002 SEP, the Independent Power Producers of New York (IPPNY) petitioned the PSC for a declaratory ruling that competition continues to be an approved procurement process. IPPNY argued that the long range plan for procuring electricity in New York is through the competitive market, in which participants will determine when and where new additions to the electricity supply are most needed and economically viable.

PSL §160(7) states that "approved procurement process means any electric capacity procurement process . . . approved by [the PSC] as reasonably consistent with the most recent state energy plan adopted pursuant to article six of the energy law." The PSC granted IPPNY's petition, concluding that "[i]t is readily apparent that competition is reasonably consistent with the 2002 SEP," as that plan "includes competition in the electricity supply market as a long range energy planning objective and strategy."[229]

[229] PSC Case 02-E-1127, Independent Power Producers of New York, Inc., Declaratory Ruling Concerning Approved Procurement Process (issued October 24, 2002), pp. 2-3.

b. Assumption of Financial Risk

KEDC's motion stated that it would not seek to recover any costs from ratepayers under the Public Service Law, nor would it operate as a qualifying facility and seek a contract under the Public Utility Regulatory Policies Act of 1978. Thus, KEDC argued, no economic risk would be borne by electricity consumers, as all such risks associated with the construction and operation of the proposed facility would be borne by the applicant. KEDC noted, however, that it would seek to sell 50% of the proposed facility's capacity to LIPA under a 15-year contract, while selling up to 100% of the facility's energy output into the energy market maintained by NYISO.[230]

SHARED argues that KEDC's pursuit of a contract with LIPA requiring the purchase of 50% of the proposed facility's capacity implies that LIPA ratepayers would be required to bear at least 50% of the financial risk associated with the facility.[231] SHARED contends, moreover, that Keyspan now "wants LIPA to contract to purchase 100% of the plant's output, thereby fully financing its development and operation for a period of at least ten years, the cost of which would be passed on to the ratepayers."[232]

SHARED's contention confuses the wholesale and retail markets for electricity. Regardless of the arrangement LIPA might have for procuring capacity and energy at the wholesale level, the decision about how, and to what extent, purchased power costs are passed along to retail customers is LIPA's alone to make. Most of LIPA's purchased power is obtained pursuant to a contract with Genco (namely, the 1997 Power Supply Agreement, or "PSA"), under which LIPA pays FERC-regulated prices reflecting

[230] KEDC's Motion for Declaratory Ruling, pp. 4, 7.

[231] SHARED's Reply Brief, p. 9.

[232] Id., p. 10.

fixed capacity costs and variable fuel and operating costs.[233] Nevertheless, in recent years LIPA has not passed along 100% of its purchased power costs to its customers.[234] And although SHARED ascribes great significance to a statement attributed to LIPA's chairman in a newspaper article, to the effect that "LIPA will own none of the power plants, but will basically have all of the risks associated with ownership,"[235] the same observation has been made about the PSA.[236] Accordingly, there is nothing inherent in KEDC's proposal to sell 100% of the proposed facility's capacity to LIPA under contract that shifts financial risk to LIPA's ratepayers.

c. Market Impact

KEDC's motion stated in addition that the proposed facility would "operate as a merchant plant and compete with other suppliers to sell electrical output into the emerging competitive electricity generation market."[237] SHARED disputes this contention, arguing that because Genco already owns 92% of the generating capacity located on Long Island (outside New York City), construction of the proposed facility will impede, rather than facilitate, competition.[238] SHARED contends, moreover, that "construction and operation of the Spagnoli Road plant will not only increase market concentration on Long Island overall but it will further increase Keyspan's market power, enabling Keyspan to

[233] LIPA Minutes, December 18, 2001, p. 23; LIPA Plan, Volume 2, p. 1-9; Tr. 2596.

[234] LIPA Minutes, March 1, 2001, pp. 10-18; February 28, 2002, pp. 18-19.

[235] SHARED's Reply Brief, p. 10.

[236] LIPA Minutes, December 18, 2001, pp. 23-25.

[237] KEDC's Motion for Declaratory Ruling, p. 4.

[238] SHARED's Initial Brief, p. 141.

entrench its dominant position and, in all likelihood, foreclose new entry and competition."[239]

SHARED's assessment of the market impact resulting from construction and operation of the proposed facility is much too simplistic. A basic principle of electricity market analysis, understood by federal and state regulators alike, is that, for any given area, the relevant geographical market for electricity can be dynamic depending upon the extent of the availability of transmission capacity.[240] On the one hand, when transmission access to off-island capacity is unconstrained, Genco's share of the generation resources available to LIPA drops to 84%.[241] On the other hand, when the transmission system on Long Island is fully loaded, the LIPA system becomes divided into geographically-limited "load pockets;" under those conditions, certain generators (such as Northport) would have 100% market shares even if Genco's facilities were sold to 27 different purchasers.[242]

The key inquiries are (i) whether there is a potential for the exercise of market power, where one firm (or two or more firms acting in concert) can control prices, and (ii) what regulatory intervention has occurred or could occur to preclude the exercise of market power. FERC has focused on the concept of a "pivotal" producer, that is, a producer whose capacity must be used to meet the market's peak demand. The comparison between a market's peak demand and the amount of capacity available to meet

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[239] Id., p. 144.

[240] FERC Docket No. ER96-2495-015 et al., AEP Power Marketing, Inc. et al., 97 FERC ¶61,219 (November 20, 2001), slip op. pp. 7-8; PSC Case 94-E-0952, supra, Opinion No. 96-12, pp. 60-61.

[241] LIPA Plan, Volume 2, pp. 3-3 - 3-4.

[242] PSC Case 94-E-0952, supra, "Analysis of Load Pockets and Market Power in New York State, DPS Staff Final Report (October 1, 1996), pp. 217-218; LIPA Minutes, December 18, 2001, p. 23.

the demand is called the supply margin assessment, or "SMA."[243] FERC has concluded as follows:

> [T]he primary tool for exercising generation market power is physical or economic withholding. To prevent physical withholding, we will require that an applicant who fails the SMA screen offer uncommitted capacity (i.e., generation in excess of each hourly projected peak load and minimum required operating reserves) for spot market sales in the relevant market. To prevent economic withholding, this uncommitted capacity will be priced under a form of cost-based rates. We will require a split-the-savings formula, which was the traditional cost-based ratemaking model used for spot market energy sales.[244]

Although the PSA was approved by FERC before the SMA screen was developed, essentially the same terms apply to Genco's sales to LIPA.[245] In fact, the PSA's capacity sales terms are more favorable to LIPA than would be FERC's default terms, because Genco must offer all of its capacity under contract and at strictly cost-based prices. Thus, even though Genco's share of the generation capacity market is large (84% to 92%, depending upon transmission constraints), it is not able to exercise market power. The addition of the proposed facility would not alter this condition, especially if LIPA agrees to purchase 100% of the facility's capacity, because by definition there would be no physical withholding, and sales prices would be subject to a FERC-approved mitigation procedure.[246]

Moreover, SHARED's emphasis on Genco's current market share gives no consideration to LIPA's stated intention to deconcentrate the supply side of the relevant geographical market

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[243] FERC Docket No. ER96-2495-015, supra, slip op. pp. 7-8.

[244] Id., p. 12.

[245] LIPA Minutes, December 18, 2001, p. 23; LIPA Plan, Volume 2, p. 1-9; Tr. 2596.

[246] FERC Docket No. ER96-2495-015, supra, slip op. p. 9; FERC Docket No. ER01-3155-002 et al., New York Independent System Operator, Inc. et al., 99 FERC ¶61,246.

by acquiring Genco's capacity under the 1997 Generation Purchase Right Agreement (GPRA) purchase option, repowering certain sites (i.e., increasing capacity at those sites), and selling the capacity to multiple purchasers.[247] As noted above, this action by itself might not reduce market power in certain load pockets. However, introduction of the proposed facility into LIPA's central load zone, coupled with the sale of Northport to an entity not affiliated with KEDC, could result in the reduction or elimination of potential market power during at least some hours of the year.[248] As FERC's SMA screen suggests, the addition of capacity in the near future would not be detrimental to the prospects for competition were deconcentration to occur at a later date.

SHARED's argument appears as well to disregard LIPA's plans for improving competition in the wholesale market by increasing its access to off-island sellers through improvements to its transmission system.[249] KEDC's proposal to build new capacity at Spagnoli Road, at a load center in the middle of the island, would greatly facilitate LIPA's objective by maximizing the availability of transmission capacity, at least cost, on the links to off-island sources. Locating the proposed facility outside LIPA's central zone transmission interfaces or at Northport would necessitate greater expenditures on transmission capacity.[250]

d. Conclusion

The financial risks of developing the proposed facility would be borne by KEDC, who will not seek to recover any costs

[247] LIPA Plan, Volume 2, Preface p. 5; LIPA Minutes, December 18, 2001, pp. 19, 24, 29, 34; March 28, 2002, pp. 11-12.

[248] PSC Case 94-E-0952, supra, Opinion No.96-12, p. 61.

[249] LIPA Plan, Volume 2, p. 1-7; LIPA Minutes, December 18, 2001, p. 29.

[250] Exhibit 1, §§4.6.1 and 16.3.

from ratepayers under the Public Service Law, or seek to enter into a contract under the federal Public Utility Regulatory Policies Act. Moreover, addition of the facility's capacity at Spagnoli Road would enhance the prospects for improved competition in the Long Island market for electricity, especially in light of LIPA's stated plans for accomplishing that outcome. Accordingly, we recommend that the Siting Board find that the proposed facility has been selected pursuant to an approved procurement process.

2. Alternatives

a. Availability of Alternate Sites

i. Applicable Law and Precedents

Evidence on the issue of whether or not there is a preferable alternative site for a proposed facility can be introduced into a PSL Article X proceeding under one of three statutory provisions. First, PSL §164(1)(b) requires each application to include "[a] description and evaluation of reasonable alternative locations to the proposed facility," and "a description of the comparative advantages and disadvantages of each such location." There is an important limitation on this requirement: "the information required pursuant to this paragraph shall be no more extensive than required under article eight of the environmental conservation law."

ECL Article 8 is the State Environmental Quality Review Act (SEQRA). DEC's regulations implementing SEQRA require "a description and evaluation of the range of reasonable alternatives to the action that are feasible, considering the objectives and capabilities of the project sponsor."[251] In Horn v. IBM, the Appellate Division held that "it would be an illogical and unwarranted extension of SEQRA to require every private developer to address . . . the possible development of

[251] 6 NYCRR §617.9(b)(5)(v).

other sites which it has no control over, which might not be for sale, or which are not economically feasible." [252] In implementing PSL §164(1)(b), the Siting Board cited Horn[253] and adopted a regulation stating that "[f]or a private applicant . . . site alternatives may be limited to parcels owned by, or under option to, such applicant."[254] The Siting Board defined a "private applicant" as "an applicant that does not have the power of eminent domain."[255]

The second statutory provision under which an applicant can be required to submit information about alternative sites is PSL §165(1), which is a general provision authorizing the Chairman of the Siting Board to direct an applicant to provide additional information supplementing an application that complies with PSL §164. In this proceeding, KEDC was required by the Chairman, pursuant to this provision, to submit additional information about the feasibility of siting the proposed facility at existing generating sites owned by Genco.[256]

Third, PSL §167(4) states both that the presiding examiner "shall allow testimony to be received on reasonable and available alternate locations," and that "in its discretion, the board may thereafter cause to be considered other reasonable and available locations." PSL §167(4) does not restrict the parties to examining potential alternate parcels "owned by, or under option to," an applicant, but it does require a showing that parcels identified as potential alternate sites are "available" to the applicant.

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[252] 110 A.D.2d 87, 95 (2d Dept. 1985).

[253] Case 97-F-0809, Siting Board Rules and Regulations, Memorandum and Resolution Adopting Article X Regulations (issued December 16, 1997), Memorandum p. 8.

[254] 16 NYCRR §1001.2(d).

[255] 16 NYCRR §1000.2(o).

[256] Letter from Chairman Helmer to Messrs. Ratzkin and Smith, March 28, 2002, p. 1.

