

## **Response to Comments on Draft Environmental Impact Statement**

### **A. INTRODUCTION**

On March 24, 2005, the Long Island Power Authority (LIPA), as lead agency, issued a Draft Environmental Impact Statement (DEIS) pursuant to 6 NYCRR Part 617 for the proposed Caithness Long Island Energy Center to be located in one of the Town of Brookhaven's Empire Development Zones. The project would consist of an approximately 350 megawatts (MW) combined cycle power plant with state-of-the-art emissions controls and would be fueled primarily by natural gas. A public hearing on the DEIS was held at 3:00 PM and 7:00 PM on Wednesday April 20, 2005 at the Yaphank Fire Department, 451 Main Street, Yaphank, New York 11980. In addition, LIPA held the public comment period open through May 25, 2005 to receive written comments.

LIPA heard 22 oral statements from the public, with 3 individuals commenting at both hearing times, and received 17 written comments with 1 organization commenting twice. All persons and organizations who commented are listed in Section C and referenced as appropriate under each summary of the comments. Transcripts of the hearings and comment letters are contained in Appendix M. The following is a summary of the comments received, and responses to those comments.

### **B. COMMENTS AND RESPONSES**

#### **PROJECT PURPOSE AND NEED**

**Comment 1:** We do really need much more electrical power. I've seen the deteriorated effect of the lack of electrical power on not only residential, but especially critical businesses. It's very difficult to shut down for a few hours and then bring people back with electrical power, not only interruptions, but the chaos that it creates with traffic lights and everything else. Electrical power is an intrinsic part of our life and we need to keep it. (Adkins)

The Long Island Association's primary purpose in submitting these comments is to underscore the critical importance of approving, in a timely manner, new electric power projects to meet Long Island's growing need for power as well as to replace aging and obsolete generating facilities. There is a broad recognition on Long Island that new generation capacity and new transmission interties to nearby systems are needed now. We strongly urge you to recognize this critical need in your consideration of this application for this project. (Pally)

**Response:** LIPA agrees with the commenters. The purpose of the project is to ensure that there is sufficient on-island generating capacity so that such chaos during electrical interruptions does not occur in 2008 or thereafter.

**Comment 2:** We are supposed to by 2013 reach 25 percent reliance on non-fossil fuel (renewable energy). This project puts out almost 360 megawatts (MW) of power. How are we to meet federal, state and LIPA's renewable energy

goals/requirements with the construction of Caithness? How is Caithness not a further perpetuation of reliance upon fossil fuels? (Seubert)

I would also ask that LIPA look into what we are really doing here. We are bringing in oil; we are bringing in gas to create electricity. There are other projects out there that are just going to bring electricity without the oil, without the gas. I just have to wonder why bring two other things that we don't have, just bring what we need. (Convery)

**Response:** As discussed in Section 18.6 of the DEIS, LIPA is aggressively pursuing renewable energy initiatives. These initiatives include wind energy, solar/photovoltaic sources, fuel cells, wave energy and geothermal. These initiatives however are not sufficient to provide the on-Island electric generation that LIPA projects to be needed by 2008 and thereafter. The Caithness Project is necessary to meet the growing on-Island power needs and the regulatory requirements of the New York Independent System Operator (NYISO). Nevertheless, LIPA is also working to meet the mandate of Executive Order 111 for energy from renewable resources.

**Comment 3:** The Fire Department understands the necessity for electricity. We need the electricity for every aspect of our life. And with the growth that is contemplated, the growth that is going on right now in this district, you all can see the need for more electricity. The Board of Fire Commissioners decided that the benefits offered by this plant far outweigh the negatives and, therefore, the Yaphank Fire District wholly supports the Caithness Generating Plant and looks forward to many years of working with the people in charge. (Davis)

**Response:** Comment noted.

**Comment 4:** I have seen the consequences of inadequate power on communities. It can be very serious. So I would just like to consider the impact of doing nothing about satisfying the growing electric power requirements because, just as building and operating a plant has ramifications, so does doing nothing or putting off the plant indefinitely. I hope that you would all consider the cost of doing nothing as well as the environmental cost of this facility. (Adkins)

**Response:** Comment noted. The Caithness Project is needed to satisfy future power demands of the LIPA system. As discussed in the DEIS, the Caithness Project would result in reliable, cost-effective energy that would not have any significant adverse environmental impacts.

**Comment 5:** The Long Island Mid-Suffolk Business Action has taken the position that this is a good plant and its net effects will be very positive. This is an opportunity to improve the air quality in the area overall. (Fazio)

**Response:** Comment noted.

**Comment 6:** The Sills Industrial Park Association agrees that more power is needed. And, indeed, the Caithness Plant, as it is predicted to be built, will be an efficient and viable source of current and power to the community, to the county, and to Long Island in the near future. We also agree that it is totally necessary and we also say that the location in Yaphank is not a bad one. (Vigliotti)

**Response:** Comment noted.

**Comment 7:** The DEIS makes the argument that at almost two percent growth in demand per year there is a need for an additional 100 megawatts of power. With the advent of the Neptune power project, if a serious effort to increase conservation efforts was made, then there is no pressing demand for this plant to be built. Additional demand could be met by increasing the efficiency of older plants. Repowering, that can be done in stages—you don't have to completely take down a plant as I heard people say—and it is the preferred, well-documented preference of groups such as Sustainable Energy Alliance of Long Island. (Malone)

If Caithness was not constructed and LIPA relied on the Neptune Cable and a heightened conservation and alternative energy program, the health of Long Island's environment would surely improve. (Kepert)

How will the operation of the Caithness plant help to expedite the repowering of older and less efficient power plants on Long Island? (Dittko)

In addition to the need for new facilities to meet growing load, new power resources are also needed to replace older generation facilities. The average age of the existing baseload power generation facilities is forty years and is composed of plants that are far more polluting and are significantly less efficient than new power plants. Environmental quality would be improved, energy security would be enhanced, the emission of global warming gasses reduced, the reliability of supply would be increased, and the region's exposure to higher fuel prices decreased if newer power resources substituted for older generating units on Long Island. (Pally)

**Response:** As discussed in Section 1.2 of the DEIS, the Caithness project is critical to the reliability of the LIPA system and to LIPA's ability to meet its peak energy demands. Currently, none of the older plants can be shut down and repowered because they are needed to prevent electric blackouts during the summer. With the Caithness and the Neptune projects operating, it may be possible to shut down one of the older plants for repowering and still meet LIPA's goal of providing a reliable bulk power generation system. LIPA is currently considering the possibility of repowering one or more of the older plants in the future.

**Comment 8:** Neither the Calpine Power Project nor the Pinelawn project is mentioned in the DEIS. Are these projects continuing projects and how will they affect future need? Further, LIPA is engaged in an off shore wind project which will

potentially generate 100-140 MW of power, we request that this additional power be factored into the need analysis of this DEIS. (Kepert)

**Response:** Chapter 16, “Cumulative Impacts” includes an analysis of the cumulative impacts of the Caithness project with other LIPA-sponsored projects, including the Calpine and Pinelawn projects. See, e.g., section 16.2 on cumulative air quality impact analysis and section 16.3, cumulative water supply impact analysis. The Calpine 2005 project is referred to in those two sections as “Bethpage.” The Caithness Project is necessary to meet the growing need for additional electric generating capacity on Long Island, particularly in Suffolk County, which cannot be met even with the installation of wind turbines off the coast of Robert Moses State Park. Section 1.2, “Project Purpose and Need,” has been revised to include more recent growth and load information.

**Comment 9:** How does this project coincide with N.Y. State and LIPA's own energy plan? (Seubert)

**Response:** The Caithness Long Island Energy Center would increase the diversity of energy supplies on Long Island and enhance and promote electric competition—a public policy goal in New York State. In June 2002, the New York State Energy Planning Board approved and issued the latest New York State Energy Plan (SEP). In all key areas—price, reliability, economic development, adequacy, and environmental impact—the SEP finds that competition in the electricity sector has been beneficial, but greater benefits can be achieved. The SEP found that, “the State must increase its capacity to generate electricity by siting new, cleaner, state-of-the-art power plants, repowering existing plants, and increasing other alternative sources of electricity generation.” The SEP forecasts that the State must increase its capacity to generate electricity by 5,000 - 7,000 MW during the early years of the planning period.

The Caithness Long Island Energy Center would be consistent with the SEP’s goal of siting new, cleaner, state-of-the-art power plants. The Caithness Long Island Energy Center would be a state-of-the-art, combined-cycle power plant, and, once operational, would be the cleanest plant on Long Island in terms of overall facility emissions on a per kilowatt hour basis. A combined-cycle plant uses waste heat from a combustion turbine to serve as the heat input to a conventional steam turbine. Since a combined-cycle plant uses less fuel than either a steam turbine or a gas turbine to generate a kilowatt-hour of electricity, the savings in fuel costs and energy supply are substantial.

The Caithness Long Island Energy Center would also be consistent with the SEP’s goal of developing competitive markets in the provision of electricity services in the State of New York and promoting competitive markets “in certain areas where they are needed”. The facility would provide approximately 300 MWs of electric energy capacity within the LIPA service area. The need for this additional generating capacity on Long Island is discussed in detail in

Section 1.2 of the DEIS, which has been revised to include information on the SEP.

The development of the Caithness Long Island Energy Center would also assist in “ensuring system reliability and improving the State’s environment.” LIPA has determined that the Caithness Long Island Energy Center is “necessary for the long term reliability of the LIPA electric generation and distribution system.” As indicated in the DEIS, “[w]ithout this or a similar project, Long Island would face the possibility of energy shortages, leading to possible rolling black-outs and the loss of reliability in the electric system.” The Caithness facility would assist in achieving environmental benefits relative to air quality. A combined cycle plant would use less fuel than either a steam turbine or a gas turbine to generate a kilowatt-hour of electricity. As a result, the proposed facility would likely be dispatched on a near continuous basis, enabling it to displace older, less efficient electric generating facilities, which would result in a net environmental benefit for Long Island.

Finally, to the extent that operation of the Caithness Long Island Energy Center displaces older, higher emitting electric generating units on Long Island, the baseload operation of the Caithness project would help to facilitate the opportunity to repower these older generating units, another stated goal of the SEP.

The Caithness Long Island Energy Center is also consistent with LIPA’s Energy Plan 2004 to 2013 (Energy Plan) published in June 2004. The proposed project would enhance the reliability of the power system by increasing generation on the eastern end of Long Island, where load growth is highest. It would minimize customer rates by more efficiently utilizing fuel as compared to existing baseload generating facilities on Long Island. Finally, the proposed project would promote a healthy environment by significantly reducing overall system air emissions.

## DESCRIPTION OF PROPOSED ACTION

**Comment 10:** In the DEIS it says that the stack is 170 foot high—it says above grade. Does that mean it’s on a berm or is it just a 170 foot high stack? (McConnell)

**Response:** The proposed exhaust stack would not be constructed on a berm. It would be constructed to a height of 170 feet above the existing ground elevation of the project site.

**Comment 11:** What effect would there be on the height of the smokestack if the project burned only gas and eliminated the need to burn fuel oil? (Dittko)

**Response:** The elimination of the use of low sulfur distillate as a back-up fuel at the project would likely allow for a slightly smaller, in terms of height, exhaust stack. However, as indicated in more detail below, the use of a backup fuel is an

important reliability issue, and as a consequence, Caithness proposes using low sulfur distillate oil as a backup fuel.

**Comment 12:** Does diesel fuel have to be used for shutting down the natural gas function for the cleanup? (Ott)

**Response:** Natural gas would be utilized as the primary fuel with a provision for low sulfur distillate (0.04 or less percent sulfur by weight) use for up to 30 days per year as a back-up fuel. This low sulfur distillate or liquid fuel would not be used for shutting down the natural gas function of the project. The plant is being designed with the proper redundancy to perform routine maintenance on the natural gas system (e.g., changing of filters) when the plant is in service on gas or during plant outages.

**Comment 13:** I have looked at the proposal on the web and examined it from an engineering standpoint as an independent person and it seems very well thought-out. The co-power generation should cut down on the fuel and increase the efficiency and keep the cost and pollution down reasonably. The transmission lines are close. You have the gas pipes running down the Long Island Expressway (LIE). It seems as though everything fits together quite well. (Adkins)

**Response:** Comment noted.

**Comment 14:** How long would it take to shut down the plant? (Tomaine)

**Response:** According to the proposed turbine manufacturer, Siemens Westinghouse Power Corporation, when the plant is operating at full load it would take slightly more than 1 hour (63 minutes) to shut the plant down. If the plant were operating at partial load, (i.e., 70 percent load), shutdown would take approximately one-half hour (33 minutes).

**Comment 15:** Are you planning to have additional sulfur dioxide (SO<sub>2</sub>) monitors? (Tomaine)

**Response:** Emissions of SO<sub>2</sub> during gas firing (at least 91 percent of the annual turbine operation) would be minimal. When the facility is operating on low sulfur distillate fuel oil, SO<sub>2</sub> will be monitored in several ways: stack testing, continuous fuel flow monitoring and periodic fuel oil sulfur content certifications. In addition, the Caithness Long Island Energy Center would perform initial stack emissions testing in accordance with the terms and schedule listed in the facility's Prevention of Significant Deterioration (PSD) and 6 NYCRR Part 201 air permits. The purpose of this initial stack emissions test is to ensure compliance with permitted emission limits (including SO<sub>2</sub>) for the combustion turbine and heat recovery steam generator (HRSG). A stack test report containing results of the stack test would be sent to the New York State Department of Environmental Conservation (DEC) Region 1 and the United States Environmental Protection Agency (EPA) Region 2. These reports would be available to the public upon request.

The facility would also perform stack testing as prescribed in the Title V air operating permit. The purpose of this stack testing would be to maintain compliance with permitted emission limits (including SO<sub>2</sub>) for the combustion turbine/HRSG. A stack test report containing results of the stack test would be sent to DEC Region 1 and EPA Region 2. These reports would also be available to the public upon request.

The SO<sub>2</sub> emission rates for low sulfur distillate oil firing in the combustion turbine proposed in the PSD and Part 201 air permit applications were based on project vendor supplied emission guarantees. These guarantees correlate directly with the fuel oil sulfur content. Obtaining low sulfur distillate oil with a maximum sulfur content of 0.04 percent, by weight, would ensure compliance with the facility's proposed SO<sub>2</sub> emission limits when firing low sulfur distillate oil. As such, the fuel oil vendor would provide a certification of the low sulfur distillate oil sulfur content upon each delivery of fuel oil to the facility. Records of the low sulfur distillate oil sulfur content would be maintained at the facility for at least 5 years. EPA Regulation 40 CFR Part 75 allows for the use of continuous fuel flow monitoring and fuel sulfur content determination in place of continuous emission monitoring for SO<sub>2</sub> if the fuel burned in the combustion turbine has a sulfur content of less than 0.05 percent, by weight.

**Comment 16:** To the extent that final terms of the power purchase agreement (PPA) could change facility design, interconnection or operational characteristics, the Final EIS should indicate that any significant change to the facility will be subject to further analysis in a Supplemental EIS. (DPS)

**Response:** If any changes to the project occur for any reason in the future, LIPA will comply with all State Environmental Quality Review Act (SEQRA) substantive and procedural requirements. Specifically, LIPA would evaluate the significance of any such change with regard to environmental impacts and the potential implications to the project's SEQRA requirements.

**Comment 17:** The Final Environmental Impact Statement should include an explanation of the purpose of lightened regulation, using language such as: "Caithness has sought lightened regulation so that the legal provisions that adhere to it, as an electric corporation selling electricity at wholesale and not providing retail service, can be made clear." (DPS)

The DEIS does not indicate that Caithness must obtain approval under Section 69 of the Public Service Law for financing. (PSC II)

**Response:** Comment noted. Section 1.4 of the EIS has been amended to include an explanation of the purpose of lightened regulation. In addition, Section 69 of the Public Service Law has been specifically mentioned.

**Comment 18:** The site plans and facility alignment drawings in DEIS Appendix C do not indicate the location of the on-site gas pipeline lateral or any potential gas

metering and regulating facilities. Final location of the on-site pipeline and related facilities should be based on an additional engineering analysis. (DPS)

The natural gas pipeline connection and electrical interconnection are not shown. (Suffolk County)

**Response:** The on-site gas pipeline lateral was illustrated on Sheet 6 of 18 of the site plan drawings included as Appendix C of the DEIS. The gas metering facilities required to support facility operation were not indicated on the site plan drawings as the likely location of the metering facilities had not been determined at the time of the submittal of the DEIS. A revised set of site plan drawings, which is included as Appendix C to the FEIS, identifies the anticipated location of the metering facilities. The electrical interconnection is shown of Figures 1-1 and 2-1.

**Comment 19:** Why is the plant itself not being powered by photovoltaic cells for its own needs? (Seubert)

**Response:** In order to provide for its own power requirements, the Caithness plant would use its own generating resources because it is the most efficient and economic method.

**Comment 20:** The security plan is inadequate as it makes no provision for the potential of terrorist activities, even though there will be a 375,000 gallon fuel oil tank and a 20,000 gallon tank that stores ammonia at the site. Only a chain link fence separates the community from the proposed facility. On-site security cannot monitor the entire perimeter of the site all the time. The DEIS fails to address this reasonably foreseeable catastrophic impact. (Swanston)

**Response:** As indicated in Section 2.11 of the DEIS “[p]rior to commencement of construction, a comprehensive security plan would be developed and implemented. The security plan would be provided to the Suffolk County Police Department and the Suffolk County Department of Fire, Rescue, and Emergency Services (FRES) for review.” Subsequent to the review of the security plan, Caithness would coordinate with the reviewing agencies regarding any concerns with the proposed plan. Facility site security and operational personnel would be equipped with communication equipment to maintain contact with management personnel and/or the Suffolk County Police Department and the Suffolk County Department of FRES.

With the safety measures incorporated into the proposed project, catastrophic failure is not reasonably foreseeable. For emergency fire services associated with the project’s 750,000-gallon fuel oil storage tank, as indicated in Section 4.2.2 of the DEIS, the plant permanent employees would be trained as an on-site fire brigade and would work cooperatively with the local fire department. Prior to the commencement of project operation, an Emergency Response Plan would be developed and implemented. The emergency response plan would be

provided to the Suffolk County Police Department and the Suffolk County Department of FRES for review, and Caithness would coordinate with these agencies regarding any concerns with the proposed plan.

In regards to the proposed 20,000-gallon ammonia storage tank, to ensure that an accidental release of ammonia would not adversely affect the health and safety of the community surrounding the proposed facility, the potential for off-site impacts resulting from a worst-case ammonia release scenario (e.g. rupture of the tank wall) was assessed using the protocols established in EPA's Risk Management Program regulations (40 CFR Part 68). The results of this assessment were summarized in Section 9.6.4 of the DEIS and a full description of the approach was included in Appendix H of the DEIS. The analysis indicated that at the closest offsite public receptor a worst-case ammonia release would result in predicted concentrations of ammonia well below 150 parts per million (ppm), which is the recommended guidance value established by the American Industrial Hygiene Association (AIHA) and represents the maximum airborne concentration below which nearly all individuals could be exposed for up to an hour without experiencing or developing irreversible or other serious adverse health effects.

#### **LAND USE, ZONING, AND PUBLIC POLICY**

**Comment 21:** The DEIS states that the project is consistent with the Smart Growth Policy Plan for Suffolk County that was published in October 2000. Had anyone read the plan, one would have noticed that the very next paragraph defers to home rule. The tri-hamlet communities have borne the burden of a lot of negative development for the greater good many times over. Where is our open space preservation? (Malone)

**Response:** The DEIS states in Section 3.3.2 that the Suffolk County Smart Growth Policy is designed to guide actions by county government and is not intended to impose specific mandates on local governments or private parties. Consistent with the proposed use of the project site as an electric generation plant, the DEIS further explains that the policy principles addressed in the DEIS focus on those that are most relevant to industrial development.

The commenter correctly notes that the Smart Growth Policy defers to home rule authority. The DEIS in fact acknowledges that the county's Smart Growth Policy "is not intended to specify a use for each parcel in the county."

"Home rule" requirements are addressed in detail in the DEIS. The project site is located within the Town of Brookhaven in an area that is not incorporated as a village. However, Section 3.3.1 of the DEIS addresses the project's consistency with the Brookhaven Comprehensive Plan, which is based on recommendations set forth in local hamlet plans. As noted in the DEIS, the Plan expressly seeks to protect the Central Special Groundwater Control Area (i.e., north of the Long Island Expressway (LIE)) from industrial development and channel such

development south of the LIE near the boundary between the Longwood and South Country school districts. In fact, this school boundary runs through the 96-acre parcel on which the project would be located. Thus, the project would be located in an area specifically designated for industrial development in the Town's Comprehensive Plan, and away from areas earmarked for protection.

Further, Section 3.4 of the DEIS provides a comprehensive review of the project's compliance with local zoning requirements. The project site is located in the L-1 District, where power generation facilities are permitted by Special Permit. The level of compliance is noted for each applicable zoning requirement. This section also explains that the project will be required to obtain Special Permit approval from the Brookhaven Town Board and site plan approval from the Brookhaven Planning Board. Thus, home rule authority is recognized in the DEIS.

**Comment 22:** Even though on paper the area is listed as an industrial park, in reality it is unimproved green space. Deforesting the land to put in a known polluter is a bad idea even if they can get green credits from elsewhere in our airshed. (Malone)

**Response:** The project site has not been designated for open space preservation. As noted in the response to the previous comment, the project site is located in the L-1 District, which allows a broad array of industrial and commercial uses, with electric generation facilities expressly authorized by Special Permit.

Section 2.1 of the DEIS provides a description of the project site. Chapter 14.0 of the DEIS provides detailed information on terrestrial resources and habitat that would be temporarily or permanently disturbed if the project is constructed. Section 18.2 assesses the "no-action alternative" (i.e., leaving the project site in its existing condition). Based on a comparative assessment of the benefits and impacts relating to land use and zoning, cultural resources, visual resources and aesthetics, socioeconomic and environmental justice, traffic and transportation, air quality, noise, water resources, ecological resources and energy, the no-action alternative was not considered to be a reasonable alternative to the proposed project. It would not be a reasonable alternative because it would not be consistent with the specific land use development patterns earmarked for the project site location or the permitted development allowed under local zoning laws, would not facilitate a reduction of overall regional air emissions, and would not further the development of a competitive electricity supply market or meet the growing demand for electricity on Long Island.

The results of the project's air quality impact assessment presented in Chapter 9.0 of the DEIS demonstrate that maximum pollutant concentration would be below the significant impact levels (SILs) and the project's air quality impacts would be insignificant throughout the local community and surrounding region. Further, because the project is located in a non-attainment area for ozone,

Caithness would be required to acquire offsets (or emission reduction credits) for the project's emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) at a ratio of 1.3:1. Thus, for example, for every ton of NO<sub>x</sub> that the project has the potential to emit, the project would require 1.3 tons of NO<sub>x</sub> emission reductions. This results in benefits to regional air quality through an overall reduction of emissions within the airshed.

