

NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

CASE 99-F-1314 - Application of Consolidated Edison Company of
New York, Inc. for a Certificate of
Environmental Compatibility and Public Need to
Repower its East River Generating Station
Located in the Borough of Manhattan, New York
City.

OPINION AND ORDER GRANTING CERTIFICATE OF
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

Issued and Effective: August 30, 2001

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NEW YORK STATE BOARD ON ELECTRIC
GENERATION SITING AND THE ENVIRONMENT

BOARD MEMBERS PRESENT:

Maureen O. Helmer, Chairman
New York State Public Service Commission

David L. Smith, Alternate for
Antonia C. Novello, M.D., M.P.H., Commissioner
New York State Department of Health

Roger McDonough, Alternate for
Charles A. Gargano, Commissioner
Empire State Development

Erin M. Crotty, Commissioner
New York State Department of Environmental Conservation

Peter R. Smith, Alternate for
Vincent A. DeIorio, Chairman
New York State Energy Research Development Authority

Andrew Reicher, Ad Hoc Member, dissenting

James White, Ad Hoc Member

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BY THE BOARD:

INTRODUCTION

Procedural History

This application for a Certificate of Environmental Compatibility and Public Need (Certificate) was filed by Consolidated Edison Company of New York, Inc. (Con Edison or the applicant) on June 1, 2000, pursuant to Article X of the Public Service Law (PSL). By letter dated July 31, 2000, Chairman Maureen Helmer informed Con Edison that its application generally complied with the filing requirements of PSL §164.

With its PSL Article X application for a Certificate, Con Edison also filed applications with the New York State Department of Environmental Conservation (DEC) for: (1) a State Pollutant Discharge Elimination System (SPDES) permit pursuant to Environmental Conservation Law (ECL) Article 17, (2) a pre-construction Air State Facility permit pursuant to ECL Article 19, and (3) a Prevention of Significant Deterioration (PSD) permit pursuant to the federal Clean Air Act and Title 40 of the US Code of Federal Regulations (40 CFR) §52.21. As discussed in the Recommended Decision, the authority to issue the required water and air permits pursuant to federal law has been delegated by the United States Environmental Protection Agency (EPA) to the DEC.

Public statement hearings, an issues conference, and evidentiary hearings were held jointly for the Article X and DEC applications. Public statement hearings were held on three days in Manhattan: the first at the New York State Department of Public Service's (DPS's) office in midtown and the others in a grade school located near the site of the proposed facility. Approximately 120 statements were received at the public statement hearings. In addition, individuals submitted comments in writing. The speakers and writers included political and civic leaders, residents, and power plant workers. Some opposed the proposed facility entirely. Others called for implementation of best available technology. A few acknowledged the need for more power and generally supported the application

but also expressed concern about the environment and health of the residents in the neighborhood of the proposed plant.¹

The issues conference was held on February 23, 2001, and the evidentiary hearings were held on seven days in April 2001 in New York City (City). At those hearings, 37 witnesses either testified or had their testimony received with an affidavit adopting the testimony as sworn to in this proceeding. Included among the witnesses were 28 for Con Edison; three for DPS; two for DEC; and four for the joint intervenors, Manhattan Community Board No. 3 and East River Environmental Coalition (CB3/EREC). Manhattan Community Board No. 3 is an advisory board created pursuant to the City Charter and consists of appointed individuals having a significant interest in the area of the proposed facility. The East River Environmental Coalition is a non-profit association formed in response to Con Edison's instant proposal. Its goal is to protect the health and safety of the residents in the vicinity of the proposed facility.

On June 28, 2001, the examiners' Recommended Decision was issued, supporting the issuance of a Certificate and DEC permits. Briefs on exceptions and opposing exceptions were submitted by the applicant, DPS Staff, DEC Staff, New York State Department of Health (DOH) Staff, New York Public Interest Research Group, Inc. (NYPIRG) and CB3/EREC. Also on June 28, 2001, we issued an order extending the 12-month deadline for review and decision from July 31, 2001 to August 31, 2001.²

In a decision dated August 16, 2001, the DEC Commissioner addressed those exceptions raised by CB3/EREC which relate to the federally delegated environmental permits. With respect to these permits, the DEC Commissioner denied the

¹ In its brief on exceptions, DPS Staff correctly points out that events outside the hearing room and messages on signs, although described in the Recommended Decision, are not part of the record.

² Case 99-F-1314, Order Extending Deadline (issued June 28, 2001).

exceptions and determined that the federally delegated permits related to air emissions and waste water discharges should be granted. The DEC Commissioner also addressed the joint petition for rehearing filed by NYPIRG and CB3/EREC.³ To the extent that the petition related to the federally delegated environmental permits, the DEC Commissioner denied the request for rehearing.

On August 21, 2001, the DEC Commissioner provided us with the environmental permits, as required by PSL §172(1). Consequently, we may conclude that the air and water quality impacts covered by these programs have been minimized, and make the related findings required by PSL §168(2)(c).

The Proposed Facility

Con Edison's proposed facility (the Project) would be installed in unused space within the existing East River Generating Station⁴ and would have a maximum steam output of three million pounds per hour (lb/hr) and a nominal electric output of 360 megawatts (MW).⁵ The Project consists of two General Electric PG724(FA) combustion turbine generators (CTGs) with dual-fuel capability and two heat-recovery steam generators (HRSGs) with duct burners. The duct burners would be located in the HRSGs, and would be independently fired to add heat to generate additional steam. Con Edison represents that the duct

³ On June 28, 2001, NYPIRG and CB3/EREC filed a petition for rehearing of our June 22, 2001 Order Concerning Interlocutory Appeals (June 22, 2001 Order), which is discussed more fully infra.

⁴ The East River Generating Station is part of the East River Complex, which also includes the South Steam Station, electrical switchyards, and fuel oil storage facilities. The East River Complex is located between 13th and 15th Streets, and between Avenue C and the FDR Drive in Manhattan.

⁵ The design summer dependable maximum net capability rating is 288 MW. Also, CB3/EREC points out that the Project would burn 2 1/2 times as much fuel annually as do the existing East River Generating Station boilers, and would concentrate approximately 42% of the steam system's peak capacity at this one site.

burners would be operated as peaking units, which would have annual capacity factors of approximately 20%. The CTG and HRSG trains, on the other hand, are expected to operate as base load units and have annual capacity factors of approximately 90%.

The exhaust from each turbine train (CTG plus HRSG) would be directed to an existing stack. Generally, each unit would be natural gas fired. However, one of the existing five million gallon fuel oil storage tanks at the site would be dedicated to the Project and filled with distillate oil to be utilized as fuel for the CTGs on an emergency basis. The existing storage tank would be sufficient to support six days of emergency service at maximum operation of the CTGs.

Con Edison estimates the cost of the Project at \$360 million, including the cost of electric, steam, and gas interconnections.

The primary purpose of the Project is to ensure that Con Edison can continue to supply its customers with reliable, reasonably priced steam by replacing the aging Waterside Generating Station (Waterside Station) with new, highly efficient natural gas-fired combined cycle equipment. It is the ancillary electrical output of the Project that requires the submission of the application under PSL Article X.

Coupling the generation of electricity with the production of steam significantly increases thermal efficiency. For example, the majority of new electrical generating facilities proposed in the United States would produce no process steam. They are expected to achieve an overall thermal efficiency of approximately 54% to 58%. Con Edison's proposal, which would use the exhaust heat of the CTGs to produce steam, would have a thermal efficiency ranging from 85% to 94%. The high efficiency would result in lower fuel consumption for the total energy (steam and electricity) produced.

THE RECOMMENDED DECISION

Required Findings

The examiners set forth the findings that we are required to make under PSL §168 as follows:

- That the facility is reasonably consistent with the policies and long-range planning objectives and strategies of the most recent state energy plan.⁶
- 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.⁷
- 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.⁸
- That the facility is compatible with public health and safety.⁹
- That the facility will not discharge any effluent in contravention of DEC standards or, where no classification has been made of the receiving waters, 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.¹⁰
- That the facility will not emit any air pollutants in contravention of applicable air emission control requirements or air quality standards.¹¹
- That the facility will control the runoff and leachate from any solid waste disposal facility.¹²

⁶ PSL §168(2)(a).

⁷ PSL §168(2)(b).

⁸ PSL §168(2)(c)(i).

⁹ PSL §168(2)(c)(ii).

¹⁰ PSL §168(2)(c)(iii).

¹¹ PSL §168(2)(c)(iv).

¹² PSL §168(2)(c)(v).

- That the facility will control the disposal of any hazardous waste.¹³
- That the facility will operate in compliance with all applicable state and local laws and associated regulations, except that we may refuse to apply specific local laws, ordinances, regulations, or requirements we regard as unduly restrictive.¹⁴
- That the construction and operation of the facility is in the public interest, considering its environmental impact and the reasonable alternatives considered [under PSL §164(1)(b)].¹⁵

The examiners noted that PSL Article X allows us to grant or deny the application as filed, or certify a facility "upon such terms, conditions, limitations or modifications of the construction or operation of the facility as the board may deem appropriate."¹⁶

Summary of the Joint Stipulation

On May 16, 2001, the applicant distributed copies of a Joint Stipulation, which covered 12 topic areas, a list of proposed certificate conditions, a joint exhibit list, a list of acronyms, and two exhibit binders. The Joint Stipulation was signed by Con Edison, DPS Staff, DEC Staff, DOH Staff, the City, Boilermakers Local No. 5, and the General Contractors Association of N.Y., Inc. CB3/EREC and NYPIRG did not sign the stipulation.

The Joint Stipulation's 12 separate topics include agreements related to: (1) Air Resources; (2) Electric Transmission Facilities; (3) Gas Supply and Transmission; (4) Land Use and Local Laws; (5) Noise; (6) Public Interest; (7) Reasonable Alternatives; (8) Soils, Geology, Seismology and

¹³ PSL §168(2)(c)(vi).

¹⁴ PSL §168(2)(d).

¹⁵ PSL §168(2)(e).

¹⁶ PSL §168(2).

Tsunami Occurrences; (9) Terrestrial Ecology; (10) Traffic; (11) Visual and Cultural Resources and Aesthetics; and (12) Water Resources. Each topic agreement identifies the nature of the probable environmental impacts of the Project, provides a set of proposed certificate conditions related to the topic, and discusses how the proposed certificate conditions would minimize adverse impacts as required by PSL §168. In addition, each topic includes a set of stipulated facts with references to appropriate testimony and exhibits that serve as the evidentiary basis.

In general, the examiners noted, the Joint Stipulation addresses all topics identified in PSL §168, and the evidentiary record compiled in this proceeding is comprehensive, supports the terms of the Joint Stipulation, and provides a factual basis sufficient for us to determine whether the Project should be certificated. The discussion that follows reviews all the issues raised by the parties in their briefs on exceptions, many of which are covered by the Joint Stipulation.

THE REQUIRED FINDINGS

Consistency With the Objectives of the State Energy Plan

PSL Article X requires that the Project be consistent with the policies, long-range energy planning, and strategies contained in the most recent (1998) New York State Energy Plan (NYSEP), which include pursuing competition, ensuring fairness, equity, and system reliability, and improving the state's environment and natural resources. According to the NYSEP, a new generating facility is consistent with the state's long-range plan for expansion of the electric power system if the new facility contributes to competition in electrical markets.

Construction of the Project, the examiners stated, should not create adverse market power conditions because Con Edison would own less than 10% of the current level of in-City capacity, and would bid the power at "to-go" costs. The "to-go" cost is the cost that would be avoided if the Project were not

selected by the New York Independent System Operator (NYISO) to produce electricity at a given time. Since the Project's operation is dictated by steam system demand, the examiners found that the applicable "to-go" cost for electric generation is likely to be zero at most times.¹⁷ Therefore, the examiners concluded Con Edison would not be able to raise the market clearing prices.

As far as ensuring fairness, equity and reliability is concerned, the examiners found that the development of the Project, coupled with the retirement and sale of the Waterside Station site, would be a means of mitigating the higher electric costs that customers would experience with the continued operation of the Waterside Station. The added generation, they stated, would contribute toward overall system reliability, and the Project's proposed combustion turbine technology has been proven to operate reliably throughout the industry.

Addressing the environment and natural resources, the examiners observed that the Project would produce steam and electricity with greater efficiency than the generation it would displace. The Project would consume 29,800 billion British thermal units (Btu) compared to 36,900 billion Btu that the displaced generation would have consumed.

No parties challenge these findings of the examiners. We conclude that the Project will be consistent with the NYSEP's objectives to ensure an adequate and continuous supply of safe, dependable, and competitively priced energy for all New Yorkers consistent with public health, safety, and environmental protection needs.

Reasonable Alternatives

The examiners reviewed a number of alternatives to steam production and to the East River Generating Station site. In their analysis, the examiners considered the applicant's

¹⁷ DPS Staff explains that this lack of pricing power offsets vertical market power created by virtue of Con Edison's ownership of the Project.

primary objective for the Project to be of paramount importance, i.e., the alternatives must meet Con Edison's steam system requirements in order to be acceptable. In all cases, they concluded that none of the alternatives was superior to the Project. CB3/EREC takes exception to the examiners' analysis, which rejected CB3/EREC's favored alternatives because they would not (1) satisfy overall steam system capacity requirements, (2) meet the uptown steam district's demands, and (3) produce energy at a cost lower than that forecasted for the Project. In addition, the examiners observed that the two alternate sites proffered by CB3/EREC, Kips Bay and the 59th Street Generating Station (59th Street Station), were less suitable than the East River Generating Station.