In the Athens case,[257] the Siting Board allowed intervenors to go forward with evidence about alternatives to the site proposed by the private applicant in that case, but the Board stated that such evidence, "to be of decisional consequence, must show that the alternative site is both preferable and available, and would resolve a significant problem with the proposed site."[258] The Board distinguished two possible sets of circumstances. On the one hand, the Board stated, "[i]nformation comparing the proposed site with alternatives might be useful to a consideration of whether it would be a mistake to locate a facility at the proposed site, in view of other realistic options." The Board advised that "[a] decision rejecting the proposed site on such grounds would require, at a minimum, evidentiary support showing that unresolved problems have been identified with the proposed site that would be remedied at one or more alternative sites."[259] On the other hand, the Board continued, where (i) the applicant does not have alternate sites for its facility under consideration, and (ii) the Board can make a determination that, with mitigation, adverse environmental impacts at the proposed site are not significant and have been minimized--so that no reason would exist to reject the application--"we would require evidence that some greatly superior site is available that should (and may) be used instead for such generating plant, before we would consider 'alternative sites' to be a material issue."[260]

In the Brookhaven case, the Siting Board observed that "the Appellate Division upheld the Athens Siting Board's determination that reasonable alternative sites are those that are both available and preferable," and held that "evidence on

[257] Case 97-F-1563, supra.

[258] Id., p. 93.

[259] Id., p. 96.

[260] Id., pp. 96-97.

the superiority of alternative sites need not be admitted into the record unless such alternative sites are first shown to be available to the Applicant."[261] The Board, moreover, rejected as "baseless" the argument of an intervenor-opponent that the applicant was obliged to submit a presentation on sites it did not own or control but considered acquiring before the pre-application process began.[262]

ii. KEDC's Evaluation of Potential Sites

In its application, KEDC noted that it is a "private applicant" that is not required by PSL §164(1)(b) or the Siting Board's regulations to address alternative project sites that it does not own or have an option to acquire. Nevertheless, KEDC's application included a discussion of the relative merits of building the proposed facility at the Spagnoli Road site vis-à-vis the sites of certain generating stations transferred from LILCO to Genco in 1998.[263]

KEDC's objective[264] is "delivering electricity generated by a combined cycle facility to the target load demand area," namely, the load center in western Suffolk County and eastern Nassau County served by LIPA's Ruland Road substation and nearby substations. KEDC noted that planning and siting studies dating back to 1986 identified the Spagnoli Road site as a potential location for a generating facility, and that the site "is considered the best location for a 250 MW combined cycle electric generating facility . . . [because it] is the only available

[261] Case 00-F-0566, supra, Order Denying Rehearing, pp. 9-10, citing Citizens for the Hudson Valley et al. v. New York State Board on Electric Generation Siting and the Environment, 723 NYS 2d 532 (3d Dept. 2001).

[262] Id., Opinion and Order, p. 50.

[263] Case 98-M-0074, Petition of Long Island Lighting Company, Order Approving Asset Transfers, Assumption of Liabilities and Issuance of Promissory Notes (issued May 1, 1998).

[264] See 6 NYCRR §617.9(b)(5)(v).

KeySpan owned location identified where a 250 MW facility can be located near a major LIPA load center and where the resulting generated power can be delivered to the electric grid without requiring major system reinforcements." [265]

The Genco sites discussed in the "alternatives" section of KEDC's application are Shoreham/Wading River, Port Jefferson, and E.F. Barrett. KEDC stated that those sites had been evaluated as the most favorable alternatives to the Spagnoli Road site, in terms of meeting KEDC's project goal, but that each site presented problems, such as greater interconnection costs, space limitations, environmental impacts, and limited availability of natural gas supplies at reasonable costs.[266] The application also included a discussion of Genco's Northport site, even though it was not evaluated as a favorable alternative, because it is located in a zoning district of the Town of Huntington that allows electricity generation as a permitted use. KEDC concluded that there were several problems at the Northport site, including increased electric and gas interconnection costs.[267]

iii. KEDC's Access to Evaluated Sites

On the date when KEDC filed its application (January 28, 2002), Genco owned the three potential alternative sites and the Northport site, subject to an option on LIPA's part to purchase the sites.[268] At that time, the option had not been exercised and was scheduled to expire in May 2002. Were the deadline for exercise of the purchase option to have passed with no action by LIPA, a restriction in the GPRA limiting Genco's

[265] Exhibit 1, §16.3.

[266] Exhibit 1, §§16.3.1 through 16.3.3. KEDC's original discussion of these sites was supplemented pursuant to PSL §165(1), in response to the Chairman's letter of March 28, 2002.

[267] Exhibit 1, §4.6.1.

[268] Exhibit 60, "Generation Purchase Right Agreement" (GPRA), §§2.1 and 2.2.

authority to sell, lease, develop, or allow development of the sites it owns[269] would have expired. However, on March 28, 2002--the same date on which Chairman Helmer requested additional information from KEDC about the alternative sites and Northport--LIPA's trustees approved an agreement with Genco to extend the period for exercising the purchase option to November 29, 2004 through May 28, 2005. Thus, the alternative sites and Northport are still owned by Genco subject to the terms and conditions of the GPRA, and the only option to purchase them is held by LIPA.

As discussed earlier, the parties were requested, in a conference call held on December 12, 2002, to address specifically the question of whether the Genco sites discussed in KEDC's application are actually available to the applicant for construction of generation capacity that would be a substitute for, as opposed to an addition to, the proposed facility. The question was posed to the parties because of (i) the Brookhaven Siting Board's reaffirmation that availability of sites identified as potential alternatives to a proposed facility's site is a threshold matter that must be established before evidence about the suitability of those sites need be considered;[270] (ii) statements in the minutes of LIPA's trustees' meetings that extension and preservation of the option to purchase the Genco facilities would allow LIPA to consider (a) acquiring the facilities, (b) financing repowering of the facilities at its lower cost of capital, and (c) deconcentrating the ownership of generating capacity interconnected with LIPA[271] by selling the facilities to several different purchasers;[272] and (iii) the stated need for the addition of new baseload capacity

[269] Exhibit 60, §5.1.

[270] Case 00-F-0566, supra, Order Denying Petition for Rehearing, pp. 9, 10.

[271] Currently, entities affiliated with KEDC own 92% of such capacity.

[272] LIPA Minutes, December 18, 2001 and March 28, 2002.

on LIPA's system before additional capacity at the Genco sites would be developed.[273] And because space constraints at certain of the Genco sites were noted in the application, where the discussion centered around the feasibility of constructing a new facility at those sites, the parties were asked to address the question of whether both a new facility and repowering plant could be accommodated at the Genco sites where LIPA has commissioned further studies of repowering.

In their supplemental briefs, KEDC, DPS Staff, and DEC Staff share a common view that the Genco sites are not available to KEDC, at KEDC's discretion, for development of either a new 250 MW combined cycle generating facility or repowering plant. The parties agree that the contracts executed at the time LILCO's generating assets were transferred to Genco[274] would require LIPA's explicit consent to any capacity additions at the Genco plant sites. The parties argue that LIPA has professed a need to see additional information, yet to be developed, about the economics of specific repowering projects (including the capital cost implications of assuming ownership of the Genco sites before work is begun), and about the duration of expected outages at the Genco sites during repowering work. LIPA has also expressed concern about the ability of a developer to bring on-line a repowering project at an alternative site within the same timeframe as the proposed facility (i.e., to be available for the summer season in 2005), but, KEDC contends, has shown no comparable interest in having new capacity constructed at any of the Genco sites. DPS Staff adds that LIPA has been "anything but silent on its intentions to pursue the right to own, operate and repower the Genco sites."[275]

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[273] LIPA Minutes, March 28, 2002 and June 27, 2002; LIPA Plan, pp. 5-24, 6-9 to 6-11, and 7-16.

[274] Exhibits 60-62.

[275] DPS Staff's Supplemental Brief, p. 2.

DPS Staff and SHARED contend that there is insufficient information about whether any of the Genco sites would have sufficient space to accommodate both a new facility, in which LIPA has expressed no interest, and repowering plant, which is being actively studied. KEDC argues that such questions have not been considered, so far, in the repowering studies conducted for LIPA, so that any consideration of dual siting would serve only to delay the completion of the repowering work. The applicant adds that the costs of the electrical and gas interconnections required at each site to support two new plants would need to be studied. The applicant notes, however, that evidence about the E.F. Barrett and Port Jefferson sites suggests that there would be space constraints at those locations, and that construction of a new facility at the field to the north of the Northport plant would preclude repowering of Unit No. 1.

SHARED's supplemental briefs raise various arguments to the effect that the Genco sites are available to, or even owned by, KEDC and were not adequately evaluated in the application. SHARED argues as follows:

1. KEDC's application refers to the applicant as "KeySpan" and also states that "KeySpan" owns the Genco sites. Therefore, the Genco sites had to be addressed pursuant to PSL §164(1)(b).

2. Consistency in the interpretation of the GPRA[276] requires that the Siting Board find that the Genco sites are available to KEDC, should the Board conclude that the GPRA does not preclude KEDC from building the proposed facility. According to SHARED, "[a]ny of the alternative sites were and remain as available to Keyspan from Genco as the Spagnoli Road site was prior to the submission of the Application."[277]

3. "[U]nless LIPA indicates a desire to prevent construction of the Proposed Facility, the proper

[276] Exhibit 60.

[277] SHARED's Supplemental Reply Brief, pp. 34-35.

assumption is that it will not enforce any particular provision of the GPRA or other Controlling Agreements."[278] Moreover, "even assuming, arguendo, that LIPA does possess a veto over construction at the alternative sites but not the Proposed Facility, it is Keyspan's burden to demonstrate that LIPA would exercise it."[279] According to SHARED, "there is no basis to suggest that LIPA inaction amounts to a bar on Keyspan action."[280]

4. Because KEDC had "statutory duties"[281] to evaluate the feasibility of repowering projects at the Genco sites, the question of whether a repowering project could be brought on-line as soon as the proposed facility is not relevant to the issue of whether the repowering project would be a reasonable alternative.

None of the foregoing arguments is convincing, and some are simply wrong. Although SHARED is correct in pointing out that the applicant used the name "KeySpan" to refer to more than one corporate entity within the KeySpan Energy conglomerate, we would find incredible any claim by an active party to this proceeding that the wording of the application led it to believe that KEDC and Genco are the same entity. The record shows that Genco was established for the purpose of acquiring LILCO's non-nuclear generation assets.[282] After SHARED alleged earlier in this proceeding that the GPRA precluded KEDC from developing the proposed facility,[283] it was explained to counsel for SHARED, on the record, that only Genco is a signatory to the GPRA.[284] The following week, the PSC issued an order explaining (in response to an argument raised by SHARED) that KEDC is not a signatory to

[278] Id., p. 30.

[279] Id., p. 39.

[280] SHARED's Supplemental Brief, p. 31.

[281] SHARED's Supplemental Reply Brief, p. 28.

[282] Exhibit 60; see also Case 98-M-0074, supra.

[283] SHARED's Motion to Dismiss Application, pp. 7-9.

[284] Tr. 325-327.

any contract with LIPA that precludes KEDC from developing the proposed facility.[285] We find SHARED's continuing arguments that KEDC, the applicant, owns the Genco sites inexplicable and unjustified.

Moreover, SHARED is wrong in contending that a "consistent" interpretation of the GPRA compels a conclusion that the Genco sites are now "as available" to KEDC as the Spagnoli Road site was, when it was sold to KEDC in 2001. The Genco sites are listed in Appendix C to the PSA,[286] and the GPRA's and PSA's requirements that Genco obtain LIPA's approval before selling, leasing, or otherwise assigning interests in "generating units" applies only to those sites. The Spagnoli Road site, in contrast, is not listed in Appendix C to the PSA, and Genco did not need LIPA's consent under the GPRA and PSA to convey the site to KEDC.

We also find insupportable SHARED's contention that "the proper assumption" is that LIPA "will not enforce any particular provision of the GPRA or other controlling agreements." As discussed earlier, Genco and LIPA agreed last March to extend the latter's option to purchase Genco's facilities to May 2005. We would not recommend a finding by the Siting Board resting on an assumption that Genco would blithely breach that contract by conveying any of the facilities at an earlier date, in whole or in part, to KEDC. Moreover, the PSA requires Genco to obtain LIPA's approval before "capital projects" are undertaken at the Genco facilities.[287] Thus, there is in fact a basis for concluding that "inaction" by LIPA would bar Genco from undertaking, or allowing KEDC to undertake, new construction or repowering projects at the Genco sites.

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[285] PSC Case 02-T-0335, supra.

[286] Exhibit 61.

[287] Exhibit 61, §§9.1.2 and 9.2.

