CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS
AUGUST 6, 2001

NEW YORK STATE
BOARD ON ELECTRIC GENERATION
SITING AND THE ENVIRONMENT

IN THE MATTER	:	
- of the -	:	
Application of Glenville Energy Park, L.L.C., for a Certificate of Environmental Compatibility and Public Need to construct and operate a 520-megawatt natural gas-fired combined cycle combustion turbine electric generating plant in the Town of Glenville, Schenectady County, N.Y.	:	Case 99-F-1835

THE PARTIES HERETO stipulate and agree as follows:

1. The Glenville Energy Park Project ("Project") is discussed in an Article X Preliminary Scoping Statement ("PSS") submitted to the New York State Board on Electric Generation Siting and the Environment ("Siting Board") in December 1999, by Glenville Energy Park, L.L.C. ("Applicant"). Applicant will perform or have performed the studies, evaluations, and analyses set forth in these stipulations to satisfy the application requirements of Article X of the Public Service Law. These stipulations are governed by Section 163 of the Public Service Law.

2. Parties hereto may limit their concurrence to one or more of the specific subject area stipulations by so indicating in a notation next to their signature. A signature without any such notation shall indicate concurrence in all of the specific subject area stipulations.

3. Those signing these stipulations agree that, as of the date hereof, the studies outlined herein constitute all the necessary studies concerning the subject matter of these stipulations that Applicant must provide to satisfy Section 164 of the Public Service Law. Except as provided herein, the signatories agree not to request Applicant to provide additional studies concerning the subject matter of these stipulations in connection with the Article X proceeding.

4. Under any of the following circumstances, Applicant agrees to perform an additional study or studies:

   (a) a new statute, regulation, or final, non-reviewable judicial or federal administrative

ruling or order is adopted subsequent to the date of these stipulations which necessitates such additional study;

(b) Applicant proposes a change in the Project or other inputs to the stipulated studies that would reasonably be expected to affect the results of the studies; provided, however, that a decision in favor of any particular alternative that Applicant has fully evaluated in the application will not be construed as a change in the Project;

(c) new information is discovered during the conduct, or as a result of the conduct of stipulated studies, that materially affects the results of the studies; or

(d) the Chairman, the Siting Board or the presiding examiner requires an additional study, evaluation, or analysis;

(e) the Department of Environmental Conservation ("NYSDEC") determines that the application is incomplete pursuant to the Uniform Procedures Regulations (6 NYCRR Part 621).

5. After the Chairman of the Siting Board's determination that the application complies with Section 164 of the Public Service Law, if any of the signatories, in any of the circumstances listed above, reach agreement with Applicant as to the scope and methodology of an additional study or studies, such agreement shall be set forth in a stipulation which shall include the agreement of Applicant to extend the statutory deadline, if necessary, for completion of the certification proceeding to provide sufficient time to permit such study or studies to be conducted and reviewed. If any of the signatories, in any of the circumstances listed above, are unable to reach agreement with Applicant, any such signatory shall be free to submit the matter to the presiding examiner for resolution and shall not be restricted from pleading that Applicant must perform an additional study or studies pursuant to a prescribed scope, methodology, study period and/or review period during the Article X proceeding regarding the subject matter of these stipulations.

6. For purposes of the studies and analyses set forth in the following stipulations, the Project shall include, among other facilities, the proposed switchyard associated therewith.

STIPULATIONS
TABLE OF CONTENTS

CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS AUGUST 6, 2001

DRAFT STIPULATION NO. 1: AIR QUALITY AND METEOROLOGY

The application to be submitted will include an examination of the impacts of criteria pollutants ("Criteria Pollutant Study") and non-criteria pollutants ("Non-Criteria Pollutant Study") from the Project on air quality. The components of the Criteria Pollutant Study will include identification of existing climate and air quality conditions and an assessment of Project technology and design, emissions, impacts and, if necessary, cumulative impacts. The components of the Non-Criteria Pollutant Study will include identification of pollutant emissions and an assessment of Project impacts. If required pursuant to paragraphs 3(f) and 3(g), below, the Non-Criteria Pollutant Study also will include an assessment of cumulative impacts and a multipathway risk assessment.

1. To the extent consistent with the following paragraphs contained in this stipulation, the methodologies, standards, and definitions for assessing air quality will follow procedures outlined, and use data contained, in the following documents:

   For performing air quality dispersion modeling:

   New York State Department of Environmental Conservation ("NYSDEC"), *Air Guide-26, NYSDEC Guidelines on Modeling Procedures for Source Impact Analyses* (December 1996).

   NYSDEC, *Air Guide-36, Emission Inventory Development for Cumulative Air Quality Impacts Analysis* (June 1995).

   United States Environmental Protection Agency ("USEPA"), *Guidance on Air Quality Models, EPA 450/2-78-027R (revised). Appendix W of 40 CFR Part 51.*

   Air Modeling Protocol to be established to the satisfaction of NYSDEC and New York State Department of Public Service ("DPS") Staff specifically for this case (hereinafter "Air Modeling Protocol"), and once approved, to be appended hereto as Attachment 1.

   USEPA, *Draft New Source Review Workshop Manual* (October 1990).

   NYSDEC, *Air Guide-12, Review of Major Sources*.

   Earth Tech, *A User's Guide for the CALPUFF Dispersion Model (Version 5),* 1999

   Argonne National Laboratory, *User's Manual: Cooling-Tower-Plume Prediction Code (SACTI Model),* EPRI CS-3403-CCM, April 1984.

For determining Good Engineering Practice (GEP) stack height and maximum creditable stack height:

> USEPA, *Guidelines for Determination of Good Engineering Practice Stack Height (EPA B Technical Support Document for the Stack Height Regulations)*, Document Number EPA-450/4-80-023R (June 1995).

For impacts on soils and vegetation:

> USEPA, *A Screening Procedure for the Impacts of Air Pollution Sources on Plants, Soils, and Animals*, Document Number EPA-450/2-81-078 (1981).

For quantification and assessment of the Project's contribution to the New York State total deposition of sulfates and nitrates, in accordance with the State Acid Deposition Control Act:

> Memorandum from Leon Sedefian to IAM Staff (March 4, 1993).

For performing visibility degradation modeling per USEPA Prevention of Significant Deterioration ("PSD") regulations:

> USEPA, *Workbook for Plume Visual Impact Screening and Analysis.* Document Number EPA-454/R-92-023 (October 1992).

For addressing Air Quality Related Values (AQRVs) impacts to class 1 areas:

> *Screening Procedure to evaluate Effects of Air Pollution on Eastern Region Wildernesses cited as Class I Air Quality Areas.* General technical report NF-151, U.S. Dept. of Agriculture Forest Service (1991).
>
> *Federal Land Managers Air Quality Related Values WorkGroup (FLAG) Draft Phase I Report (10/99).* Published by U.S. Forest Service, National Park Service, and U.S. Fish and Wildlife Service.
>
> *The Interagency Workgroup on Air Quality Modeling (IWAQM) Phase 2 Summary Report and Recommendations for Modeling Long Range Transport Impacts.* Document number EPA-454/R-98-019 (Dec. 1998).

For non-criteria pollutant ambient air limitations and benchmarks:

> NYSDEC, *Complete & HAP Listing of AGCs, SGCs, and Air Quality Standards* from the Toxics Assessment Section, Bureau of Stationary Sources.

USEPA's On-Line Integrated Risk Information System (IRIS) Database.

USEPA's Annual Health Effects Assessment Summary Tables (HEAST).

USEPA's National Center for Environmental Assessment (NCEA).

US Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR).

Risk-based ambient air criteria developed by the New York State Department of Health ("NYSDOH") or other recognized organizations.

CRITERIA AND OTHER REGULATED POLLUTANTS

2. The air quality Criteria Pollutant Study will include:

(a) an assessment of existing climate data (average and extreme conditions) for the region surrounding the Project obtained from local climatological summaries, meteorological data sets from nearby stations, and/or other sources, as described in the Air Modeling Protocol, required to determine the normals and extremes of wind speed, temperature, and precipitation;

(b) an assessment of existing air quality levels and air quality trends for criteria pollutants in the region surrounding the Project including air quality levels and trends taken from regional air quality summaries and air quality trend reports, as described in the Air Modeling Protocol;

(c) if the Project exceeds any Significant Impact Level ("SIL"), as defined in "New Source Review Workshop Manual, Prevention of Significant Deterioration and Nonattainment Area Permitting" (October 1990) , an existing major emission source inventory within the largest significant impact area, plus 50 kilometers, using data to be obtained from the NYSDEC and other relevant states. The inventory, if any SILs are exceeded, shall be included as an appendix to the Application and verified by the source state or per Air Guide 36 requirements and will be used in the modeling analysis in accordance with the NYSDEC approved Air Modeling Protocol. All information submitted in support of the inventory of nearby sources, including data verification worksheets per Air Guide 36 requirements, will become public information;

(d) an assessment of the impacts from quantifiable criteria pollutant emissions, including

those generated during construction of the Project;

(e) a control technology assessment for pollutants subject to PSD review and Nonattainment New Source Review promulgated under 40 CFR 52.21 and 6 NYCRR 231, respectively, to determine the best available control technology ("BACT") and lowest achievable emission rate ("LAER") for the applicable pollutants. The study assessment will include the evaluation of control alternatives for BACT included in the applicant's PSD application. A determination will also be made of the applicability of case-by-case maximum achievable control technology (MACT) for the combustion turbines per 40 CFR 63.43 and, if applicable, MACT will be proposed.