**Comment 23:** Noticing that there is a tremendous problem with the shortage of workforce housing for our young people, Suffolk County is planning to put 1,000 workforce housing units next to this plant. I think that is a problem that should be addressed in the DEIS as well as how it's going to affect those homes that are going to be on Suffolk County property that is adjacent to this facility. (Essel)

Suffolk County's proposal to erect a densely populated Work Force Housing community directly east of the parcel must be taken into consideration. (Hurley)

The Suffolk County owned property east and northeast of the site could be developed for non-governmental purposes. (Suffolk County)

**Response:** Suffolk County owns approximately 440 acres of property in Yaphank and this property has recently been the subject of discussions as to its future development. The property is located west of Yaphank Avenue and south of the Long Island Expressway. At its closest point this property is approximately one-half mile (2,500 feet) from the project's 96-acre parcel and slightly less than one mile (4,500 feet) from the project site.

In February 2005, in the State of the County address, Suffolk County Executive Levy discussed the possibility of developing the property, indicating that there were a number of possible uses that could be considered including recreation, commercial sports facilities (such as car or motorcycle racing and a basketball stadium), and workforce housing.

The County is currently developing criteria which would be used to evaluate proposals for the use of the site. When the criteria are established, it is anticipated that the Suffolk County Department of Public Works will issue a request for proposals under which potential developers will propose specific projects. Once proposals are received, the county will evaluate the bids and select a winning plan for the site. This plan will have to be approved by both the County Executive and the County legislature. Following approval, an agreement will be negotiated with the winning bidder, and the developer will then prepare a detailed site plan, seeking required permits from the applicable governmental entities.

The selection of the winning plan for the site is unlikely to occur prior to the end of 2005 and may take much longer. However, to ensure that potential issues associated with this contemplated development are addressed, DEIS Sections 3.2.2 and 3.2.3 have been amended to provide a description of the possible

development considered by the county and a general discussion of the project's compatibility with this development, should it be developed.

The proposed plant would not have any significant adverse air quality or any other significant adverse impacts on any developments that may occur in the future. Air quality dispersion modeling results indicate that the maximum modeled concentrations of criteria pollutants at all receptor locations adjacent to the proposed facility, including the nearby County property, both with natural gas and low sulfur distillate fuel oil firing in the combustion turbine, would be below the EPA-defined significant impact levels (SILs) and the National Ambient Air Quality Standards (NAAQS). Additionally, a review of Figure 10-4 of the DEIS indicates that modeled noise levels during facility operation would be below 50 decibels A weighted [dB(A)] at all locations on the County property, which is the most restrictive noise level allowed at residential land uses under the Town of Brookhaven noise ordinance. Similarly, intervening vegetation between County property and the project site would result in minimal impact to visual resources. It is not anticipated that the construction periods for the County project and the Caithness project would overlap; thus, there would be no significant cumulative traffic impacts. Accordingly, the proposed facility would not adversely impact any workforce housing developed in the future on the Suffolk County property located east of the project's 96-acre parcel.

**Comment 24:** The Brookhaven Town Code further states that the minimum required percentage of lot to remain natural and undisturbed shall be 30 percent and the minimum area of natural vegetation shall be 54 percent. Does Caithness meet these requirements on its 15-acres? (Kepert)

**Response:** The 15-acre site merely describes the fenced area within which the main components of the facility would be located. It does not describe a defined lot. The entire parcel controlled by Caithness is approximately 96 acres. As described in Section 3.4.2 of the DEIS, the minimum area that must remain natural and undisturbed is 30 percent. The total area within the 96 acre parcel that would remain undisturbed is approximately 54 percent. As indicated in the DEIS, this percentage excludes areas that would be temporarily disturbed and re-vegetated after the construction phase. Therefore, the proposed project would comply with this Town Code requirement.

**Comment 25:** Town code requires 20-acres for a power plant as proposed by Caithness. We request that the 15-acre parcel now sited for the project be increased to 25-acres to ensure the proper buffer for the other businesses within the area. (Dittko)

**Response:** As noted in the response to the prior comment, the 15 acres merely refers to the fenced area within which the facility's main components would be located, whereas the entire parcel is approximately 96 acres. As noted in Section 3.4.2 of the DEIS, the parcel area exceeds the 20-acre requirement for an electric generating facility under the Town Code, and the 25-acre area proposed by the

commenter. Further, as explained in the DEIS, the project would meet or exceed all setback and buffer requirements in the Town Code.

**Comment 26:** In making the determination as to whether to issue a variance, the Town of Brookhaven must determine a number of factors including whether the difficulty was self inflicted. Certainly Caithness realized that the Town of Brookhaven height variances could not be complied with prior to acquiring the present site. Therefore, the difficulty can be judged as self-inflicted. (Kepert)

**Response:** The criteria to be considered with respect to a variance request, including whether the difficulty was self-created, is addressed in Section 3.4.2(C) of the DEIS.

**Comment 27:** The out-of-date information and older maps (1990, 1991) of the area do not accurately reflect recent growth. Board of Cooperative Educational Services (BOCES) and other public and private schools are hard to locate on the DEIS maps, and they have large populations that are relatively close to the plant. The DEIS needs to better directly reflect recent and future planned growth and reflect fully community characteristics. (Seubert)

**Response:** Chapter 3.0, "Land Use and Zoning", of the DEIS, describes existing land uses within the project's one and two-mile study areas; assesses the proposed project's compatibility with existing and proposed land uses within the study areas; and evaluates the proposed project's compliance with existing zoning and community master plans. Caithness believes that the chapter provides an accurate depiction of the general land uses present and proposed within the project study areas. Consistent with common practice in the environmental consulting field, the DEIS utilized the latest New York State Department of Transportation (NYSDOT) and United States Geologic Survey (USGS) mapping available for the project site area. The one and two-mile radius site aerial included as Figure 3-2 of the DEIS incorporated that latest aerial photography (October 2001) available from the New York State Geographic Information System (GIS) clearinghouse. A field reconnaissance was conducted within the project study area to confirm and augment the information provided in the mapping and aerial photography. The assessment provided in Chapter 3.0, "Land Use and Zoning," presents information obtained from both the windshield survey and a review of the available mapping and aerial photography. To ensure that the EIS provides an accurate assessment of existing conditions within the project study area, a new Figure 3-2a has been included in the FEIS to provide a June 2004 aerial of the project study area.

## COMMUNITY FACILITIES

**Comment 28:** Local impacts to our schools in Patchogue-Medford, South County, Longwood, and Sachem, all within about three miles, have not been adequately addressed. (Seubert)

Senior Citizen housing along Southaven Ave., Brookhaven Hospital, Tutor Time, John Foley Nursing Home Facility, Baseball Heaven, The Interdisciplinary School's handicapped children, a new jail, Senior Citizen House at exit 66, Tucci development along the North Service Rd. are only a partial list that needs to be included and all impacts (traffic, air, health, quality of life) fully addressed. Children, the sick, aged the most vulnerable of society need to have the best air and environment in which to flourish and impacts need to be addressed. (Seubert)

**Response:** As indicated on page 4-4 of the DEIS, due to the limited number of operational employees, the proposed facility would not result in the placement of a significant number of additional students. Nor would emissions from the proposed facility adversely impact school facilities.

As indicated in Section 4.3.4 of the DEIS, "the results of air quality modeling analyses indicate that the maximum air quality concentrations calculated at all sensitive receptors (including community facilities) located within several kilometers of the proposed facility would be well below the EPA-defined SILs for all applicable standards and would not cause any violations of National Ambient Air Quality Standards (NAAQS)." As indicated in Section 9.5.2 of the DEIS, to evaluate potential air quality impacts "a polar receptor grid was developed that extended from the proposed combustion turbine stack to a distance of 15 kilometers." Therefore, potential impacts to schools located within about nine miles of the project site were included as part of the evaluation.

Figures 9-4 through 9-11 in Chapter 9.0 of the DEIS present contours of the maximum modeled concentrations due to the proposed facility. As the contour figures indicate, the maximum modeled concentrations are concentrated on the Caithness property and decrease rapidly with distance. The maximum modeled concentrations due to the proposed facility presented in Tables 9-18 through 9-22 of the DEIS show that the facility would have air quality concentrations well below the NAAQS at all locations. The NAAQS have been developed to protect the most sensitive population groups, which include young children, the elderly, asthmatics, and those members of the population that have other breathing difficulties. Accordingly, the modeling addressed an area up to 15 kilometers from the project site, and the analysis determined that the project would result in maximum modeled concentrations well below the NAAQS. Therefore the proposed project would not result in significant adverse impacts to the schools in Patchogue-Medford, South County, Longwood and Sachem or adversely affect children, the sick, or elderly individuals present at any community or recreational facility located within 15 kilometers of the project site.

**Comment 29:** The DEIS states that the South Country School District is endorsing this project. We spoke to several people on the school board and they haven't even voted on it. (Essel, Grier-Key)

**Response:** The South Country School District indicated its support for the Caithness project in a letter to John LaValle, Town of Brookhaven Supervisor, dated April 15, 2003. As far as is known, the South Country School District has not formally changed its position with regard to the project.

**Comment 30:** You state that you will be working with local police and fire department in case of an emergency. Will there be additional training or equipment purchased for our local fire departments? (Tomaine)

**Response:** As indicated on page 4-3 of the DEIS, the permanent employees at the Caithness project would be trained as an on-site fire brigade and would work cooperatively with the local fire department to function as the first line of defense. As part of this training effort, a safety orientation program and fire response plan would be in place during project operation to reduce the likelihood of the need for emergency services. Caithness has met with the Board of Fire Commissioners of the Yaphank Fire District to discuss the development plans for the project. The Yaphank and Brookhaven Fire Districts would benefit from the project through the substantial local tax benefits provided by the project. As indicated on page 7-6 of the DEIS, Caithness Long Island would not be seeking relief from local tax requirements.

**Comment 31:** The DEIS never mentions the John Foley Health Center. Certainly seniors are a group identified by the EPA as a population, which is particularly sensitive, to the toxins which will be emitted by the Caithness plant. Additionally just north of the site, the Town of Brookhaven has approved a development of 620 units. Impacts on these sensitive populations must be determined and appropriately addressed. (Kepert)

**Response:** The refined air quality modeling analysis incorporated a very densely spaced receptor grid that encompassed the surrounding communities to a distance of 15 kilometers. This receptor grid incorporated locations that would represent sensitive population areas. The rigorous modeling analysis used five years of hourly meteorological data and demonstrated that the maximum air quality concentrations at all locations would be below the significant impact concentrations and well below the New York State and National Ambient Air Quality Standards—health based standards designed to protect the most sensitive population groups, specifically senior citizens and other members of the population that may have difficulty breathing.

## **CULTURAL RESOURCES**

**Comment 32:** The DEIS states that historic maps were examined in the Patchogue Public Library. We suggest that the resources of the Longwood Public Library are more appropriate sources for information pertaining to the history of this location. (Kepert)

**Response:** Page 5-2 of the DEIS states, “[m]aps, reports, and other records were used to identify sites in close proximity to the 96-acre parcel. The Town of Brookhaven files and records were examined for pertinent information, and an effort was made to secure historic maps of the area. Repositories examined included the Town of Brookhaven Tax Assessor’s Office, the Patchogue Public Library, and the Middle Country Public Library.” In addition, the Longwood Public Library was contacted in the analysis of cultural resources addressed in the DEIS. Data obtained from these locations were reviewed in addition to historic mapping obtained from a review of the site files at the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP). The Phase I Cultural Resource Survey report submitted to the OPRHP in December 2004 incorporated the historic maps obtained from the OPRHP files.

**Comment 33:** The unanticipated discovery plan (p. 5-6) fails to adequately provide for the discovery of cultural resources and does not even require a site visit by an archeologist if cultural resources are discovered. The construction workers at the site will be required to make an on-site determination as to whether their continued activities could affect the artifacts. Construction workers are ill-prepared to make this determination. It is further precipitous to conclude that no impacts to cultural resources would result when a significant portion of the site has never been investigated for the presence of cultural resources. (Swanston)

**Response:** The project’s proposed unanticipated discovery plan is consistent with that of other approved New York State construction projects proposed for sites with a low likelihood for encountering archaeological remains. However, the comment is not accurate in its description of the proposed unanticipated discovery plan. As indicated on page 5-6 of the DEIS, the project’s unanticipated discovery plan requires that “[I]f cultural resources indicators are found by construction personnel, the construction supervisor would be notified immediately. The supervisor, in turn, would notify the environmental inspector, who would notify a designated archaeologist, who would be available to respond to this type of find. Based on the information provided, the archaeologist would determine if a visit to the area is required and, if so, would inform the construction crews. No construction work at the site that could affect the artifacts or site would be performed until the archaeologist reviews the site. The site would be flagged as being off-limits for work, but would not be identified as an archaeological site per se in order to protect the resources. The archaeologists would conduct a review of the site and would test the site as necessary. The archaeologist would determine, based on the artifacts found and on the cultural sensitivity of the area in general, whether the site is potentially significant and would consult with the OPRHP regarding site clearance.” Further, the plan requires that “[b]oth the environmental inspectors and the construction personnel would be provided with a preconstruction briefing regarding potential cultural resources

indicators.” Accordingly, the construction workers present at the site would not be “ill-prepared” to make a determination regarding cultural remains.

Moreover, the project’s DEIS and proposed unanticipated discovery plan were provided to the OPRHP, as an involved agency under SEQRA, for review and comment. In a letter dated May 16, 2005, the OPRHP indicated that they “have no further concerns regarding the currently proposed construction which includes the previously examined 18 acre parcel, the “Primary Site Development Area” and the “Area for Construction Parking and Laydown, Interconnection Facilities, and New Substation””. No comments were received from the OPRHP relative to the proposed unanticipated discovery plan. Accordingly, the proposed plan is considered appropriate for the Caithness Long Island project site.

## VISUAL RESOURCES

**Comment 34:** The ballooning demonstration confirmed the general findings of the project visual impact assessment (VIA) report that there will likely be limited unobstructed views of the proposed stack. (Hecklau)

**Response:** Comment noted.

**Comment 35:** The discussion in the VIA states that minimal topographic relief does not afford long distance vistas, and potential visibility is expected to be very limited to non-existent. These statements require additional documentation. Viewshed maps, cross sections, and/or photographic documentation that would support this statement are not in the DEIS. The Brookhaven Town Board requests that viewshed maps and cross sections be prepared, or if they are prepared, included in the DEIS. A photo log, including all photos taken during the original ballooning exercise, should be provided as an appendix to the report. (Liccione, Hecklau)

**Response:** Long distance vistas are available when the viewer is elevated above intervening obstructions in the foreground, typically either vegetation or buildings, or when openings are created such as along a broad roadway. The minimal topographic relief in the project study area (i.e., within a two-mile radius of the project site) is apparent to even casual observers and is illustrated by the topographic maps included in the DEIS. Accordingly, the lack of long distance vistas due to minimal topographic relief is simply a statement of fact.

The comment is incomplete with respect to the conclusions set forth in the DEIS. Section 6.2.1 of the DEIS, which provides a general overview of the regional and local landscape, states: “The minimal topographic relief does not afford long distance vistas.” However, Section 6.3.2 of the DEIS states more specifically: “Potential visibility of the proposed facility is expected to be very limited to non-existent *from locations beyond one mile toward the north and west, and two miles to the east.*” [Emphasis added] The remaining discussion

presented in that section of the DEIS substantiates that statement by summarizing the results of the visual impact assessment based on direct observations and reconnaissance of the study area and further indicates where intermittent views are expected. Figure 6-2 shows field checkpoints at various locations throughout the surrounding study area from which the demonstration balloon was not visible, substantiating the statement that potential visibility of the proposed facility is expected to be very limited to non-existent.

A viewshed map has been prepared and Section 6.4.1 of the DEIS has been amended to reference the new figure. A photo log has been included as an Appendix to the FEIS.

**Comment 36:** A greater description of the project's details, including illustrations, is required to fully understand the visual impacts of the project. Currently, the DEIS omits such details as lighting, stack details and rooftop structures from both the discussion in the text and in the simulations. The project description should also include a discussion of occurrence of stack plumes, which is the smoke coming out of the stack. If stack plumes are anticipated, the height, length and orientation of the plumes should be modeled and shown in the simulations and the discussion in the text should include how stack plumes would change project visibility and impact. (Liccione, Hecklau)

**Response:** The proposed lighting plan for the project is described in Section 6.3.8 of the DEIS, and is illustrated on Sheet 9 of 15, Lighting Plan, of the site plan drawings included in Appendix C. The stack is described in Section 2.4.2.J of the DEIS, and its appearance is illustrated in the project rendering included as Figure 2-4. A comprehensive analysis and discussion of combustion plume visibility is provided in Section 9.6.5 of the DEIS; potential stack plume dimensions are described in Section 9.6.5.C and graphically illustrated in Figure 9-13.

**Comment 37:** The visual resources and potential viewpoints within the study area listed in Table 6-1, and the viewpoint locations shown in Figure 6-2 do not match. Table 6-1 lists viewpoints 26 and 30 as having views to the stack, but the identification circles on Figure 6-2 are not shaded to indicate project visibility. In addition, Figure 6-2 is confusing. Project visibility from all viewpoints should be clearly indicated. Additional documentation should be provided to verify potential visibility from the area of viewpoints 26, 27, 28, 29 and 30. (Liccione, Hecklau)

**Response:** The viewpoint locations that are shaded green on Figure 6-2 had confirmed project visibility and were selected for photographic simulations. The two additional viewpoints referenced on Table 6-1 were not selected for photographic simulations. The note on Figure 6-2 has been revised to eliminate the apparent discrepancy and confusion.

Potential visibility of the project stack from viewpoints 26, 27, 28, 29, and 30 is noted in Table 6-1 based on observations during the balloon demonstration on October 7, 2004. These five viewpoints are clustered in the area along Yaphank Road south of the LIE exit 67, approximately 1.5 miles from the Project site. Photos from Viewpoints 26 (LIE exit 67), Viewpoint 27 (Suffolk County Home) and Viewpoint 30 (LIPA substation) are provided in Figures 6-3d and 6-3e. The photo from Viewpoint 29 (the Suffolk County Farm and Educational Center) was selected for preparation of a project simulation to represent the extent of project visibility from this general area. Further documentation to verify potential visibility from these viewpoints is unnecessary.

**Comment 38:** Further description concerning the balloon and camera specifications, field methodology and viewpoint selection is needed. The DEIS, in order to adequately inform the reader about the impacts of the project, needs to describe the methodologies used in greater detail. It is difficult to evaluate the photographs and simulations without an understanding of the balloon dimensions and flight characteristics. It is also important to include the camera lens setting and whether the photographs are digital or film. (Liccione, Hecklau)

**Response:** Section 6.4.1 of the DEIS describes the viewpoint selection process and the use of the tethered balloon to determine potential visibility from the identified viewpoints. Section 6.4.3 of the DEIS describes the balloon demonstration procedures including the type of camera and film (digital and 35 mm film), the use of a GPS (Global Positioning System) to determine the location and alignment of the camera, and the process used for preparation of the photographic simulations. Language has been added to the DEIS to indicate the dimension of the balloon (6-foot diameter) and the focal length of the camera lens (50 mm).

**Comment 39:** The viewpoint selection process should be described with sufficient detail so that the reader can determine whether the selected viewpoints are truly representative of the range of views that will be available to different landscape similarity zones and view groups within the study area. (Liccione)

Why were 6 out of 11 simulation viewpoints located in or adjacent to sites where viewer sensitivity to visual change is likely to be low (i.e., Long Island Cycle Park and Sills Industrial Park)? Were all landscape similarity zones and viewer groups considered in the viewpoint selection process? (Hecklau)

**Response:** The viewpoint selection process is described in detail in Section 6.4.1 of the DEIS, where it states that viewpoints with confirmed visibility fall into the general categories of: 1) nearby residential communities; 2) public views along Patchogue Yaphank Sills Road; 3) nearby recreation areas; and 4) community/public institutions. Section 6.4.2 of the DEIS provides a detailed discussion of the 11 selected viewpoints, indicating the rationale for each selection. Table 6-1 indicates the land use, historic/scenic significance, and

viewer groups for each of the viewpoints, readily demonstrating that the range of land uses and viewer groups is represented by the selected viewpoints.

With regard to “different landscape similarity zones,” that terminology is derived from a visual impact assessment methodology that was not used for this analysis. Section 6.2.1 of the DEIS states: “In terms of climatic, geological, ecological, and spatial characteristics, Long Island can be considered a single regional landscape, and thus the study area is entirely within this single regional landscape.”

**Comment 40:** The model used in the simulations should include additional detail (e.g., proper lighting, stack details, roof top structures, plume conditions) to accurately illustrate what the project will look like with an illustration of that model included as an appendix or figure in the report. The computer model of the proposed facility should be reviewed as necessary and the simulations re-done if any changes are visible. (Hecklau)

The Town of Brookhaven is concerned by the manner in which the visual impact on the Vietnam Veterans Memorial is treated in the DEIS. The DEIS makes the assertion that the visual impact on the Memorial would not be significant and was, therefore, not included in the study area. As this is an important scenic location, it is important to include this location as a viewpoint in the DEIS. Accordingly, a simulation of the project, based on a revised computer model, as seen from the Suffolk County Vietnam Veterans Memorial should be provided. At the very least, the referenced simulation of the Brookhaven Energy Project as viewed from the Memorial should be included. (Liccione, Hecklau)

**Response:** The model used in the preparation of the project simulations was included in the DEIS as Figure 2-4, Project Rendering, and reflect the current design elements of the proposed project. As shown in the photo simulations presented as Figure 6-4a through 6-4k of the DEIS, the only project feature that would be visible from most potential viewpoints is the exhaust stack. Additional details, beyond Figure 2-4, are not necessary to evaluate the potential impact of the limited project visibility evidenced by these simulations.

Section 4.2.1 of the DEIS describes the process for selected viewpoints for simulation. A viewpoint from the Vietnam Veterans Memorial was not initially chosen for simulation because it was distant from the project site and, based on the information available from a previously reviewed project, project visibility was concluded to be insignificant and consistent with the existing view from that location within a panoramic context. However, in order to accommodate the Town of Brookhaven’s concern, the Vietnam Veterans Memorial was visited during a balloon demonstration on April 26, 2005 to provide for the requested analysis. The results of this additional analysis have been added to Section 6.4.3

of the DEIS, and the requested photographic simulation is provided as Figure 6-41.