Finally, SHARED is incorrect in claiming that KEDC had "statutory duties" to address repowering projects at the Genco sites in its application, as alternative locations under PSL §164(1)(b). As explained earlier, the Siting Board's regulations state that such a requirement would apply only to sites owned by, or under option to, an applicant.[288] The "alternatives" section of the pre-application stipulations addressed only technical alternatives at Spagnoli Road,[289] and the stipulations stated generally that compliance with their terms would constitute compliance with PSL §164. The Siting Board's Chairman agreed, finding the application--with its brief, voluntary assessment of the Genco sites as alternative sites for the proposed facility and its lack of discussion of repowering--to be in compliance with PSL §164. Pursuant to PSL §165(1), the Chairman directed KEDC to supplement the discussion in the application, but did not direct the applicant to address repowering projects at the Genco sites.[290] When SHARED requested access to the proposed facility's site and certain Genco sites, our ruling on the request stated that it is "clear" that "intervenor-proponents of alternate sites may be required to assume the burden of going forward on this issue."[291] When SHARED introduced the issue of repowering the Genco sites in its direct case, we issued a ruling noting that "the applicant has been required to provide information about potential alternative sites for the proposed facility," and holding that SHARED could proceed with "the not-inconsequential burden of going forward on the alternatives issue by introducing

[288] 16 NYCRR §1001.2(d)(2).

[289] Exhibit 1, Appendix 2B.

[290] Approximately one month after the Chairman found the application in compliance with PSL §164, SHARED moved for dismissal of the application. However, SHARED's motion did not advance the lack of discussion of repowering as grounds for dismissal.

[291] Case 01-F-0761, Procedural Ruling (issued June 5, 2002), p. 5, citing Case 97-F-1563, supra.

a discussion of technological alternatives to the proposed facility at other sites."[292]

KEDC addressed alternative sites to the extent provided for by PSL Article X, and the burden of going forward on the feasibility of repowering projects as alternatives to the proposed facility was properly assigned to (and, at least initially, willingly assumed by) SHARED. Accordingly, the question of whether repowering projects could be brought on-line as soon as the proposed facility is highly relevant and material to the issue of whether such projects would be "reasonable and available" as alternatives to the proposed facility.

iv. Conclusion

The sites discussed in KEDC's application as potential alternative sites for the proposed facility and/or raised in SHARED's direct case as potential sites for repowering projects are all owned by Genco and under option to LIPA.[293] Therefore, PSL §164(1)(b) does not apply to those sites, and the threshold inquiry is whether there is a basis for a finding by the Siting Board, pursuant to PSL §167(4), that the sites are available to KEDC.

In Brookhaven, the Siting Board held that an intervenor-opponent of the proposed facility in that case should demonstrate the availability of an alternate site--LIPA's property at Shoreham--by providing an affidavit stating that the Shoreham site was available for sale or lease to the applicant in that case, before the intervenor-opponent would be permitted to

[292] Case 01-F-0761, Procedural Ruling (issued July 31, 2002), pp. 2-3 (some emphasis supplied).

[293] In its direct case, SHARED discussed two sites that are not owned by Genco and do not currently host major electric generating facilities (Calverton and Brookhaven National Laboratory [BNL]). However, the record contains no evidence showing that those sites are either available to KEDC or reasonably suitable given KEDC's objectives.

proffer testimony on the factual issue of whether the Shoreham site would be superior to the site proposed by the applicant.[294] In this proceeding, no such affidavit from Genco has been provided, nor is there comparable evidence that the requisite approvals and consents from LIPA under the GPRA and PSA could be obtained. Thus, there would be no basis whatsoever for an affirmative finding by the Siting Board that any of the Genco sites is available to the applicant, and such a finding would be required before the reasonableness of the available sites could be taken into account as a "pertinent consideration" under PSL §168(2)(c)(i).

The record in this proceeding and officially-noticeable public records weigh against a finding (or even an assumption) that the Genco sites are available to KEDC, and there is no offsetting evidence to support such a finding. In December 2001, LIPA was faced with the prospect of losing its option to purchase the Genco facilities in five months. LIPA recognized that its acquisition of the facilities would give it "greater ability to directly influence the course of competition in the Long Island power market, in the best interest of its ratepayers, including the sale of generation assets to third parties," whereas, LIPA concluded, "KeySpan would not be similarly inclined to sell generation assets or otherwise promote competition." LIPA concluded further that leaving in place the then-current GPRA would result in retention of the facilities by Genco, and "a competitive market would not develop on Long Island for the next twelve years under the PSA, plus potentially an additional fifteen years thereafter."[295] Once LIPA and Genco agreed to an extension of the GPRA's purchase option, LIPA was given "an

[294] Case 00-F-0566, supra, Order Concerning Interlocutory Appeals From Article X Issues Ruling (issued January 2, 2002), p. 6. Later in the case, an information request to LIPA elicited the response that the Shoreham site would not be made available to the applicant (Order Denying Petition for Rehearing, p. 13).

[295] LIPA Minutes, December 18, 2001, pp. 24, 29, 34.

opportunity to examine alternatives, including the possibilities of repowering one or more plants, the ownership of some of the plants by LIPA or third parties, and the introduction of competition into the market."[296] These alternatives have been restated in LIPA's draft energy plan.[297] From the foregoing, we do not see how anyone could reasonably infer that LIPA would now allow another KeySpan entity to assume control over any particular Genco asset or site. In any event, the Siting Board has tended to require clear evidence of availabilty and not rely on inferences.

Moreover, even if Genco's or KEDC's ownership of a repowered Genco plant were to be permitted by LIPA, such a plant could not be considered an "alternative" to the proposed facility because it would not be available until a later date.[298] LIPA's plan is to meet stringent reliability criteria,[299] but last summer, while the hearings in this case were underway, the federal Department of Energy was prepared to order the operation of the Cross-Sound Cable direct current transmission line, prior to its receipt of all environmental approvals, because "an emergency exists on Long Island in the State of New York due to a shortage of electric energy, a shortage of facilities for the generation of electric energy, a shortage of facilities for the transmission of electric energy and other causes."[300] The Cross-Sound Cable still has not received approval by Connecticut authorities,[301] the Northport-Norwalk transmission line has been damaged,[302] and LIPA's sale of electricity increased by 10% from

[296] LIPA Minutes, March 28, 2002, p. 12.

[297] LIPA Plan, Volume 2, Preface p. 5.

[298] LIPA Plan, Volume 2, p. 7-16.

[299] LIPA Plan, Volume 2, p. 5-24.

[300] United States Department of Energy, Order No. 202-02-1 (issued August 16, 2002).

[301] LIPA Minutes, November 25, 2002, p. 13.

[302] LIPA Minutes, November 25, 2002, pp. 10-12.

the summer of 2001 to the summer of 2002. Clearly, a facility with an in-service date later than the proposed facility's cannot be considered an available, or reasonable, alternative.

Accordingly, we recommend that the Siting Board decline to make a finding that there are sites other than Spagnoli Road, or technologies other than a new combined cycle plant, available to KEDC.

b. Reasonableness of Proposed Alternative Sites

i. Introduction

We have recommended that the Siting Board find that the environmental impacts resulting from construction and operation of the proposed facility at Spagnoli Road would not be significant and would be minimized, and that construction and operation of the facility would be compatible with public health and safety. Therefore, in accordance with the Athens decision, a finding that another site would be preferable would depend on a showing, by the proponent of that site, that it is available and "greatly superior."[303] Although the threshold test of availability has not been met for any of the sites evaluated by KEDC or proposed as alternatives by SHARED, we have nevertheless evaluated those sites on the basis of fuel use, electric transmission interconnection costs, and potential environmental impacts, and we conclude that none of those sites would be preferable to the Spagnoli Road site.

ii. Fuel Use

The proposed facility would use natural gas supplied through a new 6,400-foot, 16-inch diameter pipeline interconnecting with an existing KEDLI natural gas pipeline south of the facility's site.[304] The KEDLI system receives natural gas

[303] Case 97-F-1563, supra, pp. 96-97.

[304] PSC Case 02-T-0335, supra.

through interconnections with the Iroquois and Transco pipelines.[305] The proposed facility would not need to use liquid fossil fuels, which burn less cleanly than natural gas, in order to maintain its reliability as a baseload source of electricity.

The only identified potential alternative site with comparable access to natural gas service is E.F. Barrett, which is located on the southern shore of Long Island well to the west of the Melville-area load center. However, this station has been identified by LIPA as a leading candidate for repowering,[306] and, as noted earlier, it appears that there would be insufficient space at that site to accommodate both repowering plant (which LIPA would not consider to be an alternative to the proposed facility's capacity) and a new generating facility.

Northport could be easily interconnected with the Iroquois pipeline, but because that would be the site's sole source of gas, the New York State Reliability Council's Rule I-R5 (also known as Local Reliability Rule No. 5) would limit the total amount of consumption of gas at the site whenever electric load on Long Island reaches 3,200 MW. In order to operate reliably during periods of peak demand, a new facility at Northport would have to burn liquid fuel stored on-site and delivered there by trucks, unless an interconnection to the KEDLI system, the cost of which would far exceed the cost of the Spagnoli Road interconnection, was constructed.[307]

The gas pipeline capacity serving the Port Jefferson site is insufficient to accommodate additional load, and existing Units 3 and 4 are also subject to Rule IR-5. Moreover, there is no natural gas service at the Shoreham/Wading River site (or the Calverton and BNL locations touted by SHARED as potential alternative sites). New or additional interconnections between

[305] Exhibit 1, §15.2.5.

[306] LIPA Plan, Volume 2, pp. 7-16, 7-19.

[307] See KEDC's Supplemental Brief, p. 13, and the references cited therein.

those sites and the KEDLI system would be even more costly than a new Northport interconnection.[308]

SHARED has contended that natural gas would be supplied less expensively to Shoreham/Wading River and Port Jefferson once new pipeline capacity was constructed, namely, the Islander East pipeline and/or the Iroquois Eastern Long Island extension.[309] Although Islander East has received a certificate from FERC,[310] it would be fair to conclude that there remains considerable uncertainty about when, or even whether, that pipeline will go into service. The Connecticut Department of Environmental Protection (CDEP) has rejected the federal coastal zone consistency determination proposed by Islander East. CDEP stated that "the activities, as proposed, are inconsistent with Connecticut's federally approved [Coastal Zone Management Program (CZMP)] and . . . at least one viable alternative exists which would reduce the environmental impacts of the proposed work."[311] CDEP's decision has been appealed to the federal Department of Commerce.

Earlier, the administrator for EPA Region 1 had raised concerns about the Islander East project that were not taken into account in FERC's decision. According to the administrator, "the issues that remain unresolved . . . will need to be addressed in the Clean Water Act Section 404 process administered by the Corps of Engineers."[312] Once CDEP's decision was issued, Islander East

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[308] Id.

[309] Even so, an interconnection between Islander East and Port Jefferson would be more expensive than the Spagnoli Road/KEDLI interconnection (Tr. 1905).

[310] FERC Docket No. CP01-384-000 et al., Islander East Pipeline Company, LLC et al., Order on Rehearing and Issuing Certificates (issued September 19, 2002).

[311] Letter of October 15, 2002 from Arthur J. Rocque, Jr., CDEP Commissioner, to Gene H. Muhlherr, Jr., Islander East Senior Project Manager.

[312] Letter of September 30, 2002 from Robert W. Varney, EPA Regional Administrator, to Magalie R. Salas, FERC Secretary.

requested ACOE to defer its review of the project's Clean Water Act §404 permit application until early 2003, to allow for "necessary time to resolve the project's regulatory issues with Connecticut."[313] ACOE regarded Islander East's request as a request to withdraw the permit application, and the application file has been administratively closed without prejudice.[314]

At the very least, therefore, Islander East must clear several remaining regulatory hurdles (and, perhaps, initiate condemnation proceedings) before the pipeline can be constructed, even though it has been certificated by FERC.[315] Moreover, Iroquois has requested FERC to defer consideration on the application for the Eastern Long Island expansion "pending notification from Iroquois regarding its plans to proceed with the project."[316] FERC has extended indefinitely the deadline for comments on the draft environmental impact statement, and has fixed February 14, 2003 as the deadline for Iroquois to file a status report that "must give a clear indication of Iroquois' intent."[317] And OPRHP has yet to complete its assessments of the Islander East and Iroquois projects' impacts on cultural and historical resources, because the two projects have employed

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[313] Letter of October 16, 2002 from Gene H. Muhlherr, Jr., Islander East Senior Project Manager, to Cori Rose, ACOE Senior Project Manager, New England District.

[314] Letter of October 18, 2002 from Christine Godfrey, ACOE Chief of Regulatory Division, New England District, to Joseph Reinemann, Islander East.