(f) pursuant to Air Guide 26, an assessment of an optimal stack height taking into consideration GEP stack height for the Project and air quality related values, visual impacts, and other considerations;

(g) an assessment of stack emissions of criteria and other regulated air pollutants, stack emissions being provided in hourly and annual estimates based on manufacturer's data, emission factors as published in USEPA Publication AP-42 (Compilation of Air Pollutant Emission Factors), design control efficiencies, and other data or specifications related to the design of the Project. All emission calculation methodologies will be clearly identified and examples provided;

(h) if required by 6 NYCRR 231, the number of NO_x and VOC emission offsets will be calculated and obtained at a 1.15 to 1.0 ratio in accordance with 6 NYCRR 231. Also a discussion of the applicability and requirements of the NOx Budget program pursuant to 6 NYCRR 204 and the federal Title IV acid rain program and related permit application to be submitted to NYSDEC will be provided;

(i) an assessment of the potential impacts to ambient air quality that may result from stationary source criteria pollutant emissions from the Project, the modeling to be done in accordance with the Air Modeling Protocol. A computer file output of dispersion modeling results and input files will be provided to NYSDEC and DPS Staff, and other parties to the proceeding on request;

(j) an assessment of visibility impacts from stationary source emissions of NO_x and PM-10 from the Project, as described in the Air Modeling Protocol;

(k) an assessment of the Project's impacts to soils and vegetation that may result from stationary source emissions of the Project using USEPA screening criteria where appropriate and the air quality impacts from any industrial, commercial and

residential emissions source growth in the area resulting from the Project (see also the Stipulation No. 9, "Terrestrial Resources" regarding air impacts on wildlife);

(l) an assessment of the predicted air quality impacts from the dispersion modeling analyses as compared to the significant impact levels and PSD increments and air quality standards;

(m) in accordance with the State Acid Deposition Control Act, an assessment of the Project's contribution to the New York State total deposition of sulfates and nitrates at defined sensitive receptors, as identified in the Air Modeling Protocol;

(n) an offsite-consequence analysis for ammonia release if ammonium hydroxide will be stored on-site for use in the proposed selective catalytic reduction ("SCR") system, including an analysis of an accidental release scenario for ammonia performed to meet the requirements of USEPA's regulations implementing Section 112(r) of the Clean Air Act.

(o) An assessment of the impacts of the Project on the Lye Brook Class I area of Vermont will be performed in accordance with procedures approved by NYSDEC, USEPA and the Federal Land Manager, as defined in the modeling protocol.

(p) submittal and the approval of a waiver from pre-construction monitoring issued by EPA, to the satisfaction of NYSDEC, DPS and USEPA staff prior to application submittal.

(q) A cumulative source impact analysis will be performed for any air pollutant for which the Project has impacts above significant impact levels. The additional sources to be analyzed to determine whether the Project, in conjunction with existing and proposed major sources, will cause or contribute to exceedances of applicable National or State ambient air quality standards (NAAQS and NYAQS) or PSD increments will include those identified as "nearby" existing sources, as defined in the USEPA Modeling Guidelines and NSR Workshop Manual, and by the Air Guide 26 procedures. The proposed inventory sources also will include all other proposed major electric generating facilities in New York State for which applications have been filed with the Chairman of the Siting Board. These additional existing and proposed sources will be limited to those located within a circular area defined by the significant impact area (SIA) of the proposed Project, plus 50 kilometers, at the time of NYSDEC approval of the Project's cumulative source inventory per Air Guide 36 requirements.

NON-CRITERIA POLLUTANTS

3. The air quality Non-Criteria Pollutant Study will include:

(a) a review of pertinent available data on non-criteria pollutants that may be emitted by combustion sources at the Project, including formaldehyde, ammonia, and any other non-criteria pollutants with emission factors such as those published by USEPA that may be identified after review of available emissions data; the specific source of each emission factor, including publication date, will be clearly identified and referenced in the application;

(b) a review of pertinent available data on non-criteria pollutants that may be emitted from the cooling tower, considering both evaporative and drift emissions. Non-criteria pollutants to be considered are those detected in Schenectady municipal water as delivered to the Project (the list of constituents being sampled for will be specified in the Air Modeling Protocol), any constituent of any cooling system additives that may be carried in the plume, or constituents that are likely to be present below detectable concentrations. These latter constituents will be identified by review of available data on water quality of the Schenectady municipal system, taken at or downstream of the Rice Road treatment plant, and other relevant available data. Potential concentrations of these constituents in the cooling tower will be estimated using reasonable assumptions, which will be described in full in the application.

(c) an assessment of the emission rates for non-criteria pollutants that may be emitted from the Project combustion sources and from the cooling system. All emission rate calculation methodologies will be described in detail, with appropriate equations and examples provided. These descriptions will either accompany or specifically be cited in, any corresponding tabulated emissions data presented in the application.

(d) an assessment of the potential ground level air and representative elevated receptor concentrations (short-term and annual averages) of non-criteria pollutants, quantified using the models and approach as discussed in the Air Modeling Protocol;

(e) a comparison of the maximum predicted air concentrations of non-criteria pollutants from the Project combustion sources and cooling system to benchmark air concentrations for both short-term and long-term exposures. These benchmark air concentrations will include 1) NYSDEC Short-term and Annual Guideline Concentrations (SGCs and AGCs), and 2) Health risk-based criteria, to include Reference Concentrations (RFCs) for noncancer effects and air concentrations associated with an incremental lifetime cancer risk of one-in-one million, obtained or derived from USEPA or other well-recognized organizations as summarized in item 1 of this stipulation.

(f) if the maximum predicted annual average air concentration of a non-criteria pollutant due to the Project exceeds ten (10) percent of the corresponding health risk-based benchmark air concentration for non-cancer effects or is equal to or exceeds the corresponding benchmark air concentration for cancer risk, Applicant will consult with NYSDOH staff to determine if there is a need for performing a cumulative air quality impact analysis, and if such an analysis is necessary, Applicant will perform the analysis according to an approach developed in consultation with NYSDOH and NYSDEC.

(g) if the maximum modeled annual average concentration of a non-criteria pollutant at any receptor point exceeds one (1) percent (persistent, bioaccumulative toxic chemicals) or ten (10) percent (other chemicals) of the corresponding health risk-based benchmark air concentration, the application will include an evaluation of the need for a multipathway risk assessment. If Applicant can demonstrate with adequate documentation to the satisfaction of NYSDOH that the modeled plume will not impact beef or dairy farms, the ten (10) percent screening factor may be used for all non-criteria pollutants. The application will include a multipathway risk assessment for those pollutants that exceed these criteria, are persistent in the environment, have the potential to accumulate in soil, water, fish, homegrown vegetables, or beef and dairy products, and, based on information available in the documents listed in the last paragraph of item 1 of this stipulation, are of toxicological concern via ingestion relative to the inhalation pathway of exposure.

(h) Applicant will contact the Centers for Disease Control (CDC) and the Cooling Tower Institute to obtain recommended guidance regarding appropriate control measures to prevent the potential growth of pathogens, such as Legionella, in wet, evaporative cooling systems. This guidance will be summarized and evaluated in the application. The application will also include the cooling tower manufacturer's recommendations for the control of pathogen growth and a discussion of the methods Applicant proposes to use to control pathogen growth in the cooling system. Based on guidance from the CDC and Cooling Tower Institute, Applicant will also propose an

appropriate monitoring program for the detection of pathogen growth during Project operation.

ADDITIONAL STUDIES

4. A stack plume visibility analysis and a cooling tower plume visibility analysis shall be provided, to include an assessment of the predicted length and frequency of any visible water vapor plumes created by the Project in accordance with procedures set forth in the Air Modeling Protocol. The results of this analysis will be used for the visibility assessment discussed in Stipulation No. 11, "Visual Resources and Aesthetics." Cooling tower modeling will also be conducted to determine the potential for impacts associated with fogging or icing on nearby roadways, on nearby residential areas, schools and parks, as well as on other tenants in the Scotia-Glenville Industrial Park and on the trucking operations in and out of the Scotia-Glenville Industrial Park and Corporations Park. Hybrid, parallel wet-dry and wet cooling towers will be addressed as part of this alternatives analysis. Such cooling towers will also be identified for use in the visual impact assessment outlined in Stipulation No. 11.