**Comment 41:** It is also our understanding that balloon tests were performed from the roof of Town Hall, a similar vantage point. Photographic evidence of these tests should have been included so that the claim that the visual impacts would be minimal could be evaluated. (Liccione)

**Response:** The project team did not conduct and is not aware of any “balloon tests” from the roof of Town Hall. Accordingly, we are not in possession of any photographs of such a test.

**Comment 42:** The summary makes generalized statements without supplying the background data to support the statements. Necessary support data/analysis, including viewshed maps, cross sections, field photos, and site maps should be provided and referenced in the summary to support the conclusions of the VIA. Did the impact evaluation suggest any adverse impact? If so, what additional mitigation measures might be helpful in addressing the impact? (Hecklau)

**Response:** Section 6.4.4 of the DEIS presents the summary of the visual impact assessment that is described in detail in the preceding 16 pages of text and 16 additional pages of site maps and photos. Field photographs are provided for 19 individual viewpoints, of which 11 were selected for photo simulations showing the proposed project. The detailed evaluation of each of the 11 selected viewpoints is presented in Section 6.4.3 of the DEIS. The conclusions presented in the summary are well supported by the overall analysis, and further documentation and references are unnecessary.

The VIA summary clearly states, “For those viewpoints where the project may be visible, the probable effects would be minimal.” In addition, “even from these relatively proximate locations within the Sills Industrial Park, visual impacts due to the project visibility are not anticipated to be significant within the context of the surrounding development.” Nevertheless, measures to minimize visual impact in the project design are described in Section 6.3 of the DEIS and again listed at the end of the summary.

**Comment 43:** Field observation of the ballooning demonstration on April 26, 2005 raised some concerns. The six- to eight-foot round weather balloon used in this demonstration was not aerodynamic enough to resist blow-down by the wind during the ballooning exercise. The accuracy of the visual simulations included in the VIA report is brought into question if the balloon height and condition observed during the April 26, 2005 demonstration was similar to that which occurred during the original ballooning used to obtain the photos for the simulations. The contents of the VIA and the results of the ballooning demonstration raise questions regarding the accuracy of the conclusions regarding potential project visibility and visual impact. Supplemental

analysis/documentation is required to assure that the information presented by the applicant is an accurate and reliable basis for a decision under the State Environmental Quality Review Act. (Hecklau)

**Response:** The ballooning demonstration on April 26, 2005 was conducted for the purpose of providing the public and local officials an opportunity to draw their own conclusions regarding the potential visibility of the project stack, the tallest feature of the proposed project. Wind conditions on that day were not optimal, but nevertheless sufficient for the intended purpose. The decision to proceed was based, in part, on the fact that the demonstration had been widely publicized, and the initially scheduled demonstration several weeks earlier had been postponed due to predicted wind conditions. A formal visual impact assessment would not be conducted under the sustained wind conditions experienced on April 26, 2005.

To substantiate the accuracy and reliability of the visual impact assessment presented in the DEIS, actual wind speed data for October 7, 2004 (the date of the initial balloon demonstration and visual assessment) and April 26, 2005 were obtained from the National Oceanic and Atmospheric Administration (NOAA) Climatic Data Center. The following table compares the surface wind speeds recorded on those days at Islip Airport, the closest data collection point to the project site:

<b>Time (EST)</b>	<b>October 7, 2004</b>	<b>April 26, 2005</b>
9:00 am	0	11
10:00 am	3	10
11:00 am	0	12
12:00 Noon	4	12
1:00 pm	8	8
2:00 pm	8	10
<b>Source: NOAA Climatic Data Center</b>		

As shown by the data in this table, the wind speeds during the morning of October 7, 2004 when the visual assessment was conducted were substantially lower than the wind speeds experienced during the more recent balloon demonstration on April 26, 2005. The relatively calm conditions on the date of the formal visual assessment provided for an accurate assessment, which is reflected in the DEIS.

For a formal visual impact assessment, specific techniques are used during the balloon demonstration to compensate for any potential movement caused by wind. As can be seen in the photo from Viewpoint 1 in Figure 6-4a, flags are positioned at 20-foot intervals on the tether to provide an indication of the extent of potential stack visibility. These flags also indicate the relative angle of the tether, enabling the observer to determine if the balloon is experiencing blow-

down from the wind. Even during ideal conditions, intermittent winds may temporarily disrupt the position of the balloon. When these situations are encountered, the observer waits for relative calm conditions before making formal observations or taking any photographs.

With regard to the accuracy of the photo simulations presented in the DEIS, the methodology described in Section 6.4.3 of the DEIS clearly indicates that GPS coordinates and computer-generated models are used to accurately construct the photo simulations—the position of the balloon in the photograph was irrelevant to this process and is not used to either scale or position the proposed project in the photograph. The subsequent assessment of potential visibility and associated impacts is based on the photo simulations and the general landscape setting and context as observed in the field.

**Comment 44:** We do not understand what is meant by the activities at County Farm being directed inward. (Suffolk County)

**Response:** The users of County Farm are absorbed in their own activities and do not frequent the facility for its view of the surrounding areas.

**Comment 45:** You can now see the transmission lines and the Patchogue/Yaphank Water Tower from half way up Bald Hill and from Granny Road. The visual needs a little more research to see where you can see it. (Seubert)

**Response:** See the response to Comment 40 regarding the Vietnam Veterans Memorial, which is located on Bald Hill. With respect to Granny Road, while field observations were not made along this road during the balloon demonstration, the roadway is oriented in a northeast-easterly direction while the project site lies generally to the southeast, limiting potential views of the project by motorists traveling along this road. If intermittent views are available from this roadway, the view would be similar to that provided from Bald Hill.

**Comment 46:** I was one of the invited members of the community to visit the Tiverton Power Plant, located in Rhode Island. The plant was slightly smaller than the one to be built by Caithness, both in the height of stack 150 feet vs. 170 feet and the energy produced. We were able to view the stack at a distance of 1¼ miles, a distance similar to what we will see of the Caithness stack and it was well above the tops of the trees. (McConnell)

**Response:** Comment noted. Visibility of a tall structure such as a power plant stack, water tower or communication tower is affected by a variety of factors including height and location of intervening vegetation and the perspective of the viewer, which is a function of the relative difference in elevation between the structure location and the viewpoint. Depending on the perspective of the viewer and the location and height of the intervening vegetation, a tall structure could be screened or appear “well above the tops of the trees.” For that reason, GPS

readings were taken at the viewpoint locations selected for photographic simulations in order to account for the relative difference in elevation, if any, between the project location and the viewpoint. Considering the variables that affect potential visibility, one cannot infer potential visibility of a project from observations made of a different project in another location.

**Comment 47:** The proposed stack deviates 25 percent from good engineering practice (p.9-32) and is still aesthetically unappealing. (Swanston)

**Response:** Good engineering practice (GEP) stack height is defined as “the height necessary to ensure that emissions from the stack height do not result in excessive concentrations of any air pollutant in the immediate vicinity of the source...” GEP stack height is calculated using a specific formula that considers the height adjacent or nearby structures. The use of natural gas as the primary fuel as well as other air quality control technologies would lower emissions to the point where the stack height would be reduced below the calculated GEP stack height while still meeting the stringent air quality standards. The lower stack height of 170 feet rather than the GEP stack height of 225 would reduce potential visibility of the proposed project without significant air quality impacts.

The steel stack would be painted a neutral gray tone to compliment the generation building, and the lower stack would eliminate the need for FAA hazard lighting. Appurtenances would be limited to a stack test platform and an access ladder, both fabricated from galvanized steel. All materials and colors would be non-reflective. The facility’s planned maintenance program would ensure that all structures and façade materials remain in good condition.

## **SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE**

**Comment 48:** The plant is proposed for an Empire Zone. The Empire Zone was established to provide sustainable job opportunities for a disenfranchised population. It hasn’t. (Malone)

The plant should not be constructed in one of the few Economic Development Zones in the Town of Brookhaven. Brookhaven’s Economic Development Zones, which according to Section 25-1 of the Town Code, is specifically targeted for extraordinary economic and human resource development programs in order to stimulate private investment, private business development and job creation. Caithness does not meet this qualification. Certainly 25 jobs cannot be considered an extraordinary job creation. I further underscore that the Town Code states that special permits should not be granted if the value of properties are impaired. The value of the 96-acre site as a job generator is clearly being impaired. Continued reliance on the importation of energy rather than on conservation and alternative sources also undermines potential job creation. (Kepert)

We question the siting of the plant in an Economic Development Zone. These zones are intended to promote industries that would provide jobs. An estimated 25 jobs on a 15-acre site does not fit the intent of the Economic Development Zone. (Dittko)

**Response:**

The commenters correctly note that the project would be developed in one of the Town's Economic Development Zones. According to the Town of Brookhaven Empire Zone website, there are approximately 500 acres of vacant industrial land within existing industrial parks in the Town. See [http://www1.brookhaven.org/business/documents/brookhaven\\_empireZone.pdf](http://www1.brookhaven.org/business/documents/brookhaven_empireZone.pdf). It should be noted that only 37 acres of the 96-acre parcel are within the Development Zone. Thus, additional industrially zoned land is available for development.

Section 3.3.1 of the DEIS recognizes that, according to Section 25-1 of the Town Code, the establishment of Economic Development Zones is to promote "extraordinary economic and human resource development programs in order to stimulate private investment, private business development and job creation."

If constructed, the Caithness Long Island Energy Center would pass along tax benefits, to LIPA and its customers. As explained in Section 18.4 of the DEIS, LIPA chose the Caithness Long Island Energy Center, in part, because it was more economically viable to LIPA's ratepayers than other proposals.

As explained in Section 7.2.1 of the DEIS, the project would generate approximately 375 peak construction worker jobs. The total primarily economic infusion (payroll expenditures and purchases) into the local economy during construction is conservatively estimated to be approximately \$41 million with an additional \$41.3 million in secondary impacts on the local economy. As explained in Section 7.2.2 of the DEIS, once constructed, the project would provide approximately 25 permanent on-site jobs, with an estimated annual on-site payroll of approximately \$1.32 million. The project is estimated to result in increased employment of approximately 75 jobs in addition to the 25 on-site jobs. When the project becomes operational, economic output in the area is expected to grow by approximately \$3.03 million per year, with household income increasing by an estimated \$2.65 million annually due to the project.

Thus, consistent with the goal of the Economic Development Zone, the project would stimulate private investment, benefit LIPA's customers, result in jobs creation both directly and indirectly, and enhance the local economy.

With respect to the commenter's observation concerning conservation and alternative sources, Sections 1.2, 18.5, and 18.6 of the DEIS provide descriptions of the purpose and need for the project, LIPA's energy efficiency and demand side management programs, and alternative energy initiatives being pursued by LIPA. The DEIS concludes that even with LIPA's efforts to promote energy efficiency, demand side management, and alternative energy sources,

additional on-Island baseload generation is required to meet demand growth, meet NYISO's regulatory requirements, and ensure reliable, lower cost electricity for LIPA's customers. Thus, the project is part of an overall strategy by LIPA to meet growing demand for electricity on Long Island. There is no basis to believe that the project's development would undermine job creation.

With respect to the comment concerning the Special Permit, the requirements for issuance of a Special Permit by the Brookhaven Town Board are addressed in Section 3.4.2 of the DEIS. Section 85-31.2 of the Town Code provides that Special Permit approval may not be granted unless the Town Board finds that the proposed use would "not prevent the orderly and reasonable use of adjacent properties in the surrounding area or impair the value thereof."

The construction and operation of the project would greatly enhance the value of the project site, as reflected in the anticipated increase in the assessed value of the property for real estate taxation purposes. As described in Section 7.2.3 of the DEIS, it is estimated that "annual local property taxes applicable to the project would be in excess of approximately \$5 million." These estimated property taxes reflect the enhanced value of the project site after the project has been constructed.

The DEIS further explains that the project would not impact the values of surrounding properties. As explained in Chapter 3.0. "Land Use and Zoning", the project is an allowed use by Special Permit. Thus, electric generation facilities, consistent with special permit criteria, have been determined to be compatible with other uses allowed in the L-1 District. The DEIS also includes a study of the impacts that power plants have on the value of surrounding properties. *See* DEIS Section 7.2.5; Appendix F. The study analyzed whether there was an impact on property values in the vicinity of existing baseload plants on Long Island. Although the study was first prepared for the KeySpan Spagnoli Road proposal, the analysis was not specific to that project. The study found "no negative effect from the energy generating plants upon the value of single family residential properties." The study further concluded that, although insufficient data existed to conduct a quantitative analysis concerning commercial property values, a "qualitative analysis of the items considered in determining the feasibility of a site for office development clearly indicates that the energy plant would have no impact on the value of surrounding commercial properties." *See* Appendix F at 15-16. Thus, the values of surrounding parcels would not be negatively impacted by the Caithness project.

**Comment 49:** The site layout on a 15-acre site allowed the development of the project within the Brookhaven Empire Zone, which provides a variety of tax benefits to qualifying projects. The DEIS states that all tax benefits will be LIPA's rather than that of Caithness. The process by which LIPA will be the beneficiary should be clarified. Further, since Brookhaven and local communities will bear

the brunt of emissions, will any of these tax benefits accrue to Brookhaven or local communities? (Kepert)

Empire Zone benefits do not accrue to the municipality or the residents, rather to the developer (Suffolk County)

We request that any tax advantages realized as a result of the operation for the Caithness plant be passed on to the area residents within close proximity to the plant and therefore most affected by its operation. (Dittko)

**Response:** Section 7.2.3 of the DEIS states:

“All benefits of the Empire Zone would accrue to LIPA and its customers because Caithness’ proposed power price structure does not incorporate any recovery by Caithness of local property taxes or the state component of the sales taxes on equipment and services.”

Thus, the price structure proposed in Caithness’s response to the LIPA Request for Proposals (RFP) calls for any local real estate or sales tax credits that would be due to Caithness under the Empire Zone program would be passed along to LIPA and its customers. In other words, LIPA and its customers, not Caithness, would receive these benefits. In addition, as a New York State instrumentality, LIPA does not distribute profits to shareholders.

Further, as explained in Section 7.2.3(A) of the DEIS, the local taxing jurisdictions do not lose local tax revenue under the program. These taxes are paid when due, but are then reimbursed to the project by New York State under the Empire Zone program. As noted above, however, in this case the benefit would flow through to LIPA and its customers. Thus, while the tax credits under the program would flow from LIPA to its customers (a large number of which are located in Brookhaven), Brookhaven and other local taxing jurisdictions would not lose any tax revenues from the project.

**Comment 50:** The DEIS assumes that the project would receive benefits from the Empire Zones Program Act and counts on those benefits. However due to reforms in this year’s budget, Empire Zones must be designated in areas served by sewer and water infrastructure unless there is no viable alternative. Additionally the reform prevents businesses that violate state, federal or local environmental or labor laws from being certified to receive the benefits of the program. (Swanston)

**Response:** Section 12.4.1 of the DEIS explains that the project site does not fall within the service area of a wastewater collection system. Therefore, sewer service is not a viable alternative at the present time. Section 12.4 explains that the project has been designed to incorporate on-site subsurface disposal for sanitary wastewater and hold-and-haul for process/facility wastewater. As explained in Section 12.3 of the DEIS, the area is within the service area of the Suffolk County Water

Authority, which has issued a Letter of Availability for the project's proposed water use. Irrespective of any Empire Zone Program requirements, Caithness does not intend to violate any labor or environmental laws.

**Comment 51:** What is the level of income which meets the definition of the Environmental Justice Communities? This is not in the DEIS. (Kepert)

**Response:** DEC's Environmental Justice and Permitting Policy (CP-29, 3/19/03) defines a low-income community as a census block group, or contiguous area with multiple census block groups, having a low-income population equal to or greater than 23.59 percent of the total population. According to the DEC policy, a low-income population is a population that has an annual income that is less than the poverty threshold. For purposes of this policy, poverty thresholds are established by the U.S. Census Bureau. The poverty level income established by the 2000 Census, which provided the basis of the EJ demographic analysis, is \$8,794 for a single person under 65 years old and \$13,738 for a family of three. Table 7-3 of the DEIS shows income data by census tract, and indicates the population percentages at or below the poverty line in Suffolk County.

**Comment 52:** I understand that the Longwood School District will not be receiving any monies from the project. (Dooley) The Central Bellport Civic Association feels that the potential monies for the school district should be shared equally among all the affected districts not just the South Country District. (Malone)

If the site remains whole, than the taxing benefits should accrue to both the Longwood and South Country school districts. (Kepert)

**Response:** The Caithness Long Island Energy Center would not adversely impact local school districts in the project area as the project would not result in the placement of a significant number of additional students in any school district. While the primary facility structures would be located in the South Country School District, all school districts within the Town of Brookhaven would receive some benefit of the project through the substantial local tax benefits provided by the project to the Town of Brookhaven and Suffolk County. Inasmuch as the Town of Brookhaven and Suffolk County would be receiving additional tax revenue as a result of the project, additional monies may become available for local schools that might not have been available if it were not for the tax revenue received by the Town and County from the project.

**Comment 53:** The project property values study should have been included rather than the study [Appendix F] for the Spagnoli Road power plant. A specific study for the Caithness project site must be included in the DEIS. (Liccione)

The visual impact will decrease land values and possibly turn away future businesses from moving into the area because of the placement of the power plant. (Vigliotti)

Are we going to be able to sell our houses because this plant is here? (Grier-Key)

**Response:** The DEIS included a study of the impacts that power plants have on the value of surrounding properties. *See* DEIS Section 7.2.5; Appendix F. The study analyzed whether there was an impact on property values in the vicinity of existing baseload plants on Long Island. Although the study was first prepared for the KeySpan Spagnoli Road proposal, the analysis was not specific to that project. The analysis assessed the impacts on value of properties surrounding three existing baseload electric generating facilities. The study found “no negative effect from the energy generating plants upon the value of single family residential properties.”

As explained in the study, the three studied plants have stacks that are “quite visible” in the surrounding area in contrast with the proposed project, which would have limited visibility. Also the three studied plants were in existence for “at least 10 years,” and therefore are not state-of-the-art like the Caithness Long Island Energy Center. Thus, the lack of impact shown for these locations evidences that adverse property value impacts are not reasonably anticipated due to the project.

Recent correspondence from the author of the property value study to LIPA confirms the relevance of the study beyond the Spagnoli Road project and that the passage of time since the study was conducted has no impact on the validity of the study’s conclusions. This correspondence has been added to the FEIS; see Section 7.2.5 and Appendix F.

**Comment 54:** In relation to local Environmental Justice issues, meteorological patterns and local air quality issues: the nearest background concentration measurements of air pollutants were taken in Holtsville, which is ten kilometers away, and other measurements were up to 100 kilometers from the site. The DEC air quality monitoring sites are too far away from the Caithness site to measure the local impact of sources in the immediate vicinity of the Caithness site. (Ames)

This proposal to be in any way scientific requires existing air quality studies be made at various locations in our local area. We have a very particular micro-climate here. We need to know the site-specific air quality of our community. (Seubert)

Ambient air samples were not taken at the site so its still unclear what the combined air quality will be with this location in such close proximity to other known pollutants. (Malone)

With the changing/rapid growth of this area we need a current site specific evaluation of our communities’ existing air quality. Certainly, at times weather/air quality observations at a distance from our area can be helpful but they do not replicate our existing conditions. A comparison of various New

York City, Long Island Mac Arthur Airport and other National Weather Services records will reveal significant differences in average, daily and record extremes. (Seubert)

**Response:** The air quality within the region of the proposed site is primarily influenced by the collective emissions of many upwind sources. Since the wind patterns are typically from west to east, the air quality monitors in Holtsville and other upwind stations were deemed adequate by both EPA and DEC to represent the air quality around the project site, and both agencies concluded that the proposed facility would not need to perform local air quality monitoring. The upwind measurements indicate that the air quality in Yaphank is considered good for all criteria pollutants, with the exception of ozone and annual particulate matter 2.5 microns or less (PM<sub>2.5</sub>), for which the entire region is out of compliance with the ambient standards. The DEC is mandated (by EPA) to develop a plan whereby these non-compliant regions will attain the ambient air quality standards. While there are some local sources of air emissions within the community of Yaphank, these sources do not emit an enormous amount of air contaminants such that the local air quality would be substantially degraded relative to the surrounding area. Furthermore, the very conservative air quality simulation analysis of the proposed facility indicated the emissions from the facility would not result in significant air quality concentrations. As such, the impact of the facility would be negligible and insignificant, regardless of the state of the local air quality. Moreover, inasmuch as the facility would result in no measurable additional air quality concentrations to the local area, as demonstrated through the rigorous air quality impacts assessment included in the DEIS and the project's air permit application, background air quality within the local community would remain unchanged by emissions from the proposed facility.

Regarding a specific microclimate for these local communities, the local area is generally level terrain at about 100 feet above sea level. There are no significant topographic features, such as an adjacent ridge or high hills that would cause the synoptic wind flow to be significantly different from the rest of Long Island. Similarly, the site is not located in a topographic depression, i.e. a local basin, which would cause cooler air to stratify and stagnate. There are no large areas with radically different soils (e.g., large, barren, non-vegetated sand pits). Such areas, if they existed, may create local temperature extremes and form strong inversions that may trap emissions. However, no such areas exist in the local communities. Microclimates typically result in areas that have a radically different topography and ground cover, and are homogeneous throughout the area. The Medford, Bellport and Yaphank area is distinctly heterogeneous with a wide variety of residential development, industrial and commercial development, open parkland, and vegetated river land (Carmans River). While transient inversions may occur (typically during the early morning hours with a clear sky during the night), such conditions are not unique to the local

communities of Medford, Bellport and Yaphank. Indeed, the local area is similarly affected by the frequent sea breeze that occurs during the warmer months as well as being influenced by the overall synoptic flow that would dictate the regional climate of Long Island. These meteorological effects serve to disperse emissions, rather than trap them in the local area. As such, there are no microclimate effects that would be expected to occur at the proposed facility location, and the air quality at the location would be expected to be well represented by the ambient monitors located in adjacent upwind areas.

Further, as explained in Section 9.2.4 of the DEIS, proposed facilities subject to PSD review may have to perform up to one year of pre-construction ambient air quality monitoring for those pollutants with emission rates exceeding the thresholds specified in 40 CFR 52.21(b)(23)(i), unless granted an exemption by the reviewing agency. An exemption is warranted if the proposed source demonstrates that it would have maximum impacts below the pollutant-specific Significant Monitoring Concentrations, or if representative quality-assured data already exist. Caithness Long Island demonstrated that both conditions are met with respect to the project, and was issued a preliminary waiver from conducting pre-construction air quality monitoring by EPA.