[315] FERC Docket No. CP01-384-000, supra, Order on Rehearing (issued January 17, 2003), ¶¶7, 34, 115-119, 173-174, and 180.

[316] FERC Docket No. CP02-52-000, Iroquois Gas Transmission System, LP, Motion Requesting Deferral of Consideration, p. 2.

[317] Id., Notice of Extension of Public Comment Period (issued January 24, 2003).

different consultants who have submitted "different and sometimes conflicting reports of identified cultural resources."[318]

Thus, the Siting Board could not reach a conclusion about the availability of natural gas, at reasonable costs, to the Shoreham/Wading River and Port Jefferson sites without speculating about the outcome of several regulatory reviews. Natural gas is the cleanest burning fossil fuel,[319] and Spagnoli Road is the only evaluated site at which KEDC could be assured that a new combined cycle generating facility would burn natural gas, at a reasonable cost and during every hour of the facility's availability, to serve the Melville-area load center.[320] Accordingly, we conclude that, from the standpoint of fuel use, the record is insufficient to support a finding that the alternative sites advanced by SHARED would be preferable to Spagnoli Road.

iii. Electric Transmission Interconnection

The primary electrical interconnection for the proposed facility would run to LIPA's 138 kV switchyard at the Ruland Road substation located approximately 4,000 feet to the east of the facility site. The route chosen for the interconnection circuit

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[318] Id., and FERC Docket No. CP01-384-000, supra, Letter of October 25, 2002 from Douglas P. Mackey, OPRHP Historic Preservation Program Analyst, to Magalie R. Salas, FERC Secretary.

[319] There are other environmental benefits to using natural gas, including lower exhaust stack heights and avoidance of fuel deliveries by truck where off-shore or pipeline facilities for liquid fuels are not available. Such impacts would be matters of particular concern at Shoreham/Wading River, were natural gas to continue to be unavailable at that site (Exhibit 1, §16.3.1).

[320] As noted in the LIPA Plan, "[e]nvironmental challenges that arise from electric generation include the need to . . . [c]ontrol emissions of SO_2, NO_x, carbon monoxide, particulate[s] and other pollutants" (LIPA Plan, Volume 2, p. 4-1).

would minimize environment impacts because it is the shortest route and would entail minimal construction difficulty.[321]

DPS Staff notes that because there are transmission constraints on Long Island at several substations, the island can be divided into east, central, and west service areas. The central area has the greatest demand for electricity, with demand for 2004 projected to be 2,350 MW. Meanwhile, generation capacity within the central area totals 2,100 MW. Therefore, to keep pace with central area load growth while demand grows throughout the island, LIPA would be required either to fortify its transmission system or arrange for the addition of generation capacity within the central area. DPS Staff observes that siting the proposed facility at Spagnoli Road, which is in the central area, would assist in satisfying the need for additional electricity in the central area. Moreover, DPS Staff continues, locating the facility near a load center would enhance reliability "by reducing the chances for transmission failure to interrupt the flow of electricity to the central area."[322]

Were a new 250 MW facility located at any of the alternative sites advanced by SHARED, the electric transmission system additions that would be required to achieve KEDC's goal of serving the Melville-area load center would be considerably more expensive than the proposed facility's interconnection with the Ruland Road substation, and the higher costs would not purchase greater reliability. Accordingly, we conclude that, from the standpoint of the electric transmission system interconnection, the record is insufficient to support a finding that the alternative sites advanced by SHARED would be preferable to Spagnoli Road.

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[321] Exhibit 1, §14.1.3.

[322] Id., p. 26.

iv. Potential Environmental Impacts

In the Athens case, the Siting Board stated that evidence about potential alternative sites, "to be of decisional consequence, must show that the alternative site is both preferable and available, and would resolve a significant problem with the proposed site."[323] Obviously, the alleged preferability of a proposed alternative site would be diminished to the extent that the alternative site itself had potential environmental problems. Moreover, as noted earlier, the question before us is whether any of the alternative sites advanced by SHARED would be greatly preferable to the Spagnoli Road site.

Although some opponents of the proposed facility alleged, in public comments or on brief, that the Spagnoli Road site would be unacceptably close to residential neighborhoods,[324] the nearest permanent residence to the site would be 3,800 feet away. In contrast, the nearest residences to the four Genco-owned sites--Port Jefferson, Shoreham/Wading River, E.F. Barrett, and Northport--would be, respectively, 400 feet, 450 feet, 550 feet, and 1,600 feet.[325] The dormitories on the SUNY campus would be farther away from the proposed facility than is the nearest residence to Northport.[326] Thus, assuming that distance from residential areas is a criterion for environmental compatibility, the Spagnoli Road site would be preferable.

The four Genco-owned sites are located along the shoreline of Long Island (E.F. Barrett is on the southern shore, while the other three are located adjacent to Long Island Sound), so the development of a new generation facility at any of those sites would require an assessment pursuant to New York's CZMP.

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[323] Case 97-F-1563, supra, p. 93.

[324] See, e.g., SHARED's Initial Brief, pp. 14-15.

[325] Exhibit 4.

[326] Tr. 2955-2956.

DPS Staff points out that Coastal Policy No. 27, which requires a demonstration of the necessity for a major new generation facility, could be satisfied, but that Coastal Policy No. 5, which "[e]ncourage[s] the location of development in areas where public services and facilities essential to such development are adequate," might not be met. DPS Staff argues that "[w]hile there is a demonstrated need for the proposed facility . . . there has been no demonstration by any party that the proposed facility needs a shorefront location." Pointing to the Northport site, DPS Staff contends that "[w]ith an inadequate supply of gas . . . siting is likely to be discouraged at Northport due to inconsistency with the State's Coastal Zone policy."[327]

DPS Staff's argument is convincing, and it would apply as well to the Port Jefferson and Shoreham/Wading River sites. Moreover, none of the four Genco-owned sites could host a new facility that would meet KEDC's objective of providing new capacity to serve the Melville-area load center without extensive and expensive additions to LIPA's electric transmission system; such additions would be obviated by constructing the proposed facility at the Spagnoli Road site. Thus, assuming that demonstrated consistency with the state's CZMP is a criterion for environmental compatibility, the Spagnoli Road site would be preferable.

KEDC notes that the Northport site is adjacent to piping plover and least tern habitats, and those bird species are classified by DEC as, respectively, endangered and threatened. SHARED contends that "the potential (or even documented) presence of these birds on the beaches to the north of the Northport site presents absolutely no impediment to the use of this site either for the location of a new 250 MW facility or repowering."[328] KEDC, in contrast, argues that plant activities would be

[327] DPS Staff's Initial Brief, pp. 15-16.

[328] SHARED's Reply Brief, pp. 92-93.

restricted in the areas near to the nesting and foraging areas during the season when the plovers and terns are present, namely, mid-March through mid-September. KEDC maintains that the minimum buffer area recommended for plover protection under guidelines issued by the federal Fish & Wildlife Service (FWS) would extend 50 to 100 feet into the field north of the plant identified by SHARED as a potential site. KEDC contends that, at a minimum, DEC would be unlikely to allow any construction work to go forward at either the northern or western fields during the plover and tern nesting and foraging seasons, and the applicant believes that there could also be restrictions imposed on plant operations during those seasons to avoid disturbing the birds.[329]

In the Islander East certification proceeding, FERC adopted a condition requiring the pipeline's sponsors to continue consultations with both FWS and DEC about least tern and piping plover habitats near the pipeline's route. FERC's condition requires Islander East to develop requirements for surveying, monitoring, or avoiding the birds and their habitats. No construction would be permitted to begin until FERC Staff received comments from FWS (and perhaps entered into a formal consultation process) and the director of FERC's Office of Energy Projects issued written notification that construction or mitigation may begin.[330] Obviously, FERC would not be involved in the siting of a generation facility at Northport, but consultations with FWS and DEC would still be required before new construction began.

Moreover, given the proposed routing of the Islander East pipeline, FERC's condition suggests that piping plover and least tern habitats are located near to Shoreham/Wading River as well as Northport. In contrast, construction of the proposed facility at Spagnoli Road would not affect such habitats.

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[329] KEDC's Initial Brief, pp. 126-127

[330] FERC Docket No. CP-384-000, supra, Order on Rehearing and Issuing Certificates, Condition No. 28.

Without more information about how proximity to the habitats would affect construction schedules, practices, and costs, the record cannot support a finding that Northport or Shoreham/Wading River would be preferable to Spagnoli Road.

Development of electric generating capacity in the western field at the Northport site would entail the elimination of three soccer fields.[331] In contrast, KEDC has agreed to develop one or more additional soccer fields, including parking spaces and a potable water supply, in an area measuring 800 feet by 350 feet in the southwestern portion of the Spagnoli Road site.[332] Thus, from the standpoint of impact on recreational facilities, no alternative site would be preferable to Spagnoli Road.

As noted in the application, the E.F. Barrett site was developed, in the 1950s and 1960s, from salt marshes and wetlands.[333] KEDC maintains that development of a new facility in the eastern field at E.F. Barrett would require disturbance of salt marshes or adjacent tidal wetlands or demolition of existing equipment. KEDC argues that "[i]t is undisputed that the area SHARED identified in the eastern part of the site is located within 300 feet of the tidal wetlands and therefore within the DEC's wetlands jurisdiction."[334] SHARED acknowledges that the eastern field at E.F. Barrett would be the least desirable of the alternatives,[335] but contends that a facility could be developed in the southern field at that site with lesser impacts. Because, as discussed earlier, development of the Spagnoli Road site would not result in adverse impacts to wetlands, the record will not

[331] Exhibit 1, §4.6.1.

[332] Joint Stipulations, Public Interest Topic Agreement §III.F.8.

[333] Exhibit 1, §16.3.3.

[334] KEDC's Reply Brief, p. 76, citing Tr. 1743.

[335] SHARED's Reply Brief, p. 102.

support a finding that either the eastern or southern field at the E.F. Barrett is preferable to the Spagnoli Road site.

The Shoreham/Wading River site has limited cleared space available for construction of a new facility.[336] DPS Staff argues that a 250 MW facility could not be constructed on the vacant cleared acreage in the northeastern portion of the site without installing the cooling structure on top of the generator building, and it points out that the record includes no analysis of the relative costs and benefits of such a design vis-à-vis the more conventional design proposed for Spagnoli Road.[337]

KEDC pointed to the probable need to clear mature vegetation as a drawback to developing a new facility at the Shoreham/Wading River site.[338] Moreover, the state's 2002 Open Space Conservation Plan identifies the "Key Span – Shoreham" parcel as an "ecologically significant" site that should be considered for "provid[ing] much needed access to the LI Sound and [creating] a connection to the 1500 acre Brookhaven State Park."[339] In contrast, there is no corresponding recommendation for the Spagnoli Road site, nor would development of the proposed facility require significant clearance of mature vegetation. Accordingly, from the standpoint of open space conservation, the

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[336] Exhibit 1, §16.3.1.

[337] DPS Staff's Initial Brief, p. 17.

[338] KEDC's Reply Brief, p. 75.

[339] 2002 Open Space Conservation Plan, Chapter V – Regional Advisory Committee Recommendations, p. 90. According to the plan, "[t]he Committees provide advice and recommendations on policies and priorities, studies and assessments, setting guidelines for project selection, the consideration of economic impacts, the ecological value of projects, the recommendation of properties to be considered for conservation and acquisition, and other relevant matters" (p. 82). The Region 1 Regional Advisory Committee Report has identified the "Long Island Sound Coastal Area" as a "Priority Project," and identifies as objectives "[p]reserving environmentally sensitive habitats and maintaining open space" and "increasing public access to L.I. Sound" (p. 90).

record would not support a finding that the Shoreham/Wading River site would be a preferable alternative to the Spagnoli Road site.

The Port Jefferson site is narrow and has hilly terrain, which would make construction of a new facility difficult and expensive. KEDC's application notes that new construction would require demolition of existing buildings and excavation of surrounding hills to accommodate major components, including the cooling structure. Before demolition could occur, asbestos removal would be required. The proximity of the remaining structures and hilly terrain would nevertheless require the construction of exhaust stacks rising 300 feet above grade (or higher).[340] In contrast, development of the proposed facility at the Spagnoli Road site would require no demolition of existing structures (other than the removal of trailers used as offices and training rooms), insignificant alteration of the existing terrain, and a far shorter exhaust stack. Therefore, from the standpoints of construction impacts, construction costs, and visual impact, the record does not support a finding that the Port Jefferson site would be preferable to the Spagnoli Road site.

v. Conclusion

As discussed earlier, the threshold test of availability has not been met for any of the sites evaluated by KEDC or proposed as alternatives by SHARED. Moreover, when those alternatives are evaluated on the basis of fuel use, electric transmission interconnection costs, and potential environmental impacts, each site has a number of shortcomings that further preclude a finding that any would be preferable (much less greatly superior) to the Spagnoli Road site. We conclude, accordingly, that the record does not support a finding that

[340] Exhibit 1, §16.3.2.

there is a "reasonable and available"[341] alternative to the proposed facility.