5. The application will include an assessment of dissolved and suspended solids deposition associated with cooling tower drift in accordance with the procedures set forth in the Air Modeling Protocol. This analysis will be used to assess the potential impacts of dissolved and suspended solids deposition on vegetation and materials, including automobiles and structures.

6. The application will include an assessment based on publicly available information of the global climate change issue associated with the emission of carbon dioxide and other global warming gases. The assessment will include: 1) a summary of the emission reduction goals of the Kyoto Protocols, 2) an estimate of the proposed facility's annual and life cycle emissions of carbon dioxide and/or other significant greenhouse gases, 3) a comparison of projected facility emissions with New York State, National and/or global emissions, and 4) a conclusory statement as to the probable importance of the proposed facility's emissions relevant to parts 1-3 above.

7. The application will include a summary of air quality impacts at receptors located at or near Scotia-Glenville Senior High School, Scotia-Glenville Junior High School, Sacandaga Elementary School, Schenectady Christian School, Lincoln Elementary School, Conifer Park Rehabilitation Center, Baptist Retirement Center, The Glendale Home, nearby residences and Maalwyck Park.

8. The application will include a plan to control fugitive dust during on-site construction.

9. The application will include a discussion of odors, if any, caused by Project construction and operation.

10. An Environmental Justice (EJ) analysis will be performed as part of the PSD application pursuant to Presidential Order 12,898, and using draft EPA Region II EJ guidance document, as referenced by EPA in an April 3, 2000 letter to NYSDEC.

11. At least 60 days in advance of submitting an application pursuant to Article X of the Public Service Law, the applicant shall submit to NYSDEC:

    (a) a PSD permit application (40 CFR Part 52); and

    (b) a permit application to construct and operate a new major stationary source (6 NYCRR Part 201).

    The information provided in the foregoing permit applications ("NYSDEC Air Permit Applications") shall be substantially the same as the information to be included in the Article X application relating to this Stipulation (Air Quality and Meteorology). The application must contain sufficient information and materials to comply with all applicable permitting requirements. At the time the NYSDEC Air Permit Applications are submitted to NYSDEC, the applicant shall also serve copies on the Departments of Public Service and Health, Town of Glenville, Village of Scotia, and Citizens Advocating Responsible Development. Applicant shall also make copies of the NYSDEC Air Permit Applications available at the Applicant's office located at 165 Freeman's Bridge Road, Scotia and the following libraries: Schenectady County Public Library, Glenville Branch of the Schenectady County Public Library, Scotia Branch of the Schenectady County Public Library, Rotterdam Branch of the Schenectady County Public Library, and the Town of Ballston Community Library. The purpose of this paragraph is to coordinate NYSDEC's air permitting review with the Article X process. Within 60 days after filing the NYSDEC Air Permit Applications, NYSDEC will advise the applicant whether the NYSDEC Air Permit Applications are sufficient for further review and make a completeness determination.

    Within 60 days of submission of the Article X application, or no less than 120 days after the applicant files the NYSDEC Air Permit Applications, NYSDEC shall make a determination of completeness or incompleteness with respect to the applications, and, if a completeness determination is made, issue a draft for the project. The Applicant understands that the Chairman of the Siting Board will not make a determination that the application complies with Public Service Law (PSL) Section 164 until advised by a NYSDEC attorney of NYSDEC's legal determination that the applicant complies with PSL Section 164(1)(f).

DRAFT STIPULATION NO. 2: CULTURAL RESOURCES

The application to be submitted will include a study of the impacts on cultural resources of the construction and operation of the Project ("Cultural Resource Study"). To the extent consistent with the following paragraphs contained in this stipulation, the methodology for assessing the potential impacts on cultural resources will be in accordance with standards and methods contained in the following documents:

New York Archeological Council, *Standards for Cultural Resource Investigations and the Curation of Archeological Collections in New York State* (1994).

Stipulation entitled *Visual Resources and Aesthetics* (established in this proceeding), which sets forth the procedures for assessing visual impacts, including impacts to cultural resources.

ARCHAEOLOGICAL RESOURCES

1. The Cultural Resource Study will include:

   (a) Phase IA studies for the Area of Potential Effect ("APE") within the Project site, and any area to be disturbed for new roadways, if any, and the electric, gas, water, and wastewater interconnections or improvements required to serve the Project, including a description of the methodology used for such studies;

   (b) with respect to the gas interconnection, the Phase IA study will be limited to a literature review;

   (c) Phase IB studies for those areas within the APE, within the Project site, and any area to be disturbed for new roadways, if any, and the electric, water, and wastewater interconnections or improvements required to serve the Project, if any, that warrant such studies, as determined after consultation with the New York Office of Parks, Recreation, and Historic Preservation ("OPRHP");

   (d) where warranted, Phase II intensive archeological field investigations will be conducted to assess the boundaries, integrity and significance of cultural resources identified in Phase I studies within the Project site, and any area to be disturbed for new roadways, if any, and the electric, water, wastewater and other off-site interconnections or improvements required to serve the Project. Phase II will be designed to obtain detailed information on the integrity, limits, structure, function, and cultural/historic context of an archeological site, as feasible, sufficient to evaluate its potential National Register eligibility. The need for and scope of work for such

investigations will be determined by the Project archeologists in consultation with OPRHP and DPS Staff.

(e) a summary of cultural resource impacts describing the nature of such impacts and demonstrating that the Project minimizes adverse impacts related to the interest of the state with respect to preservation of archaeologic and historic sites.

2. All archeological materials recovered during the Project cultural resources investigation will be cleaned, catalogued, inventoried and curated according to New York Archeological Council standards. To the extent possible, recovered artifacts, if any, will be identified as to material, temporal or cultural/chronological associations, style and function. The Project archeologists will provide temporary storage for artifacts until a permanent curatorial facility is identified.

3. The application will include an Unanticipated Discovery Plan that will identify the actions to be taken in the unexpected event that resources of cultural, historical, or archaeological importance are encountered during Project construction and operation. This plan will include a provision for work stoppage upon the discovery of possible archaeological or human remains. In addition, the plan will specify that the methodology used to assess any discoveries will follow the most recent *Standards for Cultural Resource Investigations and Curation of Archeological Collections in New York State*. Such an assessment, if warranted, will be conducted by a professional archeologist, qualified according to the standards of the New York State Archeological Council and the National Park Service at 36 CFR 61.

4. The application will include measures to be implemented to minimize adverse impacts to any significant cultural resources discovered during construction. The OPRHP Coordinator will be consulted throughout the investigation and DPS Staff will be informed of the status and results of the investigations.

HISTORIC RESOURCES

5. The Cultural Resource Study will also include:

(a) a field inspection of sites or structures listed on the State or National Register of Historic Places (including also an inspection of sites and structures eligible to be listed on these Registers, to the degree required by OPRHP) or other sites or structures specified by OPRHP within the Project Viewshed. For purposes of this stipulation, "Project Viewshed" shall be the area of potential visibility designated on the viewshed map prepared pursuant to the stipulation in this proceeding on Visual Resources and Aesthetics. An OPRHP Building – structure Inventory Form will be completed for each such property and submitted to OPRHP and DPS for review;

(b) project review data sheets and an analysis of impacts due to construction and operation of the Project on listed sites identified pursuant to paragraph 5(a) above, including photographs representing the potential views (toward the Project site) from the structures or cultural sites as well as photographs of such structures or cultural sites; and

(c) a discussion of potential mitigation measures, and an assessment of effects of mitigation on reducing adverse impacts on listed structures or other structures within the Project Viewshed identified by OPRHP.

DRAFT STIPULATION NO. 3: ELECTRIC TRANSMISSION FACILITIES

1. The methodology of the studies made to support the application that are discussed herein requires that they either be performed by, or under the auspices of, the New York Independent System Operator (NYISO), or be approved by the NYISO Staff before the application is filed.

2. The application will include an Interconnection Study ("Interconnection Study"), consisting generally of a design study and system reliability impact study. The Interconnection Study will include the necessary technical analyses (Thermal, Voltage, Short Circuit and Stability) to evaluate the impact of the interconnection of the Project on the Niagara Mohawk Power Corporation ("Niagara Mohawk") system, New York Independent System Operator ("NYISO") system, and the New England Independent System Operator ("NE-ISO") system and Pennsylvania-Jersey-Maryland ("PJM-ISO") systems. Both peak (summer and winter) and off-peak load conditions will be investigated, and extreme contingency scenarios will be evaluated at various load levels in accordance with the "NPCC Basic Criteria for the Design and Operation of Interconnected Power System," the NYISO Transmission Expansion and Interconnection Manual, and Niagara Mohawk's interconnection criteria and planning criteria. The analysis will include the currently available data regarding the requirements of these systems, and the study will be done in consultation with Central Hudson, Consolidated Edison, LIPA, NYPA, Niagara Mohawk, NYSEG, Orange and Rockland, Rochester Gas & Electric, NE-ISO, and PJM-ISO. The Interconnection Study will also include: the new facilities to be installed by the Project providing circuit connection between the Project site and Rotterdam Substation, as well as any other system upgrades required. The Interconnection Study will include a tabulation showing compliance/non-compliance with criteria of the following: Central Hudson, Consolidated Edison, Niagara Mohawk, NYPA, LIPA, NYSEG, Orange and Rockland, Rochester Gas & Electric, NYISO, PJM-ISO, NE-ISO, NPCC, and NERC.