Since the Project is primarily a steam system supply option, an understanding of Con Edison's steam system is necessary to demonstrate the need for the Project. Con Edison's steam system is the largest such system in the world. It comprises approximately 100 miles of transmission, distribution, and service mains that deliver steam from generating stations to customers. Its service area extends from the southern tip of Manhattan to 96th Street. However, the steam system's load centers and distribution grids are located in two districts: an uptown district, which serves a concentration of large buildings in the midtown area responsible for about 75% of the total demand, and a downtown district, which serves the area at the southern tip of Manhattan. The uptown district is supplied principally by the Waterside Station located at East 38th Street, as well as several other smaller steam generating stations, including the 59th Street Station. The downtown district is supplied primarily by other steam generating stations. The East River Complex is centrally located and therefore supplies both districts.

In order to deliver the steam from the East River Generating Station to the uptown district, Con Edison proposes to construct a steam main, which would be 30 inches in diameter and sized to accommodate approximately 2.4 million lb/hr of steam. The remaining 0.6 million lb/hr of steam to be produced

by the Project would be fed into the existing steam distribution mains through an on-site interconnection.

Con Edison had filed a steam system plan with the Public Service Commission (PSC) that addressed, among other things, the retirement and divestiture of the Waterside Station and the repowering of the East River Generating Station. The PSC authorized Con Edison to continue its auction of the Waterside Station and three adjoining parcels (the First Avenue Properties) for the purpose of real estate development and to continue the process of obtaining all necessary regulatory approvals for the repowering and addition of electrical capacity at the East River Generating Station to replace the output of the Waterside Station.¹⁸

In its brief on exceptions, CB3/EREC challenges the examiners' conclusions that Con Edison's steam system forecast should be accepted, and that the costs of alternative 4 exceeded the cost of the Project. Each of these items will be discussed below.

1. Steam System Forecast

According to the examiners, Con Edison's existing steam capacity of 13,336,000 lb/hr is needed to satisfy its customers' peak requirements of 11,980,000 lb/hr for the winter of 2000/01 plus reserve requirements. They also found that the Project's steam generating capacity of 3,000,000 lb/hr would be needed to replace the Waterside Station's capacity and to provide sufficient additional capacity to permit five of the South Steam Station's ten package boilers to be placed on cold standby, which Con Edison proposed in order to achieve additional economic benefits. The examiners rejected CB3/EREC's position that Con Edison had overforecast its steam system's capacity needs by eliminating 19 days' worth of data. CB3/EREC proffered forecasts which supported CB3/EREC's position that its

¹⁸ Cases 96-S-1065 and 96-S-1121, Consolidated Edison Company of New York, Inc. - Rates, Order Concerning Phase II Steam Plan Report (issued December 2, 1999), p. 13.

alternatives would supply the steam system with sufficient capacity even though the capacity of each alternative would be less than that estimated for the Project.

Con Edison's forecast of its customers' peak load, the examiners explained, is based on usage during the previous winter period, November 1 through March 31. Usage and temperatures for weekends and holidays are excluded because peak loads as a general matter occur on a weekday. Thus, out of the approximately 150 days in the winter period, 95 would comprise the non-holiday weekdays.

The examiners observed that Con Edison exercised judgment to exclude some additional data. For the winter of 1999/00, which forms the basis for the forecast in this case, the regression equation had 76 data points; 19 days were omitted because, in Con Edison's opinion, they seemed inappropriate or anomalous in that they did not reasonably represent the relationship between steam usage and temperature. For example, on a day that was close to 5.0 degrees Fahrenheit, Con Edison measured a drop in steam pressure, which indicates that it was not sending out as much steam as its customers were demanding. Con Edison reasoned that this peak data point should not be used in the regression equation because it would understate customers' demand.

The weather variable for the 76 data points ranged from 28 degrees Fahrenheit to 58 degrees Fahrenheit. The steam sendout forecast based on the 1999/00 winter data was approximately 11,920,000 lb/hr at the 5.0 degrees Fahrenheit design conditions. Con Edison added 60,000 lb/hr to that forecast to take into consideration load growth expected for the next winter. Thus, the applicant's total steam sendout forecast was 11,980,000 lb/hr.

CB3/EREC disputed that estimate, maintaining that Con Edison's steam system peak demand for the 2000/01 winter should have been calculated as only 11,475,000 lb/hr. CB3/EREC challenged the procedure Con Edison used to estimate the 1999/00 winter peak load forecast of 11,920,000 lb/hr. First, inasmuch as the applicant employed only 76 of the 95 non-holiday, weekday

observations for its statistical analysis, CB3/EREC argued Con Edison violated the statistical principle that unless sampling is random, forecasts are biased.

Next, CB3/EREC asserted that Con Edison included an inordinate number of warm weather days and excluded the coldest days.¹⁹ The peak weather variables in Con Edison's sample range from a low of 28.0 degrees Fahrenheit to a high of 58.9 degrees Fahrenheit.

The exclusion of the coldest days' data, CB3/EREC argued, creates such a distance between Con Edison's data points and its chosen design conditions that even if the "coefficient" (the sensitivity of peak demand to temperature) had been derived in an unbiased fashion, the peak forecast calculated with this coefficient would not be statistically robust, i.e., its reliability would be questionable.

The examiners then described CB3/EREC's forecasts noting that CB3/EREC developed a trend line from the annual winter peaks for the previous 10 and 20 years. Employing data adjusted to the design weather condition of 5.0 degrees Fahrenheit, CB3/EREC performed four calculations using two different historical periods (1990-2000 and 1980-2000) and two different coefficients for the weather variable (one coefficient is drawn from Con Edison's 1999/00 analysis, the other from its

¹⁹ In its brief on exceptions, CB3/EREC proffers the actual temperatures for the excluded days. DPS Staff and Con Edison object to CB3/EREC's attempt to introduce new evidence in the record. They note that CB3/EREC provided no justification for not including this information in its testimony during the evidentiary hearings. This proffered evidence, along with other such offers noted infra, will not be accepted because CB3/EREC had a full opportunity to present its case at the hearings, and did not offer justification for reopening the record. Furthermore, in this instance, even if we were to take official notice of these facts pursuant to §306(4) of the State Administrative Procedure Act, the new material would not be of decisional consequence because it is not the use of the actual temperatures, but rather the credentials of the witnesses and the decision of the PSC that forms the basis of our conclusions.

1996/97 analysis). Using least-squares trend lines, CB3/EREC calculated four forecasts for the 2000/01 winter peak load, which averaged approximately 11,160,000 lb/hr.

In all four calculations, CB3/EREC observed that the least-squares lines slope downward; in other words, Con Edison's weather-adjusted winter peak loads have been declining over time. The two trend lines that CB3/EREC distilled from 1980-2000 peak load data show that peak demand adjusted for weather has been dropping by an average rate of 68,000 lb/hr each year, while the two trend lines employing the more recent 1990-2000 peak load data declined an average rate of about 125,000 lb/hr each year.²⁰

Absent a confirmed hypothesis explaining the reasons for the decline in weather-adjusted peak loads over the past one to two decades, the examiners reported that CB3/EREC cautioned against extrapolating the trend lines (and the corresponding rates of decline) beyond the present. Thus, CB3/EREC would use 11,160,000 lb/hr to forecast future peak steam loads beyond the 2000/01 winter, but would temper this statistically derived figure with an allowance of 300,000 lb/hr to reflect not only statistical uncertainty but also the absence of a clear explanation for the marked decline that is embodied in the trend line.²¹ This brings CB3/EREC's peak steam forecast to approximately 11,475,000 lb/hr.

²⁰ In its brief on exceptions, CB3/EREC refers to data in interrogatory replies and not to exhibits. CB3/EREC claims these data confirm its estimate of the rate of decline. This new evidence cannot properly be accepted at this stage of the proceedings and, even if accepted, would not be of decisional consequence because we have accepted CB3/EREC's computations for the sake of argument.

²¹ In its brief on exceptions, CB3/EREC offers a new study to buttress its allowance of 300,000 lb/hr. The study will not be accepted because it was not presented at the hearing; and even if admitted, it would not be of decisional consequence, because we have accepted the value of 300,000 lb/hr for the sake of argument.

The examiners concluded that from a strictly statistical point of view, CB3/EREC raised some valid criticisms of Con Edison's load forecast study including the elimination of data points based on the judgment of the witness, and the extent of the extrapolation of the trend line from the observed weather variables to the design conditions. However, they noted that CB3/EREC's load projection does not cure all of these problems. For example, even though CB3/EREC's study did not eliminate data points, CB3/EREC does not employ an extrapolation of its trend line to project future load. Rather CB3/EREC truncated the trend line in 2000/01 and then added an allowance of 300,000 lb/hr to reflect statistical uncertainty and the absence of a clear explanation of the decline embodied in its trend line. The net result, the examiners stated, is that Con Edison's and CB3/EREC's load forecasts are both products of judgment.

They explained that Con Edison and CB3/EREC further exercised judgment in choosing the specific equation and independent variables for the regression analysis. For example, Con Edison chose a weather variable to explain the variation in steam usage and defined its weather variable based on professional judgment. This equation has the benefit of reflecting a cause and effect relationship between the temperature and steam usage, which is generally more desirable than a regression analysis that is based on a mere correlation.

CB3/EREC, the examiners observed, chose a time variable to develop a long term trend in usage, and selected an average value derived from four trend lines to forecast load. According to the examiners, CB3/EREC did not demonstrate a cause and effect relationship between time and usage, nor did the examiners find one intuitively obvious. CB3/EREC's equations establish only a correlation between time and steam usage.

Noting that both Con Edison's and CB3/EREC's forecasts are replete with the judgment of the individuals preparing the studies, the examiners turned to the credentials of the witnesses to decide which study should be given more weight. They pointed out: (1) CB3/EREC's witness had limited experience

with steam systems and had generally been out of the energy field for the past decade; (2) Con Edison's witness had been the company's principal steam planner since 1995; (3) the DPS Staff witness, who also has many recent years of experience with Con Edison's steam system, supported the applicant's study; and (4) the PSC, which has jurisdiction over Con Edison's steam system, recently reviewed the applicant's long range plans and concluded that the capacity of the Waterside Station should be replaced. Thus, the examiners recommended that we accept the applicant's peak load forecast.

In its brief on exceptions, CB3/EREC repeats its criticism that Con Edison discarded 19 days of data from its analysis. According to CB3/EREC, the 19 data points were not selected at random and left a sample of 76 days in which the lowest temperature was approximately 28 degrees Fahrenheit. CB3/EREC emphasizes that Con Edison's witness explained only the elimination of one day's data point, and CB3/EREC points out that the actual load on this day was 1,000,000 lb/hr less than the applicant's design load for that temperature.²² CB3/EREC again argues that the distance between Con Edison's data points and its chosen design conditions is great enough to be statistically questionable.

Next, CB3/EREC agrees with the examiners that the forecasts contain a measure of judgment, but contends Con Edison's exclusion of the data points without explanation goes beyond judgment and constitutes bias. In contrast to Con Edison's analysis, CB3/EREC distinguishes its allowance of 300,000 lb/hr, noting it reflects statistical uncertainty, and its truncation of the trend line in 2000/01, stating it is based on conservative judgment instead of biased manipulation of data.

With respect to the credentials of Con Edison's forecasting witness, CB3/EREC observes in its brief opposing exceptions that the applicant's witness was not professionally trained in statistics or econometrics and had never taken a

²² As noted above, the accompanying drop in steam pressure is the reason Con Edison excluded these data.

course dealing specifically with either subject. In contrast, CB3/EREC's expert, it claims, is trained in statistics and econometrics and has applied these disciplines professionally throughout a 30-year career in policy analysis and has remained active in energy matters. As far as the DPS Staff witness is concerned, CB3/EREC would give no weight to his opinion because he did not perform a study of Con Edison's peak steam loads, and acknowledged under cross-examination that he was unaware that Con Edison had deleted data points from its sample for forecasting peak steam loads.

Con Edison responds that it does not claim to have randomly selected the data used in its study. Rather, the applicant asserts that it applied professional judgment, based on its assessment of steam system dynamics, to disregard data it deemed unrepresentative. According to Con Edison, the application of professional judgment to make adjustments in connection with statistical methods is neither improper nor unusual.

Turning to the credentials of Con Edison's witness, the applicant points out that its witness has taken courses dealing with statistics and is a professional engineer licensed in the State of New York. In its brief opposing exceptions, the applicant reiterates the qualifications of its witness and the criticisms of CB3/EREC's witness.

With respect to the regression analyses themselves, Con Edison notes its technique is predicated on a demonstrated linear relationship between temperature and load, and its peak load regressions showed a very high correlation between load and temperature, a correlation that exists over a wide range of temperatures and has been repeatedly confirmed for many years. Asserting that the relationship between the two variables has been demonstrated to be a linear one, Con Edison argues that the use of data from certain of the coldest days of the year does not have the importance that CB3/EREC would ascribe to it. On the other hand, Con Edison states that contrary to CB3/EREC's assertion that system load follows a predictable trend over time, the load is not "predictable" in the straight downward

line that forms the basis for CB3/EREC's statistical method. On the contrary, Con Edison says, loads have varied up from one year to the next about as often as they have varied down. Thus, the applicant concludes that CB3/EREC's method is unreliable for forecasting "next year's" load.

Con Edison asserts that CB3/EREC's forecasting methodology is based upon a simplistic model limited to one independent variable (calendar year) and one dependent variable (peak load), and the independent variable (calendar year) has very little explanatory power in accounting for the variations in the dependent variable. According to Con Edison, the weak relationship between the two variables (calendar year and peak steam demand) is illustrated by a low r^2 value (a statistical measure of the linear relationship between the variables) and the fact that steam demand has frequently increased rather than decreased on a year to year basis. Since CB3/EREC's independent variable has limited explanatory power, the applicant claims there exist one or more other important variables that drive peak steam demand that CB3/EREC omitted from the equation, rendering its statistical model unreliable.