**Comment 55:** The environmental justice section of the DEIS characterizes future overall air quality by adding the projected impacts of the Caithness facility to the background levels of four criteria pollutants (CO, SO<sub>2</sub>, PM<sub>10</sub>, and NO<sub>2</sub>). The cumulative air quality assessments presented in Chapter 16 of the DEIS again include only analyses of the four criteria pollutants mentioned above, and only include emissions from LIPA related projects, other large combustion sources, and proposed or planned future industrial uses for the lands near the site. By restricting these analyses to four criteria pollutants, the assessments do not fully address local air quality issues. Neither analysis mentions the criteria pollutants ozone or PM<sub>2.5</sub> despite the fact that Suffolk County is classified as being a non-attainment area for both. Nor do the analyses include assessments of current concentrations or local emissions of hazardous air pollutants (HAPs), volatile organic compounds (VOCs), or other pollutants. (Ames)

**Response:** The DEIS rigorously assessed the cumulative impacts of the criteria pollutants known to be emitted in significant quantity by other major sources within the vicinity. PM<sub>10</sub> was assessed and is considered a surrogate for PM<sub>2.5</sub>. The Caithness facility would not emit ozone, and the Caithness facility's contribution to the regional ozone formation is mitigated by requiring emission reduction credits (ERCs) for its emissions of NO<sub>x</sub> and VOCs as discussed in detail in the DEIS and in responses to other comments. Pursuant to this comment, a discussion of HAPs has been added to Section 7.3.4 of the FEIS.

**Comment 56:** The intent of the environmental justice analysis is to determine whether an adverse environmental burden exists in the area. Because the air quality impacts

that will result from construction of the Caithness project may be of a very different type than the impacts from current nearby sources (e.g., the Caithness plant is not likely to produce persistent odors), a simple adding of the individual air quality parameters does not fully measure the overall burden of the many local sources. Since the presence of the current sources have lead to perceptible air quality impacts, the addition of another source of air pollution in the area may need to be offset by nearby source reductions or impact mitigation, in order to lessen the overall burden. (Ames)

**Response:** The Caithness facility would be required to procure emissions offsets within the regional air shed. Caithness is evaluating the feasibility of purchasing ERCs from Long Island-based sources, to the extent that they are available. However, consistent with state and federal regulatory policies, it is not required that ERCs must be purchased from local sources to achieve local air quality benefits. Once Caithness identifies the source of its ERCs, a notice regarding the ERCs will be issued by DEC and the public, including the Town of Brookhaven, will be given an opportunity to comment on the proposed ERCs as provided for under DEC's regulations. Regarding cumulative impacts, see responses to comments 55 and 57.

**Comment 57:** The DEIS should include a more complete qualitative or semi-quantitative description of overall air quality issues in vicinity of the Caithness site. Only when such an appraisal is included can the environmental justice and cumulative impact issues surrounding the proposed Caithness facility be fairly judged. (Ames)

**Response:** The DEIS discusses in both qualitative and quantitative detail the overall air quality issues in the vicinity of the Caithness Long Island project. As discussed and demonstrated through rigorous mathematical modeling, the air quality will not be significantly impacted or threatened by the Caithness project.

The DEIS discusses in both qualitative and quantitative detail the overall air quality issues in the vicinity of the Caithness Long Island project. As indicated above, the Environmental Justice section also discusses the cumulative affects of existing sources with the emissions of the Caithness project for both criteria and non-criteria emissions. The Environmental Justice section now incorporates a discussion regarding the very low emissions; and essentially no appreciable cumulative impact of HAP emissions from the project with other sources in the area is expected. Furthermore, the DEIS analyses as well as in these responses has indicated that the low emission rates from the project result in minimal and insignificant contributions to the cumulative background air quality. The background concentrations of both criteria and non-criteria pollutants are the collective sum of the major and minor sources upwind from the Caithness facility. The upwind monitoring concentrations have been deemed acceptable and representative of the project local area by both EPA and DEC. As discussed and demonstrated in the DEIS through rigorous mathematical modeling, the air

quality within and beyond the local community will not be significantly impacted or threatened by the Caithness project.

**Comment 58:** The school poverty rates do not seem to correlate with the DEIS. Social and environment justice dictates a thorough discovery of how many communities in parts of North Bellport, Patchogue, Medford and South Yaphank can justifiably be sustainable without undue community burden. The DEIS ought to study areas where the industrial type home image impacts health and academic achievement. (Seubert)

**Response:** Consistent with the review requirements of the state and federal permits required by the project, the environmental justice analysis presented in Section 7.3 was prepared in accordance with the DEC Policy CP-29, Environmental Justice and Permitting, and federal guidance documents prepared by EPA for use in preparing a National Environmental Policy Act (NEPA) environmental justice analysis.

The analysis conducted revealed that portions of the study area exceed DEC thresholds for minority and/or low-income representation. Therefore, an analysis of potential environmental impacts within the community of concern was conducted. As detailed in Section 7.3.4 of the DEIS, the environmental impact analysis demonstrated that the project's potential environmental impacts would not be considered adverse and that the potential insignificant impacts identified would not have a disproportionate impact on the identified environmental justice community of concern.

**Comment 59:** I'm here to lend support in any way that I can to help gainfully employ approximately three hundred and seventy-five construction workers for an extended period of time. I urge the Town of Brookhaven to expedite this process. (Kennedy)

**Response:** Comment noted.

#### **TRAFFIC AND TRANSPORTATION**

**Comment 60:** The Yaphank Fire Department finds the traffic would not be generated to the point that it would cause further problems. As a matter of fact, probably with the new signaling devices, the traffic will be enhanced from a safety standpoint. (Davis)

**Response:** Comment noted. However, no new signaling devices are being proposed at this time.

**Comment 61:** With respect to traffic, the study fails to include an analysis of the Bellport Avenue/Horseblock Road intersection which would seem to provide access to the site. The Town of Brookhaven understands that this intersection operates at a low level of service and is presently a significant contributor of congestion

along Horseblock Road. The Brookhaven Town Board would like to see this analysis in the DEIS. (Liccione, Schneider)

**Response:** The proposed scope of work and the study intersections were reviewed by the Town of Brookhaven Traffic Safety Division and Suffolk County Department of Public Works. Additional intersections were added to the scope at their request. The revised scope of work for the traffic study was presented at the public scoping session for the project. No modifications to the scope were requested at that time. However, in response to the comment received at the public hearing, traffic counts were recently recorded at the intersection of Bellport Avenue and Horseblock Road. The analysis of the intersection has been completed. The results of the analysis are included in Chapter 8, "Traffic and Transportation," of the FEIS.

**Comment 62:** The fuel delivery trucks will have to enter from Yaphank Avenue, make a right turn off of Horse Block Road into the facility; and then exit as a right turn off Horse Block Road to go to Sills Road to go back to the LIE. The traffic during oil usage time will be two tankers per hour. Waste Management has a facility on the south side of Old Dock Road, and many other businesses including the sanitation facility and the compost company also on Old Dock Road. We would like some other design be made for truck traffic. (Vigliotti)

**Response:** Existing truck traffic in the project area was included in the traffic counts recorded at the study intersections. Also, a vehicle classification count was performed to identify the portion of trucks in the vehicle stream. The trucks were included in the intersection analysis for existing and future conditions at each study intersection. Fuel delivery trucks would likely use Horseblock Road to enter and exit the site. At this time, Suffolk County has indicated that they would allow entering left-turn movements at the Zorn Boulevard access. Therefore, trucks would be allowed to turn left into the site from Horseblock Road. Exiting trucks must turn right onto Horseblock Road. Therefore, traffic to the Caithness facility would likely not use Yaphank Avenue. The analysis considered the truck traffic generated by the proposed Caithness facility during construction and operation. Two trucks per hour added to the peak hour volumes is not considered to be significant.

**Comment 63:** I didn't see where Tri-County, which is a 260,000 square foot warehouse on Sills Road, will be operating twenty-four hours a day on Sills Road by Horseblock and South Haven Avenue. Impacts from those trucks have not been counted. (Seubert)

**Response:** In accordance with the approved scope of work, requests for identification of other planned projects in the vicinity of the site were made to the Town of Brookhaven Traffic Safety Division and Suffolk County Department of Public Works. Those projects identified as significant, were included in the study. In addition, traffic volumes were increased by an annual growth factor to account

for increases in population and additional traffic generated by projects not in the immediate area. Following the public hearing, the Town of Brookhaven Traffic Safety Division was again contacted for information pertaining to the “Tri-County” warehouse project. The Town recently provided information on “Intercounty” Warehouse located within the South Silver Industrial Park. It is assumed that this is the warehouse project that was referenced at the hearing. A traffic impact study was performed for the approval of the subdivision of the South Silver Industrial Park that considered the full occupancy of the site. Impacts and subsequent mitigation improvements were identified as part of the approval for the Industrial Park. The mitigation improvements have been constructed and are in place. In addition, a traffic impact study was completed for the proposed Intercounty Warehouse. The Town reviewed and approved the site plan and the warehouse is currently under construction. Therefore, the Traffic Safety Division of the Town of Brookhaven determined that it was not necessary to include this project in the No Build Condition for the proposed Caithness Long Island Energy Center. Further, as recommended by NYSDOT, a 2.04 percent annual growth factor was applied to existing traffic volumes in the study area to account for potential background growth.

**Comment 64:** Temporary construction traffic impacts are not fully resolved, and a potential conflict with a planned road intersection project to improve safety may arise. The Final EIS should include an analysis of an alternative construction traffic route which would avoid the problematic intersections. (DPS)

**Response:** As part of the scoping process, the Suffolk County Department of Public Works was contacted regarding the study intersections. The County indicated that Horseblock Road/CR 16 should be considered the likely travel route to/from the project site and as such, should be analyzed in the traffic study. It is also noted that, during a public information meeting held as part of the project’s public outreach program, local residents who reside off Yaphank Avenue vigorously voiced their concern that truck traffic along Yaphank Avenue not increase as a result of the project.

**Comment 65:** Trip generation excludes the construction period, when at least 500 daily trips would be required, and fails to specify how many trips would be required for back-up fuel and ammonia delivery. (Swanston)

**Response:** Section 15.1 of the DEIS provides a detailed assessment of potential traffic impacts during construction of the project.

It is anticipated that both fuel oil and aqueous ammonia would be brought to the project site in 12,000-gallon tanker trucks. Approximately two tanker trucks per hour would be required during periods of oil-fired operation. Ammonia would be delivered to the site two to three times a week.

## AIR QUALITY

**Comment 66:** Although your plant has very low air emissions, isn't it true they need an acid rain permit and must obtain offsets? (McConnell)

**Response:** The Caithness Long Island Energy Center is subject to the Acid Rain Program based upon the provisions of 40 CFR 72.6(a)(3) since the combustion turbine/HRSG is considered a utility unit under the program definition and does not meet the exemptions listed under paragraph (b) of this section. The project is subject to Phase II Acid Rain requirements and Caithness Long Island is required to submit an acid rain permit application by the 24 months prior to the date on which the unit expects to begin service as a generator. The Acid Rain permit application for this project was included in Appendix E of the PSD/Part 201 air permit application, which was submitted on January 26th, 2005. The project's PSD/Part 201 air permit application was included as part of Appendix F of the DEIS. The facility must also obtain offsets (emission reduction credits) for the project's emissions of NO<sub>x</sub> and VOC at a ratio of 1.3 to 1.

**Comment 67:** My main concern is sulfuric acid that's produced by diesel fuel. My question is when does the thirty days start? Does it start January 1st, in which case we could have a cold winter, and they could start using diesel fuel in December, and then you get a new start date for thirty days from January 1st to January 30th. You would lose your thirty days for two years within a sixty-day time period. Or is it seasonal, where you've got thirty days within the winter? (Ott)

**Response:** The combustion turbine would be limited to firing low sulfur distillate fuel oil for a maximum of 30 days or 720 hours on a rolling 12-month basis. The facility is required to record the quantity of low sulfur distillate fuel oil burned in the combustion turbine continuously. At the end of the month, the facility is required to add the total low sulfur distillate fuel oil burned in that month to the total low sulfur distillate fuel oil burned in the previous 11 calendar months, to ensure compliance with the 720 hour per year limit. In other words, the fuel limit would be based on a rolling annual year and not a calendar year.

**Comment 68:** ERCs can be created from either past or future unit shutdowns, and since Caithness may meet DEC standards by purchasing credits from as far away as Philadelphia, the quality of our air in Suffolk County may very well not improve and has the very real possibility of further deterioration. To prevent further deterioration, we request that Caithness be required to purchase any needed ERCs from local generators, such as Northport and Port Jefferson. As a severe non-attainment area and one of the twenty worst areas in the country for air quality, we cannot afford further air quality deterioration. (Kepert, McConnel)

In order for the Town of Brookhaven to have a better understanding of the new local air quality changes that would result from the plant and the emission reduction offsets, we need to know from where these offsets will be purchased.

The Town needs to understand the net benefits of the offsets and to know where these offsets are going to be and what they are going to be. (Ames)

The displacement theory of air pollutants and purchase of emission credits does nothing to address or evaluate our own Medford, Bellport, Yaphank air quality and health and environmental concerns. (Seubert)

**Response:**

Ozone forms in the presence of sunlight from chemical reactions between hydrocarbons, i.e., volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), both of which are emitted by combustion of fossil fuels, as well as by natural sources. The atmospheric chemical reactions that lead to photochemical oxidants (including ozone) take hours to occur and will peak when the sunlight is the strongest—typically early afternoon during the summer months. Since the reactions occur over time, the precursors are often transported by the prevailing winds over many miles, resulting in a regional formation of ozone and other photochemical oxidants. As such, reducing emissions of precursors upwind of ozone non-attainment areas (where the ozone ambient air quality standard is being exceeded) improves the air quality downwind. As an example, during the summer months the prevailing winds in the New York-Philadelphia corridor have a strong southwesterly component. Emission reductions of ozone precursors in Philadelphia and New Jersey serve to reduce the ozone concentrations in the New York air shed, which includes Long Island.

Since ozone is strictly a wide-ranging regional problem, the regulatory agencies have taken a regional approach towards achieving attainment. ERCs for NO<sub>x</sub> and VOCs are available for use on a regional basis (not restricted to same geographic location) because such credits directly serve to reduce the net loading of ozone formation precursors into the regional air shed and improve air quality throughout the region, including Long Island. Therefore, ERCs are a means whereby the regional air quality is improved in the most economic manner.

ERCs are certified emission reductions created by eliminating the potential for future emissions at an existing site by reducing actual emissions from that existing facility, typically either through a shutdown, add-on controls, fuel change or operating restriction that is made enforceable by a permit condition. Once the ERCs are quantified and certifiable, they may be sold to new sources located within the regional airshed to offset the emissions of ozone precursor emissions (NO<sub>x</sub> and VOC). This is accomplished by requiring new major sources to obtain reduction credits essentially to displace the emissions of the new source at a ratio of 1:1 or greater such that there is no additional loading of these pollutants.

For the Caithness project the ERC's ratio for ozone precursors is 1.3:1. In order to achieve a net reduction of ozone precursors, the Caithness Long Island facility would be required to obtain ERCs from a source located within the regional airshed as defined by the regulatory agencies. This would cause about a

30 percent reduction in the emissions of ozone producing precursors relative to the emissions potentially added by the Caithness facility. The collective reduction in precursors ultimately translates to lower ozone concentrations throughout the region and the local project area would feel the effects of the ERCs. Therefore, local air quality benefits in the local communities of Medford, Bellport and Yaphank would be achieved through the purchase of ERCs from a source within the regional airshed.

Caithness is evaluating the feasibility of purchasing ERCs from Long Island-based sources, to the extent that they are available. However, consistent with state and federal regulatory policies, it is not required that ERCs must be purchased from local sources to achieve local air quality benefits. Once Caithness identifies the source of its ERCs, a notice regarding the ERCs will be issued by DEC and the public, including the Town, will be given an opportunity to comment on the proposed ERCs as provided for under DEC's regulations.

**Comment 69:** In general, most of the DEIS is a thorough analysis of the air quality issues that it addressed. (Ames)

**Response:** Comment noted.

**Comment 70:** The impacts from the plant should also be put into a figure. Some of the values and the tables are at the fence-line of the plant which are admittedly the highest, but in order to consider health, it would be more useful to have these values as they're predicted at the nearest residences because that's really where you are concerned about them and the businesses that are along Old Dock Road. That would help in the Town being able to consider the potential health impacts of this facility.

The criteria pollutants should be pulled together in a simple figure that compares the impact of the plant, the current background, the local background situation of concentrations and the National Ambient Air Quality Standards. The figure should include the criteria pollutant PM<sub>2.5</sub>, which is currently in its own section. (Ames)

**Response:** Figures 9-4 through 9-11 in Chapter 9.0 of the DEIS present contours of the maximum modeled concentrations due to the proposed facility overlaid onto the NYSDOT map. The NYSDOT map shows the nearby residences, roadways, and towns. As the contour figures indicate, the maximum modeled concentrations are concentrated on the Caithness property and decrease rapidly with distance. The maximum modeled concentrations due to the proposed facility presented in Tables 9-18 through 9-22 show that the facility would have air quality concentrations well below these health based standards (i.e., NAAQS). Thus the facility would have insignificant health impacts.

The DEIS has been amended to include Figures 9-11a through 9-11e that compare the NAAQS, existing background ambient air concentrations, and the maximum modeled facility concentrations for each criteria pollutant.

**Comment 71:** I've looked at the projected emissions on other power plants, including the Spagnoli Road plant which is also an excellent plant if it is ever built. These combined cycle facilities are considerably better than what we currently have, and would be an improvement. (Fazio)

**Response:** Comment noted.

**Comment 72:** The proposed project, while it is among the cleanest technology available, still produces serious emissions in amounts significant enough to trigger oversight. (Malone) Will there be online access to New York State emission results? (Tomaine) How will the community know that all local, state and federal regulations are adhered to and how will we know the efficiency and air quality characteristics of the plant are being maintained to its initial effectiveness? Will we be assured that as improvements are made, yearly upgrades will be instituted to insure that state-of-the-art remediation of the plant exists? (Seubert)

**Response:** The Caithness Long Island Energy Center would perform initial stack emissions testing in accordance with the terms and schedule listed in the facility's PSD and Part 201 air permits. A stack test report containing results of the stack test would be sent to DEC Region 1 and EPA Region 2. These reports would be available to the public upon request.

The facility would use continuous emission monitoring systems to measure and record stack exhaust concentrations of NO<sub>x</sub>, CO and ammonia to determine compliance with the facility's permit emission limits. Additionally, the facility would use continuous fuel flow monitors to measure and record the amount of fuel that would be burned in the combined cycle unit. The results of the fuel flow monitoring would be used in conjunction with the emission factors presented in the air permit applications to determine compliance with the facility's other permit emission limits. The facility would obtain certifications of the fuel oil sulfur content from the fuel oil vendor each time fuel oil for the combustion turbine and auxiliary boiler is delivered to the facility. The purpose of the fuel sulfur content determination is to ensure compliance with the facility's SO<sub>2</sub> and particulate permit emission limits.

The facility would also perform stack testing as prescribed in the facility's Title V air operating permit. A stack test report containing results of the stack test would be sent to DEC Region 1 and EPA Region 2. These reports would also be available to the public upon request.

Also, the facility would provide an Excess Emissions Report every calendar quarter to DEC Region 1 and EPA Region 2. These reports would contain the results of the facility's continuous emission monitoring and any deviations from

the facility's emission limits. These reports would also be available to the public upon request.

Results of any inspection performed by New York State officials would be made available to the public if requested. The project would be required to operate in accordance with its state and federal air permit conditions. Yearly upgrades would not be specifically required; however, the facility would be maintained on a regular basis.

**Comment 73:** What are the long-term health effects of breathing emissions from the project? (Malone)

Long Island is among the worst places in the nation to breathe, according to the EPA. The American Lung Association gives Suffolk County a failing grade on its ozone level and a C in pollution from soot and other particles. (McConnell)

**Response:** The NAAQS have been developed by the EPA and DEC and established to protect the health of the general population and are based on numerous health-based studies. The standards are developed to protect the most sensitive population groups, which include young children, the elderly, asthmatics, and those members of the population that have other breathing difficulties. The Caithness Long Island facility has been assessed using rigorous air quality simulation models, which have been developed and approved for use by both EPA and DEC for assessing new emissions sources. The conservative air quality assessment conducted for the proposed facility determined that operation of the proposed project would result in maximum modeled air quality concentrations less than the EPA-defined significant impact levels, which have been established at a level approximately one to three percent of the overall ambient air quality standard. As such, it can be concluded that the proposed facility would not have any short-term or long-term effect on the breathing ability and/or public health of the local community population.

Further, as previously indicated in the above responses, because the project is located in a non-attainment area for ozone, Caithness would be required to acquire offsets (or emission reduction credits) for the project's emissions of nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs). Due to the area's status as non-attainment, emission reduction credits at a ratio of 1.3:1 must be obtained. This leads to about a 30 percent reduction in the emissions of ozone producing precursors relative to the emissions potentially added by the Caithness facility. The collective reduction in precursors ultimately translates to lower ozone concentrations throughout the region, from which the local project area will benefit.

In addition, as explained in Section 18.7 of the DEIS, Alternative Project Technologies, the project would employ state-of-the-art "combined cycle" technology, which is approximately 30 percent more efficient than conventional simple cycle electric generator technologies. Since a combined cycle facility

uses less fuel than either a steam turbine or a gas turbine to generate a kilowatt-hour of electricity, the savings in fuel is significant, which results in lower operating costs. As a result, the Caithness Long Island Energy Center is anticipated to be dispatched on a near continuous basis, enabling it to displace existing, less efficient, higher emitting generating facilities, which would result in a separate and additional net air quality benefit for Long Island.

**Comment 74:** What effects will this plant have on the background concentration of the 2.5 micron and finer size particles in the Plainview-Old Bethpage area? Please quantify any stated increase, and describe what test data and/or modeling analyses you have to support your statement. (Buzzelli)

**Response:** As discussed in the DEIS, the project would directly emit PM<sub>2.5</sub> from the combustion of natural gas and distillate fuel oil. Secondary formation of PM<sub>2.5</sub> due to reactions involving potential PM<sub>2.5</sub> precursor pollutants (primarily SO<sub>2</sub>, NO<sub>x</sub>, and ammonia [NH<sub>3</sub>]) would occur very slowly. The wind rose presented in Figure 9-1 of the DEIS presents a rough approximation of the amount of precursor pollutant conversion at a given location. Plainview/Old Bethpage is approximately 26 miles west of the project site. Based on the figure, the most common wind speeds measured in the direction toward which the project's plume could potentially reach the area in question (from east to west) vary from 4 to 17 knots (4.6 to 19.6 miles per hour). Assuming the lowest wind speed of 4.6 miles per hour, it would take approximately 5 1/2 hours for the plume to reach Plainview/Old Bethpage. In that time period only about 5 to 17 percent of the precursor pollutants would be converted, using the EPA reference presented in the DEIS. The very small percentage of precursor pollutants that would be converted to PM<sub>2.5</sub> over the above distance would have no measurable impact on regional PM<sub>2.5</sub> concentrations due to plume dispersion. Therefore, the project is expected to have no significant impact as a result of secondary PM<sub>2.5</sub> formation.