3. Overall Public Interest Assessment

The Siting Board must find that construction and operation of the proposed facility would serve the public interest, considering among other things the facility's potential environmental impacts.[342]

With regard to environmental effects, the proposed facility's overall benefits would outweigh any potential environmental and social costs, especially because its minimal environmental impacts would be mitigated in accordance with the proposed certificate conditions. Air quality would be improved, insofar as the proposed facility's electricity production would displace the output of older, less efficient, and higher-emitting generators that would need to be run to meet local demands.[343] The proposed facility would contribute to the reliability of the electric system on Long Island by adding generation capacity needed to satisfy NYISO reliability criteria.[344]

The proposed facility would not cause a significant impact on the surrounding community's existing services, and it would provide socio-economic benefits to the community. Construction of the proposed facility would employ, on average, 350 persons, and the applicant projects that construction would

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[341] PSL §167(4).

[342] PSL §168(2)(e). Subsumed within the discussion in this part of the recommended decision is a consideration of the "no action" alternative, which must be addressed in an application filed under PSL Article X [16 NYCRR §1001.2(c)] but need not be specifically addressed in the Siting Board's findings [PSL §168(2)]. The discussion addresses benefits resulting from construction and operation of the proposed facility that would not occur without its certification.

[343] Exhibit 1, §§16.2 and 17.2.

[344] See KEDC's Initial Brief, pp. 116-117, and the references cited therein.

increase economic activity in the area by approximately $26 million.[345] The applicant asserts, in addition, that annual property taxes paid by the proposed facility would exceed $5 million.[346]

Moreover, the applicant has committed its support, in the joint stipulations, to several community benefit and air quality improvement projects. The community benefit projects are as follows:[347]

1. KEDC or its affiliates will provide funding over a 10-year period to support a discount in the "the commodity cost of power" to encourage development of industries in the technology and biotechnology sectors along a section of Route 110 near the proposed facility.

2. KEDC will work with the Town of Huntington to develop a program for revitalizing, and enhancing the quality of life in, the Huntington Station area. KEDC will also provide funds to be distributed as grants and loans.

3. KEDC will develop one or more soccer fields, with parking facilities and a potable water supply, in an area measuring 800 feet by 350 feet in the southwest portion of the proposed facility's site. The soccer fields will be leased to the Town of Huntington or potentially associated junior soccer leagues without the payment of rent.

4. KEDC will undertake two educational initiatives, one in connection with SUNY, to promote awareness of renewable energy technologies.

The air quality improvement projects are as follows:[348]

1. Eight of the 16 burners in Unit 3 at Genco's Northport generating station would be converted from oil-only firing to dual fuel (gas and oil

[345] Exhibit 1, §12.3.

[346] Exhibit 1, §12.7.2; KEDC's Initial Brief, p. 162.

[347] Joint Stipulations, Public Interest Topic Agreement §III.F.

[348] Proposed Certificate Condition III, paragraphs 4 through 7.

firing), resulting in emission reductions that would more than offset the proposed facility's emissions.

2. KEDLI will allow the Town of Huntington's light duty fleet vehicles, and commercial vehicles of other third-party (non-KeySpan) owners, to use KEDLI's planned natural gas vehicle fast-fill station at its Greenlawn Operations Center.

3. KEDC or KEDLI will assist the Town of Huntington in converting its light duty vehicle fleet to gas-burning vehicles by examining federal and state funding opportunities and providing its own funding of $200,000 to pay for the incremental costs of gas-burning vehicles.

4. KEDC or its affiliates will install a microturbine at the Dix Hills Skating Rink to supply a portion of its electric and thermal load requirements.[349]

In view of the foregoing, we conclude that the construction and operation of the proposed facility is in the public interest, considering the facility's potential environmental impacts. We recommend that the Siting Board reach the same finding.

III. OTHER MATTERS

A. Service of Compliance Filings

The Siting Board's regulations specify that copies of compliance filings be served on DPS Staff, DEC Staff, and "each party specified in the certificate."[350] Proposed Certificate Condition II.3 states that compliance filings "shall be served on all active parties that have advised the Board of their desire to receive a copy of such filings." For purposes of the compliance

[349] We have modified proposed Certificate Condition VIII.2, and added Certificate Condition III.8, to allow for extensions to the schedules for implementation of the community benefit and air quality improvement projects by written agreement of the parties, so that certificate amendments would not be required.

[350] 16 NYCRR §1003.3(c).

filing service requirement, we define "active parties" to mean parties entering appearances at the May 10, 2002 issues conference or the evidentiary hearings (see Appendix A). Active parties wishing to receive copies of the compliance filing should so indicate in their briefs on exceptions or in letters filed by the due date for such briefs.

B. Officially-Noticed Documents

In our Procedural Ruling of November 18, 2002, we took official notice of three documents that are not public records under the Siting Board's regulations.[351] In order to complete the record, we propose to mark the documents as exhibits and receive them into evidence. The exhibit marks would be 122 for the newspaper article submitted by KEDC; 123 for the letter to LIPA submitted by KEDC; and 124 for the article submitted by SHARED on October 8, 2002. Any objections to this proposal may be raised on exceptions.

In its supplemental brief filed on January 3, 2003, SHARED has requested that notice be taken of a brief article published back in October 18, 2002. However, it is obvious from a review of the article that it does not comport with SHARED's characterization of its content. Moreover, the article merely noted that the LIPA Plan had been released the previous day. Because the LIPA Plan is a public record freely available on LIPA's website, the article adds nothing of substance to the information available to the parties. Accordingly, official notice will not be taken of that article.

C. Motion to Strike Evidence

On December 31, 2002, SHARED moved to strike Exhibit 27 from the record. Exhibit 27 is the first version of the joint stipulations, and includes a page with the signature of counsel

[351] 16 NYCRR §1000.11(a).

for the Town of Huntington. SHARED argues at considerable length that the Town acted improperly when it entered into the joint stipulations. SHARED's motion is opposed by DEC Staff, DPS Staff, KEDC, and the Town.

SHARED cannot reasonably claim that it would be prejudiced by leaving the exhibit in the record, because SHARED is the party who asked that it be marked for identification in order to facilitate cross-examination of KEDC's witnesses.[352] Striking the exhibit while leaving in place the transcript of the cross-examination would result in an incomplete record. Moreover, most of SHARED's arguments in its motion raise issues that fall well outside the jurisdiction of the Siting Board. Accordingly, SHARED's motion is denied.

D. Requests for Additional Hearings

Through affirmations of counsel dated September 24, 2002 and October 8, 2002, SHARED has requested that additional hearings be held. Both affirmations state that SHARED should be permitted to submit additional testimony about the technical feasibility of repowering projects at the sites of Genco-owned electric generating stations, and about LIPA's willingness to support such projects. The second affirmation seeks further examination of the issue of whether the proposed facility has been selected pursuant to an approved procurement process, based on a newspaper article stating that KEDC would seek to enter into an agreement requiring LIPA to purchase all of the proposed facility's capacity. KEDC filed a response, dated October 17, 2002, opposing SHARED's request, and SHARED file a reply to KEDC's response on October 23, 2002.

We see no need to convene additional hearings. LIPA's willingness to consider repowering at certain Genco-owned sites, and significant details about the feasibility of repowering, are

[352] Tr. 1315.

among the information available to the public following the issuance of the LIPA Plan. Additional information is available in the publicly-available minutes of the meetings of LIPA's trustees. Moreover, as discussed earlier in this decision, KEDC's pursuit of a contract with LIPA for the purchase of 100% of the proposed facility's capacity is not inconsistent with a finding by the Siting Board that the proposed facility has been selected pursuant an approved procurement process. Accordingly, SHARED's requests for additional hearings are denied.

IV. SUMMARY AND CONCLUSIONS

In Section I.D of this decision, we outlined the findings that PSL Article X requires the Siting Board to make before it may grant a certificate. We summarize these findings here.

A. Approved Procurement Process and Competition

Pursuant to PSL §168(2)(a), the Siting Board must find that the "facility was selected pursuant to an approved procurement process." On the basis of the application and the applicant's motion of January 28, 2002, we conclude that the proposed facility has been selected pursuant to an approved procurement process.

B. Environmental Impacts

PSL §168(2)(b) requires the Siting Board to identify the nature of the proposed facility's probable environmental impacts. We conclude that the record in this proceeding contains a complete review of the likely adverse and beneficial effects in all of the areas of concern listed in that provision of PSL Article X. With respect to each such concern, moreover, we conclude that with the implementation of the mitigation proposals accepted by the applicant, and recommended herein, the proposed

facility minimizes environmental impacts as contemplated in §168(2)(c)(i).

In reaching the determinations regarding how the facility would minimize environmental impacts, the Siting Board is required to consider the state of available technology, and New York's interests pertaining to aesthetics, the preservation of forests and parks, fish and wildlife, viable agricultural lands, and other pertinent considerations. With respect to each aspect of the proposed facility's probable impacts, we conclude that both the range of available and feasible approaches to mitigating those impacts, as well as the state laws respecting aesthetics, historic preservation, and resource preservation, have been thoroughly considered.

Based on the foregoing analysis, we also conclude that the Siting Board may find that the proposed facility is compatible with public health and safety (§168(2)(c)(ii)), will not discharge effluents in contravention of standards adopted by DEC (§168(2)(c)(iii)), and will not emit air pollutants in contravention of applicable air emission control requirements or air quality standards (§168(2)(c)(iv)). There are no solid waste management or hazardous waste disposal facilities associated with this facility.

As we have also discussed, the Siting Board issues all state-level permits required for the construction and operation of the proposed facility, except for permits required pursuant to the federal Clean Air Act and Clean Water Act. DEC is expected to make final determinations about the requested air emission and water discharge permits. Therefore, the Board should be able to make the requisite findings required under §168(2)(c)(iii) and (iv), and issue its final decision and a certificate.

As further discussed, we find that the proposed facility is designed to operate in compliance with most applicable state and local laws and regulations (§168(2)(d)), and that compliance with a limited number of those laws would be

unreasonably restrictive in light of existing electric generation technology, the needs of and costs to ratepayers, and, in addition, the proposed facility's consistency with existing land uses in its immediate vicintiy. We find as well that the proposed facility's construction and operation will be in the public interest (§168(2)(e)).

C. Conclusion

As discussed above, we conclude the Siting Board can make all of the findings it is required to make pursuant to Article X (PSL §168(2)) in order to grant a Certificate of Environmental Compatibility and Public need to the Applicant, subject to terms and conditions listed in Appendix B to this decision. We recommend that the application, so conditioned, be granted.

February 4, 2003
RRG/KJC:yrs

APPENDIX A

APPEARANCES

FOR KEYSPAN ENERGY DEVELOPMENT CORPORATION:

Michael B. Gerrard and Andrew S. Ratzkin, Esqs., Arnold & Porter, 399 Park Avenue, New York, New York 10022.

FOR THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION:

Jennifer Hairie and Franz Litz, Esqs., 625 Broadway, Albany, New York 12233.

FOR THE NEW YORK STATE DEPARTMENT OF PUBLIC SERVICE:

Kimberly Harriman and Kevin Lang, Esqs., Three Empire State Plaza, Albany, New York 12223.

FOR THE NEW YORK STATE DEPARTMENT OF HEALTH:

David W. Quist, Esq., Room 2421, Five Empire State Plaza, Albany, New York 12237.

FOR THE COUNTY OF SUFFOLK:

Phyllis Seidman, Esq., County of Suffolk, Department of Law, 100 Veterans Memorial Highway, Hauppauge, New York 11788

FOR THE TOWN OF HUNTINGTON:

Maureen Liccione, Esq., Twomey, Latham, Shea & Kelley, 33 West Second Street, Riverhead, New York 11901

FOR THE TOWN OF OYSTER BAY:

Ralph P. Healey and Marilyn L. Olshansky, Esqs., Town of Oyster Bay, Town Hall, Oyster Bay, New York 11771

FOR THE SOUTH HUNTINGTON ALLIANCE FOR RESPONSIBLE ENERGY DEVELOPMENT, et al.:

Mark A. Chertok and Kate Sinding, Esqs., Sive, Paget & Riesel, 460 Park Avenue, New York, New York 10022; and Richard C. Cahn, Esq., Cahn & Cahn, 445 Broadhollow Road, Suite 332, Melville, New York 11747.