Finally, CB3/EREC offers this remedy, if we are hesitant to accept its forecasts: (1) remand the steam load forecast issue with instructions requiring Con Edison to release its 1999/00 steam peak and weather data for the missing data points, along with Con Edison's rationale for seeking to exclude any of these data from its statistical sample; (2) permit the parties to submit supplemental testimony and be cross-examined on the steam load forecast issue, using only the revised 1999/00 data sample; and (3) have the examiners submit revised findings on the matter to us. CB3/EREC expects that Con Edison's method, when reapplied to an unbiased and representative sample, would demonstrate that its steam peak forecast of 11,980,000 lb/hr is too high by at least 0.5 million lb/hr; and, more importantly, the record would be built upon a valid data set.

We agree with the examiners' recommendation that the applicant's steam load forecast be accepted and CB3/EREC's be rejected on the grounds that: (1) Con Edison's regression

equation has an obvious cause and effect relationship between the independent (temperature) and dependent (steam usage) variables while CB3/EREC's variables (time and usage) do not exhibit such a relationship; and (2) Con Edison's study is supported by its witness and the DPS Staff witness, both of whom have many years of valuable experience dealing with the applicant's steam system. CB3/EREC's witness, although versed in statistics, does not have a sufficient background in steam system planning and operations to refute the professional opinions of Con Edison's and DPS Staff's witnesses.

Furthermore, we will not accept CB3/EREC's proposal to reopen the record. CB3/EREC has had a full opportunity to present its case during the hearings in this proceeding, which were held in April 2001, and could have submitted a study reflecting all the 1999-2000 data at that time. No reason has been given by CB3/EREC for its failure to do so. Given the absence of any such showing to justify reopening the record, we will not remand the case for further hearings.

2. Alternative 4

CB3/EREC presented six alternatives to the Project; the Recommended Decision rejected all six. CB3/EREC takes exception to the examiners' finding that alternative 4 would cost more than the Project. In alternative 4, CB3/EREC proposed placing in the East River Generating Station one CTG and HRSG identical to either CTG/HRSG unit proposed for the Project except that the number of duct burners would be reduced by one-third. This unit's peak output would be 180 MW of electricity and 1,250,000 lb/hr of steam. In addition, CB3/EREC would install two 180 MW units at the 59th Street Station and retire three existing high-pressure boilers. Lastly, CB3/EREC would retire all ten package boilers (1,100,000 lb/hr) at the South Steam Station.

CB3/EREC maintains that the examiners erred in finding that alternative 4 should be charged with the loss in net present value associated with a delay in conveying the Waterside Station property. In Con Edison's brief opposing exceptions, it

disagrees with CB3/EREC on the cost assignment issue. The applicant further points out that alternative 4 would not meet the Project's objectives, has site specific disadvantages when compared to the Project, would not offset any significant adverse impact, and would involve a fundamental redesign of the steam system. Each point will be discussed below.

a. Cost Allocation to Alternative 4

Con Edison claimed that the annual cost of alternative 4 would be \$93.9 million, or \$10.8 million more than the Project's. After considering a number of adjustments, the examiners found that alternative 4 would impose a minimum \$1.4 million cost disadvantage when compared to the Project. The examiners noted that the cost disadvantages could worsen if the delay caused by a rejection of the Project prompted the parties to relinquish the contract for the sale of the First Avenue Properties, which could deny ratepayers benefits of between \$122 million and \$181 million. In addition, they stated that since no costs were included by CB3/EREC for decommissioning and dismantling the high pressure boilers at the 59th Street Station, the net losses for alternative 4 would be greater. No dollar estimate for this additional cost was presented.

In its brief on exceptions, CB3/EREC challenges the examiners' adjustment to alternative 4 insofar as the examiners included a \$4.0 million cost to capture the loss in net present value associated with an assumed 30-month delay in conveying the Waterside Station property to the purchasers. CB3/EREC concedes that it did not question the magnitude of the \$4.0 million figure previously because it believed the cost of delay should not be counted against alternative 4. CB3/EREC's earlier position was that rejection of the Project would not have caused any delay if Con Edison had pursued licensing of alternatives concurrently with the Project. The examiners rejected CB3/EREC's position and noted that if Con Edison had filed simultaneous applications it would have incurred additional costs by doing so.

In its brief on exceptions, CB3/EREC estimates that a concurrent application for another site such as the 59th Street Station would have cost Con Edison no more than \$10 million, and probably considerably less. Applying the applicant's annual capital charge rate of 12.07%, CB3/EREC calculates an annual cost of no more than \$1.2 million. If this cost had been assigned to alternative 4 instead of the \$4.0 million, CB3/EREC estimates that alternative 4 would show an approximate \$1.5 million advantage when compared to the Project.

With respect to the cost of decommissioning and dismantling the high pressure boilers at the 59th Street Station, CB3/EREC observes that this station would have sufficient room to install two complete CGTs and HRSGs without removing any existing equipment. Thus, its alternative 4 would require only that the high pressure boilers be retired and not removed. Accordingly, CB3/EREC claims that dismantling the high pressure boilers at 59th Street is not a task to be charged to alternative 4.

Next, CB3/EREC does not agree with the examiners that the delay resulting from abandoning the Project in favor of an alternative would pose a threat to closing the transaction for the First Avenue Properties. According to CB3/EREC, even if the pending sale of the First Avenue Properties were terminated, other buyers would come forward to bid a fair price for the parcels. Moreover, CB3/EREC suggests that inasmuch as the developers have already invested considerable time, money and prestige in preliminary development activities such as architectural competitions, it strains credulity to suggest that they would cancel the venture on account of a delay of several months in receiving the sites.

Finally, CB3/EREC infers that the examiners double counted the cost associated with a 30-month delay in the retirement of the Waterside Station, once in the \$4.0 million adjustment and again in their conclusion which cites some additional unspecified costs.

Con Edison responds that its pursuit of multiple, simultaneous, and mutually inconsistent Article X applications

and engineering designs would have been inefficient and would have saved nothing, since the applicant would have incurred the expense of many additional millions of dollars for the engineering and environmental studies and hearings that would have been required for these additional hypothetical power plants. Con Edison emphasizes that CB3/EREC did not tell it which of the six alternatives it should have turned into a full-fledged PSL Article X application. According to the applicant, it could not have anticipated at the outset of the PSL Article X process that CB3/EREC--months after the instant application had been submitted and deemed complete--would redesign the steam system by proposing to retire the South Steam Station and the high pressure boilers at the 59th Street Station, as well as proposing other alternatives (now abandoned) involving a site at Kips Bay and the 74th Street Station.

In addition, Con Edison argues that a comparison of the costs of alternative 4 to the costs of the Project is an "apples to oranges" exercise because alternative 4 would provide the steam system customers in the uptown network with markedly reduced steam system reliability, as discussed further below. Inasmuch as Con Edison claims the benefits of alternative 4 are not commensurate with the benefits of the Project, Con Edison believes it would be misleading to compare the cost of alternative 4 to the cost of the Project.

The applicant notes that it followed the process of identifying a preferred course of action and submitting a PSL Article X application for such action that analyzed reasonable alternatives, which is exactly what is required by the statute, and was authorized by the PSC in its December 2, 1999 Order.²³ Con Edison concludes that alternative 4 would result in a minimum 30-month delay, whose costs should not be laid at its doorstep.

A new filing, Con Edison contends, would cause a 30-month delay comprising: (1) 14 months of preliminary engineering and environmental studies leading to submittal of a

²³ Note 18, supra.

PSL Article X application; (2) two months to obtain a determination of completeness; (3) 12 months of PSL Article X proceedings, including discovery, hearings and briefing, leading, perhaps, to issuance of a PSL Article X certificate; and (4) two months to complete post-certification compliance filings. According to the applicant, the 30-month delay in Project implementation that would be occasioned by pursuit of any of the CB3/EREC alternatives would delay the Waterside Station retirement by at least the same period of time. As a result, Con Edison observes environmental benefits of the Project would be forgone during the delay and economic benefits would be threatened. Con Edison explains that the Project's numerous environmental benefits, including significant reductions in projected annual in-City emissions from the Con Edison steam system, would be deferred for the period of delay.

Con Edison explains that it entered into an agreement to convey title to the First Avenue Properties, and has requested that the full economic benefits from the net after tax gain of this sale, estimated to be well over \$100 million, be directed to its ratepayers. The projected 30-month delay in the Waterside Station's retirement that would result from pursuit of any of CB3/EREC's alternatives, Con Edison estimates, would put off the closing of the First Avenue Properties transaction, and more importantly, would also pose a threat to Con Edison's ability to close that transaction at all, thereby putting at risk most of the ratepayer benefits that are expected from the sale agreement.

Under the sale agreement, Con Edison can force a closing with respect to the Waterside Station parcel only if this generating station is first demolished and the environmental remediation of the property has been completed. Inasmuch as those conditions cannot be satisfied until the facility's steam generating capacity has been replaced by the Project (or some reasonable alternative), the applicant notes, there would be a 30-month delay in the demolition of the Waterside Station, subsequent environmental remediation, closing of the sale agreement, and the date on which Con Edison's

ratepayers would be entitled to realize the substantial economic benefits of the sale.

Of even greater concern to Con Edison is that the 30-month delay would push the tender date for the Waterside Station parcel beyond the sale agreement's final outside date of November 2006. According to Con Edison, the record demonstrates that it would take 30 months for Con Edison to complete the permitting and certification process for an alternative, approximately 15 months to build the new facility, five months to conduct shakedown operations, and 28 months to demolish the Waterside Station. Thus, Con Edison calculates the lead time for conveyance of the cleared and remediated Waterside Station parcel to be approximately 78 months, or 6 1/2 years, from the date of a decision to pursue one of CB3/EREC's alternatives to the Project.

Con Edison states that the possibility that the developers would agree to take title after expiration of Con Edison's period for forcing a closing under the sale agreement would presumably depend on numerous factors, including their access to capital, their success in seeking the rezoning of the properties that they are pursuing, and the vitality of the City's real estate market. Pursuit of the CB3/EREC alternatives, Con Edison claims, would force its ratepayers to bear these risks, and is therefore not in the public interest.

We agree with the examiners that the cost of delay that would be incurred as a result of pursuing an alternative instead of the Project should be included in weighing the reasonableness of the alternative. We do not agree with CB3/EREC's position that Con Edison should have filed an application for alternative 4 or any other alternative on a contingency basis. No such contingency filing is required by statute nor would it be cost effective. CB3/EREC conveniently limited its estimated cost of an additional filing to that of one filing for alternative 4. However, it in fact proposed six alternatives at three sites. Had Con Edison filed an application for each alternative, the costs would have far exceeded CB3/EREC's annual estimate of \$1.2 million and, without

a doubt, would push the cost estimates of the alternatives beyond those of the Project.

With respect to the costs of decommissioning and dismantling the high pressure boilers at the 59th Street Station, possible abandonment of the sale of the First Avenue Properties, including the Waterside Station parcel, and the double count related to a delay from abandoning the Project in favor of an alternative, none of these costs was reflected in the estimates presented by the examiners.

Obviously, if the boilers were not dismantled, that cost would not be assigned to the alternative; likewise if the sale of the First Avenue Properties were not delayed, no such cost would be incurred. However, these possibilities exist and the risks of their occurrence should be considered. Finally, the cost of a delay in the retirement of the Waterside Station was correctly reflected in the examiners' estimates and would not be double counted as CB3/EREC claims.

b. The Objectives and Capabilities of the Project

According to the examiners, alternative 4 would fail to meet two essential objectives for the Project, namely: (1) to replace the Waterside Station's steam generating capacity and (2) to do so in such a way as to maintain the present level of reliability for the uptown steam network that the Waterside Station serves.

Con Edison supports the examiners' finding that none of the alternatives is preferable to the Project. It points out in its brief opposing exceptions that alternative 4 is unreasonable because it fails under PSL Article X alternatives analysis to "take into account the objectives and capabilities of the applicant;"²⁴ and, as stated in the SEQRA regulations, is

²⁴ 16 NYCRR 1001.2(c).

not "feasible, considering the objectives and capabilities of the Project's sponsor."²⁵

For example, Con Edison notes it is uncontroverted that alternative 4 would reduce the amount of steam that it could send out to the steam system by 200,000 lb/hr and would therefore fail to replace Waterside Station's steam generating capacity.

In addition, to replace Waterside Station's present steam sendout capacity of 2,350,000 lb/hr in the uptown steam district, the Project as proposed has been designed in connection with a steam main reinforcement to deliver steam from the East River Generating Station to the uptown network. Con Edison observes that alternative 4 as proposed by CB3/EREC would not have this capability. Instead, it would bottle up the extra steam capacity at the East River Generating Station.

The Recommended Decision recognizes this shortcoming and notes that alternative 4 could provide the uptown district with only the minimum reserve margin and would need an additional steam main. Con Edison states that alternative 4 would reduce the uptown network steam capacity by 350,000 lb/hr, since overall steam sendout capacity would be reduced by 200,000 lb/hr, as a result of CB3/EREC's failure to provide for full replacement of Waterside's steam generating capacity. Although 150,000 lb/hr of steam sendout capacity would be added to the East River Generating Station, there would be no means of transporting it to the uptown network.

Inasmuch as alternative 4 would reduce overall steam capacity, Con Edison maintains that alternative 4 would reduce its reserve margin, especially for the uptown network, and thereby fails to satisfy an essential Project objective of ensuring that the Waterside Station's retirement will not reduce the reliability of the steam system. It is particularly

²⁵ 6 NYCRR 617.9(b)(5)(v). Although applications under PSL Article X are exempt from environmental review under SEQRA, PSL §164(1)(b) states that alternatives presented under PSL Article X "shall be no more extensive than required under Article VIII of the Environmental Conservation Law."

important, the applicant reasons, to be cautious in the context of steam system reliability because excess steam cannot be imported in an emergency.