**Comment 75:** Suffolk County is listed as one of the 20 worst counties in the state for the following pollutants: Carbon Monoxide, Nitrogen Oxides, PM<sub>10</sub> emissions, PM<sub>2.5</sub> emissions, sulfur dioxide emissions, and volatile organic compound emissions. Yet according to your DEIS we have been designated an "attainment" or "unclassified" for all criteria pollutants except for ozone, which we are a severe non-attainment area, and PM<sub>2.5</sub> which Suffolk County has been designated as a non attainment area. (Kepert)

**Response:** The attainment designations are issued by EPA, the federal agency that sets health based air quality standards.

**Comment 76:** Caithness is also required to buy SO<sub>2</sub> allowances in order to comply with the Acid Rain regulations as promulgated in 40 CFR 72 and CFR 73. Based upon potential emissions calculations the project would be required to purchase no more than 43 tons of allowances per year. (Kepert)

**Response:** That is correct.

**Comment 77:** Caithness proposes to store aqueous ammonia at a maximum ammonia concentration of 19 percent. This seems a blatant attempt to avoid the modeling required by the EPA, rather than a way to comply. (Kepert)

The Clean Air Act risk management plan requirement is cynically and unwisely circumvented by storing on site ammonia at 19 percent concentration when a 20 percent concentration would require modeling of a catastrophic release of the 20,000 gallon tank of stored ammonia. (Swanston)

**Response:** The use of aqueous ammonia at a concentration of 19 percent for the selective catalytic reduction (SCR) system to control NO<sub>x</sub> emissions is consistent with standard industry practice. Nonetheless, even though Caithness is not subject to the EPA's Risk Management Program (i.e., Section 112r of the Clean Air Act), a modeling analysis for the potential accidental release of 19 percent aqueous ammonia was conducted and is summarized in Section 9.6.4 of the DEIS. Results of the analysis indicate that the worst-case release scenario would have no significant adverse impacts and the concentrations of the released ammonia would be less than 150 parts per million at the property line. This is the recommended guidance value established by the American Industrial Hygiene Association (AIHA) and represents the maximum airborne concentration below which nearly all individuals could be exposed for up to an hour without experiencing or developing irreversible or other serious adverse health effects. Appendix H of the DEIS provided the detailed ammonia impact assessment conducted for the project.

**Comment 78:** Why was meteorological data for air quality impact modeling, and dispersion of emissions taken from Mac Arthur Airport, which is located 8.5 miles west of the site when Brookhaven National Laboratory is half the distance? You also measured PM<sub>10</sub> and NO<sub>2</sub> concentrations at Eisenhower Park which is 34 miles away. (Kepert)

**Response:** According to the National Climatic Data Center (NCDC), the Brookhaven National Lab meteorological station does not record hourly surface observations. The Brookhaven National Lab meteorological station collects upper air sounding data and has a Nexrad radar system. The Upton cooperative surface station is also located at the Brookhaven National Lab; however, the data collected by the cooperative station is insufficient for air quality modeling purposes.

The representative background NO<sub>2</sub> concentrations presented in Table 9-1 of the DEIS were recorded at the Holtsville monitoring station in Suffolk County. Representative background PM<sub>10</sub> concentrations were obtained from the Eisenhower Park monitoring station in Nassau County because it is the closest PM<sub>10</sub> monitor in the area. As stated in Section 9.1.3.B of the DEIS, the

Eisenhower monitor provides conservative estimates of the background PM<sub>10</sub> concentrations for the proposed project. This is due to the Eisenhower monitor being located in a highly urbanized area and being subjected to the downwind effects of New York City, especially Queens County. Use of these monitoring sites for air quality modeling purposes has been approved by EPA and DEC.

**Comment 79:** Why did you exclude ozone for background ambient air quality when we are clearly a severe non-attainment area for ozone, and emissions, such as NO<sub>x</sub> and VOCs coming from Caithness facility, will clearly worsen that situation. (Kepert)

**Response:** The representative background ozone concentrations for 2001, 2002, and 2003 are presented in Table 9-1 and discussed in Section 9.1.3.F of the DEIS.

**Comment 80:** Please explain the possible negative health effects of fossil fuels? (Seubert)

**Response:** Combustion of fossil fuels, namely coal and heavy fuel oil, release potentially harmful air emissions. Exposure to emissions of lead, mercury, sulfur dioxide, particulate matter, carbon dioxide, and ozone-forming nitrogen dioxides may be hazardous to public health. Toxic compounds, like mercury and lead, may poison organ systems and may lead to brain damage and death. Fish consumption advisories have been imposed in parts of the country where lakes and waterways have been contaminated with mercury from electric power plants. Other pollutants, like ozone and particulate matter, may cause respiratory and other health problems, particularly in children and the elderly. However, such negative health effects are minimized to the greatest extent possible through the use of clean burning fossil fuels such as natural gas and highly refined light distillate fuel oil, which has only trace quantities of harmful compounds.

**Comment 81:** The air quality studies must be conducted at different times of the year and times of the day, and include cloud and precipitation (e.g. rain, snow) conditions relative to the precise study location. (Seubert)

**Response:** The air quality studies were performed using over 40,000 hours of meteorological observations, which included all hours of the day, seasons and address clouds and precipitation. The EPA and DEC determined that the meteorological data used for the studies adequately represents the conditions of the precise study location.

**Comment 82:** “Balls of pollution” and hot spots could result. We would like the DEIS to study or offer studies and information regarding this concern. What measures will be taken to ensure the power plant will not exacerbate our local health and deteriorating air quality? The average air quality is not acceptable. Spikes in air quality are of great concern. Spikes have the most dramatic effects and require localized study-especially considering our tri-hamlet concerns. (Seubert)

**Response:** The air emissions are gaseous in nature, and emitted well above their condensation temperature, and do not condense or coalesce to form “balls of pollution.” The DEIS describes in detail the high level of emissions controls to be employed by the Caithness Long Island Energy Center. Such emission controls include use of clean burning fuels, low-NO<sub>x</sub> combustors, and catalysts for NO<sub>x</sub> and carbon monoxide emissions reductions. The EPA and DEC air permits would include short-term emission limits to minimize and/or eliminate any “spikes” in local air quality. The facility air quality studies demonstrated that all concentrations, including short-term averages, do not exceed the SILs.

**Comment 83:** We ask you to research impacts from the plant's emissions recognizing different populations, state of health, age, ethnic, economic background and other factors. (Seubert)

**Response:** Figures 9-4 through 9-11 in Chapter 9.0 of the DEIS present contours of the maximum modeled pollutant concentrations due to the proposed facility. As the contour figures indicate, the maximum modeled concentrations are concentrated on the Caithness property and decrease rapidly with distance. The maximum modeled concentrations due to the proposed facility presented in Tables 9-18 through 9-22 of the DEIS show that the facility would have air quality concentrations well below the NAAQS at all locations. The NAAQS have been developed to protect the most sensitive population groups, which include young children, the elderly, asthmatics, and those members of the population that have other breathing difficulties. Accordingly, inasmuch as the modeling conducted determined that the project would result in maximum modeled concentrations well below the NAAQS, which have been developed to protect the most sensitive populations, it can be concluded that the project would not result in significant impacts to all individuals, irrespective of population of origin, state of health, age, and ethnic and economic backgrounds.

**Comment 84:** The Department’s comments on the air application were provided in our April 1, 2005 letter, and Appendix H (Air Permit Application and Ammonia Impact Assessment) of the FEIS should be revised to address these comments. (DEC)

**Response:** Comment noted. Appendix H has been updated to add DEC’s April 1 letter and Caithness’ response.

**Comment 85:** This is to inform you of a recent EPA regulatory development which may apply to the Caithness Energy facility permit application. On April 5, 2005, EPA’s final nonattainment designations for PM<sub>2.5</sub> became effective. On that same day, EPA provided an interim guidance memorandum specifying the associated requirements for New Source Review and PSD purposes. EPA designated all of Long Island to be in nonattainment for PM<sub>2.5</sub>, and their guidance requires that New York State apply the provisions of their nonattainment regulations, or 40 CFR Part 51, Appendix S, to any new or modified major source.

EPA has also stated that this requirement applies to any major source for which a final permit determination has not been made prior to the April 5, 2005 date. The Caithness facility application has to conform to the nonattainment area requirements references in the guidance. More specifically, this includes obtaining emission offsets for PM<sub>2.5</sub> (in the form of PM<sub>10</sub> emissions, as a default), performing the necessary showing of net air quality benefit analysis, and demonstration of Lowest Achievable Emissions Rate (LAER). (DEC)

**Response:** Comment noted. Section 9.2 of the DEIS has been revised to reflect the EPA's recent designation of Suffolk County as non-attainment for PM<sub>2.5</sub> and to discuss the project's compliance with the new PM<sub>2.5</sub> standard and associated New Source Review and PSD requirements. Pursuant to the EPA guidance memorandum on New Sources Review (NSR) applicability for PM<sub>2.5</sub>, the PM<sub>2.5</sub> emissions from the Caithness facility would be below the thresholds to trigger NSR and thus the Caithness facility would not be subject to LAER or offset requirements for PM<sub>2.5</sub>.

## NOISE

**Comment 86:** The sound levels will rise significantly at our property line to the tune of 70 decibels. That would be equivalent to driving in your car at 65 miles per hour on the LIE. That hum that you would hear there would be equivalent to what we would be listening to all the time. (Vigliotti)

**Response:** It is acknowledged that sound level increases would occur at the neighboring industrial uses. However, exterior project sound levels would be approximately 65 dBA at adjoining industrial uses, well below the sound level allowable under the Town of Brookhaven's noise standard. The standard limits sound levels at adjoining industrial zones to no greater than 75 dBA (See Chapter 10 "Noise" for an explanation of noise measurement parameters.). Further, the DEC Noise Policy guideline, which was used in the preparation of the DEIS to assess the potential for impact at residential locations, also provides guidance for commercial and industrial locations. According to the DEC policy, noise levels in industrial and commercial settings should not exceed an upper limit of 79 dBA, a higher level than the Town ordinance allows. Lastly, the industrial buildings would provide significant attenuation of exterior noise levels, likely greater than 20 dBA. Interior noise levels would therefore be substantially lower.

**Comment 87:** Temporary impacts during facility construction warrant mitigation requirements. Noise related to construction activities is subject to specified daytime hour limitations, but is otherwise exempt from the Town of Brookhaven Noise Ordinance limits. The Final EIS should clearly indicate that the time limits specified in the Town of Brookhaven code will be implemented, unless the Town specifies other mitigation or waives the construction period limits of 7 AM through 6 PM on weekdays. (DPS)

**Response:** A second shift is not planned and would only be implemented during short periods as necessary to recover any delays in the construction schedule. As stated in the comment, the Town of Brookhaven time limits relative to construction noise would be adhered to. Should any relief from these limits be required, Caithness and its equipment, procurement and construction contractor would seek the appropriate approvals and waivers from the Town of Brookhaven consistent with Town requirements.

## **INFRASTRUCTURE**

**Comment 88:** Under current requirements of the New York Public Service Commission, electric generating companies with interruptible gas contracts are required to maintain, or have on call or under contract, the equivalent of five days of petroleum fuel at the maximum winter burn rate. The proposed volume of on-site petroleum storage is totally inadequate to meet the alternate fuel needs of this proposed facility. Where will the additional oil needed to run the Caithness power plant on a daily basis come from, and how will these vast quantities of oil be delivered to the Bellport site? The magnitude of the additional demand would undoubtedly have a significant and negative impact on the supply, distribution and price of heating oil to the majority of Long Island's residents, institutions, and businesses. This is not an inconsequential problem since the incremental fuel oil consumption for this power plant alone represents an increase of 12.5 percent over and above the average daily consumption of fuel oil on Long Island during the critical 150-day peak use period.

Caithness is open and amenable to the twin concept of dedicated off-site storage to meet the five-day PSC requirement, as well as dedicated transfer facilities and transportation assets to move product, as needed, to the generating site, thus dramatically minimizing any negative impacts which their operations may have on the heating oil industry and our customers. (Rooney)

PSC requires a five-day inventory to meet the fuel demand under full power output. (PSC II)

**Response:** Comments noted. LIPA, as fuel manager for this project, is examining this issue and will make appropriate arrangements to meet all applicable requirements. The proposed on-site storage tank would provide approximately 2 days' supply for distillate oil operation. Additional on-site storage to meet the 5-day inventory requirement is not being contemplated; rather, off-site options such as firm contracts for supply or control over off-site tankage are being examined. Preliminary information gathered by the project sponsor indicated these options should be available when and as required to meet PSC requirements.

**Comment 89:** Why do we need to risk the transportation of and the storage of 750,000 gallons of fuel oil on site? There is a major issue surrounding the storage tank. If they don't have to store oil, we wouldn't have to have a tank. Elimination of the

750,000 gallon oil storage would ensure a breach does not happen. There is the idea of using the railroad to bring in the oil. Maybe we wouldn't have those trucks on the road if we had the use of the railroad and an underground cable there. (Seubert)

We request that the use of oil be eliminated from this proposal. (Keper)

We request that the fuel for the powering of the Caithness plant be solely gas. The environmental risks of both the storage and transport of fuel oil far outweigh the financial benefit that may be gained by purchasing natural gas as an "interruptible" fuel supply. (Dittko)

**Response:**

The project site is outside Suffolk County's designated "deep recharge areas," and as a consequence, fuel oil storage facilities can be constructed at the project site. The project's 750,000-gallon fuel oil tank would be constructed and designed in accordance with the stringent requirements of Article 12 of the Suffolk County Sanitary Code, which is a design-based regulation, and whose purpose is to ensure the safe storage and handling of all toxic and hazardous materials, including oil and chemical transfer procedures. The fuel oil tank design would also comply with the requirements of the DEC Major Oil Storage Facility (MOSF) license, which is required to be obtained by the project pursuant to Section 174 of the Navigation Law and 6 NYCRR Part 610 and 17 NYCRR Parts 30 & 32. These state and local regulatory programs require environmental controls to prevent spills or leaks and rapid countermeasures in the unlikely occurrence of a spill or leak. Due to design, safety, and management controls and systems for onsite bulk fuel storage, potential impacts to environmental resources would be minimized. Because the project would have tanks associated with emergency engines, lubricating and transformer oils, and similar equipment, a Spill Containment Countermeasure and Control (SPCC) Plan would be implemented irrespective of oil use. All oil storage areas would be installed within double containment walls of dikes capable of holding 110 percent of the volume of the largest container. Alarms, monitors, and other physical and managerial devices would be common practice for oil storage at the project. With these measures being planned and implemented, natural resources would be adequately protected. Therefore, it was determined that no significant impacts would occur as a result of the storage of low-sulfur distillate fuel oil at the project site.

Utilizing the main line of the Ronkonkoma Branch of the Long Island Railroad (LIRR), which is located approximately 2,500 feet north of the project site and adjacent to the 96-acre parcel to the north, was not considered feasible as the railroad right-of-way is an active passenger rail line, serving as the LIRR's main line to Riverhead and Greenport.

Caithness is proposing to utilize natural gas as the primary fuel for the project. However, natural gas supply can be curtailed during periods of high natural gas demand, which typically occur in severe cold weather. Using a backup fuel can

relieve the stress on the natural gas system during such conditions. Backup fuel use would also ensure that, while residences, schools, hospitals and firm sales customers are given first-order priority for gas supply, the project's ability to operate and provide power for LIPA and its customers is preserved. For this reason, the use of a backup fuel is an important reliability issue, and as a consequence, Caithness proposes using low sulfur distillate oil as a backup fuel. Additionally, the project's ability to operate on low sulfur distillate oil creates great value for LIPA's customers while increasing the reliability of the project and the LIPA transmission system as a whole.

As indicated in LIPA's Energy Plan, ["f]uel diversity improves system reliability... During peak demand periods, gas supply availability concerns limit the amount of generation fired by natural gas to only key generating plants. The option to burn natural gas or residual oil has strong economic value. The flexibility to fuel switch based on price ensures the lowest possible cost to the customer." Accordingly, the ability to operate on low sulfur distillate oil was viewed as a preferable option by LIPA in reviewing the various project proposals submitted in response to its RFP. Caithness estimates that by surrendering its entitlement to natural gas supplies when demand for natural gas is at its peak, LIPA would save approximately 36 million dollars per year in fuel costs, which helps to lower the cost of electricity for LIPA's customers while ensuring that schools, hospitals and residential homes may have an additional natural gas supply when it is critically needed.

**Comment 90:** The location of this plant will not create any problems for the groundwater and discharge nor any other affecting the water supply. The water supply in this area is sufficient with the pumping station being right down Horseblock Road and fed by an eighteen-inch main. (Davis)

**Response:** Comment noted.

**Comment 91:** There is no mention of potential hazards due to transport of ammonia and oil materials to the facility. So I would ask that the DEIS include some information of the volumes that will be transported to the site; i.e., information for each shipment and the potential impacts of spills of either ammonia or the fuel oil that will be coming into the facility. (Ames)

Data should be provided on the potential public health, safety and environmental effects should a spill occur, as well as the amount of oil in each shipment and the routes that will be used. (Hurley)

**Response:** As described in the DEIS, the project would have on-site storage capacity for low sulfur distillate oil and aqueous ammonia, which would be a 19 percent solution. On site storage requirements and release prevention and containment measures are addressed in the DEIS.

Suppliers would not be supplying distillate oil and aqueous ammonia solely to the Caithness Long Island Energy Center. Rather, Caithness would be an incidental customer of suppliers who are operating within their respective service areas.

It should be noted, however, that suppliers of these products must comply with stringent state and federal requirements relating to public safety and hazardous materials transportation. See, e.g., 17 NYCRR Parts 819-820; 49 CFR Parts 100-199, 390-393, 396-397. For example, distillate oil and aqueous ammonia are both regulated under the U.S. Department of Transportation regulations. State and federal requirements for transportation of such materials include, but are not limited to, registration and record keeping, identification number assignment, labeling, incident notification, and release response plans. In addition, transporters of such materials, including distillate oil and aqueous ammonia, must comply with “special provisions” relating to packaging/containment during transportation based upon the specific attributes of the material. See 49 CFR 172.101-102.

Caithness would only contract with suppliers who are properly licensed and registered under state and federal law. Thus, there would be assurance that appropriate measures would be in place to minimize the risk of a release during transportation, and respond to a release in the unlikely event that one occurs.

It is anticipated that both fuel oil and aqueous ammonia would be brought to the project in 12,000 gallon tanker trucks. The trucks are anticipated to travel to the project site from the west via the LIE. While Caithness cannot confirm the local routes that would be followed at this time, it is reasonable to expect that the delivery trucks would exit the LIE at Exit 65 and travel Horseblock Road east to its intersection with Zorn Boulevard, at which point the trucks would turn left and travel north on Zorn Boulevard to the project site.

**Comment 92:** The possible dangers of electromagnetic radiation that would be around the power plant should be investigated? (Lindemann)

Perpetuation and expansion of the possible risks attached to high tension wires need to be studied. Long Island Avenue from Holtsville to Yaphank needs to be thoroughly researched before extending any transmission power. Cancer clusters have been noted over the years in our area. Clusters of cancer have been associated with transmission lines. Transmissions lines run through our community. (Seubert)

**Response:** Section 12.10 of the DEIS analyzes the potential electric and magnetic field (“EMF”) impacts associated with the project’s 1,500-foot, 138 kilovolt (kV) electric transmission interconnection in accordance with the applicable electric field strength standards established by the New York State Public Service Commission. The post-construction magnetic field levels and electric field

levels for the project's proposed 138 kV electric transmission line interconnection were calculated using C3CORONA, the corona and field effects computer program developed by the Bonneville Power Administration and the U.S. Department of Energy. The maximum predicted magnetic field level was calculated to be less than 16 millegauss (mG), where the recommended guideline is 200 mG, immediately below the transmission line. The predicted magnetic field levels fall to less than 2 mG, at a distance of approximately 100 feet from the center of the electric transmission interconnection. Regarding predicted electric field levels, the maximum predicted electric field level is calculated to be under 0.3 kilovolts per meter (kV/m), where the recommended guideline is 1.6 kV/m. The predicted electric field levels fall to less than 0.02 kV/m at a distance of approximately 100 feet from the center of the electric transmission interconnection. Electric and magnetic fields of this magnitude would have no adverse health effects and would be well below the 200 mG and the 1.6 kV/m guidelines.

The same analysis applies for both the proposed switchyard that would be located on the northern portion of the 96-acre parcel. No significant impacts from the switchyard due to EMF are expected. The proposed project would use the existing Holbrook-to-Brookhaven transmission line that runs just to the east of the 96-acre parcel within an existing LIPA right-of-way. Based on the System Reliability Impact Study (SRIS) results, no substantial changes to the transmission system would be required, and no significant adverse impacts are expected.

**Comment 93:** Concerning stormwater storage or any open air water storage, will it be treated for mosquitoes? (Tomaine)

**Response:** On-site recharge basins would function like most recharge basins on Long Island and would not retain standing water conducive to mosquito breeding. Given the rapid infiltration rate of on-site soils, Caithness does not expect to have standing stormwater in the basins for an extended duration of time and therefore mosquito treatment is not expected to be required for these structures. Periodic maintenance of the basins (i.e., to roughen the surface) would be used to ensure that clogging over time does not occur. Similarly, water that collects in secondary containment areas would not be allowed to sit in the containment areas for an extended period of time after a storm event. Therefore, mosquito treatment would not be required at the containment structures.

**Comment 94:** How long will you stay operational in an extended drought before public water is threatening? (Tomaine)

**Response:** As indicated in Section 12.3.4 of the DEIS, the Upper Glacial Aquifer, the source of potable water in the region, has a high water-bearing capacity, which makes supply-related drought restrictions very rare. The thickness of the Upper Glacial Aquifer allows wells to be installed well below the water table, thus

making such users relatively unaffected by drought conditions. There are areas of limited water supply in Suffolk County, but these are found in far eastern sections of the county (especially coastal areas of the North Fork). According to conversations with Suffolk County Water Authority (SCWA) personnel, the SCWA has not issued water use curtailments or bans in decades. The project does not expect to have to institute a drought regime.

If a drought regime were instituted, the project would comply with the same requirements as other industrial users. Specifically, the project would be in a position to curtail water use for power augmentation if required by the SCWA. The threshold for this action would be whenever the SCWA informed the project that it could no longer guarantee a delivery capacity of 150 gallons per minute (gpm) or otherwise asked for a curtailment of water withdrawals from the distribution system. This would enable the facility to continue to generate electricity at peak efficiency during most of the fall, winter and spring seasons. A reduction in output could occur during the summer season if the ability to use inlet air cooling for power augmentation were curtailed.