APPEARANCES

FOR PACE UNIVERSITY SCHOOL OF LAW, CENTER FOR ENVIRONMENTAL LEGAL STUDIES:

Victor Tafur, Staff Attorney, Center for Environmental Legal Studies, 78 North Broadway, White Plains, NY 10603

APPENDIX B

NEW YORK STATE BOARD
ON ELECTRIC GENERATION
SITING AND THE ENVIRONMENT

IN THE MATTER

– of the –

Case 01-F-0761

Application of KeySpan Energy Development Corporation for a Certificate of Environmental Compatibility and Public Need to Construct and Operate a Nominal 250 Megawatt Combined Cycle Combustion Turbine Electric Generating Plant in the Town of Huntington, Suffolk County, New York

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RECOMMENDED CERTIFICATE CONDITIONS

I. Project Authorization

1. The Certificate Holder is authorized to construct and operate the Project, including associated interconnects, as described in the Application, except as waived, modified or supplemented by this Certificate or other permits.

2. The Certificate Holder is responsible for obtaining a State Pollutant Discharge Elimination System ("SPDES") permit for storm water discharge to the groundwater aquifer, a Title V permit under the Clean Air Act ("CAA"), and other approvals and permits as specified in the Application.

3. The Project shall be designed to operate and be operated in compliance with all applicable federal and state laws and regulations. Facility plans and specifications shall be prepared in conformance with applicable requirements of the New York State Uniform Fire Prevention and Building Code and shall be certified by a registered engineer or architect.

4. The Project shall be designed to operate and be operated in compliance, subject to the exceptions provided in Section VI below, with all applicable local laws and regulations.

5. The Certificate Holder is authorized to enter into an interconnection agreement with the Long Island Power Authority ("LIPA") for interconnection of the Project facilities to the Ruland Road substation (138 kV bus) approximately 4,000 feet east of the site, as described in Section 14 of the Application.

6. The Certificate Holder is authorized to enter into an interconnection agreement with KeySpan Energy Delivery Long Island gas transmission system existing 20-inch gas main at the intersection of Daniel Street and Route 110 in East Farmingdale.

7. The Certificate Holder shall abide by all applicable water supply requirements of the Suffolk County Sanitation Code and with all applicable requirements of the ordinances of the South Huntington Water District.

8. The Certificate Holder is authorized and required to connect to the Suffolk County DPW's Bergen Point Sewer Treatment Plant. Certificate Holder shall abide by all applicable wastewater requirements of the Suffolk County Sanitary Code.

II. General Conditions

1. The Project shall be constructed, operated and maintained as set forth in the Application and other submissions, and as indicated by the Certificate Holder in stipulations and agreements during this proceeding, except as these may be waived, modified or supplemented by the Board, and except as set forth in conditions contained in the SPDES and Title V Air Permits issued by the New York State Department of Environmental Conservation ("NYSDEC").

2. The Certificate Holder shall submit a schedule of all plans, filings and other submissions to the Board required in the Certificate Conditions. The Certificate Holder shall coordinate the schedule for submitting Compliance Filings with the relevant state agencies having jurisdiction over such Compliance Filings. The Schedule shall include at a minimum, a cross-referenced table showing the applicable Certificate Condition Number, an abbreviated description of the Certificate Condition, the description of the Compliance Filing Submittal, the dates drafts will be submitted, the Formal Scheduled Submittal Date and any Updated Filing Dates. Any abbreviations should be set forth in a legend. The Schedule pages shall be numbered and include on each page the issuance date.

3. The Certificate Holder shall submit a Compliance Filing consistent with Part 1003 of the Article X regulations. A "Licensing Package" is defined herein as a component of the Compliance Filing and includes all plans or other submissions required by these Certificate Conditions. Licensing packages may be submitted individually or on a combined basis. All filings shall be served on all active parties that have advised the Board of their desire to receive a copy of such filings.

4. Operation of the Project shall be in accordance with the SPDES and Title V Air Permits.

5. These Certificate Conditions shall be made contract requirements for the construction contractors as applicable.

III. Air Resources

1. The Certificate Holder shall operate the Project pursuant to the air permit issued by NYSDEC under Article 19 (6 NYCRR Part 201-6), as may be modified or amended by NYSDEC from time to time.

2. The Certificate Holder shall use natural gas as the exclusive fuel for the combustion turbines.

3. The Certificate Holder shall design the Project's combustion turbines to use dry low-nitrogen oxides combustion technology for NOx control while burning natural gas. In addition, the Certificate Holder will utilize SCR technology to control NOx emissions.

4. Irrespective of its receipt of a Certificate or Permits for the Spagnoli Road Energy Center, Applicant or its affiliates will undertake a multi-million dollar pollution reduction project which will result in significant reductions in emissions in the Town of Huntington, including NOx, SO2 and PM10 and PM2.5. Unit 3 of the Northport Power Station will be converted to dual-fired capacity by installing natural gas capability on 8 of the 16 burners. The conversion of Northport 3 will be completed and is scheduled to become gas capable no later than December 2003. The level of emission reductions that will be realized from the natural gas capability at Unit 3 will be far greater than the new emissions generated at the Spagnoli Road facility. The combined effect of the addition of gas capability at Unit 3 in Northport and the installation of the Spagnoli Road Energy Center will result in a substantial net emissions decrease in the Town of Huntington.

5. The Applicant understands that its affiliate, KeySpan Energy Delivery Long Island, as part of its gas expansion policy, plans to establish a high volume fast fill fueling station for cars and light and medium duty vehicles, at the southeast portion of its Greenlawn Operations Center, currently scheduled for construction during 2003. The Applicant also understands that, in addition to use by KeySpan Corporation's fleet of dedicated natural gas vehicles, KeySpan Energy Delivery Long Island will permit the use of this fueling station facility for other commercial customer clusters, including Town of Huntington light duty fleet vehicles, in accordance with its established requirements for providing fueling station access for use by commercial third parties.

6. The Applicant or its affiliate will assist the Town of Huntington to support the conversion of its light duty vehicle fleet to cleaner burning compressed natural gas ("CNG"). Applicant or its affiliates shall evaluate different federal and state funding opportunities to offset the incremental cost of purchasing CNG vehicles. Funding from sources such as the Federal Transit Administration ("FTA"), the State Energy Program and the Clean Cities Coalition's menu of grants are available. This effort will support the conversion of 9 light duty trucks, 15 sedans and 2 vans on a phased-in basis in accordance with the Town's existing replacement schedule of approximately 2 trucks and 2 sedans per year. In addition, the Certificate Holder agrees to provide $200,000 payable over 6 years to cover any additional incremental costs of purchasing the above referenced CNG vehicles. This six (6) year program will commence on the date of commercial operation of the Spagnoli Road Energy Center. In the event the 9 light duty trucks, 15 sedans and 2 vans

are converted to CNG fuel and all or some portion of this $200,000 fund remains, then the remaining portion shall be offered to support other clean energy initiatives that the Town and Certificate Holder mutually agree upon. In the event the Greenlawn gas fueling facility is not operational by the date of commercial operation of the Spagnoli Energy Center the $200,000 fund will be utilized to support other clean energy initiatives that the Town and Certificate Holder mutually agree upon.

7. Irrespective of the issuance of a Certificate or Permits for the Spagnoli Road Energy Center, Applicant or its affiliates shall install an energy efficient, clean burning microturbine to provide a portion of the electricity and thermal energy for domestic hot water and heating at the Dix Hills Skating Rink. The microturbine shall be installed within 18 months of December, 2003.

8. The schedules for the projects and facilities described in paragraphs 4 through 7 above may be extended by written agreement of the parties that are signatories to the joint stipulations.

IV. Electric Transmission Facilities

1. The Certificate Holder shall assure financing of such system upgrades or remedial measures as may be required by the NYISO Minimum Interconnection Standard, the Class of 2002, or applicable, Transmission Reliability Assessment Study, and LIPA's interconnection requirements.

2. The Certificate Holder is authorized to construct and agrees to design, engineer, and construct transmission facilities in support of the Project consistent with the System Reliability Impact Study ("SRIS") approved by the New York Transmission Planning and Advisory Subcommittee ("TPAS"), the New York Independent System Operator ("NYISO") Operating Committee, and the NYISO 2002 Transmission Reliability Assessment Study ("TRAS"), and in accordance with the applicable and published planning and design standards and best engineering practices of NYISO, LIPA, the New York State Reliability Council ("NYSRC"), Northeast Power Coordinating Council ("NPCC"), North American Electric Reliability Council ("NERC"), and North American Electric Reliability Organization ("NAERO"), and successor organizations depending upon where the facilities are to be built and which standards and practices are applicable. Specific requirements shall be those required by the NYISO Operating Committee and TPAS in the approved SRIS and by any interconnection or facilities modification agreements.

3. The Certificate Holder shall work with LIPA, and any successor Transmission Owner (as defined in the NYISO Agreement), to ensure that, with the addition of the Spagnoli Road Energy Center, the 138 kV transmission lines will have system protection and appropriate communication capabilities to ensure that operation of the electric transmission system is adequate under NPCC "Bulk Power System Protection Criteria," and meets the protection requirements at all times of the NERC, NPCC, NYSRC, NYISO, and LIPA, and successor Transmission Owner (as defined in the NYISO Agreement). The Certificate Holder shall ensure compliance with applicable NPCC criteria and shall be responsible

for the costs to verify that the relay protection system is in compliance with applicable NPCC, NYISO, NYSRC and LIPA criteria.

4. The Certificate Holder shall operate the Project in accordance with the approved tariffs and applicable rules and protocols of LIPA, NYISO, NYSRC, NPCC, NERC, and NAERO, and successor organizations. The Certificate Holder reserves the right to seek subsequent review of any specific operational orders at the NYISO, New York State Public Service Commission ("NYSPSC"), the Federal Energy Regulatory Commission, or in any other appropriate forum. The Certificate Holder shall comply with operational orders issued by NYISO, or its successor. In the event that the NYISO encounters communication difficulties, the Certificate Holder shall comply with directives issued by the LIPA system operator or its successor.

5. The Certificate Holder shall assure that the transmission interconnection shall be designed, constructed and operated to assure compliance with the electromagnetic field ("EMF") standards established by the NYSPSC in Opinion No. 78-13 (issued in June 19, 1978) and the Statement of Interim Policy on Magnetic Fields of Major Electric Transmission Facilities (issued September 11, 1990).

6. The Certificate Holder agrees to comply with the applicable reliability criteria of LIPA, NYISO, NPCC, NYSRC, NERC and successors. If it fails to meet the reliability criteria at any time, it shall notify the NYISO immediately, in accordance with NYISO requirements, and shall simultaneously provide the NYSDPS with a copy of the NYISO notice.

7. The Certificate Holder shall file a copy of the following documents with the Siting Board and with the NYSPSC : (i) the SRIS approved by the NYISO Operating Committee, which shall be filed prior to the commencement of construction of the Project; (ii) any requirements imposed by the NYSRC, which shall be filed prior to the commencement of construction of the Project; (iii) all facilities agreements, interconnection agreements, and amendments thereto, with LIPA and successor Transmission Owners (as defined in the NYISO Agreement), which shall be filed prior to the commencement of commercial operation of the Project; (iv) a Relay Coordination Study, which shall not be filed later than 18 months prior to the projected commercial operation date of the Project; and (v) the detailed design of the interconnection facilities, and updates thereto, which shall be filed prior to the commencement of commercial operation of the Project.

8. The Certificate Holder shall comply with dispatch instructions issued by NYISO, or its successor, in order to maintain the reliability of the transmission system. In the event that the NYISO encounters communication difficulties, the Certificate Holder shall comply with dispatch instructions issued by LIPA, or its successor, in order to maintain the reliability of the transmission system.

9. The Certificate Holder shall present a Compliance Filing including: (i) a detailed site plan for the electric interconnect, indicating location, depth of cover, relation to other features and facilities, property lines and easements; (ii) reference to appropriate construction details, public safety measures, and environmental control measures; (iii) permits obtained from NYSDOT and the Town of Huntington concerning construction of

electrical interconnect facilities in public rights-of-way, and any pertinent materials submitted in support of applications for such permits; and (iv) appropriate detail concerning any necessary electrical interconnection-related traffic control plans.