We agree with Con Edison that the steam system capacity should not be reduced. As noted above, we reject CB3/EREC's position that the applicant's steam sales forecast is overstated. Thus, we conclude that the existing capacity, including the reserve margin, is necessary to maintain an adequate level of reliability. Adoption of CB3/EREC's proposed alternative 4 would reduce Con Edison's reserve margin to the bare minimum, which is not in the public interest.

c. Site Specific Concerns

The examiners concluded that the 59th Street Station has the disadvantage of requiring a new stack, which the Project does not require if located at the East River Generating Station, and of being closer to residential buildings when compared to the Project.

Con Edison observes that CB3/EREC did not take exception to these findings, and that CB3/EREC failed to demonstrate on the record the feasibility of constructing the new stack it proposed for the 59th Street Station. According to the applicant, the 59th Street Station is located in a residential and commercial neighborhood; Hudson River Park, a notable riverfront public open space, is being constructed by the State of New York immediately north of the site; and Riverside South, a major residential and commercial development already approved by the City, will involve the construction of a number of high rise towers also just north of the station. Con Edison states that CB3/EREC presented no analysis as to whether alternative 4 would meet the requirements of DEC's new source review regulations,²⁶ would result in an exceedance of

²⁶ 6 NYCRR Part 231-2.

significant impact levels,²⁷ or would yield the required net air quality benefit.²⁸

We are mindful of the fact that alternative 4 would need various permits before it could be built. We need not render a decision on the merits of each application for such permits. Instead, we affirm the examiners' findings that the site of the East River Generating Station is superior to the 59th Street Station site of alternative 4 because the former not only has existing stacks, which can accommodate the exhaust from the Project, but also is buffered somewhat from the surrounding residential buildings.

d. Absence of Significant Adverse Impacts

In the Recommended Decision, the examiners found that PSL §168(2)(e) requires us to determine whether the Project is in the public interest after reasonable alternatives are examined pursuant to PSL §164(1)(b), which calls for an evaluation of the comparative advantages and disadvantages of each location. They also recognized that the inquiry is not whether any such alternatives exist, but whether any alternative is preferable to the proposed site.²⁹

As discussed above, the examiners concluded that alternative 4 would not be able to supply enough steam to satisfy Con Edison's forecasted capacity requirements for its overall steam system, and would only be able to supply the minimum reserve needs of the uptown district. They further found that alternative 4 would be more costly than the Project.

The specific site of alternative 4 is Con Edison's 59th Street Station. The examiners recognized that, although the 59th Street Station has sufficient space to house the

²⁷ 6 NYCRR 231-2.9(d)(2)(ii).

²⁸ 6 NYCRR 231-2.9(d)(2)(i).

²⁹ Citizens for the Hudson Valley v. NYS Board on Electric Generation Siting and the Environment, ___ AD3d ___ (3d Dep't 2001).

Project, it has the disadvantages of insufficient stack capacity and of being closer to residential buildings when compared to the Project proposed for the East River Generating Station site.

Finally, the Recommended Decision states that a major benefit of Con Edison's proposal is the net air quality benefit; the predicted emissions from the Project would not exceed significant impact levels. In contrast, the examiners observe that CB3/EREC did not demonstrate that its proposed alternatives would provide benefits similar to the applicant's Project.

DPS Staff and Con Edison reiterate in their briefs opposing exceptions that the inquiry is not whether alternative 4 is an option but whether it is preferable to the Project. The applicant would further refine the inquiry to determine whether the alternative would mitigate or avoid any significant adverse environmental impacts that the Project may cause.³⁰ Con Edison asserts and we agree that the Project will not result in any significant adverse environmental impacts, and that CB3/EREC has not demonstrated that the Project would cause a significant environmental impact that would be ameliorated by alternative 4 or any of the other alternatives CB3/EREC proposed. We note that particulate emissions from the Project will not exceed the EPA's significant impact levels, including the EPA 24-hour and annual significant impact levels for PM₁₀, even if both Project units were to simultaneously operate at 100% of the proposed permit limit every day of the year, and even if the emissions reduction proposal, which is projected to reduce PM₁₀ emissions from existing boilers at the East River Generating Complex, were not included. Finally, Con Edison had prepared a cumulative impact analysis that demonstrates that the Project's particulate emissions, even when combined with those of other sources and background levels, will be below the national ambient air quality standards (NAAQS). Considering other criteria pollutants as well, we find that the Project, the implementation of the emission reduction proposal, and

³⁰ See WEOK Broadcasting Corp. v. Planning Board of the Town of Lloyd, 79 NY 2d 373, 379-80, 583 NYS 2d 170, 175-76 (1992).

retirement of the Waterside Station will reduce aggregate annual emissions from the East River Generating Complex, and reduce projected aggregate annual emissions from the Con Edison steam system as a whole.

Finally, for the reasons set forth above and those set forth in the Recommendation Decision, we adopt the examiners' findings that the Project is preferable to alternative 4.

e. Redesign of the Steam System

As noted above, alternative 4 calls for the installation of three CTG/HRSG trains (one at the East River Generating Station and two at the 59th Street Station), and retirement of Con Edison's three high pressure boilers at the 59th Street Station and five additional package boilers at the South Steam Station. The examiners accepted the applicant's position that the retirement of these high pressure and package boilers, which are dedicated exclusively to the steam system and do not generate electricity, would involve a wholly unwarranted, fundamental redesign of the Con Edison steam system and fails the test of reasonableness on that basis alone. The examiners noted that each package boiler at the South Steam Station is rated at a maximum steam output of 110,000 lb/hr, and the South Steam Station boilers provide approximately 19% of the steam supplied to the downtown network. The steam output of the South Steam Station, they observed, can be fine-tuned by turning individual boilers on or off; consequently, these boilers are ideal peaking units. Con Edison notes the high pressure boilers have similar load following characteristics.

By contrast, the examiners stated that the CTG/HRSG trains CB3/EREC would install are based on a different technology, which would not have the same performance flexibility and would operate as base load capacity. In its brief opposing exceptions, Con Edison points out that the record demonstrates that one of the three CTG/HRSG trains included in alternative 4 would have to be shut down during the summer and a number of other months to protect against the overgeneration of steam in excess of steam system customers' needs. CB3/EREC

concedes that its alternative 4 units would be base load in nature and may produce more steam than is necessary to satisfy demand.

In their briefs opposing exceptions, DPS Staff and Con Edison cite E.F.S. Ventures Corp. v. Foster, in which it was held that a reviewing agency may not use the environmental review process to address environmental impacts caused by existing conditions and any mitigation measures imposed must be directed at lessening the significant environmental impacts, if any, of the proposed action.³¹ The proposed action here, DPS Staff and the applicant state, is the Project, and it is this "facility" that must be the focal point of any mitigation measures that we may consider.

The examiners reviewed this issue and we adopt their finding that under PSL §168(2), we may: grant or deny the application as filed or " . . . certify the facility upon such terms, conditions, limitations or modifications of the construction or operation of the facility as the board may deem appropriate" (emphasis supplied). Since we cannot require the modification of the steam system that is not part of the facility, we find CB3/EREC's alternative 4 unacceptable. Our only recourse would be to deny certification of the Project if we were to conclude it did not satisfy the requirements of PSL Article X. We find otherwise.

Air Quality

According to CB3/EREC, our June 22, 2001 Order requires consideration of the potential public health impacts from air emissions. CB3/EREC argues that the Recommended Decision does not include such a consideration, and requests that the hearing record be reopened to receive information about this potential impact.

CB3/EREC contends further that the mitigation measures it proposes, such as taller emission stacks and changing the

³¹ E.F.S. Ventures Corp. v. Foster, 71 NY2d 359, 372, 526 NYS2d 56, 63 (1988).

fuel used by the boilers at the South Steam Station, should also be evaluated. According to CB3/EREC, there is no record about the possible effect of taller stacks in minimizing public health impacts from the Project. In its brief on exceptions, for the first time in this proceeding, CB3/EREC proposes to use the New York Externalities Cost Model (EXMOD) to evaluate local and regional public health impacts of PM₁₀. CB3/EREC requests that we reopen the record to receive additional information about the potential health impacts and the social costs associated with PM₁₀ emissions, alternative sites, and additional mitigation measures to minimize adverse environmental impacts.

DPS Staff, DOH Staff, DEC Staff, and the applicant object. DPS Staff opposes any reopening of the hearing to receive results obtained from the EXMOD model. DPS Staff states that EXMOD was designed to study average externality costs based on a variety of factors and that the model has a low geographical sensitivity level. Based on this limitation, and because all proposed alternative sites are located within a few dozen blocks of each other, DPS Staff contends that EXMOD should not be used to evaluate potential health impacts of the Project.

DOH Staff opposes CB3/EREC's request that we reconsider the June 22, 2001 Order, and the intervenor's exceptions to the Recommended Decision. DOH Staff contends that the issues presented in CB3/EREC's brief on exceptions were already raised and considered in early phases of this proceeding. According to DOH Staff, CB3/EREC presents nothing new in its brief on exceptions, and the intervenor should not be permitted a second opportunity to appeal the examiners' issues ruling.

According to DEC Staff, the PM₁₀ standard is a health-based standard, as required by the federal Clean Air Act. In addition, DEC Staff argues that we have correctly assessed our authority to review potential PM₁₀ related health impacts pursuant to PSL §168, in light of the federal permitting authority delegated to DEC. DEC Staff asserts further that the intervenor has not identified any other legally applicable particulate standard, which we could use in place of the current

particulate standard as a basis for an independent assessment of potential public health impacts, that is more restrictive than the current NAAQS. In addition, DEC Staff contends that CB3/EREC has not cited any authority that would allow us to impose some other standard, if one existed.

DEC Staff contends further that we should rely on DEC's expertise with respect to assessing air quality and related potential public health impacts from the Project. According to DEC Staff, certain topics within the expertise of other agencies require no independent evaluation on our part. To support its position, DEC Staff cites PSL §166(1)(b), which identifies the DEC as a party to the PSL Article X proceeding and requires the DEC to present expert testimony about a proposed facility's potential environmental impacts, as well as whether the proposal would comply with state and federal statutes. DEC Staff acknowledges that the courts have found it improper for agencies to delegate their respective approval authority. Nevertheless, DEC Staff argues agencies may rely on other agencies' expertise with respect to developing a record about potential environmental impacts. DEC cites case law to support this argument.³²

DEC Staff objects to CB3/EREC's continued attempts to present stack height as an issue. Although CB3/EREC's initial attempt to raise this issue was timely, DEC Staff argues that on interlocutory appeal the intervenor did not prevail, and accordingly the proposed issue has been excluded. DEC Staff asserts that CB3/EREC therefore cannot use the exception process to reassert excluded issues for adjudication at this stage of the proceeding.

³² Jackson v. State Urban Development Corp., 67 NY2d 400, 494 NE2d 429, 503 NYS2d 298 (1986). Molinari v. City of New York, 146 Misc2d 713, 551 NYS2d 760 (Sup Ct 1990). Akpan v. Koch, 152 AD2d 113, 547 NYS2d 852 (1st Dept 1989); *motion to vacate denied*, 75 NY2d 743, 551 NE2d 102, 551 NYS2d 901 (1989); *aff'd*, 75 NY2d 561, 554 NE2d 53, 555 NYS2d 16 (1990); *motion to amend denied*, 76 NY2d 846, 559 NE2d 1289, 560 NYS2d 130 (1990).

According to Con Edison, there is no basis to reopen the record to consider the potential public health impacts of particulate matter. The applicant argues there is substantial evidence in the record that particulate levels would not increase above significant impact levels at any affected location, and that, on balance, particulate concentrations would be reduced in the City.

In addition, the applicant maintains there is no basis to require the use of alternative fuels by Boilers 60 and 70, or the modification of stacks. Referring to our June 22, 2001 Order, the applicant argues that the scope of our jurisdiction is limited to the Project and not to other steam generating equipment at the South Steam Station. With respect to taller stacks, Con Edison cites the DEC Commissioner's June 4, 2001 Interim Decision, which excluded this proposed issue from adjudication based on an insufficient offer of proof from CB3/EREC.

As a prerequisite to issuing the Certificate, we must find that the proposed facility will minimize adverse environmental impacts [PSL §168(2)(c)(i)], will be compatible with public health and safety [PSL §168(2)(c)(ii)], and will be in the public interest [PSL §168(2)(e)]. In addition, we must find that the proposed facility will violate no applicable DEC regulations, or water and air quality standards [PSL §168(2)(c)(iii - iv)].

However, DEC determines whether air emission and water discharge permits should be issued to power plant developers subject to PSL Article X. DEC permit conditions ensure that potential impacts to air and water quality are minimized and are compatible with public health and safety. Consequently, as we have already determined with respect to this matter, we must accept the specific findings and conclusions of the DEC Commissioner relating to the air emission and water discharge permits issued pursuant to federal delegation.³³ We, of course,

³³ Case 99-F-1314, Order Concerning Interlocutory Appeals (issued June 22, 2001), p. 13.

consider the air emission and water discharge effects of proposed facilities (as those effects are identified by DEC) in considering whether, for example, a proposed facility is in the public interest.