During a temporary emergency condition (i.e., an infrastructure emergency such as a pipeline break), the facility would continue to operate through use of on site storage.

**Comment 95:** How much of the 40,000 to 80,000 gallons per day consumed by the project will be returned to the aquifer and what is the total gallons used for all purposes? (Seubert)

**Response:** As presented in Table 12-1 and Figures 12-1, 12-2, and 12-3 of the DEIS, the facility's water supply requirements are projected to range from 30 gallons per minute (gpm) or 43,200 gallons per day (gpd) to 56 gpm or 80,640 gpd. As shown on the preliminary water balance diagrams, water use would vary with variations in ambient temperature (i.e., summer vs. winter operating conditions) and type of fuel used (i.e., natural gas vs. low sulfur distillate).

The bulk of the facility's water needs are directed at replacing water lost to the atmosphere through evaporation. By maximizing internal reuse of process streams to minimize facility water supply needs, only a small fraction (i.e., 1 to 2 percent) of facility's makeup requirements would be returned to the aquifer.

**Comment 96:** The operation of the facility will produce an average of 5 gpm or 7,200 gpd of water that will require off site disposal. Why is it necessary for certain waste water to be carted off the site? What toxins will be in this water and where and how will it be transferred for treatment, and transported? How much carted waste water is expected? (Kepert, Seubert)

**Response:** As indicated in Section 12.4.4 of the DEIS, trench type floor drains would be used to collect and convey equipment and floor wash water (approximately 5 gallons per minute or 7,200 gallons per day) from the generation building to a

wastewater holding tank. In potentially oily areas of the facility, the floor drains would be directed to an oil water separator prior to discharge to the wastewater holding tank. The sludge/oil collected in the oil water separator would be managed off-site at a licensed facility. After passing through the oil-water separator, the floor drain wastestream is likely to contain low levels of oil and/or grease (i.e., less than 15 milligrams per liter [mg/l]), detergents or surfactants used for various cleaning/maintenance activities and low levels of suspended solids. The suspended solids concentration is expected to range from 10 to 30 mg/l. Remaining constituents in the wastewater are anticipated to be at concentrations approximately equivalent to the quality of the raw water makeup supply from the Suffolk County Water Authority distribution system. This applies to the following constituents or constituent groups: heavy metals, calcium, magnesium, iron, manganese, sodium, chloride, sulfate and phosphate. With respect to toxins, this waste stream may contain low levels of oil/petroleum hydrocarbons following treatment. In addition, it is expected that the pH of this wastewater will typically range from 7.0 to 8.5 standard units.

Caithness would obtain authorization to discharge the process wastewater streams generated at the facility (i.e., floor drains and off-line compressor washes) to a local sewage treatment plant on a hold and haul basis. The wastewater collected in the wastewater holding tanks would be transferred to a tanker truck on an as-needed basis for off-site disposal. Secondary containment would be provided for each transfer area to avoid a release to the environment in the event of a spill. The tanker truck would transport the facility's wastewater to the local sewage treatment plant for treatment. The wastewater generated at the facility is expected to comply with the sewer use limits and therefore no special treatment will be required for the facility's process wastewater at the local sewage treatment plant.

**Comment 97:** What cleaning agents will be used to clean the stacks, power plant, etc. and how will they be brought to, stored and handled at the plant and later removed off the plant? Please list all cleaning agents and their possible health and environmental impacts. (Seubert)

**Response:** The cleaning agents to be used during facility washes would be typical of those used in the power industry and would be non-hazardous in nature. The particular brand of the cleaning agents to be used during facility washes has not been selected at this time. All washwaters (i.e., floor drains, compressor washwater, etc.) would be collected in holding tanks for off-site disposal at a sewage treatment plant. The wastewater holding tanks and transfer areas would have appropriate secondary containment to minimize the potential for a release to the environment in the event of a spill. The cleaning agents would be brought to the facility in totes and stored inside in appropriate secondary containment.

**Comment 98:** The DEIS's conclusion that there will be no effect on electric infrastructure is not supported by a completed System Reliability Impact Study (SRIS). To avoid any adverse impacts on the electric transmission system, the Final EIS should indicate that an approved SRIS should be a condition precedent to the execution of the PPA. Moreover, any additional facilities necessary to accommodate the operation of the electric generating facility should be addressed in the Final EIS with an indication that any significant changes to the transmission system will be subject to further analysis in a Supplemental EIS. (DPS)

**Response:** The SRIS for the project has been prepared and submitted to NYISO for review and approval. NYISO's approval is currently anticipated to occur prior to the earliest potential execution date of the PPA. Sections 2.9 and 12.9 of the EIS have been revised to provide a discussion of the SRIS results relative to impacts to the transmission system due to the project and anticipated upgrades associated with the project's interconnection with the system.

**Comment 99:** DEC staff note the measures indicated in the DEIS that will be employed to reduce water use resulting in a typical average water consumption of 35 gallons per minute or 50,400 gallons per day for the facility. These measures include the use of an air-cooled condenser, a fin-fan cooler (similar to an automobile radiator) for auxiliary cooling of plant equipment and sub-systems, and recycling/reuse of HRSG blowdown and inlet air cooler blowdown. The DEIS indicates that the net savings through internal recycle/reuse of water will range between 40,000 to 50,000 gallons per day under typical operating conditions. (DEC)

**Response:** Comment noted.

**Comment 100:** The DEIS correctly indicates that components of the project (i.e., ammonia storage system and petroleum storage facilities) will require registration/licensing under the Chemical Bulk Storage Regulations (CBS) and the Petroleum Bulk Storage Regulations. The registrations and licenses must be obtained prior to operation of the new equipment. (DEC)

**Response:** Comment noted.

**Comment 101:** Although the FEIS does not need to include the actual design plans, please be aware that the Bulk Storage Supervisor for Region 1 should be contacted at the appropriate time and can provide comments on the design plans prior to commencement of construction so that any required changes can be made. (DEC)

**Response:** Comment noted.

## WATER RESOURCES

**Comment 102:** Our vernal ponds, wetlands, river streams, such as the Carmans River, are dramatically affected by weather fluctuations. Ponds dry for years explode from the deep ground freeze followed by snow cover, snow melt and rain. The next year the same amount of precipitation results in much lower pond length and dry stream days. The plant's 40,000 to 80,000 gallons of water use per day may not seem much of a draw, but it could alter the environmental effects to sensitive areas including the fragile Carmans River corridor, watershed and headwaters. How will the water draw of this project and those of the already approved projects, impact locally preserved lands, nature preserves, river corridors and the surrounding fragile ecosystem? (Seubert)

**Response:** As indicated in Section 12.3.3 of the DEIS, the Patchogue/Yaphank well field would likely supply most if not all of the project's water needs based on its proximity to the project site. The cross gradient distances to the freshwater reaches of the Carmans River from the Patchogue-Yaphank well field range from 9,000 feet northeast of the well field to just over 3.2 miles east of the well field. The recharge area for the Patchogue/Yaphank well field extends in a northwesterly direction from the well field (i.e., groundwater flows from northwest to southeast in the vicinity of the well field based on regional groundwater contour mapping). The freshwater reach of the Carmans River, which is fed by both groundwater and surface water runoff, is located northeast and east of the well field. As such, the freshwater reach of the Carmans River would not be affected by aquifer withdrawals from the Patchogue/Yaphank well field. A capture zone analysis was performed to further demonstrate that the incremental increase in groundwater withdrawals at the Patchogue/Yaphank well field following project startup would not substantially increase the width of the well field's capture zone. The approximate depth to the water table within the capture zone of the Patchogue/Yaphank well field exceeds 50 feet. With a minimum depth to groundwater of 50 feet, aquifer withdrawals would have no impact on environmental systems in the project's two-mile study area including the Carmans River, wetland area, the Pine Barrens or potential vernal pool habitats. A discussion of the capture zone analysis summarized in this response has been added to Section 12.6.1 of the DEIS.

**Comment 103:** The proposal is just outside the deep recharge Zone III, and protection of Zone VI serves to protect our South Shore Estuary, creeks, fragile bay, drinking water, fishing and tourist industry. A current geological survey of the project site is required to ensure that the Zone III characteristics and properties do not extend to the project site. Any approvals for the proposals should await a new health and environmental study that may redefine the Suffolk County's hydrogeological zones more accurately. Suffolk County, the Health Department, Water Authority, etc. are initiating a study of the hydrogeological zones and to

possibly redefine the hydrogeological zones. The Caithness DEIS would not be complete without these results. (Seubert)

Statements made in sections 3-6 and 3-12 of DEIS affirming the location of the Power Plant “located in the Hydrogeologic Zone IV” should be reevaluated. Our Association has in its possession, documents and reports, refuting the groundwater boundary lines of Hydrogeologic III, a Deep Recharge Area, referenced in the NYC 208 Waste Treatment Management Plan. They support the theory that the lines may well be further south, lying under the parcel Caithness proposes to build their plant. (Hurley)

**Response:** Appendix D to the DEIS includes correspondence from the Suffolk County Department of Health Services confirming that the project would not be located in or adjacent to the Groundwater Management (Hydrogeologic) Zone III. The Hydrogeologic Zones presented in the Long Island Comprehensive Special Groundwater Protection Area Plan and adopted in the County Legislation are the combined results of numerous studies conducted by local, state and federal agencies over the past 20 years. Neither LIPA nor Caithness is aware of any new plans for the Long Island Regional Planning Board to reestablish the zones at this time.

Nevertheless, the proposed project is designed to protect both groundwater quantity and quality as well as neighboring sensitive areas such as the Pine Barrens and Carmans River to the maximum extent practicable regardless of the hydrogeologic zone within which the project is located. The facility would be constructed and designed in accordance with the stringent requirements of Article 12 of the Suffolk County Sanitary Code, which is a design based regulation, and whose purpose is to ensure the safe storage and handling of all toxic and hazardous materials, including oil and chemical transfer procedures. The fuel oil tank design would also comply with the requirements of the DEC Major Oil Storage Facility (MOSF) license, which is required to be obtained by the project pursuant to Section 174 of the Navigation Law and 6 NYCRR Part 610 and 17 NYCRR Parts 30 & 32. These state and local regulatory programs require environmental controls to prevent spills or leaks and rapid countermeasures in the unlikely occurrence of a spill or leak. Due to design, safety, and management controls and systems for onsite bulk fuel storage, potential impacts to environmental resources would be minimized. A Spill Containment Countermeasure and Control (SPCC) Plan would be implemented irrespective of oil use, because the project would have tanks associated with emergency engines, lubricating and transformer oils, and similar equipment. All oil storage areas would be installed within double containment walls of dikes capable of holding 110 percent of the volume of the largest container. Alarms, monitors, and other physical and managerial devices would be common practice for oil storage at the project. With these measures being planned and implemented, natural resources would be adequately protected.

To minimize the net groundwater withdrawals from the aquifer, Caithness has incorporated an air-cooled condenser for heat dissipation into facility design rather than relying on once-through or evaporative cooling technologies. Caithness is proposing to recycle and reuse process wastewater where practicable, and Caithness site stormwater, demineralization rinse and drain down water, and sanitary wastewater would discharge into the ground in accordance with a State Pollutant Discharge Elimination System (SPDES) permit. These permitted discharges to ground would serve as recharge to the local aquifer system. A copy of the SPDES permit application filed with the DEC was provided in Appendix J of the DEIS.

To protect the groundwater quality of the aquifer, Caithness is proposing to collect all process wastewater that is not appropriate for recycling (with the exception of demineralization rinse and drain down water) at a hold and haul tank for proper offsite disposal. Because the demineralization rinse and drain water would be comprised of partially demineralized municipal water that would meet all groundwater discharge standards, Caithness is proposing to discharge this stream to the recharge basin in accordance with the SPDES permit. Furthermore, Caithness would develop and implement structural (i.e., secondary containment, oil water separator, etc.) and non-structural controls (spill control equipment, tank unloading procedures, routine inspections, etc.) to prevent stormwater contamination and the release of oils and chemicals offsite as part of a comprehensive Storm Water Pollution Prevention Plan and Spill Containment Countermeasure and Control Plan. A complete discussion of the structural and non-structural controls to be implemented onsite is included in Section 12.7.5 of the DEIS.

With the measures built into project design to reduce the facility's net water withdrawals from the aquifer and the facility's proposed structural and nonstructural best management practices to be implemented onsite to protect groundwater quality, the project would not impact the water quantity or quality of the aquifer or neighboring sensitive areas such as the Pine Barrens or Carmans River. A capture zone analysis demonstrates that the increased water withdrawals at the Patchogue/Yaphank well field would not substantially increase the width of the well field's capture zone and therefore the freshwater reaches of the Carmans River would not be affected. Furthermore, the groundwater depth within the capture zone exceeds 50 feet and therefore pumping at the Patchogue/Yaphank wellfield would not impact the Pine Barrens that have shallow root structures or potential vernal pools habitat.

**Comment 104:** A study of project pollutants' effects to the ecology, water quality and integrity of the Pine Barrens and Zone III should be conducted. Impacts to the Great South Bay, National Wertheim Wildlife Refuge and potential area growth as well as existing conditions need be more fully addressed.

The DEIS needs to address impacts far beyond the site; because emissions travel far. The DEIS needs to explain how farm animals, produce at the Suffolk County Farm, local horse farms, area endangered species will be immune to the pollutants emitted by Caithness. (Seubert)

The Caithness brochure that was handed out said that it's not near any parks or rivers. Yet the Carmans River is within the 2-mile radius of the power plant. I believe that the environmental impact statement needs to be further worked on so that we can get a true evaluation of the area along Carmans River. It's extremely sensitive and extremely important. The quality of the water as it would affect us and the quality of the air as it would affect the animal life, the birdlife and people are major concerns for us. (Dooley)

The Open Space Council has done quite a lot over the years to ensure the safety of the Carmans River, and they basically feel that the power plant will have a big impact on the Carmans Rivers and the headwaters of the river and the surrounding area and it could impact the quality of the air and the groundwater quality. (P. Seubert)

**Response:** An air quality study of the potential impacts to soils and vegetation was conducted for the proposed facility and included in Section 9.5.4 of the DEIS. The maximum modeled air quality concentrations, regardless of the location, were compared to the EPA's published screening concentrations (levels at which change has been reported in vegetation). Results of the study showed that the maximum modeled concentrations due to the facility would be well below the sensitive vegetation screening concentrations. Thus, the proposed facility would not adversely impact vegetation in the surrounding area.

Global weather change (or global warming) was also addressed in the DEIS in Section 9.6.8. As this analysis demonstrated, the proposed facility would contribute less than 1 percent to the New York state carbon dioxide (CO<sub>2</sub>) emissions inventory, less than 0.025 percent to the national CO<sub>2</sub> emissions inventory, and less than 0.005 percent to the global CO<sub>2</sub> emissions inventory. Thus, the facility would result in a minimal increase in global warming gases.

Further, since the proposed project site is located in a severe ozone non-attainment area, and VOC and NO<sub>x</sub> emissions each exceed the 25 ton/yr threshold, the project is subject to non-attainment new source review for both VOC and NO<sub>x</sub>, which are ozone precursors. Under non-attainment new source review the project is required to offset its emissions of these ozone precursors at a ratio of 1.3:1. This will cause about a 30 percent reduction in the emissions of ozone producing precursors relative to the emissions potentially added by the Caithness facility. The collective reduction in precursors ultimately translates to lower ozone concentrations throughout the region, of which local project area will benefit.

Air quality modeling was conducted to address the health-related impacts due to the facility. Both criteria pollutants and non-criteria pollutants were included in the study. The criteria pollutant impacts were compared to the NAAQS, which are health-based standards developed by the EPA. The non-criteria pollutant impacts were compared to the DEC annual and short-term guideline concentrations (AGCs and SGCs, respectively), which are health-based concentrations, presented in the DEC's Air Guide-1. Section 9.5 of the DEIS presents the criteria pollutant study, while Section 9.6.3 presents the non-criteria pollutant study. Results of both studies indicate that the facility would not have any adverse health effects on the surrounding area.

As discussed in Section 9.6.2, local impacts from acid precipitation from the proposed facility are highly unlikely because the process of converting sulfur dioxide and nitrogen oxide gases into their acid counterparts can take several days. During this time, the pollutants would have traveled hundreds of miles from the original source. Thus, the emissions from the facility would have little or no contribution to the acidity of the precipitation that falls on the surrounding area. Accordingly, emissions from the proposed facility would not be expected to adversely impact environmental systems, including the Great South Bay, the National Wertheim Wildlife Refuge the Carmans River, the Pine Barrens, and Hydrogeologic Zone III. A more detailed assessment of potential impacts to the Carmans River corridor and Pine Barrens has been added to Section 12.6.1 of the FEIS.

## TERRESTRIAL ECOLOGY

**Comment 105:** I'm very concerned about the clearing of the 28 acres. For no reason at all those woods would be taken down. (Seubert)

The proposed ecological restoration of the 28-acre clearing would result in a change in native vegetation. This is an adverse impact that has not been discussed. (Swanston)

**Response:** Approximately 53 acres of the 96-acre site would remain undisturbed, which includes a vegetated buffer around the facility itself. Approximately 28 acres of forested stands would be temporarily disturbed to support development of the construction laydown and construction parking area. The construction laydown area is required for the temporary laydown and storage of facility materials and equipment. A gravel parking area would be constructed to serve the approximately 375 construction workers and park construction vehicles when not in use.

No rare, threatened, and endangered species would be impacted within the site areas to be disturbed. As indicated on page 14-22 of the DEIS, according to a letter dated August 31, 2004, DEC indicated that there are no known occurrences of rare, threatened, or endangered species present on the site. The United States Fish and Wildlife Service (USFWS) indicated the same in a letter

dated September 10, 2004. These agencies' findings were field-confirmed during walk-through surveys of the entire 96-acre parcel conducted by an ecologist. Given the absence of rare, threatened, and endangered species on the site, no significant impacts would occur as a result of the clearing of any to all of the existing vegetation present within the project site, including the construction laydown and parking areas.

## CUMULATIVE IMPACTS

**Comment 106:** Other locations do not have the things that we have in this area. We already have high rates of cancer, high rates of asthma, among the highest, even higher than the Harlem asthma rates. (Grier-Key)

**Response:** The very conservative air quality simulation analysis of the proposed facility indicated the emissions from the facility would not result in significant air quality concentrations. Maximum predicted pollutant concentrations would be less than the EPA-developed SILs. As such, the impact of the facility is recognized to be negligible and insignificant, regardless of the state of the local air quality. As demonstrated through a rigorous air quality assessment, the facility would result in no appreciable additional air quality concentrations to the local area. This assessment is included in the DEIS and the project's air permit application. The conclusion of this analysis is that the background air quality within the local community would remain unchanged by the emissions of the proposed facility. This is without any consideration of the benefits provided by the project through the acquisition of ERCs and displacement of existing, less efficient, higher emitting plants. As such, it can be reasonably concluded that the proposed facility would not have any short-term or long-term effect on public health or the breathing ability of the local community population. High concentrations of air pollution have been known to exacerbate asthma. However air pollutants are not the only cause for asthma. Allergens are also an important triggering factor of asthma and include mold, pollen, animal dander, to name a few. The Caithness Long Island facility would minimize the air pollution component for asthma by using clean burning fuels and emissions offsets thereby reducing the net loading of pollutants in the region.

**Comment 107:** They say this whole thing is good for the region, but what about the people who live locally? With the fact that we have dumps, compost yards, major highways, etc., in addition to this proposed facility, all these things combined. I don't think it's fair that the working class has to have everything on their backs. It's just unfair that this is being thrown in this neighborhood. (Grier-Key)

This proposal has Long Island's landfill just to the east, Holtsville's dump to the west, recycling centers, Long Island Compost, transfer stations of garbage, construction and demolition debris centers, propane facilities, oil, storage and transport facilities, businesses, sand gravel separation, past and future Superfund sites, car storage, dismantling, and car crushing businesses. Many of these

enterprises are located less than 5,000 to 10,000 feet from the plant, and the cumulative effect could place current and future residents at needless risk. Pollutant interaction from all facilities requires scientific studies and discovery of what is in our local air before we move forward. There is also a thing called AIMBY, "Always in My Back Yard," we have many things affecting our community here and we don't need one more impact to it. (Seubert)

I've seen this area grow with the likes of Gershow. There is an inversion along Route 111 that even in the coldest part of the winter stinks unbelievably. This is just a small example of all the pollution that we have. A couple of garbage transfer stations are proposed in this. (Ott)

Certain hamlets cannot continually withstand negative impacts for the benefit of communities outside their hamlet. Identification and evaluation of these impacts must be contained in the DEIS. (Seubert)

**Response:**

Caithness Long Island recognizes that the local community has a local industrial base that may result in air emissions. However, based on air quality monitoring data recorded by both EPA and DEC, the local air quality does not exceed the ambient standards, and that, with the exception of the annual average for ozone and PM<sub>2.5</sub>, the air quality within the local community is considered good. Further, as explained above, the Caithness facility has demonstrated that its emissions would not result in significant air quality impacts to the local community. Additionally, the Caithness facility has demonstrated that trace emissions of any toxic compounds have been assessed and determined to be well below the DEC ambient standards.

Further, the operation of the Caithness facility would not result in objectionable odors. Due to the tall stack, air quality concentrations resulting from the facility, even during conditions of transient inversions, would be negligible since the facility emissions are emitted at a height well above the ground. This is in direct contrast to mulching and composting facilities that have their operations at ground level with no associated plume rise. Under such conditions nuisance odors may occur from composting and mulching, and garbage transfer stations. The Caithness facility cannot and would not perform any such composting, mulching or garbage transfer. Indeed, it would not be licensed to do so, since its purpose is to generate electricity.

Finally, the proposed facility would be located at a site that has been determined appropriate for industrial development in both the Town's comprehensive land use plan and its zoning ordinance. The comprehensive plan encourages industrial development south of the LIE. Further, Section 3.4 of the DEIS provides a comprehensive review of the project's compliance with local zoning requirements. The project site is located in the L-1 District, where power generation facilities are permitted by Special Permit. The level of compliance is noted for each applicable zoning requirement. This section also explains that the

project is required to obtain Special Permit approval from the Brookhaven Town Board and site plan approval from the Brookhaven Planning Board.