3. Thermal Analysis: Calculate transfer limits for the base 2003 system for the following interfaces: UPNY-Con Ed, Central East, Total East, PJM-NY, and NE-NY. Evaluate the thermal performance of all pertinent system components impacted by the Project, such as transmission cables, transmission lines, and transformers during normal and emergency conditions established in accordance with the criteria listed in paragraph 2 above, to ensure that these components operate within their rated load capabilities.

4. Voltage Analysis: Evaluate the voltage performance of the system during normal and emergency conditions to ensure that established voltage limits are maintained at all pertinent system buses. Emergency conditions examined will include the most severe contingencies established in accordance with the criteria listed in paragraph 2 above. The voltage

conditions will be evaluated prior to and following those contingencies.

5. Stability Analysis: Evaluate the transient stability performance of the Project with the interconnected system during and after the most severe system disturbances established in accordance with the criteria listed in paragraph 2 above. Both peak and off-peak system load conditions will be demonstrated for the following contingencies including but not limited to:

   (a) a permanent three phase fault on any generator, transmission circuit, or bus section, with normal clearing;

   (b) a permanent phase to ground fault on any generator, transmission circuit, transformer or bus section, with delayed fault clearing;

   (c) loss of any element without a fault; and

   (d) a permanent phase to ground fault on a circuit breaker, with normal fault clearing.

   (e) loss of a double circuit tower.

   In addition, system stability during and after the following extreme contingencies (which exceed in severity the contingencies (a) through (e) above) will be analyzed to determine that there are no effects which may cause widespread system disturbance including but not limited to:

   (f) loss of the entire capability of a generating station,

   (g) loss of all lines emanating from a generating station, switching station or substation,

   (h) a permanent three phase fault on any generator, transmission circuit, transformer or bus section, with delayed fault clearing, and

   (i) the sudden loss of a large load or major load center.

6. Short Circuit Analysis: Evaluate the effect of interconnecting the Project on the fault duty levels of individual breakers at all 34.5kv, 46kv, 69kv, 115kv, 138kv, 230kv and 345kv substations for Central Hudson, Consolidated Edison, LIPA, NYPA, Niagara Mohawk, NYSEG, Orange and Rockland, Rochester Gas & Electric, PJM-ISO and NE-ISO. The analysis will be performed in accordance with the criteria listed in paragraph 2 above. Fault duties will be expressed in symmetrical interrupting values, and will include simulations for three types of faults:

(a) three phase-to-ground fault;

(b) two phase-to-ground fault; and

(c) single phase-to-ground fault.

Where the ratings of the existing breakers are not adequate to interrupt the fault duties determined, alternate mitigation measures will be determined or those breakers will be designated to be upgraded to adequate interrupting ratings.

7. Relay-Coordination: Identify any relay coordination changes that may be necessary and identify and provide such proposed changes to Central Hudson, Consolidated Edison, LIPA, NYPA, Niagara Mohawk, NYSEG, Orange and Rockland, Rochester Gas & Electric, NYISO, PJM-ISO, and NE-ISO. A description of those changes will be included in the application.

8. Auto-Reclosing: If auto-reclosing is applicable to the proposed facility and the interconnection to the transmission system, the applicant shall demonstrate that the machines to be used will withstand high speed auto-reclosing and submit a report demonstrating the ability.

9. Based on the aforementioned Interconnection Study, the application will include:

(a) an evaluation of the potential significant impacts of the Project and its interconnection to the New York State transmission system reliability at a level of detail that reflects the magnitude of the impacts. This evaluation shall include transmission systems under the NYISO, PJM-ISO, NE-ISO control and transmission systems under the control of the local utility;

(b) an analysis of the impacts of the Project and associated interconnection facilities on voltage, stability, thermal limitations, short circuit and transmission interface capabilities as prescribed in the NYISO or New York State Reliability Council ("NYSRC") and NPCC (as applicable) planning and operating standards;

(c) a discussion of the benefits and detriments of the Project on ancillary services and the electric transmission system, including impacts associated with reinforcements and new construction necessary as a result of the Project;

(d) an analysis of any reasonable alternatives that would mitigate adverse reliability impacts, if any, of the Project on the New York State transmission system; and maintain voltage, stability, thermal limitations, and short circuit capability at levels

consistent with standards promulgated by NERC, NYISO, PJM-ISO and NE-ISO, or the NYSRC, as applicable.

(e) an estimate of the increase or decrease in the total transfer capability across each affected interface. If a forecasted reduction in transfer capability across affected interfaces violates reliability requirements, an evaluation of reasonable corrective measures that could be employed to mitigate or eliminate said reduction will be included.

PRE-APPLICATION PROCESS

10. The draft scope of Interconnection Study and the draft Interconnection Study will be provided to system protection and system planning engineers of DPS Staff, NYISO Staff, Central Hudson, Consolidated Edison, LIPA, NYPA, NYSEG, Niagara Mohawk, Orange and Rockland, Rochester Gas & Electric, PJM-ISO and NE-ISO, for comments and review. Comments will be incorporated into the scope and a copy of the transmittal will be provided to DPS Staff.

11. Upon finalization, the scope of Interconnection Study will be provided to DPS Staff, NYISO Staff, Central Hudson, Consolidated Edison, LIPA, NYPA, NYSEG, Niagara Mohawk, Orange and Rockland, Rochester Gas & Electric, PJM-ISO and NE-ISO. A copy of the transmittal will be provided to DPS Staff.

12. The applicant will keep DPS Staff, NYISO Staff, PJM-ISO, NE-ISO, Consolidated Edison, Central Hudson, LIPA, NYPA, NYSEG, Orange and Rockland, and Rochester Gas & Electric advised of the Interconnection Study as it progresses.

13. DPS Staff may request technical conferences with the NYISO or its designee and the applicant, together, from time to time to discuss the Interconnection Study as it progresses.

14. All updates and draft reports will be provided concurrently to DPS Staff, New York transmission owners, NYISO Staff (including computer input data[1] and output cases that are used in performing the analysis).

1. Subject to confidentiality protections as appropriate.

15. Upon completion, the Interconnection Study will be provided immediately to DPS Staff, PJM-ISO, NE-ISO, and New York transmission owners ("TO"), and the Applicant will arrange a technical conference with Niagara Mohawk and DPS Staff to explain to DPS Staff the scope, inputs, assumptions, change cases and other relevant parameters of the Interconnection Study. This will be done prior to the filing of the Article X application.

CONSULTATION PROCESS

16. Upon receipt, the applicant will immediately provide to DPS Staff any response to the Interconnection Study.

17. The applicant agrees to provide documentation demonstrating that project meets the New York TOs' requirements and has been approved by the NYISO staff approval process, the project has consulted with the NE-ISO and the PJM-ISO and that all the necessary studies have been completed and are attached to the Article X application.

18. The applicant agrees to notify, or have NYISO notify, the PJM-ISO and NE-ISO about the Project and work cooperatively on any joint studies with those ISO's that are required.

19. The applicant agrees to provide to DPS Staff concurrently copies of any draft or final studies submitted to those ISO's as well as any computer input data and output data. Comments provided by those ISO's will be provided to DPS Staff as they are received by the applicant.

CONFIDENTIALITY

20. Nothing herein shall prejudice the applicant's ability to formally invoke trade secret protection pursuant to 16 NYCRR §§ 6-1.3 and 6-1.4 by submitting the information to the presiding administrative law judge along with the applicant's reasons why the information should not be disclosed to parties other than DPS Staff. If trade secret protection is invoked, the applicant will cooperate with DPS Staff in obtaining a protective order so that DPS Staff may have access to the information without delay.

ELECTRIC AND MAGNETIC FIELDS

21. The application to be submitted will include an engineering electric and magnetic field analysis performed by a Professional Engineer licensed and registered in New York State. The analysis, to be certified by the Professional Engineer whose signature and official seal are attached, will include all input and output data showing that operation of the proposed interconnection to the electric grid under summer normal, winter normal, and short term emergency (STE) loading conditions will comply with the (a) Public Service Commission's applicable electric field strength standards, as set forth in Opinion 78-13, and (b) with the applicable provisions of the Commission's Interim Policy Statement on Magnetic Fields, dated September 11, 1990. Input data means a tabular listing of all the input parameters necessary to model the EMF levels in computer simulations. Output data means all the printed graphs and tabular data produced as a result of performing computer simulations in support of the application.

OTHER

22. Subject to the Applicant's right to invoke trade secret status, the application will include a description of the status of negotiations and copies of agreements with municipalities, companies (including Niagara Mohawk) or individuals for transmission of power from the Project.