Here, the DEC Commissioner has determined that the proposed facility will not have adverse impacts on air quality, including particulate matter, in New York County or in the vicinity of the plant. Specifically, Commissioner Crotty found that:

It is clear from the findings, for example, that the project's emissions would meet all NAAQS and New York State standards for criteria pollutants, as well as the health-based benchmarks for non-criteria pollutants established by DEC and DOH. RD at pp. 149, 75-76, 114. Additionally, the project's air contaminant emissions will have no significant impact on any receptor location and would be less than USEPA's duly established significant impact levels of pollutants. RD at pp. 65, 72. Further, the cumulative impact of all project emissions would not result in any exceedance of NAAQS. RD at p. 114. Similarly, non-criteria pollutant emissions would not exceed the recognized benchmark concentrations established to protect public health. RD at pp. 114-115. The project itself, together with the shutdown of the existing Waterside Station, and Con Edison's Emissions Reduction Proposal, would improve air quality both in New York City as a whole and in the vicinity of the project area. RD at p. 75. See also RD at p. 106. Finally, the project would lower concentrations of $PM_{2.5}$ and PM_{10} , as well as other pollutants. RD at p. 146.

There is no question that public health impacts were considered on this record, particularly with respect to particulate matter. The foregoing amply demonstrates the project[']s conformity with the health based standards and the regulatory methodologies and guidance issued to ensure the protection of public health. Accordingly, the totality of this information is sufficient to render a further review of CB3/EREC's request for rehearing and/or to

receive in evidence its stricken prefiled testimony on 'health impacts' (PM_{2.5}) as having no decisional consequence.³⁴

Accordingly, we deny CB3/EREC's request to reopen the record for purposes of examining air quality issues by receiving additional information about PM₁₀, alternative sites, or additional mitigation measures related either to the Project or to other steam generating equipment at the East River Complex.

Noise Impacts

The examiners recommended a finding that the proposed Certificate conditions would minimize the Project's noise impacts and satisfy applicable health and safety requirements, in conformance with PSL §168(2)(b) and (c). CB3/EREC excepts, and NYPIRG seeks reconsideration of our June 22, 2001 Order on this subject. We shall deny CB3/EREC's exception. NYPIRG's petition is denied for reasons explained elsewhere in this Opinion, although the petition relies on CB3/EREC's arguments regarding noise and therefore is subject also to the same criticisms that lead us to deny CB3/EREC's exception.

The proposed Certificate conditions require that Con Edison comply with the City's Noise Code. Thus, Con Edison must demonstrate such compliance as part of its post-certification compliance filing(s) in this proceeding. Should it fail to do so, the Certificate is subject to modification or

³⁴ Matter of Applications by Consolidated Edison Company of New York, Inc., (DEC Case No. 2-2606-00012-000021) Decision (August 16, 2001), at pp 7-8.

revocation.³⁵ In CB3/EREC's view, the pertinent questions nevertheless remain unresolved because the applicable City standard requires a calculation whereby the noise emitted by the source at issue is projected ("referred") to the property line of the residence that would be affected. CB3/EREC claims that we should reopen the record to receive additional evidence, as the Recommended Decision does not specify the equation to be used in the referral calculation. CB3/EREC says the calculation should assume that the source of the Project's noise will be the plant's entire south wall, whereas Con Edison assertedly intends to assume that the noise is emitted only from a point source. Con Edison's approach, CB3/EREC argues, will understate the relevant noise impact at the residential property line because sound from a point source diminishes comparatively abruptly over a given distance. According to CB3/EREC, until the proper equation is specified, one can assess neither the noise impact nor the adequacy of the proposed noise mitigation measures.

In opposition to the exception, DPS Staff responds that Con Edison's application already includes a noise analysis that considers the noise source to be the wall rather than a point, so no purpose would be served by reopening the record as

³⁵ Con Edison seeks assurance that, except in "extraordinary circumstances," the remedy for violation of local laws would be an enforcement proceeding by local authorities rather than the remedies provided in PSL §168(2) and 16 NYCRR 1000.15(e)(2). (Con Edison's July 13 letter in lieu of brief on exceptions, p. 2.) Con Edison raises this point in response to our observation that, if the applicant violated City noise standards, "it would be in violation of its certificate, subjecting Con Edison to its revocation and penalties." (Case 99-F-1314, Order Concerning Interlocutory Appeals (issued June 22, 2001), p. 21.) The applicant's proposed limitation on the use of PSL §168(2) and 16 NYCRR 1000.15(e)(2) is not to be found in the statute, and cannot readily be defined outside the context of an actual violation. Should an actual violation occur, we would expect all agencies with enforcement authority to work cooperatively so that the exercise of such authority is carefully tailored to the circumstances then present. The requested clarification therefore is denied.

CB3/EREC advocates. Con Edison and DOH Staff assert that our June 22, 2001 Order disposed of all noise impact issues now raised on exceptions. Additionally, Con Edison notes that the Joint Stipulation proposes to entrust the City with enforcement of the Noise Code standards, and already includes an agreement by the City that the Project complies with the Noise Code.³⁶

Given that the existing noise analysis specifically recognizes the square footage of the south wall as a noise emitting area, CB3/EREC's exception fails to explain how (if at all) its approach differs from Con Edison's or why the necessary information cannot be found in the present record. More fundamentally, even if an assessment of noise impacts depends on methodological choices (as, e.g., between an area source and a point source), the same may be true of any other determinations committed to local authorities pursuant to PSL §172(1). CB3/EREC fails to show why the City, with its long established expertise in administering and enforcing its own noise regulations, cannot be trusted to make the appropriate technical judgments in this instance as well. The exception therefore is denied.

Public Interest

Adding the electrical generation to the Project, the examiners concluded, would reduce electric production costs and

³⁶ Con Edison, referring to the examiners' recommendation that we act pursuant to PSL §172(1) to authorize certain permitting procedures by City agencies, seeks clarification that (as the Joint Stipulation contemplates) the City agencies' authority to administer the permit programs will include the authority to enforce the local laws under which the permits may be issued. (Con Edison's July 13 letter in lieu of brief on exceptions, p. 2, citing Recommended Decision, p. 139; see, similarly, Con Edison's opposition to the NYPIRG and CB3/EREC petition for rehearing, p. 26, and Con Edison's brief opposing exceptions, pp. 5 and 28.) The clarification is valid, and the Certificate will be issued subject to that understanding. Our decision whether to authorize another agency to require a permit in no way impairs that agency's ability to enforce substantive provisions relating to such permit.

enhance reliability within the lower Manhattan and in-City electrical load pockets.³⁷ The examiners observed that the Project would displace the Waterside Station's dispatch of approximately 600 gigawatt-hours (gWh) of electricity per year and an additional 1,700 gWh of generation from other plants. Were this generation displaced in the year 2002, the examiners noted that the associated fuel cost savings would be approximately \$25 million.

With respect to the lower Manhattan and overall in-City load pockets, the examiners pointed out the Project would provide a net increase of 288 MW in lower Manhattan and 125 MW in the City. Without the Project, the lower Manhattan load pocket would become deficient by 2005 and the in-City load pocket risks deficiency by 2002. Thus, they concluded the Project will augment capacity in the load pocket areas.

The Project would also displace a planned \$29 million in reinforcements for the East River 69 kilovolt (kV) and East 13th Street 138 kV transmission systems.

In addition, they observed that the Project would obviate operating costs and ongoing capital investments of the Waterside Station. The Project would also allow five of the ten package boilers at the South Steam Station to be placed in "cold storage." The sum of the fuel cost savings and other production cost savings resulting from the Project, the examiners found, would amount to \$27 million per year. This figure does not include the estimated net real estate benefits of \$220 million that Con Edison expects from the sale of the Waterside Station, subsequent to its decommissioning, and the other three First Avenue Properties. If the real estate benefits were included, the total economic benefits from the Project to ratepayers would average approximately \$45 million per year over 20 years.

³⁷ A load pocket is a geographic area that, because of transmission limitations, must have internal generation resources available to ensure reliable service for the area's load under normal and contingency (equipment failure) conditions.

The Project would also provide a public benefit with respect to air quality. The decommissioning of the antiquated Waterside Station will provide, in part, the necessary emission reduction credits (ERCs) required by 6 NYCRR Subpart 231-2 for the proposed facility. The applicant has obtained 193.0 tons of ERCs for NO_x, 222.1 tons of ERCs for volatile organic compounds (VOCs), 120.3 tons of ERCs for carbon monoxide, and 109.4 tons of ERCs for particulates.

To determine whether the Project would provide a net air quality benefit, the applicant also performed the air modeling analysis required by 6 NYCRR 231-2.9(d). Consistent with DEC guidance, the affected areas in this case included the area surrounding the East River Complex as well as areas around the offset sources, such as the Waterside Station and the 59th Street Station. The results reported in the Recommended Decision show that the net impact of the Project on predicted emissions of particulates and carbon monoxide, compared with the emission offsets for these criteria pollutants would provide a net benefit, on balance, in the area affected by the Project.

Finally, as noted above, the predicted emissions would not exceed the applicable significant impact levels, which as a matter of regulation demonstrates that the emissions from the Project would not exceed the NAAQS.

No party challenges these findings. We conclude that the Project is consistent with sound steam and electrical system planning, will help minimize the cost of electricity and steam, and will improve the City's overall air quality. On balance, these benefits far outweigh the local impacts resulting from construction and increased production of steam and electricity at the East River Generating Station, including the impacts associated with fine particulates discussed by the DEC Commissioner.³⁸ Consequently, we find that certification of the Project is in the public interest.

³⁸ Matter of Applications by Consolidated Edison Company of New York, Inc., Decision (August 16, 2001), at p. 8.

Miscellaneous Matters

Con Edison notes that the Recommended Decision implicitly mischaracterizes, as \$3.0 million, the applicant's proposed contribution to neighborhood amenities other than expansion of the recreational space on the East River Esplanade.³⁹ In fact, the intended contribution is \$3.0 million in total, including \$0.5 million for the Esplanade project.

DPS Staff seeks to correct the Recommended Decision's statement that there would be consultation "with the PRHPL [Parks, Recreation, and Historic Preservation Law]" regarding archaeological resources, where the intended reference was to consultation with the Historic Preservation Field Services Bureau in the State Office of Parks, Recreation and Historic Preservation (OPRHP).⁴⁰ DPS Staff also calls for express recognition here that OPRHP has determined that the Project will not adversely affect cultural resources.⁴¹ These points are noted.

Finally, we note that there is a typographical error in footnote 140 of the Recommended Decision. The appropriate regulatory reference is 6 NYCRR 231-2.9(d)(2)(ii), rather than 6 NYCRR 231-2.9(b)(2)(ii).

PETITIONS FOR REHEARING OF
ORDER CONCERNING INTERLOCUTORY APPEALS

³⁹ Con Edison's July 13 letter in lieu of brief on exceptions, p. 2, citing Recommended Decision, p. 147.

⁴⁰ DPS Staff's July 13 letter in lieu of brief on exceptions, p. 2, citing Recommended Decision, p. 142. See Joint Stipulation, p. 83. DPS Staff's proposed correction refers to consultation with the State Historic Preservation "Officer," whereas the Joint Stipulation refers to the "State Historic Preservation Office (SHPO)." For purposes of this Opinion, we construe SHPO to denote the Officer and the Officer's staff in the Historic Preservation Field Services Bureau.

⁴¹ Joint Stipulation, Exh. 39.

On July 13, 2001, NYPIRG and CB3/EREC (Petitioners) petitioned for rehearing of our June 22, 2001 Order Concerning Interlocutory Appeals. Petitioners argue that we erred in our rulings on (1) air emissions, (2) noise, (3) modifications to non-facility generators, and (4) environmental justice.

Air Emissions

Petitioners assert that we erred in deferring to the DEC on the impacts of emissions from the proposed plant on air quality, specifically, the public health impacts of particulate matter (PM₁₀) and fine particulate matter (PM_{2.5}). Petitioners argue that because we must make findings as to the environmental impacts of the Project under PSL §168, we are required by law to make our own assessment of the impacts of PM_{2.5} emissions independent of the DEC. They maintain that our decision violates PSL Article X, disregards the legislative history, and will mean that the public has no opportunity to raise any environmental or health impacts relating to air, water or hazardous materials. Petitioners further assert that we, in deciding whether to grant a Certificate, cannot balance the benefits and impacts of the plant if we defer to DEC's findings as to the air impacts of the Project. Finally, Petitioners argue that the our deference to the DEC Commissioner diminishes the authority of the remaining members of the Board.

Con Edison responds that deference by the Board to the DEC on air quality impacts is: (1) allowed by PSL Article X, (2) lawful, considering case law under the analogous State Environmental Quality Review Act (SEQRA) review process, (3) consistent with the fact that DEC acts on air quality issues under the federal Clean Air Act pursuant to authority delegated and guidance issued by the EPA, and (4) consistent with PSL Article X's central purpose of streamlining environmental review of proposed power plants and avoiding duplicative review of the same issues by two agencies. The applicant states that the regulation of particulate emissions from power generators is a complex technical matter, that the DEC has considerable expertise in the regulation of particulates, and that the DEC's

approach to the issue is consistent with guidance from the EPA. Con Edison further argues that the DEC determined, based upon a record that provides ample support for its conclusions, that particulate emissions associated with the Project would not have adverse impacts on public health.

The applicant argues that the decision in Matter of UPROSE v. Power Authority of the State of New York, ___ A.D.2d ___, 2001, N.Y. App. Div. LEXIS 7564 (2d Dep't July 23, 2001) does not require further hearings on PM_{2.5} because the record in this proceeding contains a thorough analysis of particulate matter and shows that there will be no adverse health impacts from the plant. The applicant asserts that deference to the DEC Commissioner on air issues does not diminish the statutory authority of any of the Board members, a majority of whom voted to defer to the DEC, and all of whom will decide the Certificate application. Finally, Con Edison argues that Petitioners have not offered any coherent methodology for an assessment of the impacts of PM_{2.5}.