V. Fuel Supply

1. The use, storage, or transportation of any fuel for the combustion turbines other than natural gas is prohibited.

2. Regarding the transportation of natural gas to the Project, the Certificate Holder shall comply with all the applicable rules and regulations of the NYSPSC and the terms and conditions of KeySpan Energy Delivery's Service Classification 14, Non-Core Transportation Service for Electric Generation.

3. The Certificate Holder shall comply with NYSPSC's interruptible gas requirements, as applicable.

VI. Land Use and Local Laws

1. The Certificate Holder shall prepare a Lighting Plan for construction and operation of the facility as a Compliance Filing. The Lighting Plan shall include details of all proposed outdoor lighting, and shall avoid off-site glare and lighting impacts to the maximum extent practicable. Final lighting plans shall detail the use of task lighting where appropriate, designate full-cutoff shields for lighting fixtures, and address specific controls for lighting beneath the air-cooled condensors. The Lighting Plan is set forth in further detail in Section XI hereto.

2. The Project shall be designed to operate and be operated in compliance, subject to the exceptions below, with all applicable laws and regulations of the Town of Huntington.

   (i) The Project shall be designed to operate and be operated in compliance with all applicable local laws and regulations, as described in Section 4.0 of the Application.

   (ii) The Certificate Holder is authorized to construct the following buildings in excess of 45 feet: turbine building (75 feet) and HRSG building (110 feet). Certificate Holder is authorized to construct additional structures in excess of 45 feet: air-cooled condensers (90 feet), exhaust stack (195 feet).

   (iii) The following local law provisions shall not be applied to the Project: (a) use restrictions (Huntington Town Code §§ 198-35(A) and 198-14(A)); (b) height restriction (Huntington Town Code § 198-55); (c) parking requirement (Huntington Town Code § 198-43, et seq.); and (d) performance standard (§ 198-89(B)).

3. Certificate Holder shall provide to the relevant agencies information equivalent to that required to obtain the regulatory permits/approvals listed below, pertaining to the construction work for or operation of the Project, as follows:

   (i) Approvals of sewer construction and interconnection (Southwest Sewer Agency);

   (ii) Approval of water supply interconnection and permit for water use (South Huntington Water District).

4. Pursuant to PSL § 172(1) and subject to the Board's ongoing jurisdiction:

   (i) The Suffolk County Department of Health Services is authorized to require that the Certificate Holder seek all applicable permits, approvals and consents set forth in Suffolk County Sanitary Code Article 12 for the construction and operation of the Project.

   (ii) The New York State Department of Transportation ("NYSDOT") and the Town of Huntington, respectively, are authorized to require that the Certificate Holder seek all applicable permits, approvals and consents for in-street construction of the Project-related electric interconnection.

   (iii) In the event that the Certificate Holder experiences an unreasonable delay, beyond the Certificate Holder's control, in obtaining any of the foregoing permits, approvals or consents, the Certificate Holder may, upon reasonable notice to NYSDOT, Suffolk County, or the Town of Huntington, as the case may be, inform the Siting Board about the delay and seek the relevant authorization directly from the Siting Board. The County may appear before the Siting Board to address the existence, cause or reasonableness of any delay.

5. The Certificate Holder will submit as Compliance Filings information sufficient to demonstrate conformance with the substantive provisions of the following permits or approvals, which would apply to the Project absent Article X.

   (i) Building permit (Sections 87-14 *et seq*. of the Huntington Town Code)

   (ii) Certificate of occupancy (Sections 87-25 *et seq*. of the Town Code)

   (iii) Fire prevention permits (Chapter 111 of the Town Code)

   (iv) Permit to engage in after hours construction (Section 141-3(J) of the Town Code)

   (v) Plumbing Permits (Chapter 153 of the Town Code) (through Compliance Filing)

6. In order to further cooperation between the Town and Applicant, Applicant agrees to consult with the Town concerning the following plans and Compliance Filings prior to their finalization or submission to the Siting Board: (i) the lighting plan set forth in paragraph VI.1 hereto; (ii) plans for the noise attenuation wall described in paragraph VII.6 hereto; (iii) the landscaping plan set forth paragraph XI.4 hereto; (v) the

environmental compliance plan set forth in paragraph XIV.1 hereto; and (vi) Compliance Filings indicated in paragraph VI.5 hereto.

7. The Certificate Holder is authorized to secure the services of a third-party Professional Engineer, licensed and registered in New York State with the appropriate professional liability insurance, who shall determine whether the facility has been designed and built in compliance with the New York State Uniform Fire Prevention and Building Code and any related provisions of the Town of Huntington Code, and certify in writing to the New York State Department of Public Service and the Town that the facility is in compliance with the applicable provisions of such Codes. The third-party Professional Engineer shall not in any way be affiliated with any entity that designs or builds the facility. The third-party Professional Engineer shall periodically consult with the Building Inspector and Fire Marshall of the Town as appropriate to obtain their input. In addition, the Certificate Holder shall provide periodic reports of the status of compliance activities and certification dates; the Certificate Holder shall provide information to the Town as necessary to maintain established databases of information necessary to protect the environment, health and safety; and should the Certificate Holder and the Town agree, the Town may can be designated to perform such administration of facility design, building inspection, and safety and infrastructure code enforcement and administration as the third-party Professional Engineer, provided it can demonstrate either the requisite expertise or access to the requisite expertise. If such an arrangement causes undue delay, the Certificate Holder shall be free to designate a substitute third-party Professional Engineer in the manner originally set forth above.

VII. Noise

1. Construction noise sources shall be mitigated by proper equipment maintenance and the use of appropriate mufflers. No pile drivers will be utilized.

2. Nighttime, weekend, and holiday construction is permitted. However, except as provided below, noisy construction activities (such as jack hammering, dump truck unloading and earth moving) shall be limited to between 7 AM and 6 PM on weekdays, unless permission is sought and received from the Board or Commission as appropriate. Construction activities requiring continuous work, such as start-up testing and commissioning and concrete pours, as well as other less noisy activities (such as mechanical and electrical installation within buildings and at the HRSGs and ACCs) are permitted on an as required basis, but each such event must be scheduled to maximize use of daytime hours and minimize the probability and duration of nighttime work. Steam blows shall take place within daylight hours, but in no event prior to 7 AM. Equipment installation and assembly shall be performed to the fullest extent practicable within buildings planned to house such equipment. For nighttime construction involving noisy activities, including start-up testing and commissioning, the Certificate Holder shall identify in a Compliance Filing the specific noise control measures which shall be implemented to minimize potential off-site noise impacts.

3. The Certificate Holder shall comply with federal noise level requirements for employees during construction and operation of the Project as established by the Occupational Safety and Health Administration of the U.S. Department of Labor (40 CFR § 1910.95).

4. Safety valves shall incorporate mufflers.

5. A temporary vent silencer shall be installed on the steam-blow vent during pipe clean out.

6. The Certificate Holder will erect an 8 to 10 foot high wall constructed of a material with a minimum sound transmission loss of 10 to 15 dB along a portion of the western boundary of its property. Such wall will be constructed within 3 months of the commencement of construction and will be maintained during facility operations.

7. During operation, the Project will achieve a modified Composite Noise Rating (CNR) of "C" at the seven sensitive noise receptors identified in the Application. Table 11-3 in the Application sets out the maximum allowed octave band levels for facility-generated sound at these receptors.

8. The Certificate Holder shall submit an operational noise evaluation report by an acoustical engineer within six-months of the start of commercial operation. Prior to conducting the operational noise monitoring evaluation, a protocol will be submitted for approval as a Compliance Filing subsequent to the issuance of the Certificate. The ambient noise data presented in the Application shall be used in the CNR analysis. Background levels measured during compliance testing shall be subtracted from the total noise levels (obtained while plant is operating) to determine plant contribution. The resulting plant contribution is the noise level that will be compared to the facility's design goals, as set forth in paragraph IV.7 above.

9. Specific noise control measures shall be incorporated in the design of the Facility to achieve the required noise design goals. These measures will include:

   (i) A lower noise air-cooled condenser unit with stealth fan blades shall be installed.

   (ii) Tuned HRSG stack silencers.

   (iii) Acoustically treated turbine building.

   (iv) Enclosures for the gas compressing station.

   (v) Turbine air inlet silencer.

   (vi) Extending the turbine building to include the HRSG and boiler feedwater pump.

VIII. **Public Interest**

1. Certificate Holder shall make good faith efforts to promptly address complaints raised by members of the public with respect to the construction and operation of the Project and shall describe in a Compliance Filing a community liaison program to provide adequate

notice and means of communication with surrounding communities and stakeholders prior to project construction. With respect to the construction period, the community liaison program shall specify:

(i) Targeted communities and stakeholders and limits of geographic areas;

(ii) Methods of timely notification and information dissemination to involved communities and stakeholders of the construction schedule prior to and during each phase of construction;

(iii) Criteria used to determine the direct mailing list;

(iv) All public locations where information shall be deposited for review and/or dissemination;

(v) A media contact plan to solicit the issuing of public service announcements for any construction-phase activities that are likely to result in significant inconvenience to the public (such as traffic disruption).

(vi) Materials used to reach stakeholders with construction information (e.g., Q&A, newsletters, information brochures, visual materials, graphs, charts, site maps, etc.);

(vii) Certificate Holder's representatives and means of contact (e.g., office location, local and toll-free telephone numbers, web address, construction site sign, information board, etc.);

(viii) A toll-free dedicated telephone line with specified hours of operation and inquiry response time;

(ix) The maintenance of a complaint log specifying procedures for receiving and responding to any complaints concerning the construction of the certified facility. Utilization of the complaint log shall extend through the operational period;

(x) The complaint response process to be used;

(xi) Availability of a public presentation request program to inform the public about the construction and operation of the facility. The availability of the public presentation request program will extend through the operational period;

(xii) Methods to evaluate the adequacy and effectiveness of the public liaison program; and

(xiii) Office location and hours.

2. The Certificate Holder agrees to implement the projects set forth in Section III.F, paragraphs 5 and 7-9 of the Public Interest Topic Agreement to the Joint Stipulations, dated November 18, 2002, in order to benefit the public. The proposals for

implementation described in the Topic Agreement may be modified by written agreement of the parties that are signatories to the joint stipulations.

IX. Soils, Geology, Seismology and Tsunami Occurrence

1. The Project will be designed to the requirements of a seismic zone factor Z = 0.15, as described in Section 6.5 of the Application.

X. Traffic

1. Regular parking for on-site construction personnel shall be within the Project site, or other nearby off-street location(s). Parking areas for construction workers shall be set forth in a Compliance Filing. The Certificate Holder shall distribute to trucking companies making deliveries, track operators and construction workers maps showing preferred arrival and departure routes. Certificate Holder shall direct trucking companies not to travel on Round Swamp Road for Project access.

2. Heavy haul deliveries will be scheduled during roadway off-peak hours.

3. The Certificate Holder shall coordinate closely with the NYSDOT, Suffolk County DPW, Suffolk Police, and Town of Huntington Traffic Division with respect to delivery of the combustion turbines and related equipment, and shall comply with all applicable regulations regarding limitation on weight, timing and duration of lane closures.

4. As set forth in paragraph VI.4(ii) above, NYSDOT and the Town of Huntington, respectively, are authorized to require that the Certificate Holder seek all applicable permits, approvals and consents for in-street construction of the Project-related electric interconnection subject to the continuing jurisdiction of the Siting Board, as set forth in paragraph VI.4 above.

XI. Visual and Cultural Resources and Aesthetics

1. The Certificate Holder shall construct the Project using low-glare, neutral-colored architectural materials, as described in the Application, Section 3, which includes color and other architectural design principles. Compliance filings shall provide specifications and details of architectural finish, surface treatments, and measures to maintain facility appearance. No signs or identification markings (other than as required by the Federal Aviation Administration for Obstruction Marking and Lighting, or other safety requirements) shall be located on the facility stack. With respect to buildings or other structures other than the stack, the use of signs or identification markings shall be in accordance with applicable local laws and regulations and shall be limited to placement on the facility administration building only.

2. The Certificate Holder shall prepare a Lighting Plan as a Compliance Filing. The Lighting Plan shall include details of all proposed outdoor lighting and shall avoid off-site glare and lighting impacts to the maximum extent practicable. Final lighting

plans shall detail the use of task lighting where appropriate, designate full-cutoff shields for lighting fixtures, and address specific controls for lighting beneath the air-cooled condensers.