DRAFT STIPULATION NO. 4: LAND USES AND LOCAL LAWS

LAND USES

1. The application to be submitted will include a study of the land uses in the vicinity of the Project ("Land Use Study"). The Land Use Study will include:

   (a) a map of all existing land uses within a two-mile radius of the Project site, including representation on an aerial photograph;

   (b) a map of existing zoning districts within a two-mile radius of the Project site, including a description of the permitted and prohibited uses within each district;

   (c) a map of all publicly known proposed land uses within a two-mile radius of the Project site, gleaned from interviews with State and local planning officials, from Applicant's public involvement process, or from other sources;

   (d) a qualitative assessment of the compatibility of the Project with existing, potential and proposed land uses within a two-mile radius of the Project site. In addition to a general evaluation of land use compatibility, this assessment will address the short- and long-term effects of Project-generated noise, odor, traffic and visual impacts on the use and enjoyment of those areas for their current and planned uses. Specific sensitive land uses to be evaluated include:

      - Scotia-Glenville Senior High School
      - Scotia-Glenville Junior High School
      - Sacandaga Elementary School
      - Maalwyck Park
      - Erie Canal Corridor (including Mohawk-Hudson Bikeway)
      - All residential areas immediately abutting Route 5 in the study area;
      - Lincoln Elementary School;
      - Schenectady Christian School;
      - Residential areas along Vley Road between its intersections with NYS Routes 5 and 147;
      - Collins Park; and
      - Flint House;

   (e) an analysis of the consistency of the proposed Project with the following land use plans where applicable to the proposed Project:

- Town of Glenville Comprehensive Plan;
- Village of Scotia Central Business District Master Plan;
- New York State Canal Recreationway Plan;
- Town of Rotterdam Draft Comprehensive Plan (once available);
- Intermunicipal Watershed Rules and Regulations;
- Downtown Schenectady Master Plan; and
- Comprehensive Economic Plan, Schenectady, New York;

(f) a qualitative assessment of the compatibility of new roadways, if any, and the electric, gas, water, wastewater and other off-site interconnections or improvements required to serve the Project, with existing, potential and proposed land uses within a one-mile radius of such improvements if the improvements are freestanding above ground or attached to existing structures and within 1,000 feet of such improvements if the improvements are constructed underground;

2. In accordance with Section 1001.7(b) of the Rules of the Siting Board, the application to be submitted will include a description of the insurance and the financial resources available to restore any disturbed areas of the Project site in the event the Project is abandoned, cannot be completed, or is decommissioned. Applicant will also provide in the application a plan for the decommissioning of the Project site. The application to be submitted will include:

   (a) a statement of the performance criteria proposed for site restoration or decommissioning;

   (b) a discussion of why these performance criteria are appropriate;

   (c) a demonstration that the financial resources available for restoration or decommissioning are adequate to restore the site to the condition specified in the performance criteria; and

   (d) a description of any security fund or insurance in place or to be obtained, and the financial resources available to Applicant in the event that either the Project cannot be completed, or that the Project must be decommissioned.

3. The application will include a summary of Applicant's American Society for Testing and Materials ("ASTM") Phase I Environmental Site Assessment, and any other environmental site assessment studies conducted by Applicant, for the Project site.

RECREATION

4. After consultation with the appropriate state and local agencies, the application to be submitted shall include an identification and analysis of any recreational land uses, including

the Mohawk River (to be analyzed for impacts to fishing, swimming, recreational boating and potential commercial boating), publicly owned nature preserves and bike paths, in any areas within two miles of the Project site (including Collins Park, school play areas, athletic fields, Maalwyck Park and other riverfront recreation areas), within one mile of interconnection routes if the improvements are freestanding above ground or attached to existing structures and within 1,000 feet of such improvements if such improvements are constructed underground, that might be affected by the sight or sound of the construction or operation of the Project, new roadways, if any, and off-site electric, gas, water, and wastewater interconnections or improvements required to serve the Project, indicating the number, usage by season, and uses of such areas potentially affected. Any improvements to such facilities that the Project may cause or augment will also be described. The application will also include a summary of impacts to recreational areas demonstrating that the Project minimizes adverse impacts to those land uses.

LOCAL LAWS

5. The application to be submitted will identify and analyze all substantive provisions of local law applicable to the Project. The application will include:

(a) after consultation with the Town of Glenville, Village of Scotia, City of Schenectady, Town of Rotterdam, County of Schenectady, and DPS Staff, an identification of all substantive local laws, ordinances, regulations and rules (as well as the Intermunicipal Watershed Rules and Regulations in the New York State Sanitary Code), to the degree that these are applicable to the construction and operation of the Project, new roadways, if any, and electric, water, wastewater and other off-site interconnections or improvements required to serve the Project; provided that before concluding the indicated consultations, the Applicant will provide a draft analysis of the local laws and regulations indicating potential issues and identifying areas of non-compliance, to the aforementioned local governments and DPS Staff for opportunity for review and comment;

(b) an identification of all substantive provisions identified above which Applicant deems to be unreasonably restrictive in view of existing technology;

(c) for any substantive provisions which Applicant deems to be unreasonably restrictive in view of existing technology, an explanation of the basis for asserting that the provision is unreasonably restrictive, including a review and analysis of reasonably related local precedent regarding the granting of variances or exceptions;

(d) for the substantive provisions which Applicant does not deem to be unreasonably restrictive, a discussion or other showing demonstrating compliance with the substantive provisions identified above; and

(e) a summary comparison table in two columns listing the provisions in the first column and the degree of compliance in the second column.

6. The application to be submitted will identify all approvals, consents, permits, certificates, or other conditions that would be required for the construction or operation of the proposed facility absent Section 172 of the Public Service Law. For each approval, consent, permit, certificate, or condition, the application will include:

(a) an identification of the State agency, municipality or agency thereof that typically exercises jurisdiction over such matter;

(b) a request that the Siting Board either (i) exercise its jurisdiction over such matter, or (ii) authorize the appropriate State agency, municipality or agency thereof to exercise jurisdiction over such matter pursuant to Section 172(1) of the Public Service Law; and

(c) an indication of the reason for each request made pursuant to subdivision (b) above.

OTHER

7. The application will identify the codes and standards with which Project design will comply.

8. The application will include a summary of applicable Federal Aviation Administration ("FAA") requirements.

9. The application will include a list of all permits that will be required to construct and operate the Project.

DRAFT STIPULATION NO. 5: NOISE

The application to be submitted will include a study of the noise impacts of the construction and operation of the Project, as described and detailed in Attachment 1, the Noise Impact Assessment Protocol, which is part of this Stipulation.

Regarding noise impacts, Applicant will provide:

1. a map showing the location of the nearest sound receptors in relation to the Project site, including the nearest residential, school, and public open space receptor locations, as indicated in Attachment 1;

2. an evaluation of ambient pre-construction baseline noise conditions, including pure tones, at the nearest noise receptors, as identified pursuant to ¶1, using actual measurement data recorded for 20 minute durations as a function of time and frequency using a Type 1 precision sound level meter (SLM) and octave band frequency spectrum analyzer, or other measurement data as described in Section 3 of Attachment 1;

3. a description of the noise standards applicable to the Project and the noise design goals for the Project at the nearest noise receptors, including the nearest residential, school, and public open space receptor locations. The noise design goals shall include dBA levels;

4. an evaluation of the impact of construction noise, at the nearest residential, school, and public open space receptor locations;

5. an identification and evaluation of reasonable noise abatement measures for normal as well as significant noise-producing construction activities;

6. an estimate of facility sound levels at the nearest receptors, as identified pursuant to ¶1, during operation of the Project;

7. an identification and evaluation of reasonable noise abatement measures, including the use of alternative technologies, for the final design and operation of the Project during all operating scenarios;

8. an evaluation of the following potential noise impacts: hearing damage; sleep interference; indoor and outdoor speech interference; enjoyment of public open space; low frequency noise annoyance; community complaint potential; and the potential for structural damage due to vibration or infrasound;

9. a ranking for the operation phase, using the Modified Composite Noise Rating ("CNR") method, at the nearest residential, school, and public open space receptor locations. At a minimum, the application will include an assessment of achieving a CNR rating of "C"; and

10. a description of post-construction noise evaluation studies that will be performed to establish conformance with operational design goals.

ATTACHMENT 1 TO STIPULATION NO. 5:
NOISE IMPACT ASSESSMENT PROTOCOL

1. Introduction

This protocol documents the procedures and methods being used to perform a noise impact assessment for the proposed Glenville Energy Park Project (the "Project") in the town of Glenville, New York. The assessment consists of determining the existing noise environment, through a community noise monitoring program, and computer noise modeling of the construction and operation of the facility noise sources.