DEC Staff also responds to the petition, arguing that we correctly assessed our authority for reviewing the health impacts of particulate matter in light of federal delegation of this issue directly to the DEC. Like Con Edison, DEC points out that such delegation has been upheld by the courts on numerous occasions in the context of SEQRA. It argues that we should not second-guess the DEC on this issue.

DEC Staff further states that Petitioners' theory that we should act independently of the DEC would violate not only EPA's delegation of federal authority to the DEC, but the legislative design of PSL Article X, which harmonizes the DEC's review of air emissions in the context of federal permitting with our certification authority. It asserts that there is nothing inconsistent between the DEC issuing air emission permits, and our making findings as to air impacts based upon DEC's determination and then balancing those findings in deciding whether to grant a certificate.

DEC Staff also claims that, in any event, the PM₁₀ standard is the correct, current NAAQS for assessing the impacts

of particulate matter associated with the Project. It states that the EPA has instructed that the PM₁₀ standard should be used as a surrogate to analyze the impacts of PM_{2.5} on public health until a PM_{2.5} standard is implemented. Finally, DEC Staff asserts that Petitioners mischaracterized the Recommended Decision on this issue, because it concluded correctly, that particulate matter is a health issue for the DEC to decide, not a social cost issue that should be addressed by the Board.

On August 8, 2001, NYPIRG and CB3/EREC filed a purported Supplemental Petition for Rehearing. Petitioners allege that the Second Department's decision in UPROSE, supra, requires us, independently of the DEC, to analyze the public health impacts of PM_{2.5} emissions from the Project under PSL Article X. Although we had deferred to the DEC to determine the air quality impacts of the Project, Petitioners did not raise this issue at that agency.

On August 9, 2001, Con Edison stated that its response to the first Petition for Rehearing fully explained why the UPROSE decision did not require further analysis of particulate matter impacts.

Noise

Second, Petitioners argue that we erred in failing to allow CB3/EREC to present evidence on the noise impacts of the Project. They argue that if compliance with the City's noise ordinance is to be assured through a Certificate condition, then that condition should specify the equation to be used to analyze the Project noise at a residential property line. That equation, Petitioners maintain, should have been the subject of a hearing.

Con Edison responds that there is no reason for a hearing on noise issues because the recommended Certificate conditions already require it to comply with the City's Noise Code at its property line, that the City will enforce the noise ordinance, and that the City has already determined that the Project would comply with the substantive requirements of the Noise Code.

Modifications to Non-Facility Generators

Petitioners assert that we erred in determining that we are not empowered to require changes at non-facility generators. Petitioners assert that the power to impose conditions related to a project is supported by the Court of Appeals' decision, made in the context of SEQRA, in E.F.S. Ventures v. Foster, supra. They argue that we have ignored the possibility of Certificate conditions that would change existing boilers and stacks in order to mitigate cumulative impacts on air quality.

The applicant responds that we correctly held that we are not empowered to require changes at non-facility generators. Con Edison states that Foster actually supports our decision because that case held that a lead agency under SEQRA could not use the review process to impose mitigation measures on existing real estate development. The applicant argues that there is no evidence that the Project would result in increased emissions from non-facility boilers, and that any mitigation of impacts required by us must be implemented.

DEC Staff argues that Petitioners are incorrect that we allowed taller stacks to be considered for non-facility stacks at the East River Station. It states that we correctly determined that we lack authority to require changes at non-facility generators as a Certificate condition. Like the applicant, DEC Staff argues that Foster stands for the proposition that, under SEQRA, conditions cannot be imposed to address pre-existing development that is not part of a proposed project.

Environmental Justice

Petitioners allege that we "found that Article X requires an examination of social impacts or social costs associated with the Project which may be unwarranted, incompatible with public health and safety or otherwise not in the public interest" (Pet. Reh'g at 21). They claim that we nevertheless refused to authorize such an examination under PSL

Article X "because [we] assumed that DEC had examined the issue in conjunction with its review of the air permits." The examiners, Petitioners allege, failed to examine the issue by ruling that the term "social costs" was not intended to include potential health impacts, and found that the Project would not have environmental justice impacts on the local community "without considering public health impacts" (Pet. Reh'g at 21). Petitioners claim, therefore, that a full environmental assessment was not done as required by PSL Article X.

Con Edison responds that we correctly held that nothing in PSL Article X requires consideration of environmental justice issues and that Petitioners can raise their environmental justice concerns in a different forum. The applicant argues that Petitioners' environmental justice allegations are nothing but a repackaging of the same PM_{2.5} issues on which we deferred to the DEC.

DEC Staff states that Petitioners misinterpreted our June 22, 2001 Order because the Order never mentions "social impacts" or "social costs" and that these terms of art cannot be read into the Order when they are not there. It argues that Petitioners have not disputed that environmental justice issues are not part of PSL Article X proceedings and are instead subject to review before the EPA Appeals Board in connection with the PSD air permit.

Availability of Rehearing

As its response to the Petition for Rehearing, DPS Staff argues that, under PSL Article X and our rules, rehearing is not available from our intermediate decision on the interlocutory appeals. DPS Staff states that PSL §170 allows rehearing only from final action by us on the application for a Certificate, that PSL §168(1) provides for rehearing on alternatives only after we render a final decision, and that PSL §168(2) contemplates that only our final decision would be subject to rehearing. DPS states that 16 NYCRR 3.7 does not provide a basis for rehearing because it applies only to the actions of the PSC, whose determinations are subject to

rehearing under PSL §22. DPS Staff states that Petitioners should raise their arguments on rehearing from our final decision on the certificate application.

DOH Staff argues that the Petition for Rehearing should be denied because it simply reiterates the arguments CB3/EREC made on interlocutory appeal from the examiners' issues ruling.

Discussion

1. Availability of Rehearing

DPS Staff is correct that, as a matter of law, rehearing is not available from our order deciding interlocutory appeals. PSL §170(1) permits rehearing only from a Board decision "denying or granting a certificate." Moreover, PSL §168(1) provides that our determination on alternatives under PSL §167(5) "shall be subject to rehearing and review only after the final decision on an application is rendered." PSL §168(2), which specifies that our jurisdiction shall cease "[f]ollowing any rehearing and any judicial review of the board's decision," also apparently contemplates that rehearing will be available only from our final decision. Petitioners' invocation of 16 NYCRR 3.7 as the basis for rehearing is unavailing, as that rule provides for rehearing of orders of the PSC under PSL §22. Accordingly, the Petition and Supplemental Petition for Rehearing shall be dismissed.⁴² To ensure that all of Petitioners' objections to the application have been fully addressed, their arguments are addressed herein as a matter of discretion.

2. Air Emissions

DOH Staff is correct that Petitioners' arguments largely repeat those made in their original interlocutory appeal from the examiners' issues ruling. Petitioners' argument that we erred in deferring to the DEC on the impacts of air emissions

⁴² Petitioners may seek rehearing of this Opinion within thirty days after its issuance. PSL §170(1).

from the Project is incorrect for the reasons stated in our June 22, 2001 Order.⁴³ Petitioners' claim that such deference is unlawful is belied by case law, decided in the context of SEQRA, holding that the lead agency conducting environmental impact review may defer to the expertise of other involved agencies and even designate another agency to act as co-lead agency to take advantage of its expertise. See Coca-Cola Bottling Co. of New York, Inc. v. Board of Estimate of the City of New York, 72 NY2d 674, 682 (1988); Jackson v. New York State Urban Development Corp., *supra*; Save the Audubon Coalition v. City of New York, 180 AD2d 348, 351-352 (1st Dep't 1992), appeal denied, 81 NY2d 702 (1993); Akpan v. Koch, *supra*. Petitioners' argument that the authority of the remaining Board members is diminished by deference to the DEC Commissioner is incorrect given that a majority of the Board voted on the decision that such deference is appropriate, and that all members of the Board participated and voted on the decision to grant the Certificate application.

Petitioners' argument that we cannot balance the environmental impacts of the Project with its benefits in arriving at a decision on the Certificate application unless we make our own assessment of particulate matter impacts separate and apart from DEC also lacks merit. Again, the DEC is the expert agency in this field, acting pursuant to federal EPA delegation and guidance. We may, and in fact did, balance the DEC's findings as to the air impacts of the Project with the benefits of the Project in deciding that the facility has minimized environmental impacts and is in the public interest. See Public Interest, *supra*, and Statutory Findings, *infra*.

Finally, the DEC Commissioner addressed the particulate matter (PM₁₀ and PM_{2.5}) issues that are the subject of Petitioners' motion for rehearing in her August 16, 2001

⁴³ Case 99-F-1314, Order Concerning Interlocutory Appeals (June 22, 2001), pp. 12-14.

Decision that air and water emission permits should be issued for the Project.⁴⁴

3. Noise

Petitioners have presented no reason why we erred in deciding that, in light of the Certificate condition to which the applicant has agreed and the PSC's and City's enforcement of the City Noise Code, the potential noise impacts of the Project should not be the subject of evidentiary hearings. We reiterate that evidentiary hearings were not required on noise issues for the reasons set forth in our June 22, 2001 Order.⁴⁵ NYPIRG's and CB3/EREC's exceptions as to the examiners' determination on noise are addressed elsewhere in this Opinion. See Noise, supra.

4. Modifications to Non-Facility Generators

Upon further consideration of this issue, we conclude that the Siting Board has jurisdiction under appropriate circumstances to modify existing facilities owned by an applicant as a condition of granting a Certificate (PSL §168(2)). If, however, a certificate condition relates to air emissions or water quality, the Siting Board's decision adopting such an order would presumably be preceded by a DEC determination that such condition would be required as a prerequisite to issuance of the relevant DEC permits. Given that the DEC Commissioner has determined that the Project would

⁴⁴ On August 21 and 22, 2001, respectively, NYPIRG and CB3/EREC wrote to DEC Commissioner Crotty and Board Secretary Deixler questioning the propriety of the DEC Commissioner's Decision on the grounds that the petitions for rehearing were presented to us, rather than DEC. As we stated in our June 22, 2001 Order, the DEC Commissioner certainly has jurisdiction to address such matters. We have deferred to the findings of the DEC Commissioner as to the air quality impacts of the Project. It was entirely appropriate for the DEC Commissioner to address air quality issues.

⁴⁵ Case 99-F-1314 Order Concerning Interlocutory Appeals (issued June 22, 2001), p. 21.

not have adverse impacts on air quality and the public health, including consideration of cumulative impacts,⁴⁶ there is no basis for us to exercise our conditioning authority in this proceeding.

5. Environmental Justice

Petitioners assert, incorrectly, that we "found that Article X requires an examination of social impacts or social costs associated with the Project" (Pet. Reh'g at 21). Rather, we determined that:

Article X does not envision the Board examining environmental justice questions per se. It does, however, require the Board to minimize the adverse environmental impacts of a proposed facility (considering the state of available technology as well as "other pertinent considerations"). PSL §168(2)(c)(i). Further, Article X conditions the issuance of certificates on the Board finding that a proposed plant's operation will be compatible with the public health and safety and, considering its environmental impacts, advance "the public interest." PSL §168(2)(e). As a general matter, therefore, the Board, in areas not subject to DEC permitting, has taken evidence on matters such as: (a) whether a proposed project is compatible with public health and safety; and (b) will result in unwarranted impacts. PSL §168(2)(b)(c).⁴⁷

Our analysis means, for example, that if a particular neighborhood would be unduly burdened with industrial facilities, and a proposed new facility would result in health impacts due to air emissions, the Board may consider whether that neighborhood should not have a new facility site. In this proceeding, however, the DEC Commissioner has determined that

⁴⁶ See Matter of Consolidated Edison Company of New York, Inc. (DEC Case No. 2-2606-00012-000021) Interim Decision, June 4, 2001; and Decision, August 16, 2001.

⁴⁷ Case 99-F-1314, Order Concerning Interlocutory Appeals (issued June 22, 2001), pp. 27-28.

the Project would not cause adverse impacts to public health in the City's non-attainment area generally, or in the neighborhoods surrounding the proposed East River Complex specifically.⁴⁸ To the contrary, the DEC found that the plant will have a net air quality benefit, both City-wide and locally, by reducing emissions of particulate matter, NOx and sulfur dioxide.⁴⁹

Finally, we did not refuse to authorize an examination of social impacts "because [we] assumed that DEC had examined the issue in conjunction with its review of the air permits" (Pet. Reh'g at 21). Rather, we determined that environmental justice issues relating to the PSD permit issued by the DEC should be raised before the EPA under the environmental justice complaint review process in 40 CFR Part 124.⁵⁰

STATUTORY DETERMINATIONS

We find and determine that:

1. On the basis of the findings and determinations in this Opinion and the examiners' Recommended Decision, the Project will be reasonably consistent with the policies and long-range energy planning objectives and strategies contained in the most recent State Energy Plan [PSL §168(2)(a)(i)].

2. Based upon the full record in this proceeding, the nature of the probable environmental impacts of the Project, including predictable adverse and beneficial impacts, of the Project on the environment and ecology; public health and safety; aesthetics, scenic, historic, and recreational values; forest and parks; air and water quality; and fish and other

⁴⁸ Matter of Applications by Consolidated Edison Company of New York, Inc., (DEC Case No. 2-2606-00012-000021) Decision (August 16, 2001), at pp. 4-8.

⁴⁹ Id. at 7. Petitioners' claim that a full environmental assessment of air impacts was not conducted (Pet. Reh'g at 21) is, therefore, baseless.

⁵⁰ Case 99-F-1314, Order Concerning Interlocutory Appeals (issued June 22, 2001), p. 28.

marine life and wildlife, will be as described in the examiners' Recommended Decision and the DEC's decisions⁵¹ [PSL §168(2)(b)].