**Comment 108:** The DEIS does not adequately account for the combined effects of the facility and other local air pollution sources. The DEIS does not realistically address overall local air quality concerns because it does not include the local impacts of existing commercial and industrial facilities in the immediate vicinity of the proposed Caithness project. Air quality concerns of local residents relate to the high density of such commercial and industrial facilities in the immediate vicinity of the proposed Caithness plant. However, because these facilities are not large-scale combustion sources and because they may not have a major impact on levels of the four criteria pollutants at the DEC monitoring sites, their presence is not accounted for in the document. A true assessment of local air quality should include either an assessment of emissions from the small to medium size sources near the site or air quality measurements collected much closer to the proposed Caithness site. (Ames)

**Response:** Although the NAAQS for PM<sub>2.5</sub> is not yet fully implemented, a cumulative assessment of PM<sub>2.5</sub> levels near the Caithness site should be undertaken. A cumulative assessment of the criteria pollutants PM<sub>10</sub> and PM<sub>2.5</sub> should include fugitive sources of particulate matter such as local on-road and off-road truck traffic, emissions from nearby recreational off-road vehicle use, and operations at the nearby composting and sand and gravel facilities. Because the criteria pollutant ozone is not emitted directly to the atmosphere, it may be necessary to perform local air quality monitoring to fully assess ozone levels near the site. A one-year air monitoring program for critical air quality parameters (*e.g.* peak ozone and annual average PM<sub>2.5</sub> levels) could be employed to confirm the implicit DEIS assumption that criteria pollutant levels measured at the nearest DEC monitoring sites are representative of conditions in the near vicinity of the Caithness site. (Ames)

The air quality within the region of the proposed site is primarily influenced by the collective emissions of many upwind sources. Since the wind patterns are typically from west to east, the air quality monitors in Holtsville and other upwind stations were deemed adequate by both EPA and DEC to represent the air quality around the project site, and both agencies concluded that the proposed facility would not need to perform local air quality monitoring. Furthermore, the representative background PM<sub>10</sub> concentrations, which is to be considered a surrogate for PM<sub>2.5</sub> according to EPA guidance, that was obtained from the Eisenhower Park monitoring station in Nassau County is considered to provide a conservative estimate of the background PM<sub>10</sub> concentrations for the project location. The Eisenhower monitor is located in a highly urbanized area and is subject to the downwind effects of New York City, especially Queens County. Accordingly, the air quality concentrations due to minor and fugitive sources are recognized by the reviewing agencies to be included in the

background monitoring concentrations. It should also be noted that the DEIS addresses PM<sub>2.5</sub> in Section 9.6.1. The DEC background monitor, at the Babylon Monitoring Station, was utilized for that analysis. This station measures both major and minor sources of PM<sub>2.5</sub> emissions.

**Comment 109:** One-quarter mile north of the site is the proposed location of the Brookhaven Energy Project, a 580-megawatt natural gas fired combined cycle electric generating plant. Cumulative effects of both of these plants would further deteriorate air quality both locally and regionally. (Kepert)

**Response:** Section 16.2.2 in the DEIS discusses the cumulative effects of the proposed Brookhaven Energy Project and the Caithness Long Island Project. Table 16-2 presents the modeling results for this cumulative analysis and demonstrates that the combined effects of these projects will not result in significant air quality impacts. Therefore, the cumulative effects would not cause further deterioration of air quality either locally or regionally.

**Comment 110:** In the cumulative analysis, the following pollutants were not analyzed: PM<sub>2.5</sub>, total suspended particulates (TSP), ozone, and lead. We request a full cumulative analysis of all toxins and particulate matter. Air impacts of other smaller facilities such as the landfill, and asphalt plant in Holbrook should also be included in any cumulative impact analysis. (Kepert)

**Response:** The cumulative impact analysis did not assess ozone since this is a regional photochemical pollutant and would not be emitted by the Caithness facility. However, the precursors to the formation of ozone (VOC and NO<sub>x</sub>) were analyzed in detail. The Caithness facility would not emit lead in any significant quantity. PM<sub>2.5</sub> emissions were addressed by including the upwind sources as a cumulative contribution to the background for both PM<sub>10</sub> and PM<sub>2.5</sub>. See response to comment 108.

## **ALTERNATIVES**

**Comment 111:** In the alternative section, there is no analysis of alternative site selection within the 96-acre parcel. Alternative locations on the 96-acre parcel should be explored. (Liccione)

It will be right on our property line. We asked to move it to the east— southeast side of the property. That would put it either into the woods by a few hundred feet, it would be out of our sight, and more importantly to us, out of our hearing distance. (Vigliotti)

I urge that LIPA push the project to the eastern boundary of the property. The reason for this is because it will be less visible to the current property owners on Old Dock Road. (Convery)

Other sites within the 96-acre parcel need to be studied, preferable further east of Sills Industrial Park, in order to minimize noise and visual impacts. (Hurley)

**Response:** Section 18.8.1 of the EIS provides a summary of a number of potential site layouts on the 96-acre parcel that was considered by Caithness during the development of the project's engineering design. Caithness utilized a number of criteria to determine the preferred location of the facility within the 96-acre parcel.

First, Caithness sought to avoid locating the facility in an area where it would be precluded from utilizing oil as a back-up fuel. In the absence of a new firm natural gas supply, the availability of oil as a back-up fuel would ensure project reliability because it would allow the facility to operate during curtailments in natural gas supply in winter. This would also enhance the reliability to LIPA's system because it would ensure that Caithness is able to generate electricity during periods of peak winter demand. The availability of oil as a back-up fuel would also minimize environmental and cost impacts by protecting LIPA's ability to call on generation from a state-of-the-art facility at any time instead of relying on older, less efficient plants. Finally, the ability to utilize oil as a back-up fuel for up to 30-days per year enables LIPA to decrease the cost profile for the project's fuel supply when there are temporary spikes in the price of natural gas.

Second, Caithness sought to locate the facility within the Town's Empire Zone. Caithness structured its price proposal to LIPA such that any benefits realized due to the facility's location within the Empire Zone would be passed along to LIPA and its customers. As described in Chapter 7 of the EIS, these benefits include relief from local real property taxes and the State portion of the sales tax on equipment and services purchased for the project. Notably, under the Empire Zone program, local real property taxes are paid when due and then reimbursed by the State. Thus, there would be no loss in revenue to any local taxing jurisdiction.

Third, consistent with the other criteria, Caithness sought to locate the facility on the 96-acre parcel such that it maximized, to the extent practicable, the distance between the facility and sensitive receptors locations such as residences.

As described in greater detail below, Caithness first determined that locating the facility on the southern portion of the 96-acre parcel is preferred because locating the facility on the northern portion would preclude on-site oil storage for use as a back-up fuel. This would preclude facility operation during periods of natural gas supply curtailment as experienced on Long Island in recent winters and thereby reduce the reliability of power supply during periods of peak winter demand and LIPA's ability to displace older, less efficient plants. In addition, the Town's Empire Zone does not extend to the northern portion of the 96-acre parcel; thus, Caithness would not be able to pass along Empire Zone benefits to LIPA and its customers if the facility were located on the northern portion of the parcel.

Caithness also assessed the feasibility and desirability of relocating the facility from its proposed location to the east side of the southern portion of the 96-parcel. As described in greater detail below, relocating the facility in this way is not preferred because: (1) the facility would be closer to receptors to the east of the facility (e.g., residences), which are considered “sensitive”; (2) the EIS demonstrates that impacts experienced within the Sills Industrial Park would not be significant; thus, any benefit to these receptor locations would be negligible if the facility were relocated to the east; and (3) relocating the facility to the east would also place it outside the Empire Zone; thus, no Empire Zone benefits would be available.

*Northern Portion vs. Southern Portion of 96-acre Parcel*

Locating the facility at the southern portion of the 96-acre parcel is preferred for a number of reasons. First, the tax lots comprising the northern portion of the 96-acre parcel are adjacent to the boundary between Hydrogeologic Zone VI and Zone III. Hydrogeologic Zone III lies to the north of this boundary and is a designated Deep Recharge Area. Article 7 of the Suffolk County Sanitary Code protects Deep Recharge Areas by prohibiting the storage of any toxic or hazardous materials on tax lots that are within or directly adjacent to a Deep Recharge Area. Accordingly, the storage of low sulfur distillate oil on tax lots along the northern boundary of the parcel would not be permitted, which would effectively preclude locating a facility with dual-fuel operation capability on the northern portion of the 96-acre parcel. The feasibility of locating the facility on the northern portion of the parcel and oil storage on the southern portion was even considered. It was determined that the Sanitary Code’s stringent threshold criteria would preclude such an arrangement based on the volumes of oil that would be piped to the facility from the oil storage area to support oil-fired operation.

Second, the Town’s Empire Zone does not extend to the northern portion of the 96-acre parcel. As described in Chapter 7 of the EIS, the Empire Zone provides a variety of real property and sales tax benefits to qualifying projects. None of these benefits would be realized if the project were located on the northern portion of the parcel outside the Empire Zone.

A third reason for siting the proposed project on the southern portion of the 96-acre parcel was that a southern location would place the proposed facility proximate to nearby existing and developing industrial properties, thereby providing for a continuation of the orderly development of the project area and avoiding a fragmented development condition.

Fourth, locating the facility in the southern portion of the parcel would move the project closer to existing infrastructure located along Zorn Boulevard, thereby minimizing the costs associated with interconnecting to municipal services, which reduce overall facility development costs, and ultimately ratepayer costs.

*Eastern Side vs. Western Side of Southern Portion*

Subsequent to the determination that locating the proposed facility on the southern portion of the 96-acre parcel is preferred, Caithness considered alternate site plans to further optimize the facility layout to minimize the facility footprint, which would allow Caithness to minimize the area of disturbance and maximize buffer areas; comply with the Town of Brookhaven setback requirements; ensure future access by easement to an out-parcel located east of the project site within the 96-acre parcel; and guarantee the provision of adequate buffers, to the extent practicable, for nearby developments. Caithness also investigated the potential for relocating the proposed facility footprint further east within the southern portion of the 96-acre project parcel. To do so, the 15-acre project site would have to be located to the east of the easement mentioned above. See Figure 2.5.

As the EIS demonstrates, the proposed location of the facility would not result in any significant environmental impacts. Most notably, Chapter 10 of the EIS demonstrates that the facility, as proposed, would comply with the Town of Brookhaven's noise ordinance requirements. Further, Chapter 9 of the EIS demonstrates that the anticipated air quality impacts based on the proposed location would be insignificant. Finally, the analysis in Chapter 6 of the EIS, which among other things specifically addresses visual impacts that would be experienced at a number of viewpoints (including locations within the Sills Industrial Park that are not considered sensitive receptor locations under DEC's visual guidance policy), concluded that the facility would not result in significant visual impacts.

Also, since the release of the EIS, Caithness has refined its design to lower the Air Cooled Condenser (ACC) height and move the ACC farther away from the western property boundary. Specifically, this change has resulted in lowering the ACC by 5 feet and moving the western side of the ACC an additional 63.5 feet to the east (245.6 feet vs. 182.1 feet) and thus farther away from the western property boundary (i.e., adjacent to the existing Sills Industrial Park developments). This design change has allowed Caithness to further minimize the already insignificant impacts that would be experienced within the Sills Industrial Park without moving the facility closer to any sensitive receptor locations (e.g., residences) to the east. Thus, the proposed location of the facility on the western portion of the parcel would not result in any significant environmental impacts.

The site areas to the east and west of the access easement are approximately the same width. However, the criteria employed by Caithness to locate the facility militate against relocating the facility to the eastern side. First, an industrial park is not considered a sensitive receptor location from an environmental impact perspective. By contrast, relocating the facility to the east of the parcel would place it closer to highly sensitive receptors, such as the residences along

Yaphank Avenue and the Suffolk County-owned property where work-force housing and other community facilities may be developed. Although these parcels are not as close to the project site as the Sills Industrial Park, any increase in impacts to these sensitive receptors would be considered adverse in contrast to any perceived benefits at non-sensitive receptors in the industrial park. Thus, any perceived benefit experienced within an area that is zoned and developed for industrial use is substantially outweighed by increased impacts that would result at existing and future sensitive receptor locations to the east of the project site.

Second, relocating the facility to the eastern side would place it completely outside the Empire Zone. Thus, any benefits that would accrue to LIPA and its customers based on the facility's location within the Empire Zone would be lost in their entirety.

Finally, relocating the facility to the east would not change the facility's level of compliance with the Town's zoning requirements. As Chapter 3 of the EIS details, the facility would comply with all of the Town's zoning requirements with the exception of the height limitation, for which Caithness would require a variance for certain facility components. The same relief from the height limitation would be required if the facility was relocated to the east.

In view of the above, moving the plant site east to minimize already environmentally insignificant impacts to industrial receptors from its current proposed location must be balanced with the potential to increase environmental impacts to sensitive receptors, such as residences, located east of the 96-acre parcel and the economic impacts to LIPA's customers. Because moving the plant east provides no more than negligible environmental benefits to industrial parcels located on Sills Road but could provide environmental and economic disadvantages, relocating the project site east is not considered a preferred alternative.

Even if one completely ignored the foregoing adverse impacts of relocating the facility to the east, the additional cost required to relocate the project and the schedule delays independently outweigh any perceived benefits of relocation. The relocation effort would cause a substantial delay in the approval process (potentially up to one year), which would result in the project not being available to LIPA in 2008. As stated in an earlier response, the Caithness Project is necessary to provide the on-Island electric generation that LIPA projects to be needed by 2008 and thereafter to meet the growing on-Island power needs and the requirements of the New York Independent System Operator (NYISO). Further, the relocation and accompanying delay in the approval process would result in substantially increased permitting and engineering design costs to Caithness, as well as increased costs to LIPA and its customers. It would also result in lost tax revenue for the Town of Brookhaven and other taxing jurisdictions.

**Comment 112:** Where was Site 4 in the DEIS located? Why was it rejected other than closeness to residences? Why would site 4, Center Eastern Long Island, have the potential for significant adverse air quality, traffic, noise, and visual impacts, and the Yaphank site does not? (McConnell)

**Response:** As discussed in the DEIS, the specifics of the facilities proposed as part of LIPA's Request for Proposals (RFP) process cannot be disclosed because of confidentiality requirements requested by the proposers. However, Site 4 was one of the final candidate sites and received a detailed evaluation of its potential for significant adverse environmental impacts. This review determined that Site 4 did have the potential for significant adverse impacts in the cited technical areas. The environmental review conducted for the DEIS found that the Caithness proposal would not have any significant adverse impacts.

**Comment 113:** The only alternative sites offered were the ones that come to LIPA from proposals. We would like to see other sites outside our area. We have the Port Jefferson plant within ten miles. We have the Holtsville plant within four or five miles. Areas should be examined where the power is going to be used, mostly to the east. I'm sure there is plenty of land out there, and there would be very few impacts on it too. (Seubert)

**Response:** Through LIPA's siting of emergency generators and the simple-cycle (below 80 MW) combustion turbines since 2002 and through the RFP process to provide baseload capacity on Long Island by using a combined cycle power plant with state-of-the-art controls, LIPA is familiar with the limited number of potential sites on Long Island which have sufficient acreage to locate a combined cycle plant and are located close enough to necessary infrastructure to run such a plant. The alternative sites considered in the DEIS are those sites that underwent review by LIPA through the RFP process because those sites are the most suitable in terms of acreage and infrastructure to operate a baseload plant. LIPA specifically used the RFP process to solicit the widest possible variety of sites. The RFP process was open to all developers, and they were free to offer any site that would meet their requirements. The proposed ANP Brookhaven site and the Caithness project were the furthest east.

**Comment 114:** Why not build the plant in Riverhead, which has had the greatest increase in electrical use? If the Iroquois Gas Line has to be extended from Commack to Yaphank, why not continue it out to Riverhead? (McConnell)

**Response:** Several years ago, a preliminary proposal was put forth for a site in Riverhead. However, that proposal did not advance beyond the preliminary stage. Currently, LIPA is not aware of a site in Riverhead that is sufficiently large and has access to the necessary infrastructure to operate a natural gas fired combined cycle power plant. Finally, in the last solicitation, no developer proposed a site in Riverhead.

**Comment 115:** Why doesn't LIPA encourage more use of renewable sources of energy? A good example is the Green Power Program which we recently joined. (McConnell)

Combined with LIPA's Energy Efficiency and Demand Side Management Only Alternatives, LIPA's need for an additional plant on Long Island is questionable at best. (Kepert)

Why were renewable choices not included as alternatives? (Seubert)

**Response:** As discussed in sections 18.5 and 18.6 of the DEIS, LIPA has extensive programs to bring about the increased use of renewable sources of energy. These programs include wind turbines, solar power, and wave and tidal current sources. However, these sources are not sufficient by themselves to supply all of Long Island's electric needs. LIPA's analysis and NYISO's analysis of Long Island's needs both found that conventional on-Island generation capacity is needed in the near future. In a recent update, NYISO again has confirmed the need to site "significant generation additions, commencing immediately, to meet its capacity requirements between the years 2008 and 2011." NYISO, Power Trends 2005, April 2005 on page 7.

**Comment 116:** The DEIS does not contain an analysis of alternative stack heights. Therefore, it is impossible for either interested parties or governmental agencies such as the Town of Brookhaven to judge the benefits and costs of proposed stack heights. The DEIS should include such analysis so that local health impacts of various stack heights can be compared, and an informed judgment can be made as to the benefits and costs of various stack heights. (Kepert)

**Response:** The issue of how the stack height was determined is addressed in several sections of the DEIS. Section 18.8.2 specifically addresses the issue of alternative stack heights and explains that while the stack height was lowered to the greatest extent practicable, a "stack height of 170 feet was determined to be the minimum stack height required to ensure insignificant air quality impacts." Section 9.5.3(D) of the DEIS describes the cavity region modeling that was conducted to support this determination. Section 6.3.4 specifically addresses efforts that were undertaken to reduce the height of the plant, including the stack, to minimize visual impacts. Finally, Section 3.4.2 addresses the issue of the stack height in relation to local zoning variance requirements.

**Comment 117:** The Longwood Alliance requests that the FEIS compare the alternative of relying on the Neptune cable with the building of additional plants and their effect on Long Island's air quality. (Kepert)

The DEIS does not examine repowering and off-Island procurement from the Cross Sound cable and the Neptune cable before approving the Caithness plant. The Neptune cable with the additional power received via the Cross Sound cable should comfortably meet these requirements. Please explain the necessity of the Caithness plant. (Dittko)

Off-island sources offer additional energy choices, and it appears our current contracts/negotiations with off-island sources can provide necessary growth without Caithness. (Seubert)

**Response:** The LIPA Energy Plan demonstrates the need for a diverse portfolio of resources to meet Long Island's energy needs. This portfolio requires that the Neptune cable, the Cross Sound cable, and the Caithness plant are all available to meet future needs. These three resources together will provide a capacity margin that will allow for an existing plant to be taken out of service, in the event that a repowering is undertaken. Therefore, neither of the cables nor the repowering option can be viewed as an alternative to the Caithness plant.

**Comment 118:** We further request that the alternative of buying and repowering KeySpan's Long Island Plants be examined and the increase in MW which will be available due to repowering be identified, as well as the effect on the quality of the air. (Kepert)

**Response:** In order to repower a power plant, the plant must shut down for several years. Accordingly, repowering any power plant, including any of KeySpan's operating power plants, would result in a decrease in available electricity during the time period the plant is shutdown for repowering. Because new on-island generation is required by 2008, repowering during that same time period without installing the Caithness plant is not a realistic alternative. See also comment 141. It is important to note, however, that Caithness would facilitate repowering.

**Comment 119:** What predicated the decision to place the proposed plant at this site? (Dittko)  
The DEIS discusses in general why other potential sites were found to have presented concerns, some significant air quality, water discharge issues when the DEIS states they were essentially the same mechanical construction as Caithness. The DEIS needs to identify all specific issues that supposedly discounted the other communities so a fair comparison can be made. Alternative locations to the east must be evaluated as they will be the prime beneficiaries of the 350 megawatts. Lack of substantial cables, gas lines, transmission lines, fuel, power connections etc. cannot be an adequate answer as it is a self-perpetuating conclusion which will continually impact the same locations. (Seubert)

**Response:** Since the installation of the simple cycle units in 2002, LIPA has researched possible sites for power plants through out Long Island. LIPA used the RFP process to bring developers onto Long Island and find potential sites. Seven sites were proposed for the development of a combined-cycle power plant, and LIPA evaluated them using a number of criteria, including environmental impact, efficiency, and effectiveness in addressing LIPA's needs and cost. Three sites were evaluated in detail, and the Caithness project was found to best serve LIPA's needs to provide power to Long Island, while also minimizing potential

impacts to the environment. The Caithness site is the farthest east of the proposed sites. See also response to comment 111.

LIPA is constrained by its existing infrastructure. Studies and evaluations are ongoing to upgrade the existing infrastructure to meet future demands. However, all desirable upgrades cannot be done at the same time, but they need to be implemented over time.

**Comment 120:** Alternatives in the DEIS do not adequately address repowering of existing plants that are negatively impacting our environment. Re-powering can be accomplished in stages, off peak times as Sept. to June, partial closings of major generating sites as often more than one plant is sited at a location. (Seubert)

**Response:** LIPA is conducting a feasibility study regarding repowering one or more of the currently operating power plants on Long Island. However, repowering does not solve the need for additional on-island generation by 2008 nor is it feasible without additional new supplies, such as Caithness. See also response to comment 118.

#### **NATURAL GAS LATERAL**

**Comment 121:** The natural gas lateral is an integral component of this application. Without said lateral the Caithness Power Project could not operate. As stated in the DEIS under the “no action” alternative, “there would be no improvement to the distribution of natural gas on eastern Long Island that would be provided by the new natural gas pipeline lateral.” Minus Caithness, the lateral obviously would not be constructed. We believe that the analysis of any and all environmental effects incurred by the extension of the gas main to the Caithness site would be part of the environmental review of this Caithness Project, and by excluding such environmental review, Caithness has segmented the environmental impacts which will occur as a result of its proposal. (Kepert)

The Town of Brookhaven is also concerned that this project is being reviewed on a segmented basis perhaps in violation of SEQRA. The DEIS fails to include a detailed analysis of the impacts of the natural gas pipeline which will be required for the plant’s operation. The Town needs to analyze the potential impacts of the cost of the pipeline construction and the project’s demand for natural gas. Members of the Town of Brookhaven Town Board recently met with representatives of Iroquois who indicated that one of the three alternate plans for the natural gas pipeline would cut through densely populated residential communities. The options for the location of the lateral underscore the necessity for a combined, comprehensive SEQRA review of both the power plant and the gas pipeline proposals. (Liccione)

We believe that the DEIS should have included the effects of the proposed gas line necessary to power the plant. A separate DEIS amounts to segmentation, illegal under the State Environmental Quality Review Act. (Dittko)

The notion that the new natural gas pipeline or “lateral” that will travel north through 93 acres may be considered in a separate Environmental Impact Statement (“EIS”) violates SEQRA. The regulations require that the lead agency, if it believes that segmented review is warranted, clearly state the reasons and demonstrate that such review is no less protective of the environment. No such demonstration has been made in the DEIS. (Swanston)

Any additional environmental analysis related to the gas transmission pipeline lateral and interconnection facilities should be addressed in the siting analysis for the selected fuel gas pipeline facility pursuant to the National Environmental Policy Act or Public Service Law Article VII, as appropriate. (DPS)

**Response:** Improper segmentation has not occurred. As explained in Section 19.1 of the DEIS, the natural gas supply lateral that the project would use would need approval from either the Public Service Commission under Article VII of the Public Service Law or the Federal Energy Regulatory Commission (FERC).