2. Noise Sensitive Areas in the Community

Topographic and other maps/aerial photography were reviewed in order to identify representative noise receptors based on land uses in the area surrounding the proposed Project. Particular attention was given to identification of representative noise sensitive receptors (e.g., residences, public open spaces, and schools) in order to assure these locations are addressed in the noise assessment. A site reconnaissance of the area was performed (December 1, 1999) in order to verify the map/aerial photography survey. Based on these efforts, the following were identified as the nearest noise sensitive receptors in the area:

(a) # 1473 Mohawk Turnpike – Nearest residence south of the Project site.

(b) Maalwyk Park – Nearest Public Park located southeast of the Project site.

(c) #321 Wren Street – Nearest residences and schools east of the Project site.

(d) #1 Heritage Parkway – Nearest residence located at a significantly higher elevation than the Project site.

(e) South End of Veile Road – Nearest residence north of the Project site.

3. Noise Monitoring Program

The noise monitoring program quantifies and characterizes pre-construction background environmental sound at the nearest noise sensitive receptors, as identified above. The measurements have been performed during cold weather (leaf-off and no insect noise) and warm weather (leaf-on and insect noise) conditions. Measurements include both attended interval measurements (20-minute samples performed during daytime, evening and early morning periods) and unattended continuous long term monitoring (1-hour periods for a minimum of 120 consecutive hours). Intermittent measurements have been conducted at all

five receptor locations. Continuous monitoring has been performed in the vicinity of the nearest residences located north, east, and south of the Project site.

All measurements include a statistical analysis of the A-weighted sound levels during the measurement periods. The measured A-weighted parameters include the energy average sound level (L_{eq}), and percentile sound levels (L_{max}, L_{min}, L_1, L_{10}, L_{50}, and L_{90}). Attended measurements also include performing octave band and one-third octave band analyses to identify existing pure tone components and to establish appropriate background sound spectra.

Attended monitoring has been conducted during meteorological conditions that include wind speeds of less than 15 miles per hour and no precipitation. Dates and times of all monitoring are specified. All sound measurement equipment used meets applicable standards for Type 1 precision instrumentation and field calibration with an acoustic calibrator has been performed before and after each measurement period. In addition, the equipment has been factory calibrated within the last year.

4. Noise Standards

The Project will be evaluated relative to the following noise standards.

4.1 Local Noise Laws

Article 14 (Noise) of the Town of Glenville Zoning Ordinance (enacted April 4, 2001), Section B and Sections C(2), (4)-(9), (14), (15).

4.2 New York State Department of Public Service

In accordance with New York State Department of Public Service (NYSDPS) requirements, the modified Composite Noise Rating Method (CNR) is used to assess potential noise impacts. This methodology takes into account many factors including the expected sound levels from the plant, the existing sound levels, character of the noise (e.g., tonal, impulsive), duration, time of day and year, and subjective factors such as community attitude and history of previous exposure. The application will contain, at a minimum, an assessment of achieving a rating of "C".

5. Computer Noise Modeling

Computer noise modeling will be performed for Project construction and operation.

5.1. Construction Noise Impact Assessment

The impact assessment will include an evaluation of environmental sound associated with facility construction at the nearest noise sensitive receptors. Estimates of the energy average sound levels (L_{eq}) and the maximum sound levels (L_{max}) for each major phase of the construction project will be calculated, and the results will be summarized in tabular form. Receptor sound levels will be estimated using a computer model that accounts for noise produced by all significant construction equipment operating at the site. The model will calculate receptor sound levels based on the typical numbers of construction machines present at the site, the typical usage factor for each type of machine, and the A-weighted sound emissions for each type of machine. Adjustments for geometric spreading (hemispherical free field), acoustic shielding from barriers (natural, and man-made), atmospheric absorption, and anomalous attenuation will be applied.

The evaluation will include a direct comparison of pre-construction sound levels (L_{eq}) with estimated construction sound levels (L_{eq}) for each major construction phase of the Project, and an assessment of the potential for community complaint. For areas where estimated construction sounds levels are expected to exceed the pre-construction weekday daytime sound level (L_{eq}) by more than 10 dBA, the report will also include an evaluation of the potential for indoor and outdoor speech interference, and sleep interference.

The assessment will also include an identification and evaluation of reasonable noise abatement measures for normal as well as significant noise-producing construction activities.

5.2 Operational Noise Impact Assessment

The impact assessment will include an evaluation of environmental sound associated with the operation of the facility at the nearest noise sensitive receptors. Estimates of facility operational sound levels (L_{eq}) in octave bands will be calculated using a computer model. The model will account for the noise emissions from each significant sound source located at the Project site. Adjustments for geometric spreading (hemispherical free field), source directivity, atmospheric absorption, ground effects, on-site structural barrier effects, and effects of prominent terrain features will be included in the model. The results of the calculations will be presented in tabular form and a graphical presentation of estimated isopleths of facility A-weighted sound levels in the surrounding community will be included in the report. The model will account for the noise emissions from each source in each octave band that propagates to specified receptor points, identifying the source and value of all data inputs used.

Noise source input data for the computer models referred to herein will be derived from the most pertinent and reliable data available. Data derived from similar (same model) equipment at other facilities or data supplied by equipment manufacturers is preferred. Computations from published empirical equipment noise equations are also acceptable. The sources of all data shall be identified.

Modeling of operational noise shall be performed for the Project with a plume abated tower and a dry cooling tower.

The basis for impact assessment will be the CNR method. Calculated estimates of facility octave band sound levels at each noise sensitive receptor will be compared to the CNR Noise Level Rank Curves, and a noise level rank at each receptor will be derived. Noise level rankings will include adjustments for pre-existing background sound levels, temporal and seasonal factors, character of the sound, and previous community exposure.

Adjustments for pre-existing background sound levels will be based on comparisons to CNR background adjustment curves. If a majority (i.e. five or more) of the nine octave-band sound levels fall into the same correction zone, that number shall be the background noise correction. If less than five octave-band sound levels fall in the same correction zone, the equivalent A-weighted sound level will be used to determine the correction number, as follows.

Maximum sound level	Minimum sound level	Correction number
59.5	54.8	-3
54.8	49.9	-2
49.9	44.5	-1
44.5	39.5	0
39.5	34.5	+1
34.5	29.5	+2

The assessment will also include an evaluation of the following potential noise impacts: hearing damage; sleep interference; indoor and outdoor speech interference; enjoyment of public open space; low frequency noise annoyance; community complaint potential; and the potential for structural damage due to vibration or infrasound.

The assessment will also include an identification and evaluation of reasonable noise abatement measures, including the use of alternative technologies, for the final design and operation of the Project.

6. References

To the extent consistent with Stipulation No. 5: Noise, the methodology for assessing the potential impacts from noise will follow the procedures and use predictive data provided in the following documents:

Empire State Electric Energy Research Corporation, *Power Plant Construction Noise Guide*, Bolt, Beranek and Newman, Inc., Report No. 3321 (1977).

Edison Electric Institute, *Electric Power Plant Environmental Noise Guide*, Volume 1, 2nd Edition (1984).

United States Environmental Protection Agency, *Model Community Noise Control Ordinance*, USEPA Report EPA 550/9-76-003 (September 1975).

United States Environmental Protection Agency, *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*, EPA Document NTID300.1, December 1971 (EPA, 1971).

DRAFT STIPULATION NO. 6: RELIABILITY OF GAS SUPPLY AND POWER BLOCK

1. The application to be submitted will include a study of gas supply, capacity, and system impact ("Gas Study"). The Gas Study will include:

   (a) a description of the Project's proposed or contemplated gas pipeline interconnection(s), including meter and regulating facilities, on-site compression facilities (if any), size, operating pressure, volume of gas required to serve the Project, nature and extent of transportation service as firm, interruptible, or both, and applicable permitting requirements;

   (b) for each of the potential pipeline interconnections, an identification of who will construct, own, and operate such interconnection;

   (c) an identification of the estimated peak hour, peak day, seasonal and annual natural gas requirements of the Project;

   (d) an analysis demonstrating that the Project will have sufficient gas pipeline capacity and fuel supply reliability to support the requirements of the Project;

   (e) an evaluation of the potential impacts of the Project and its interconnection(s) on the gas distribution system of Niagara Mohawk. In particular, the application will include an evaluation of how the Project's gas consumption during peak demand periods will affect the ability of existing interstate and intrastate pipelines to meet the demands of the Capital Region, and whether additional curtailment of other industrial users will result from operation of the Project;

   (f) a description of the status of negotiations, and copies of executed agreements or contractual obligations (with attendant terms and conditions redacted as necessary to protect proprietary information) for providing gas to the Project, including agreements/contracts for necessary rights-of-way.

2. Identification and comparative analysis of interconnection route alternatives and specific construction requirements that may be necessary due to the need for a gas pipeline crossing of the Mohawk River.