3. For the reasons set forth in this Opinion, the DEC's decisions⁵² and the examiners' Recommended Decision, the Project, if constructed and operated in accordance with all the Certificate conditions set forth in Appendix B of this Opinion and the terms of permits issued by other agencies, will minimize adverse environmental impacts, considering the state of available technology and the interest of the state respecting aesthetics, preservation of historic sites, forest and parks, fish and wildlife, viable agricultural lands, and other pertinent considerations [PSL §168(2)(c)(i)].

4. For the reasons set forth in the DEC's decisions,⁵³ and examiners' Recommended Decision, the Project, if constructed and operated in accordance with all the Certificate conditions set forth in Appendix B of this Opinion and the terms of permits issued by other agencies, will be compatible with public health and safety [PSL §168(2)(c)(ii)].

5. For the reasons set forth in this Opinion, the DEC's decisions,⁵⁴ and the examiners' Recommended Decision, the Project, if constructed and operated in accordance with all the Certificate conditions set forth in Appendix B of this Opinion and the terms of permits issued by other agencies, will not discharge any effluent in contravention of DEC standards [PSL §168(2)(c)(iii)].

6. For the reasons set forth in this Opinion, the DEC's decisions,⁵⁵ and the examiners' Recommended Decision, the

⁵¹ See Matter of Consolidated Edison Company of New York, Inc. (DEC Case No. 2-2606-00012-000021) Interim Decision, June 4, 2001; and Decision, August 16, 2001.

⁵² Id.

⁵³ Id.

⁵⁴ Id.

⁵⁵ Id.

Project, if constructed and operated in accordance with all the Certificate conditions set forth in Appendix B of this Opinion and the terms of permits issued by other agencies, will not emit any air pollutants in contravention of applicable air emission control requirements or air quality standards [PSL §168(2)(c)(iv)].

7. Because the Project will not include a solid waste disposal facility and will not generate hazardous waste, the adverse environmental impacts governed by PSL §168(2)(c)(v) and (vi) will not occur.

8. For the reasons set forth in this Opinion, the DEC's decisions,⁵⁶ and the examiners' Recommended Decision, the Project, if constructed and operated in accordance with all the Certificate conditions set forth in Appendix B of this Opinion and the terms of permits issued by other agencies, will operate in compliance with all applicable state and local laws and associated regulations [PSL §168(2)(d)].

9. For the reasons set forth in this Opinion, the DEC's decisions,⁵⁷ and the examiners' Recommended Decision, the Project, if constructed and operated in accordance with all the Certificate conditions set forth in Appendix B of this Opinion and the terms of permits issued by other agencies, will be in the public interest, considering the environmental impacts of the Project and the reasonable alternatives examined [PSL §168(2)(e)].

We therefore grant to Con Edison, a Certificate of Environmental Compatibility and Public Need for the construction and operation of a 360 megawatt natural gas-fired electric generating facility at the East River Generating Station site, subject to the terms, conditions, and limitations set forth in this Opinion and Order.

⁵⁶ Id.

⁵⁷ Id.

The New York State Board on
Electric Generation Siting and the
Environment for Case 99-F-1314 orders:

1. The Recommended Decision of examiners Walter T. Moynihan, Rafael A. Epstein and Daniel P. O'Connell, to the extent consistent with this Opinion and Order, is adopted and, together with this Opinion and Order, constitutes the decision of this Board in this proceeding.

2. Subject to the conditions appended to this Opinion and Order, a Certificate of Environmental Compatibility and Public Need is granted pursuant to Article X of the Public Service Law to Consolidated Edison Company of New York, Inc. (the applicant) for the construction and operation of a 360 megawatt gas-fired electric generating facility on the East River Generating Station site in New York County, provided that the applicant files, within 30 days after the date of issuance of this Opinion and Order, a written acceptance of the certificate pursuant to 16 NYCRR 1000.14(a).

3. Upon acceptance of the certificate granted in this Opinion and Order or at any time thereafter, the applicant shall serve copies of its compliance filing(s) in accordance with the requirements set forth in 16 NYCRR 1003.3(c) and Certificate Condition II(C). Pursuant to 16 NYCRR 1003.3(d), parties served with the compliance filing(s) may file comments on the compliance filing within 15 days of the service date of the filing.

4. This proceeding is continued.

By the New York State Board
on Electric Generation Siting
and the Environment for
Case 99-F-1314

(SIGNED)

JANET HAND DEIXLER
Secretary to the Board

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CERTIFICATE CONDITIONS

I. Project Authorization

- A. The Certificate Holder is authorized to construct and operate the Project, as described in the Application, except as waived, modified or supplemented by this Certificate or other permits.
- B. The Certificate Holder is responsible for obtaining a State Pollutant Discharge Elimination System ("SPDES") permit modification approval under the Clean Water Act ("CWA"), a Prevention of Significant Deterioration ("PSD") permit under the Clean Air Act ("CAA"), a State Air Facility permit, and other approvals and permits as specified in the Application.
- C. The Project shall be designed to operate and be operated in compliance with all applicable federal and state laws and regulations. Subject to the Board's ongoing jurisdiction, the Project shall be designed to operate and be operated in compliance with all applicable local laws and regulations.
- D. The Certificate Holder is authorized to connect the Project facilities to the Con Edison gas distribution system main located at East 13th Street and Avenue D.
- E. The Certificate Holder is authorized to construct electric transmission facilities and interconnect those facilities from the Project to Con Edison's existing 13th Street 138 kV substation and East River 69 kV substation.
- F. The Certificate Holder is authorized to connect the Project facilities to the Con Edison steam distribution system main on First Avenue in the vicinity of the Project.

II. General Conditions

- A. The Project and/or its site 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, State Air Facility and PSD Permits issued by the New York State Department of Environmental Conservation ("NYSDEC").
- B. The Certificate Holder shall submit a schedule of all plans, filings and other submissions to the Board as may be required by these Certificate Conditions, and to the extent practicable, shall coordinate the schedule for submitting Compliance

Filings with the relevant state agencies having jurisdiction over such Compliance Filings.

- C. 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.
- D. Operation of the Project shall be in accordance with the SPDES, PSD and State Air Facility Permits.
- E. These Certificate Conditions shall be made contract requirements for the construction contractors as applicable.
- F. Appropriate construction personnel shall be trained in the environmental compliance matters.

III. Air Resources

- A. The Certificate Holder shall operate the Project pursuant to the air permits issued by NYSDEC under Article 19 (6 NYCRR Part 201-6) and the PSD program (40 C.F.R. §§ 52.21 and 124).
- B. The Certificate Holder shall implement the measures identified in its letter dated November 21, 2000 to reduce projected emissions from existing sources at the East River Generating Complex (the "Complex"), namely (i) boiler tuning and control enhancements for existing Units Nos. 6 and 7; (ii) pressure part refurbishment and burner upgrades for the South Steam Station; (iii) Unit No. 6 condenser replacement and (iv) limiting use of fuel oil in Unit No. 6 during April-October so that 90 percent of the fuel combusted in Unit No. 6, on a heating value basis, will on average be natural gas during that period, based upon a three season averaging period.
- C. The Certificate Holder shall install induced flue gas recirculation equipment ("IFGR") for Unit No. 7 at the Complex and limit the use of fuel oil in Unit No. 7 during April-October so that 90 percent of the fuel combusted in Unit No. 7, on a heating value basis, will on average be natural gas during that period.
- D. The Certificate Holder shall use best efforts to use natural gas rather than fuel oil at existing Units Nos. 6 and 7 at the Complex during the months of November through March to the extent that such use of natural gas is consistent with its

obligation to ratepayers to generate steam and electricity in a reliable and economic manner.

- E. If the Certificate Holder decides to store, rather than generate, aqueous ammonia on site, the Certificate Holder may store aqueous ammonia (with an ammonia concentration of less than 20%) at the Complex in connection with the Project. If the Certificate Holder stores more than a *de minimis* amount of aqueous ammonia at the Complex in connection with the Project, it shall conduct an analysis of potential off-site consequences of an accidental release of any such aqueous ammonia and take any necessary mitigating measures with regard to such storage. If the Certificate Holder generates ammonia at the Complex and, consequently, does not store more than a *de minimis* amount of aqueous ammonia in connection with the Project, such an analysis will not be required.

IV. Electric Transmission Facilities

- A. The Certificate Holder will take remedial measures to ensure that adverse electrical impacts are minimized by upgrading sixteen circuit breakers at the East River and East 13th Street substations, replacing thirty-three circuit breaker timers at the East 13th Street substation, implementing mitigation fault measures at other Con Edison transmission substations, as appropriate, and developing a comprehensive plan to resolve the overduity conditions caused by the cumulative fault contributions from various interconnection projects.
- B. The Certificate Holder shall design, engineer and construct (or fund the construction of) the transmission interconnection such that its operation will comply with the "Interim Guidelines on Limits of Exposure to 50/60 Hz Electric and Magnetic Fields," of the Non-Ionizing Radiation Committee of the International Radiation Protection Association.
- C. The Certificate Holder is authorized to construct and shall design, engineer, and construct transmission facilities as provided in 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 2001 Transmission Reliability Assessment Study ("TRAS"), and in accordance with the applicable and published planning and design standards and best engineering practice of NYISO, Con Edison, 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.

- D. The Certificate Holder shall operate the Project in accordance with the approved tariffs and applicable rules and protocols of Con Edison, 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 agrees to obey the system operator at the NYISO and the Con Edison operator or their successor.
- E. The Certificate Holder shall design, engineer, and construct the transmission interconnection such that its operation shall comply 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), respectively.
- F. The Certificate Holder agrees to comply with Con Edison, NYISO, NPCC, NYSRC, NERC and successors reliability criteria. If it fails to meet the reliability criteria at any time, it shall notify the NYISO in accordance with NYISO requirements and shall simultaneously provide the Commission with a copy of the NYISO notice.
- G. The Certificate Holder shall file a copy of the following documents with the Board and the NYSPSC: (1) the SRIS approved by the NYISO Operating Committee; (2) any requirements imposed by the NYSRC; and (3) all facilities agreements and interconnection agreements with Con Edison and successor Transmission Owners.

V. Gas Supply

- A. In constructing the Distribution System Reinforcement and Service Line, the Certificate Holder will comply with all State and local laws and secure all required street excavation permits to minimize any adverse environmental impacts.
- B. Once the exact route of the Distribution System Reinforcement is determined, the Certificate Holder will identify all historic resources that could be impacted by the new gas main and take appropriate steps in order to minimize any such impacts.
- C. The Certificate Holder will obtain sufficient non-interruptible interstate transportation capacity to satisfy the Project's needs throughout the year. The capacity will be obtained through a combination of long term, annual, and seasonal (winter) contracts, supplemented, as necessary, by short-term capacity purchases.

- D. In order to provide non-interruptible transportation of gas from the citygate to the Project, an interdepartmental gas transportation agreement will be made between Con Edison Gas Operations and its Steam Business Unit.

VI. Land Use & Local Laws

- A. The Project shall be constructed principally within the existing East River Generating Station.
- B. The Certificate Holder shall make efforts to work with The City of New York to expedite any actions required in connection with the Project that would impact the Stuyvesant Cove Master Plan.
- C. Subject to the Board's ongoing jurisdiction, the Certificate Holder shall seek the regulatory permits and approvals specified in the Application from the relevant New York City agencies pertaining to the construction work for or operation of the Project.
- D. The Certificate Holder shall minimize fugitive dust from construction.
- E. As part of the reasonable and prudent cost of obtaining approval for and implementing the Project, the Certificate Holder shall, subject to receipt of all necessary governmental approvals for the Project:
 - 1. Provide funding to The City of New York in the amount of \$500,000 towards the cost of widening the East River Esplanade in the vicinity of the Project, and
 - 2. Provide funding to the New York City Economic Development Corporation in the amount of an additional \$2,500,000 at the time commercial operation commences to assist the local community in the development and implementation of projects such as local air quality improvement, health improvement, or amenities programs in the vicinity of the Complex. After consultation with appropriate local officials, and in coordination with The City of New York, the Certificate Holder will identify projects within the local area to be funded under the program. The Certificate Holder will provide funding, out of the funds provided for in this paragraph, for scoreboards for the ball fields located immediately north of the East River Generating Station.
- F. The Certificate Holder will fund the purchase of ornamental and/or screen plantings for placement around the East River Generating Station consistent with New York City guidelines. Such plantings are to be cared for under the Vegetative Maintenance Plan described in Section XII.D of the Certificate

Conditions. The purchase costs of such plantings will not be chargeable to the ratepayers under the Certificate Holder's rate plans.

VII. Noise

A. The Certificate Holder will implement the following capital improvements or equivalent attenuating measures to ensure that Complex noise levels comply with the limits set forth in Title 24, Chapter 2 of the New York City Administrative Code as it exists as of the date the Joint Stipulations were submitted to the Board (the "Noise Code"):

1. Install acoustical lagging on Unit Nos. 6 and 7 exhaust plenums on the Station rooftop.
2. Install acoustical curtains or acoustical treatment of existing louvers on the south wall of the 13th floor.
3. Enclose the gas veranda.

B. In furtherance of its efforts to address the local community's concerns about existing noise from the Complex, the Certificate Holder will implement a noise reduction program that would include the following capital improvements, operational changes, or equivalent attenuating measures:

1. Attenuate the exhaust of the two Unit No. 6 "self-sustaining" auxiliary steam system safety valves, the Unit No. 7 start-up safety valves and the South Steam Station deaerator safety valve.
2. Prohibit operation of paging system operation between 7 PM to 8 AM except in the event of exigency.
3. Prohibit testing of circuit breaker between 7 PM to 8 AM except in the event of exigency.
4. Minimize use of backup beeping alarms after 6 PM by dispatching trucks from East 16th Street.
5. Conduct routine maintenance survey to identify noise sources in need of mitigation.
6. Upgrade twelve breakers at the East River Substation and four circuit breakers at the East 13th Street Substation by modifying the design from compressed air actuated to SF₆ insulated design.