(i) The Lighting Plan shall indicate appropriate lighting levels for worker safety requirements, including reference to applicable standards.

(ii) The Lighting Plan shall specify appropriate FAA Aviation Obstruction Marking and Lighting requirements for a dual-lighting system; top-mounted lights shall be as low as FAA requirements allow.

3. The Certificate Holder shall implement its Unanticipated Discovery Plan (Appendix 10A to Application) in the event that cultural resources are encountered during construction.

4. The Certificate Holder shall develop a landscaping plan in consultation with the Department of Public Service staff and the Town of Huntington. The Final Landscaping Plan will be provided as a Compliance Filing for Siting Board approval and will include the area not utilized for the facility as a result of reducing parking spaces from 93 to 33 spaces.

(i) Provisions for the landscape development and maintenance shall be included as part of the Compliance Filing. Appropriate tree planting and replacement specifications shall be addressed. Any tree species planted within a Town of Huntington street right-of-way shall be from "Street Trees - List of Acceptable Plant Material" from the Town of Huntington.

(ii) Following completion of construction, an offsite landscape planting plan shall be proposed, in consultation with the DPS Staff, Bethpage State Park, and SUNY Farmingdale, for planting locations to screen views of the facility from the park. If warranted, such consultation will also address facility lighting controls. In no event shall Applicant be required to plant in order to screen views from locations other than the bridle path, and the 8^{th} and 9^{th} tees of the Black Golf Course. Landscaping undertaken pursuant to this provision shall not exceed $25,000 in cost.

(iii) Certificate Holder will eliminate any existing Ailanthus vegetation within its property prior to the onset of operations and such efforts will be specified in site development plans. Certificate Holder will report on consultations with LIPA to develop a cooperative vegetation maintenance management plan for the facility site's border with the existing LIPA right-of-way.

(iv) The landscaping plan will indicate (a) access and parking for the soccer field(s), as set forth in section VIII.2(v) herein; (b) the educational display, as set forth in section VIII.2.vi(b); and (c) the location of interior fencing.

XII. Water Resources

1. The Project shall be designed and implemented so as not to adversely affect the Bergen Point Sewer Treatment Plant (STP) and allow the STP to accept the discharge of process and sanitary wastes from the Project. The Project's discharge will conform to limits to be specified in consultation with the Suffolk County Sewer Agency.

2. Certificate Holder shall operate the Project in accordance with the effluent limitations imposed under its SPDES permit for storm water discharge.

3. The Certificate Holder shall comply with all applicable local, state and federal chemical and waste-storage, use, and handling regulations, as described in the Application.

4. The Certificate Holder shall implement the Spill Prevention Control and Countermeasures and Storm Water Pollution Prevention Plan, as applicable, to assure that water quality remains protected as required by the Clean Water Act and the ECL.

XIII. Decommissioning

1. Prior to commencing any construction, other than research, surveying, boring or related activities necessary to prepare final design plans and permitting, the Certificate Holder shall file with the Secretary a parent guarantee from KeySpan Corporation to assure funding for the restoration of any disturbed areas in the event that the Facility is not completed. If at any time before the completion of the Facility, either (1) the tangible net worth of KeySpan Corporation falls below $1 billion; or (2) if KeySpan Corporation experiences a downgrading, or is placed on a credit watch for a possible downgrading of its Senior debt below investment grade, then the Certificate Holder shall promptly notify the Siting Board in writing of such event, and shall provide some other or additional financial assurance as might be required by the Board to demonstrate its ability to restore the site.

2. The Certificate Holder shall file with the Secretary evidence that sufficient funds are available to cover the cost of decommissioning, dismantling, closing, or reusing the plant when it has reached the end of its service life. Such evidence shall be in the form of a performance bond, escrow, letter of credit or other appropriate financial instrument, or satisfaction of a financial test, with appropriate renewal provisions. The Certificate Holder may also provide estimated values of equipment salvage and resale and scrap metal recovery. Such estimated values shall be considered in determining the amount of funds necessary to cover the cost of decommissioning, closing, or reusing the plant. The Certificate Holder shall not commence commercial operation of the Facility until the Public Service Commission has determined that the financial instrument provided by the Certificate Holder is appropriate and sufficient to cover the cost of decommissioning.

XIV. General Construction and Solid Waste

1. The Certificate Holder shall submit an Environmental Compliance Plan as a Compliance Filing to ensure (1) implementation and maintenance of required environmental mitigation measures; (2) compliance with the terms of this Certificate; and (3) compliance with applicable federal, state and local statutes, ordinances, rules and regulations. The Environmental Compliance Plan shall include at a minimum:

   (i) The name(s) of the environmental inspector(s) and a statement of qualifications for each inspector demonstrating sufficient knowledge and experience in environmental matters to complete the inspections and audits;

   (ii) A certification from the Certificate Holder confirming the independence of the inspectors(s) and the authority of the inspector(s) to "stop work" in cases of non-compliance or imminent environmental or safety hazard;

   (iii) Provision for deployment of more than one inspector in the event that two or more major field operations are undertaken simultaneously, such that at least one inspector shall be assigned to each construction area and no inspector shall be assigned to more than two active construction areas at any one time;

   (iv) A proposed checklist of matters to inspect for compliance, including the specific items or locations to be inspected, the inspection method to be employed (e.g., visual, auditory, testing by instrument, etc.), and acceptability criteria to be applied by the inspector(s);

   (v) A procedure setting forth how the Certificate Holder shall respond to and correct problems found by the inspector(s);

   (vi) A schedule for monthly environmental audits during construction and submission of audit checklists, together with a written explanation of problem(s) signed by the auditor(s) and an authorized representative of the Certificate Holder, to DPS Staff, DEC Staff, and local agency and/or building inspectors; and

   (vii) A schedule for submission of annual audits during the first two years of operation of the Facility to DPS, DEC, and appropriate local agencies.

2. Trucks used for transporting cut or fill material, if any, shall be covered to avoid loss of transported material and truck speed on-site shall be controlled to minimize dust.

3. The Certificate Holder shall not dispose of land clearing waste or construction related waste by burning those waste materials on the site. The Certificate Holder shall be responsible for the actions of its contractors to prevent the burning of waste materials on the site. All land clearing and construction wastes must be disposed of at a state-approved landfill.

4. Before hiring contractors for solid waste haulage, the Certificate Holder shall request evidence that such contractors are in possession of all required permits and licenses.

During the period of operation, the Certificate Holder shall retain for inspection records showing that all waste hauling and disposal contractors have all required permits and licenses. Solid waste shall be disposed of only at a state-approved landfill.

5. All unused, excavated materials and/or construction debris, if any, shall be removed upon completion of construction and placed at a Board approved location or state permitted disposal facility.

6. Certificate Holder shall require the engineering, procurement and construction ("EPC") contractor to maintain a site-specific health and safety plan, including a spill control plan, which will be submitted as a Compliance Filing.

7. Certificate Holder shall submit as a Compliance Filing a grading and drainage plan and a soil erosion and sediment control plan. Such plan will include methods for the control of potential fugitive dust emissions during construction.

LIST OF ACRONYMS, DEFINITIONS & ABBREVIATIONS

Term	Full Definition
40 CFR	Title 40 of the Code of Federal Regulations
ADT	average daily traffic
AGC	annual guideline concentration
Agencies	NYS Department of Public Service, NYS Department of Health and NYS Department of Environmental Conservation
AM	daily period that begins with midnight and ends with noon
ANSI	American National Standards Institute
APE	Area of Potential Effect
Applicant	KeySpan Energy Development Corporation
Application	KeySpan Energy Development Corporation application to Siting Board, case no. 01-F-0761
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
Benchmark Concentrations	Short-term and long-term benchmark concentrations for non-criteria contaminants, including short-term guideline concentrations and annual guidline concentrations, as set forth in NYSDEC Policy Guidance Document DAR-1 issued in July 2000, and the health risk-based air concentration levels set forth in Section 6 and Appendix Y of the Application.
Certificate	Certificate of Environmental Compatibility and Public Need pursuant to Article X
Certificate Conditions	Conditions imposed on Applicant upon issuance of Article X Certificate
Certificate Holder	KeySpan Energy Development Corporation
CFR	Code of Federal Regulations
CNR	Composite Noise Rating
CO	carbon monoxide
CO_2	carbon dioxide
COC	community of concern
dB, dBA	decibel; decibel on the A-weighted scale
DEC (or NYSDEC)	New York State Department of Environmental Conservation
DPW	Department of Public Works
ECL	Environmental Conservation Law
EJ	Environmental Justice
EMF	electric and magnetic fields
EPA (or USEPA)	United States Environmental Protection Agency
ERCs	emission reduction credits
gpm	gallons per minute
HAPs	hazardous air pollutants

HCM	1994 Highway Capacity Manual
H_2SO_4	sulfuric acid mist
HRSG	heat recovery steam generator
Issues Ruling	Ruling issued by the Presiding and Associate Examiners, dated May 15, 2002, concerning adjudicable issues in the Article X proceedings
Joint Exhibit List	exhibit list compiled in support of the Joint Stipulations
Joint Issues Conference	Hearing held on May 10, 2002 to identify adjudicable issues in Article X and NYSDEC proceedings
kV	kilovolt
kV/m	kilovolt per meter, a unit measuring electric field strength
kW	unit of electric power equal to 1.3 horsepower
LAER	Lowest Achievable Emission Rate
LIE	Long Island Expressway
LIPA	Long Island Power Authority
LOS	Level of Service
MACT	Maximum Achievable Control Technology
MAPS	Market Assessment Portfolio Strategies MW Flow Model
mG	milligauss, a unit measuring magnetic field strength
MW	megawatt, equal to one thousand kilowatts
MWhr	unit of electric energy production equal to one thousand kilowatts for one hour
NAAQS	National Ambient Air Quality Standards
NAERO	North American Electric Reliability Organization
NERC	North American Electric Reliability Council
$(NH_4)SO_4$	ammonium sulfate salts
NO_2	nitrogen dioxide
NOx	nitrogen oxides
NPCC	Northeast Power Coordinating Council
NSPS	New Source Performance Standards
NYISO	New York Independent System Operator
NYSDEC (or DEC)	New York State Department of Environmental Conservation
NYSDPS	New York State Department of Public Service
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
NYSRC	New York State Reliability Council
NYSTS	New York State Transmission System
O_2	oxygen
OSHA	United States Occupational Safety and Health Administration
PM (as time)	daily period that begins with noon and ends with midnight
PM	(as pollutant) particulate matter
PM10	particulate matter with a diameter of 10 microns or less
$PM_{2.5}$	particulate matter with diameter of 2.5 microns or less
Project	Spagnoli Road Energy Center, Siting Board case no. 01-F-761
ppm	parts per million

ppmvd	parts per million dry volume
PSC	New York State Public Service Commission
PSD	Prevention of Significant Deterioration
PSL	Public Service Law
psig	pounds per square inch gauge
SCDHS or DHS	Suffolk County Department of Health Services
SCDPW or DPW	Suffolk County Department of Public Works
SCR	Selective Catalytic Reduction
SCREEN3	EPA Screening Model
SCWA	Suffolk County Water Authority
SGC	short-term guideline concentration
SIC	Standard Industrial Classification
SILs	Significant Impact Levels
Siting Board (or Board)	New York State Board on Electric Generation Siting and the Environment
SO_2	sulfur dioxide
SPCC	Spill Prevention, Control and Countermeasures
SPDES	State Pollutant Discharge Elimination System
SRIS	System Reliability Impact Study
STE	short-term emergency
Stipulations	Pre-Application Stipulations governing the scope of studies prepared in support of Application
STP	Sewage Treatment Plant
SWPPP	Storm Water Pollution Prevention Plan
Topic Agreements	Agreement between the parties to the Joint Stipulations concerning the finding that the Board must make concerning the Application
Town	Town of Huntington
TPAS	New York Transmission Planning and Advisory Subcommittee, a division of NYISO
tpy or tons/yr	tons per year
US	United States
USDOE	United States Department of Energy
USEPA (or EPA)	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USGS	United States Geological Survey
USTs	underground storage tanks
VALLEY	EPA model for terrain
VIA	Visual Impact Assessment, a part of VRAP
VISCREEN	EPA Visibility Screening Model
VOC	volatile organic compounds
vol.	volume
VP or VAP	visual impact assessment point

VRAP	Visual Resources Assessment Procedure (described in Smardon et al.)
WSR	Wild, Scenic and Recreational
wt.	weight