3. The application will contain an assessment, with supporting details, of the reliability and feasibility of Applicant's preferred generation equipment. As part of the supporting details, reliability data for the major generation components including the gas turbine, heat recovery steam generator, and steam turbine; and collectively for the entire power block will be provided. Data is to be unit specific to the Applicant's facility and not averages of other

makes and/or models of equipment. The reliability data to be included is as follows: capacity factor; availability; equivalent availability; forced outage rate; equivalent forced outage rate; and starting reliability, if available. Data for the last five years–year-by-year and cumulative– will be provided. If the equipment does not have an operating history, estimates of operating reliability with the rationale including back-up information from tests and experience with individual equipment components will be provided.

4. The application will explain the basis for the selection of the power block, including a discussion of alternatives and why the particular power block was chosen over others.

DRAFT STIPULATION NO. 7: SOCIOECONOMIC

The application to be submitted will include a study of the socioeconomic impacts of the construction and operation of the Project. Regarding social and economic implications, Applicant will provide:

1. an estimate of the number of temporary construction jobs that will be created by the Project, by discipline;

2. an estimate of the average construction work force, by discipline, for each quarter, during the period of construction, and an estimate of the peak construction employment level;

3. an estimate of the annual construction payroll, by trade, for each year of the project and an estimate of annual direct non-payroll expenditures likely to be made in the vicinity of the Project (materials, services, rentals, etc.) during the period of construction. For purposes of paragraphs 3-7 of this stipulation, "vicinity of the Project" shall include Albany, Rensselaer, Schenectady, Saratoga, Fulton, Montgomery and Schoharie Counties;

4. an estimate of the annual secondary employment and economic activity likely to be generated in the vicinity of the Project by the construction of the Project. This analysis should state the basis of any economic multiplier factor or other assumption used;

5. an estimate of the number of jobs and the on-site payroll, by discipline, during a typical year once the Project is in operation, and an estimate of other expenditures likely to be made in the vicinity of the Project during a typical year of operation;

6. an estimate of the annual secondary employment and economic activity likely to be generated in the vicinity of the Project by its operation;

7. a comparison of the anticipated construction work force, by trade, with the construction work force available within commuting distance, assuming a continuation of recent construction work force employment levels, with the exception that the labor force demands of any unusually large project which has been publicly announced for construction in the vicinity of the Project site during construction of the Project shall be addressed in the analysis, with respect to other projects subject to Article X of the Public Service Law, the analysis need only address projects for which an Article X application was filed 60 days prior to the date of submission of the Article X application for the Project;

8. an estimate of the extent and duration of temporary construction worker in-migration, if any;

9. an identification of the amount and location of housing, if any, expected to be used by any construction workers temporarily relocating to work on the Project;

10. an estimate of incremental school operating and infrastructure costs, if any, that will be incurred by any affected school district during the construction phase of the Project, this estimate to be made after consultation with the Scotia-Glenville School District;

11. an estimate of incremental school operating and infrastructure costs, if any, that will be incurred by any affected school district due to the permanent operation of the Project, this estimate to be made after consultation with the affected school districts;

12. an estimate of incremental municipal or utility operating and infrastructure costs that will be incurred by the Town of Glenville, the County of Schenectady, the Village of Scotia and any other affected municipality or utility for police, fire, emergency, water, sewer, solid waste disposal and other municipal or utility services during the construction phase of the Project, this estimate to be made after consultation with the affected municipalities and utilities;

13. an estimate of incremental municipal or utility operating and infrastructure costs that will be incurred and any benefits that will be realized by the Town of Glenville, the City of Schenectady, the County of Schenectady, the Village of Scotia and any other affected municipality or utility for police, fire, emergency, water, sewer, solid waste disposal and other municipal or utility services due to the permanent operation of the Project, this estimate to be made after consultation with the affected municipalities or utilities;

14. an identification of all jurisdictions (including benefit assessment districts) that levy real property taxes or benefit assessments upon the Project site, its improvements and appurtenances;

15. for each taxing jurisdiction, an identification of the most recent tax rate (or benefit assessment charge), and total tax levy for the jurisdiction;

16. for each taxing jurisdiction, an identification of the most recent assessed value (or benefit formula) assigned to the Project site, its improvements and appurtenances;

17. for each taxing jurisdiction, an estimate of the amount of the most recent annual taxes (or benefit charges) levied against the Project site, its improvements and appurtenances;

18. an estimate of the projected post-construction assessed value (or benefit formula) that will be assigned to the Project site, its improvements and appurtenances;

19. for each taxing jurisdiction, an estimate of the amount of annual taxes (or benefit charges), or payments in lieu of taxes based on publicly available benchmarks, it is projected would be levied against the post-construction Project site, its improvements and appurtenances;

20. for each taxing jurisdiction, a comparison of the fiscal costs to the jurisdiction that are expected to result from the construction and operation of the Project with the expected tax or payments in lieu of tax revenues generated by the Project;

21. an assessment of the need for a property value mitigation program for residences whose values are affected by the Project and a proposed program, such program to either be as described in Attachment 1 to this Stipulation No. 7 ("Make Whole Property Value Program") or a reasonable alternative;

22. a description of all on-site equipment and systems to be provided to prevent or handle fire emergencies and hazardous substance incidents;

23. a description of all contingency plans to be implemented in response to the occurrence of a fire emergency or a hazardous substance incident;

24. a specific plan for receiving, evaluating and responding in a timely fashion to community complaints during construction and operation of the Project;

25. a discussion of the feasibility, costs and benefits of having the Project provide thermal energy and/or electricity to end users, or wholesale customers; and

26. a description of the economic benefits, including property and sales tax abatement and/or Economic Development Zone benefits, that the Applicant intends to seek for the Project.

ATTACHMENT 1 TO STIPULATION NO. 7:
MAKE WHOLE PROPERTY VALUE PROGRAM

At least six (6) months prior to commencement of construction of the Project, a property value appraisal is to be prepared, at the Applicant's expense, and by a qualified, certified appraiser of the Applicant's choosing, for all single-family home properties within ½ mile of the Project site ("appraised homes"). This appraisal will serve as a baseline to determine if property values have been affected by the power plant. Within five years of commencement of operation of the power plant, should an attempt be made to sell any of the appraised homes by any of the original property owners, the Applicant agrees to purchase the property at a price equal to the pre-construction appraisal, under the following conditions:

- The property owner, through a licensed real estate broker/agent, has made a good faith effort to sell the property for at least 180 days.

- The property owner is unable to secure a purchase price that equals or exceeds 95% of the power plant pre-construction appraised value.

- The property owner does not reject credible purchase offers that meet or exceed 105% of the power plant pre-construction appraised value.

In lieu of an outright purchase of the property by the Applicant, the property owner may seek a one-time lump sum payment from the Applicant for loss of property value following an attempt to sell as prescribed by the above three conditions. Following a failed attempt to sell, another appraisal will be conducted on the property, at the Applicant's expense, and by a qualified, certified appraiser of the Applicant's choosing. The difference between the power plant pre-construction appraised value and the post-plant construction value is the amount that the Applicant shall compensate the property owner.

Both the outright purchase scenario and the compensation for loss of value scenario are optional. Property owners are not obligated to participate in either scenario, should they attempt to sell their property. Regardless, the Applicant's obligation to purchase property or to compensate the property owner for loss of value, at the owner's request, expires once the power plant has been operational for more than five years.

Should the property owner contest the property value, as determined by the Applicant's appraiser, the property owner may obtain a second appraisal at his/her own expense. This applies to both the pre- and post-construction appraisal. If either of the Applicant-determined pre- or post-construction appraisal values differ from the property owner-appraised value by more than 5%, the dispute shall

be settled by arbitration. In the event that the appraisals differ by less than 5%, the value assigned by the property-owner's appraiser shall prevail.

DRAFT STIPULATION NO. 8: SOILS, GEOLOGY AND SEISMOLOGY

The Application to be submitted will include a study of the soils, geology and seismology impacts of the Project ("Geotechnical Study"). The components of the Geotechnical Study will include identification and mapping of existing conditions, impact analysis, and proposed mitigation.

1. To the extent consistent with the following paragraphs contained in this stipulation, the methodology for assessing potential impacts related to soils, geology and seismology will follow the appropriate procedures described, or will use data provided, in the following documents:

   American Society for Testing and Materials (ASTM) testing methods and standards.

   Isachsen, Y.W. et al, editors, *Geology of New York: A Simplified Account*, New York State Museum/Geological Survey (1991).

   Jacob, Klaus, *Seismic Vulnerability of New York State: Code Implications for Buildings, Bridges and Municipal Landfill Facilities*, National Center for Earthquake Engineering Research (NCEER), Buffalo, New York (April 1993).

   National Earthquake Information Center. *Preliminary Determination of Epicenters*, Monthly Listing, USGS.

   New York State Geological Survey, *Damaging Earthquakes in New York State 1737-1989* (1989).

   New York State Geological Survey and New York State Museum, *New York State Geologic Highway Map* (1990).

   Nottis, Gary N., editor, *Epicenters of Northeastern United States and Southeastern Canada, Onshore and Offshore: Time Period 1534-1980*, New York State Museum Map and Chart Series Number 38 (1983).