To the extent the chosen alternative would require FERC approval (e.g., Iroquois line), as an interstate pipeline transmission facility, the proposed gas pipeline lateral would be regulated under the requirements of the Federal Natural Gas Act (NGA). An Iroquois lateral would require a certificate of public convenience and necessity issued by FERC under the NGA. If the NGA grants jurisdiction to FERC over a matter, its jurisdiction is considered exclusive. There is no legal basis to impose SEQRA’s environmental review requirements on an interstate pipeline proposal that is subject to FERC’s exclusive jurisdiction. However, it should be noted that an NGA lateral would be subject to the requirements of the National Environmental Policy Act (NEPA) as part of FERC’s review of the proposal. Thus, a FERC-lateral would be subject to environmental review under NEPA.

In addition, in the recent past, Eastern Long Island has suffered shortfalls in natural gas supply during winter periods, and this trend is expected to continue or worsen in the future unless additional natural gas supply is provided. Thus, additional capacity is needed for Eastern Long Island independent of the Caithness project. Thus if, for example, the Iroquois lateral option were used to supply natural gas for the Caithness Long Island project, the lateral would not be for the sole and exclusive use of the Caithness project, and would be available to others. Thus, the lateral would have value and utility independent of the Caithness project.

In addition, the analysis in the DEIS follows the approach employed in a prior proceeding for the Wawayanda Energy Center project that required a Certificate of Environmental Compatibility and Public Need pursuant to Article X (since expired) of the Public Service Law. The Wawayanda Energy project received an Article X Certificate in 2002.

Wawayanda Energy proposed that its natural gas supply for the project would come from an undeveloped interstate pipeline running from New Jersey to New York. Even though the pipeline would require FERC approval and therefore would not be subject to environmental review under Article X), a literature review of the pipeline was prepared under the Article X process to provide an overview of the environmental impacts that could be associated with the pipeline.<sup>1</sup> The Caithness Long Island SEQRA scope of work followed this model.

To the extent the chosen alternative would require approval under Article VII, SEQRA expressly excludes actions subject to Article VII, which imposes its own environmental review requirements.

Notwithstanding the foregoing, and in order to provide additional information responsive to the comments received, based on available information, Chapter 19.0 of the DEIS has been revised to provide a more detailed map level/literature review of environmental impacts associated with the natural gas supply lateral options. It should also be noted that potential environmental impacts associated with the new natural gas lateral within the 96 acres have been assessed in the DEIS.

**Comment 122:** It has come to our attention that on January 26, 2005 the LIPA Board of Trustees passed a resolution recognizing the Iroquois natural gas pipeline as the best option. The resolution authorizes LIPA to enter into an agreement with Iroquois for the pipeline. It is obvious that the project cannot operate as described in the DEIS without a gas pipeline and that LIPA has already chosen a preferred alternative. (Liccione)

**Response:** The purpose of the January 2005 LIPA Board resolution was for the Board to approve LIPA's entering into an agreement with Iroquois for Iroquois to undertake the appropriate environmental studies regarding such a proposed pipeline, including the appropriation of all necessary permits. LIPA has not chosen any of the alternatives discussed in Chapter 19 of the DEIS as the actual supplier of natural gas. At this time, LIPA is evaluating all alternative sources of natural gas for the Caithness project. It should be further noted that if Iroquois does receive all appropriate approvals to construct a new pipeline and such pipeline is constructed, Iroquois can supply natural gas to users other than LIPA.

**Comment 123:** A natural gas pipeline spur would have to be constructed which would leave the northeastern portion of the 96-acre site and follow LIPA's transmission right of

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<sup>1</sup> Article X projects were exempted from SEQRA review. ECL § 8-0111(5). However, the environmental review undertaken in an Article X proceeding was essentially equivalent to what would be required under SEQRA.

way. Such an extension will have environmental consequences particularly if it travels through hydro-geologic Zone III. (Kepert)

The town is concerned that the pipeline might encroach upon the Special Brookhaven Comprehensive Land Use Plan or the Central Pine Barrens area. (Liccione)

As the operation of the plant is dependent on a gas pipeline lateral, more information is needed re. the pipeline's impact on the Deep Recharge Area, which the plant must pass through. (Hurley)

**Response:** In response to comments received, and consistent with the map level/literature review conducted for the lateral options, potential impacts to hydro-geologic zones are addressed in greater detail in Chapter 19.0 of the FEIS.

**Comment 124:** Has the Iroquois pipeline, which ends in Commack, been approved to be built twenty-two miles to Yaphank, to this site? (McConnell)

**Response:** None of the gas pipeline lateral alternatives addressed within the DEIS has applied for or received approval to construct. As indicated on page 2-16 of the DEIS, it is contemplated that any new natural gas pipeline lateral would be developed by an entity other than LIPA or Caithness and would be available to the proposed project as well as other users in eastern Long Island. Any new pipeline project would require separate approval from either the PSC under Article VII of the Public Service Law or FERC under its NGA certificate authority.

**Comment 125:** The project is speculative and indicates no selection of a supply pipeline. This makes the project inadequate for public review because it is not possible to ascertain which pipeline will be selected and because each pipeline has different environmental impacts. (see p. 2-17). (Swanston)

**Response:** The commenter correctly notes that a natural gas lateral option has not been chosen. However, Chapter 19 of the DEIS presents three viable options for natural gas supply, and provides a map level/literature review of potential impacts associated with each option. Notwithstanding the possibility that each option may result in somewhat different impacts, the review indicates that the impacts are not likely to be significant and could be appropriately mitigated through the specific permitting process for the lateral. The environmental review process for the natural gas pipeline will have its own public participation requirements.

#### **ADDITIONAL COMMENTS**

**Comment 126:** What has happened to the Brookhaven Energy Project which is at 580 megawatts approved in August of 2002, which is a quarter mile north of this project? Has that been dropped or is that continuing? (McConnell)

## Caithness Long Island Energy Center

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**Response:** That project still has its approval from New York State Board on Electric Generation Siting and the Environment and could be built in the future.

**Comment 127:** Why was the KeySpan/ANP joint venture proposal not economically viable? (McConnell)

**Response:** LIPA analyzed the KeySpan/ANP proposal, compared it to other proposals received and concluded, based on a thorough analysis, that the Caithness proposal offered Long Island ratepayers substantially superior economic advantages

**Comment 128:** Is it possible to build another power plant in five, ten or twenty years in that same spot, being that you have ninety-six acres? (McConnell) What is the planned usage for the remaining acres? (Dittko)

Caithness seems to be reserving the right to develop the remainder of the 96 acre parcel. Clarification of future intent for the uses of the remainder of the 96 acre site needs to be provided. All setbacks must be met in light of future probable subdivision of the parcel. (Kepert)

What type of development is planned on the remainder of the 96-acre site. (Suffolk County)

The FEIS should provide a description of the plans for the remaining 81 acres of the site that will not be directly utilized by the project. This description should indicate how much area will remain as a permanent dedicated buffer, and include any plans for expansion of the facility or subdivision to allow for additional uses. (DEC)

**Response:** To date, there are no plans by either LIPA or Caithness as to what would be developed, if anything, on the rest of the 96 acres that would not be used as part of the Caithness Long Island project site. No subdivision of the 96-acre parcel is being proposed. To the extent that at some time in the future, a proposal to develop any or all of the remaining 83 acres is brought forth, that project would undergo its own separate environmental review.

**Comment 129:** We request an extension of the public comment period. (Hurley, Seubert, Malone, Essel, Lindemann, Convery) We request a substantial time span for evaluation of the proposal and the public hearings. We ask to return to square one and reopen the scoping session. (Seubert)

**Response:** Per the request of interested persons, the public comment period was extended by an additional three weeks. The public comment period originally was to run from March 30, 2005 through May 4, 2005, which is more than the SEQRA requirements for a 30-day public comment period. However, per the request of the Town of Brookhaven and other organizations and individuals, the public comment period was extended through May 25. LIPA believes the approximately two-month comment period has been sufficient, particularly

based on the number of comments LIPA has received on the DEIS. In addition, LIPA and Caithness have held several open houses and meetings with various local organizations prior to the release of the DEIS and during the public comment period on the DEIS.

**Comment 130:** The residents of Yaphank were not included in mailings and, as a result, did not have the opportunity to participate in the beginning stages of the SEQRA review process. (Hurley)

This group did not give us the correct address for where they were putting the plant. Therefore, we were not involved in the beginning process. (Essel)

Why hasn't your public outreach and participation program been more successful? Some people have gotten yellow cards, but we haven't gotten one. There's a lot of people that haven't gotten any mailings about this. I don't think there is any hotline. Was anyone from Alexan, the townhouses about a half-mile away, contacted or made aware of the project? (McConnell)

More extensive effort and contact to area residents, stakeholders and interaction with the Patchogue-Medford School District, Sachem, Longwood, local emergency services, need be included and comments referenced. (Seubert)

**Response:** Beginning in 2003, Caithness began to meet with representatives of government and the community to discuss plans for the project. Through May 2005, a total of 64 meetings were held with two dozen government agencies and elected officials (including the Suffolk County Police Department and the Yaphank Fire Department, which have jurisdiction over the project property), 18 different community groups (including Bellport-Hagerman-East Patchogue Alliance, the Medford Taxpayers and Civic Association, the Yaphank Taxpayers and Civic Association, and the Affiliated Brookhaven Civic Organizations), and the news media. LIPA and Caithness continue to work together on outreach to interested parties in the community.

Public notification of the scoping meeting on January 5, 2005, and the public comment hearing on April 20, 2005 was made by legal notices in *Newsday* and the *Environmental, News Bulletin*, display advertisements in editions of *Suffolk Life Newspapers* that are mailed to homes and businesses in the Town of Brookhaven, postings on the LIPA web site, and post card mailings to more than 6,000 homes and businesses near the project site.

The addresses for the post card mailings were derived from LIPA's own billing system to try to ensure accuracy of saturation mailing to the community within a two mile radius of the project site. In addition, the mailing went beyond the two mile radius to include a senior citizen apartment community to the southwest and the population center of Yaphank to the north.

**Comment 131:** Why was the appendix not included in the DEIS. (Seubert)

No appendices were supplied for interested parties. The DEIS thus provided is inadequate for review by the public. This violates the spirit and the letter of the State Environmental Quality Review Act, as the DEIS has not been fully made available as required by law. 6 NYCRR 617.9 (a) (1-5). (Swanston)

**Response:** Appendices were available to all interested parties. Hard copies of the Appendices were available at four public libraries. Electronic copies are available on LIPA's web site. Announcements were made at all public hearings and in public notices where copies of the Appendices could be obtained. LIPA received requests for the Appendices, and 10 hard copies and 5 CD copies were distributed. The hard copy of the Appendices is about 6 inches thick, weighs over 10 pounds and costs about \$500 to print and bind.

**Comment 132:** Why was the scoping site in the wealthy, sophisticated, distant incorporated Village of Bellport chosen? Why were not schools/public/private places chosen nearer to the site and nearer the population impacted? (Seubert)

**Response:** LIPA preferred to hold the public scoping meeting in the auditorium of a school in the South Country Central School District, as the proposed facility is to be located within this jurisdiction. An auditorium setting was preferred as most suitable for the purposes of the meeting, which was to have representatives of LIPA, Caithness and the public hear comments on the project scope. The Bellport Middle School, which was the site of the public scoping meeting, is about the same distance from the project site as other schools in the area.

To respond to concerns expressed by some members of the community about the location of the scoping meeting, LIPA scheduled the public comment hearing on the DEIS for the meeting room of the Yaphank Fire Department. The proposed facility is to be located within that Fire Department's jurisdiction.

**Comment 133:** Why was the project called North Bellport when first proposed for a sub-80 megawatt plant? (Seubert)

**Response:** There was no intent to mislead the public as to the location of the project. Irrespective of its name, the location of the project was indicated in numerous handouts and presentation materials made available to the public at community meetings and other public outreach events, as well as in the draft and final scope of work issued by LIPA as part of the SEQRA process. Prior to the Caithness project, another developer was pursuing a smaller power plant at the same location. That project was called the North Bellport Energy Center. Thus, there was already an announced connection to Bellport with respect to a prior proposal for this site. Further, when the Caithness project was first proposed, another power plant proposal was already known to be located in Yaphank. Thus, it was believed that utilizing "Bellport" in the name of the Caithness project would help avoid any confusion between the two. After Caithness was made aware of concerns over the name, Caithness decided to change the name

of the project to the Caithness Long Island Energy Center and the name of the project sponsor to Caithness Long Island, LLC.

**Comment 134:** As the lead agency and the parties most desirous of the Caithness Power Plant, it behooves LIPA/Caithness to lend credibility to the process by providing financial resources for a more transparent open, non-bias scientific “review.” (Seubert)

**Response:** It is not normal practice to provide funding to outside groups during the SEQRA environmental review process. This would cause an undue burden on the LIPA rate payers. LIPA has committed substantial resources to ensure that this environmental review is sound and has a scientific basis for all statements made and analyses contained in the DEIS.

**Comment 135:** The existing KeySpan baseload plants have outlived their life and all of those plants should and must be retrofitted. In order to do that, we need to put a baseload plant on Long Island online so that possibly one of those plants at a time can come down and be replaced with a combined cycle plant. (Kennedy)

It would make more sense to repower the older plants and to make better use of the Shoreham property. (McConnell)

Guarantees of shutting down existing power plants and retrofitting current inefficient plants ought to be a requirement of this proposal. We have 600 some odd megawatts coming in from New Jersey and 300 to 400 coming in from Connecticut. We have plenty of time now to do what’s right and plenty of time to do a long study of this project. (Seubert)

**Response:** LIPA continues to study the desirability of repowering one or more of the power plants currently operated by KeySpan. However, the purpose of the Caithness project is to provide necessary on-island generation to meet the 2008 NYISO standards and the predicted shortfalls in on-island generation as a result of continued demand growth on Long Island.

**Comment 136:** The lead agency’s role is to review the document, to declare it is complete, to say that it thinks all of the information is there, and then that lead agency is to, as a disinterested third party, review the comments and evaluate them as any board or government body would. For the lead agency to be advocating for a document in a DEIS hearing is something I would say is unusual. (Liccione)

The Central Bellport Civic Association objects to the fact that LIPA is both the sponsor and the lead agency and has misled the public and continues to omit from public outreach members of the affected communities. Additionally, LIPA has a fiduciary relationship with many of the local environmental groups that precludes their participation. (Malone)

**Response:** LIPA is the appropriate lead agency for the project as it is the agency principally responsible for undertaking, funding and approving the proposed action. All the

other involved agencies consented to LIPA's serving as lead agency under SEQRA for the Caithness Long Island Energy Center.

It is true that LIPA has done considerable outreach on the Caithness project because LIPA recognizes, as have other agencies, that there is a need for reliable and clean electric generation on-island. LIPA, through its RFP process, has reviewed many power plant proposals and believes the Caithness project is the one that minimizes environmental impacts, provides clean and reliable electric power necessary to serve the LIPA grid and is one that would be most economical to LIPA's ratepayers. However, LIPA has not made a decision to proceed with the Caithness project as it is still evaluating the environmental impacts of the project and alternatives to the project. Nonetheless, LIPA does believe that public meetings, presentations, open houses and the like are essential so that the public has the appropriate information to comment on this important project. LIPA as a public entity does not believe it should do nothing but review a DEIS and determine it complete as suggested by the commenter; LIPA has a much greater responsibility to its public and wants the public to be fully informed about a project so that the public can provide comments and assist LIPA in its evaluation of the project.

**Comment 137:** The study area should be extended. The whole study area should be in five miles. That would include North Bellport, East Patchogue, Patchogue, Holtsville, and even Bellport Village. The radius area of the project needs to include the Holtsville area. Area residents of the Medford community are at the confluence of the Holtsville plant, the proposed Caithness plant, and the Port Jefferson plant. Cumulative impacts to all communities from Bellport, east, west, south and north to Yaphank need be included. The DEIS radius center point ought to be defined and radius expanded. (Seubert)

**Response:** The study area defined in the project's SEQRA scope of work was established at two miles as the potential impacts of the facility would primarily occur within a two-mile radius from the project site. In specific instances where impacts could reasonably be expected beyond two-miles, the SEQRA scoping document required a larger study area. For instance, air quality modeling conducted for the project addressed an area of 15 kilometers from the project site. Additionally, LIPA selected 10 miles as the required large source cumulative impact study as it was determined that the potential for significant cumulative air quality impacts associated with operation of the project, if any, would be anticipated to occur within a 10-mile radius of the facility, rather than the primary two-mile study area.

**Comment 138:** There are no guarantees or agreements that the dirtier plants will be running less as a result of this project. Displacement doesn't tell what happens to hundreds of tons of pollutants that are emitted. (Malone)

There is no guarantee that the health of the environment will improve with the construction of Caithness. (Kepert)

How will the Caithness project ensure our area will have healthier air? LIPA offers a displacement theory that is speculation by the applicant. There are no assurances that other Long Island plants will operate less or close down and bend to cheaper and safer gas fired plants. (Seubert)

**Response:** The heat rate of the proposed Caithness plant is far better than the rates found at the older electric generating plants. Therefore, when it is bid into the electric system, it would be less expensive than the older plants and would be selected to generate electricity before the older plants. However, during periods of peak demand, all plants may be needed to operate. Computer simulations project that emissions of SO<sub>2</sub> and NO<sub>x</sub> would be reduced by the operation of Caithness.

**Comment 139:** It is Longwood Alliance's understanding that LIPA has verbally agreed to the following: First, purchase needed power from the Caithness Plant prior to purchasing from other plants, and secondly, to reduce the amount of power purchased from both the Northport and Port Jefferson's plants by the amount of megawatt supplied or purchased by Caithness. We have a third request/question. Can KeySpan sell the power, no longer demanded by LIPA, into the grid and off island? If the answer to this question is yes, we would request that LIPA agree to purchase both plants and place them on a schedule for repowering. (Kepert)

**Response:** The Caithness plant would be the most efficient plant on Long Island, and its operation would substantially reduce the operation of KeySpan's older, less efficient generating plants on Long Island, formally owned by LILCO. LIPA has a contract for the purchase of all power from KeySpan plants on Long Island, including Northport and Port Jefferson. This contract gives LIPA the right to all of the power output from the plant and to determine when to run the plant. It is LIPA's current practice to sell power from the KeySpan plants off-Island when it is economical to do so and consistent with environmental requirements. However, because these plants are relatively inefficient, the off-Island sales have been and are expected to be minimal.

LIPA is continuing to study repowering of the older Long Island power plants.

**Comment 140:** Fire Protection, evacuation are segmented. Please list all electric lines, poles and transmission sub-station recently improved in our area, it appears the upgrades can be construed as augmentation for the Caithness project and a major segmentation of the project without environmental considerations which attempts to allude inclusion in the process. (Seubert)

**Response:** A switchyard to support the Caithness project would be built in the northeast portion of the 96-acre parcel, and the impacts of this switchyard were addressed in the EIS. The transmission improvements referred to in the comment are not

related to the Caithness project; no upgrades to the LIPA system have been undertaken at this point in time for the Caithness project.

**Comment 141:** The Long Island Mid-Suffolk Business Action is interested in repowering the KeySpan plants. These are old, very polluting plants by comparison to this new technology. In order to do that, you have to have new power facilities in place so you can close down those plants, take down the infrastructure and build it again in a new and improved combined cycle facility. With a plant like this, it would probably get us a step further and be able to do that removal of some of those old plants. This project is a key element in a larger picture where I think the community will benefit. (Fazio)

**Response:** Comment noted.

## **C. LIST OF PERSONS COMMENTING**

### **ORAL COMMENTS**

Kevin Rooney, Oil Heat Institute of Long Island (Rooney)

Harold Adkins (Adkins)

John McConnell (McConnell)

Charles F. Ott (Ott)

Georgette Grier-Kay (Grier-Key)

Connie Kepert, Longwood Alliance (Kepert)

Don Seubert, Medford Taxpayers & Civic Association (Seubert)

Scott Convery (Convery)

Carol Dooley (Dooley)

Pat Seubert, Open Space Council (P. Seubert)

Herb Davis, Board of Fire Commissioners, Yaphank Fire Department (Davis)

Maureen T. Liccione, Esq., for Brookhaven Town Board (Liccione)

Michael Ames, Cambridge Environmental (Ames)

Fran Hurley, Yaphank Taxpayers & Civic Association (Hurley)

Ernest Fazio, Long Island Mid-Suffolk Business Action (Fazio)

Anthony Vigliotti, Sills Industrial Park Association (Vigliotti)

Miles Malone, Central Bellport Civic Association (Malone)

Nanette Essel (Essel)

Barbara Lindemann (Lindemann)

### **WRITTEN COMMENTS**

Mitchell Pally, Long Island Association, April 6, 2005 (Pally)

Maureen Liccione, Esq. (representing Town of Brookhaven), April 7, 11, 15, 19, and May 25, 2005 (Liccione).

Dennis Buzzelli, undated (received April 22nd) (Buzzelli)

Steven Blow, State of New York Department of Public Service, April 29th, 2005 (DPS)

Luana Tomaine, May 1, 2005 (Tomaine)

John McConnell, May 7th, 2005 (McConnell)

Connie Kepert, Longwood Alliance, May 16, 2005 (Kepert)

Steven Schneider, P.E. (representing Town of Brookhaven), May 24, 2005 (Schneider)

Douglas Dittko, The Affiliated Brookhaven Civic Organization, May 24, 2005 (Dittko)

Fran Hurley, Yaphank Taxpayers & Civic Organization, May 25, 2005 (Hurley)

Michael Ames, Sc. D. (representing Town of Brookhaven), May 25, 2005 (Ames)

Don Seubert, Medford Taxpayers & Civic Association, May 25, 2005 (Seubert)

Kevin Kispert, New York State Department of Environmental Conservation, May 25, 2005 (DEC)

John Hecklau (representing Town of Brookhaven), May 23, 2005 (Hecklau)

Samara F. Swanston, Watchperson Project, May 25, 2005 (Swanston)

Peter K. Lambert, Suffolk County, May 19, 2005 (Suffolk County)

Steven Blow, State of New York Department of Public Service, May 20, 2005 (PSC II)

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