7. Restrict the shutdown and startup of Unit No. 7 to daytime hours when on steam sendout mode of operation, except as needed to maintain system reliability.
 8. Conduct a noise survey of the 69 kV yard at the northwest corner of the Complex and perform an analysis of the need for attenuating measures, and, if necessary, implement corrective measures that are economical and technically feasible.
- C. The Certificate Holder will incorporate a variety of noise attenuating measures into the Project design in order to ensure that during Project operation sound levels at the property line of receptors are within the night-time limit of 45 dBA, and, therefore, will not cause any adverse noise impacts, as follows:
1. Design acoustical treatments into the noise sources or materials of building construction.
 2. To meet the noise limitations at Murphy Park and Stuyvesant Town, use either an inlet air silencer system, or twelve-inch acoustical louvers or equivalent attenuating measures to attenuate sound emanating from the Project Unit No. 1 CTG air inlet system, along the north wall, that is emitted to the outdoors through the proposed wall louvers.
 3. Mitigate noise from the Project Unit No. 2 CTG air inlet system, located on the north and west gallery building walls, by using an air inlet silencer system or equivalent attenuating measures.
 4. Reduce indoor noise that is emitted through the roof ventilator and that propagates to south receptors by closing the south facing vents. The vents facing to the north may remain open without acoustic treatment. Alternatively, four of the six south facing roof vents may be opened if 12-inch acoustic louvers are placed over them.
 5. To meet the noise limitations at Jacob Riis Houses and St. Emeric's Church, reduce sound that is transmitted through the south wall by replacing or sealing the openings for the existing single pane windows, which comprise about 50 percent of the wall's surface area. The majority of the window openings will be sealed. If double pane windows are installed, then windows can be retained for a surface area equal to 10 percent of the wall's total surface area. Alternatively, if single pane windows are retained, then their surface area will be limited to 5 percent of the total surface area of the wall.
 6. Mitigate transformer noise at the northwest corner of the electrical gallery building, if required, by installing a barrier wall on the north side of the

- new Project Unit No. 2 generator step-up transformer. The wall will be positioned 4 feet north of the transformer, and will extend 3 feet above the top of the transformer. The top will be open for ventilation. To prevent sound from passing through the barrier, the barrier walls will have no openings, and will be constructed of material such as hollow core cinder block with a sound transmission class rating of 23 or greater.
7. HRSG exhaust stack noise is already reduced by attenuation from the exhaust ducts and stack walls and by directing the exhaust noise upwards. However, untreated stack noise will be further mitigated, if required, with breaching insulation or an equivalent measure.
 8. Perform street excavation work in accordance with New York City Department of Transportation ("NYCDOT") requirements.
- D. The Certificate Holder will carry on construction activities outside the walls of the East River Generating Station building between the hours of 7 a.m. and 6 p.m. (the "Daytime"), as required by Section 24-227 of the Noise Code. Construction activities may be conducted within the interior of the building during other hours, except that during such periods the Certificate Holder shall not conduct or allow to be conducted activities that will cause noise considered excessive under City standards at nearby sensitive receptors, including, but not limited to, heavy rigging operations, debris loading or removal or hauling by trucks, jack hammering, external wall removal or reinstallation, or louver installation. Delivery of oversized equipment such as the combustion gas turbines, heat recovery steam generators, boiler drum and step up transformers will be during night time hours as mandated by and in coordination with NYCDOT. Otherwise, deliveries related to construction activities shall take place during the Daytime.
- E. After commercial startup, the Certificate Holder will perform mid-field octave band sound pressure level measurements of the Project while it operates under typical load to verify conformance with design goals. The specifications for the testing protocol will be set forth in a Compliance Filing prior to testing.
- F. The Certificate Holder will prepare a technical analysis to determine whether operationally and technically feasible measures are available to: (i) seal all or most of the window openings in the south wall of the East River Generating Station other than those specified in Section VII of the Certificate Conditions; and (ii) further reduce noise levels from the south wall of the East River Generating Station. The Certificate holder will make a pre-operation Compliance Filing detailing the analysis and study undertaken and the measures performed in accordance with such study.

VIII. Public Interest

- A. The Certificate Holder will maintain access to each commercial or residential establishment during the period of construction, and will maintain pedestrian traffic to the extent practicable through the construction area.
- B. The Certificate Holder will stage construction so that no single area is affected for a prolonged period, and will, as set forth in Sections VII and XI of the Certificate Conditions, coordinate closely with and adhere to conditions imposed by the NYCDOT and the New York City Department of Buildings with respect to the hours of construction.
- C. The Certificate Holder will restrict materials storage locations, and will periodically change the locations of workout trailers during construction to limit possible impacts.
- D. The Certificate Holder has agreed to provide funding to widen the East River Esplanade and to assist the local community in the development and implementation of projects such as local air quality improvement, health improvement, or amenities programs as set forth in Section VI.E of the Certificate Conditions.
- E. The Certificate Holder will develop a Community Liaison Program in consultation with interested parties in the vicinity of the Complex. The Certificate Holder will submit a written description of the Community Liaison Program to the Board as a preconstruction compliance filing, and the Certificate Holder will implement the Program upon its approval by the Board. The Community Liaison Program will continue for the duration of the Project, (except as may otherwise be allowed by the Board as provided herein). The Certificate holder shall implement this program for no less than five years, and may thereafter seek permission from the Commission to terminate the program. The Community Liaison Program will include the following:
 - 1. Con Edison will provide the name, e-mail address, and company phone number of a single Point-of-Contact (PC) at Con Edison who will respond to reasonable community inquiries concerning plant construction and operation;
 - 2. Three representatives will be selected upon the recommendation of Community Boards 3 and 6, in consultation with appropriate local officials, (the "Community Representatives") and the Certificate Holder will make a good faith effort to address promptly complaints raised by such Community Representatives with respect to construction at or operation of the East River Generating Station. Such problems may include odor, noise or other

“nuisance” impacts associated with the day-to-day operation of the East River Generating Station.

3. The PC will escort Community Representatives to inspect plant construction and operation at reasonable times, upon request. Requests for meetings or plant inspections will be made to the PC.
4. The Certificate Holder shall maintain a Community Issues Resolution Log that: (i) tabulates complaints raised with respect to plant construction or operation expressed by the community and resolutions thereof implemented by the Certificate Holder; and (ii) details community outreach activities conducted by the Certificate Holder. This log will be available for inspection at the East River Generating Station during all Con Edison business hours by members of the public and their representatives, and by the NYSpsc or other State agencies or The City of New York, upon request.

IX. Soils, Geology, Seismology and Tsunami Occurrence

- A. The Project will be designed and constructed to withstand the expected effects of a seismic event in accordance with the New York City Building Code for regions identified as Seismic Zone 2A.
- B. The Project will be designed and constructed to ensure that the Project can withstand the expected effects of a seismic event with an effective zero period peak acceleration of 0.15g in S₁ Type materials, as defined by the New York City Building Code.

X. Terrestrial Ecology

- A. Any work conducted in connection with the installation of gas or steam mains through any public park or public street shall be conducted in accordance with conditions imposed by NYCDOT and NYCDPR to mitigate any temporary adverse impacts to the park or street and to fully restore any affected areas to their pre-existing condition after the work is completed.
- B. The Certificate Holder shall submit a Vegetative Maintenance Plan in connection with the Facilities Management Program as provided in Section XII.D of the Certificate Conditions.
- C. The Certificate Holder shall minimize the amount of fugitive dust that will occur during construction through the application of dust minimization techniques as set

forth in the Application. Any dust palliatives that are used by the Certificate Holder in controlling fugitive dust will be approved by NYSDEC.

XI. Traffic

- A. The Certificate Holder, through consultation with the community liaison appointed pursuant to Section VIII.E of the Certificate Conditions, will monitor the effects of construction on parking conditions in the area. Based on the information received from such consultation, the Certificate Holder will consider and, as appropriate, implement various options to reduce the number of vehicle trips to the Project site, such as the use of shuttle buses for construction workers and East River Generating Station personnel.
- B. The Certificate Holder will make special efforts to maintain pedestrian access to recreational fields adjacent to the Project site across East 15th Street.
- C. The Certificate Holder will mitigate potential traffic impacts during Project construction in one or more of the following ways:
 1. requesting the NYCDOT to perform minor retiming of traffic signals at the westbound East 14th Street approach at First Avenue during the 2:00 to 3:00 PM peak hour, by subtracting two seconds of green time from the northbound phase and adding it to the east/westbound phase, and at the northbound left turn movement of Avenue C at East 14th Street, by subtracting two seconds of green time from the east/westbound phase and adding it to the north/southbound phase;
 2. providing incentives to encourage more construction workers to use public transportation; or
 3. staggering the shift times of some workers.
- D. The Certificate Holder will minimize traffic impacts during construction of the interconnection lines as follows:
 1. potential traffic disruptions will be considered during the planning of the work;
 2. interconnection routes and construction methods will be selected to limit the width of construction activity within the street to minimize interference with traffic lanes;
 3. road plates will be used to keep streets open where possible during periods when construction within excavated trenches is not being performed;

4. the physical limits of work areas will be arranged to minimize congestion related to construction by utilizing smaller work areas and allowing suitable buffer zones between work areas;
 5. hours of work in time-sensitive zones, such as hospital areas, will be limited; and
 6. it will adhere to conditions imposed by the NYCDOT in connection with the issuance of a street opening permit.
- E. The Certificate Holder will coordinate closely with the New York State Department of Transportation ("NYSDOT") and the NYCDOT with respect to the closure of the FDR Drive for delivery of the CTGs and related equipment, and will comply with all applicable regulations regarding the timing and duration of such closure. Unless otherwise allowed by the NYSDOT or NYCDOT, no closures of the FDR Drive will occur during morning or evening peak traffic hours. If the interconnection requires the placement of ducts across 14th Street, the Certificate Holder will minimize traffic impacts during construction of the interconnection lines as provided in Section XI.D of the Certificate Conditions.

XII. Visual and Cultural Resources & Aesthetics

- A. The Certificate Holder shall design and paint the louvered openings to be incorporated into the north side of the east section of the East River Generating Station in an aesthetically pleasing manner that will visually blend with the existing East River Generating Station facade. To the extent the wall openings required for facility construction are larger than the louvered openings, the affected facade areas will be restored, if feasible, to their original appearance. The Certificate Holder will match brick and facade color, texture and appearance to closely approximate the original appearance and minimize any aesthetic discontinuity.
- B. The Certificate Holder shall design the Project's CTGs to use dry low-nitrogen oxides combustion technology, as opposed to water or steam injection, for NOx control while burning natural gas. Water injection will only be used for NOx control while burning distillate oil for 16 hours per year for testing and in the case of emergency.
- C. Upon designation of the street locations for interconnection lines, the Certificate Holder shall determine in consultation with an archeologist the potential for the presence of archeological resources at such locations. The Certificate Holder in consultation with an archeologist and historian will delineate areas of potential effect to assess potential impacts of this construction on any identified archeological and architectural resources. Appropriate precautions will be taken

during construction in the vicinity of any designated historic landmarks and eligible structures to preserve and protect them. If historically significant or archeological resources are identified, mitigation measures would be developed in consultation with SHPO. The Certificate Holder shall submit a "Plan and Procedures for Identifying and Responding to Unanticipated Discoveries of Cultural Resources Associated with the Project" in a preconstruction compliance filing, and the Certificate Holder will implement such Plan upon its approval by the Board.

D. The Certificate Holder shall develop and implement a Facility Maintenance Program to assure that the area located between East 13th and East 15th Streets, from the FDR Drive to Avenue C, including the East River Generating Station and certain ancillary features, structures and land owned by the Certificate Holder (the "Complex Area") is maintained in a clean and groomed condition. The Facility Maintenance Program with respect to the Complex Area identified above shall include the following:

1. Periodic inspection of outside infrastructure and grounds.
2. Facades will be cleaned, repainted or replaced if age, weathering or material decay warrant such treatment.
3. All fencing will be kept plumb, in a clean, well maintained condition.
4. Paved areas will be kept in a clean, repaired condition.
5. All lawn areas will be mowed weekly during the spring and early summer and as needed during the later part of the growing season.
6. All ornamental or screen plantings will be properly cared for and all dead or dying plantings will be removed and replaced in accordance with the Vegetative Maintenance Plan.
7. All fugitive trash or debris will be collected and removed from the Station Area and disposed of properly.
8. Snow and ice on surrounding sidewalks will be removed.

The Facility Maintenance Program and Vegetative Maintenance Plan shall be filed with the NYSPSC within six months prior to commencing commercial operations at the Facility.

XIII. Water Resources

- A. The Project will require modification of the SPDES permit issued by NYSDEC under Article 17 (6 NYCRR Part 750) for the discharge of wastewater and will operate in accordance with the effluent limitations imposed thereunder.
- B. The Project will be designed and implemented so as not to adversely affect the POTW and will allow the POTW to continue to accept the discharge of stormwater and sanitary wastes from the Station (including the Project).
- C. The design of the Project will limit its water intake to an average of approximately 4,000 gpm and maximum of approximately 8,300 gpm of New York City potable water which will be supplied by the New York City Department of Environmental Protection.
- D. All chemical storage areas will be located indoors. The Certificate Holder will abide by the East River Generating Station's best management practices for stormwater mitigation.
- E. The Certificate Holder will comply with all local, state and federal chemical and waste-storage, use, and handling regulations.
- F. The Certificate Holder will update its Spill Prevention Control and Countermeasures ("SPCC"), CSPP and Storm Water Pollution Prevention Plan ("SWPP") plans where applicable to assure that water quality remains protected as required by the Clean Water Act and the ECL.