   United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Montgomery and Schenectady Counties, New York* (1978).

   United States Department of Agriculture, Soil Conservation Service, *Soil Survey of Schoharie County, New York* (1969).

2. Regarding soils, geology, and seismology, the Geotechnical Study will include:

SOILS

(a) a map or series of maps delineating soil types on the Project site and new roadways, if any, based on geotechnical investigations; and a map or series of maps delineating soil types for off-site, electric, water, and wastewater interconnections or improvements required to serve the Project, based on the county soil survey referenced in paragraph 1 above;

(b) a description of the characteristics and suitability for construction purposes of each soil type identified above, including bearing capacity and suitability for use as fill, the results of the Environmental Site Assessment for the Project site, a description of the recharge/infiltration capacity of each soil type and a discussion of any dewatering that may be necessary during construction and whether the Project will contain any facilities below grade that would require continuous dewatering;

(c) a map delineating depth to bedrock on the Project site and new roadways, if any, based on geotechnical investigations; and a map or series of maps delineating depth to bedrock for off-site, electric, water, and wastewater interconnections or improvements required to serve the Project, based on the county soil survey referenced in paragraph 1 above;

(d) a map delineating existing topography showing contours at two-foot intervals on the Project site and new roadways, if any, based on a topographic site survey; and a map or series of maps showing contours at ten-foot interval along off-site, electric, water, and wastewater interconnections or improvements required to serve the Project, based on USGS topographic mapping;

GEOLOGY

(e) a map or description of underlying bedrock types on the Project site, new roadways (whether temporary or permanent), if any, and off-site electric, water, and wastewater interconnections or improvements required to serve the Project, including an evaluation for potential impacts due to Project blasting (if used), construction and operation, based on information to be obtained from available published maps and scientific literature, review of technical studies conducted on and in the vicinity of the Project, and on-site field observations, test pits and/or borings;

(f) if bedrock is to be used for foundation support, a description of the characteristics and suitability for construction purposes of each bedrock type identified above;

(g) a map delineating existing slopes (0-3%, 3-8%, 8-15%, 15-25%, 25-35%, 35% and over) on the Project site, new roadways, if any, and off-site electric, water, and wastewater interconnections or improvements required to serve the Project;

(h) a proposed site plan showing existing and proposed contours at two-foot intervals, for the Project site, and at ten-foot intervals for any area to be disturbed for new roadways, if any, and off-site electric, water, and wastewater interconnections or improvements required to serve the Project, at a scale sufficient to show all proposed buildings, structures, paved and vegetated areas, and construction areas;

(i) a preliminary calculation of the quantity of cut and fill necessary to construct the Project, including separate calculations for topsoil, sub-soil and rock;

(j) a description and preliminary calculation of the amount of fill material to be brought in to the Project site, and any area to be disturbed for new roadways, if any, and off-site electric, water, and wastewater interconnections or improvements required to serve the Project;

(k) a description and preliminary calculation of the amount of cut material or spoil to be removed from the Project site, and any area to be disturbed for new roadways, if any, and off-site electric, water, and wastewater interconnections or improvements required to serve the Project;

(l) a description of excavation techniques to be employed;

(m) a delineation of temporary cut or fill storage areas to be employed;

(n) a waste handling plan which will indicate the methods and procedures the applicant will use to handle any and all hazardous wastes encountered at the Project site and off-site water and wastewater interconnection areas during construction and operation. This plan shall address at a minimum: (i) identification; (ii) recovery; (iii) segregation; (iv) isolation; (v) temporary storage; (vi) final disposal method; and (vii) provisions for public and regulatory notification.

BLASTING

Based on its preliminary studies, Applicant believes that no blasting will be necessary for any construction on the Project site, or in any area to be disturbed for roadways to be constructed, if any, or all electric, water, and wastewater interconnections or improvements required to serve the Project. The application will either include sufficient site-specific geotechnical evidence to demonstrate that no blasting will be necessary under any circumstances, or the informational requirements of the three paragraphs that follow regarding blasting information to be provided in the application will be satisfied.

(o) a preliminary plan evaluating the extent to which blasting is needed on-site or for any off-site electric, water and wastewater interconnection required to serve the Project, and describing all blasting operations including location, blasting contractor qualifications, charge sizes and limits, quantity of discrete blasts, hours of blasting operations, estimates of amounts of rock to be blasted, warning measures, measures to ensure safe transportation, storage and handling of explosives, use of blasting mats, a plan for a pre-blasting videotape condition survey of nearby buildings and improvements, and coordination with local safety officials;

(p) an assessment of all potential impacts of blasting, including impacts on above-ground structures and below-ground facilities such as pipelines and wells and the Great Flats Aquifer;

(q) an identification and evaluation of mitigation measures to avoid or minimize blasting impacts, if any should potentially occur, including the use of alternative technologies and/or location of structures, and including a plan for securing compensation for damages that may occur due to blasting;

SEISMOLOGY

(r) a description of the regional geology, tectonic setting and seismology of the Project vicinity;

(s) an analysis of the expected impacts of the blasting (if used), construction and operation of the Project on the regional geology, if such can be determined;

(t) a comparison of historical seismic activity experienced in the Project area to applicable building code requirements; and

(u) an identification of any potential impacts of geology and seismology on the Project.

DRAFT STIPULATION NO. 9: TERRESTRIAL RESOURCES

The application to be submitted will include a study of the terrestrial resource impacts of the construction and operation of the Project. Regarding terrestrial resource impacts, Applicant will provide:

VEGETATION

1. to the extent consistent with the following paragraphs contained in this stipulation, the ecological communities will be described according to Reschke, *Ecological Communities of New York State* (1990);

2. a description of the Project site, and any area to be disturbed for new roadways, if any, and off-site electric, water, and wastewater interconnections or improvements required to serve the Project, as to the presence of any vegetation communities, the type of vegetation communities, the structure of these communities and the species composition of each community, based on field reconnaissance or systematic surveys; in addition, vegetation communities along the gas interconnection route or routes will be generally described in accordance with Reschke, based on a route walkover, if applicant can secure access, and/or windshield survey;

3. a list of the species of flowering plants, ferns, and fern relatives occurring on the Project site, and the relative abundance of each;

4. a description of the vegetation communities present on the Project site, and along any area to be disturbed for new roadways, if any, and electric, water, gas, wastewater and other off-site interconnections excluding the gas interconnect or improvements required to serve the Project, on the basis of field observations, including an identification and delineation of any habitats or natural communities which could support listed species or such species of special concern as are identified by the U.S. Fish and Wildlife Service, NYSDEC and the New York Natural Heritage Program, with Applicant to make inquiry with these three agencies. However, Applicant's level of effort with respect to the gas interconnection route or routes shall be limited to a route walkover, if Applicant can secure access, and/or windshield survey;

5. documentation of the structure of communities identified pursuant to clause 4 above (canopy, understory, and ground cover) by visual observations of either representative sample plots or sampling transects, identifying the structure and composition of the vegetation communities identified based on dominant species, but all species observed being recorded for the purpose of site inventory;

6. an estimate of the species and number of all trees 12 inches or greater in diameter at breast height within the Project site;

7. an analysis of the impact of the construction and operation of the Project and new roadways, if any, and electric, water, and wastewater interconnections or improvements required to serve the Project, on the vegetation identified above, including a delineation of the vegetation areas to be removed or disturbed, mapped at a scale of not more than 100 feet per inch; and an analysis of the impact of construction of the off-site gas interconnection, consistent with Applicant's level of effort as described in paragraphs 2 and 4, above;

8. an identification and evaluation of mitigation measures, including the use of alternative technologies, regarding vegetation impacts identified;

WILDLIFE

9. a description of the Project site, and any area to be disturbed for new roadways, if any, and electric, gas, water, wastewater and other off-site interconnections or improvements required to serve the Project, as to the wildlife, including mammals, birds, amphibians, and reptiles, and wildlife habitats, that occur in, on, or in the vicinity of the Project site and areas to be disturbed, based on spring and summer field reconnaissance or available data, including an identification and delineation of any habitats or natural communities which could support listed species or such species of special concern as are identified by the U.S. Fish and Wildlife Service, NYSDEC and the New York Natural Heritage Program, in consultation with Applicant. However, Applicant's level of effort with respect to the gas interconnection route or routes shall be limited to a route walkover, if Applicant can secure access, and/or windshield survey;

10. a list of the species of mammals, birds, amphibians, and reptiles reasonably likely to occur in, on, or in the vicinity of the Project site based on site observations and supplemented by publicly available sources;

11. an analysis of the impact of the design, construction and operation of the Project, including air emissions and new roadways, if any, and electric, gas, water, wastewater and other off-site interconnections or improvements required to serve the Project, on the wildlife, wildlife habitats, and wildlife travel corridors identified pursuant to paragraphs 9 and 10 above; however, Applicant's level of effort with respect to the gas interconnection route or routes shall be limited to a route walkover, if Applicant can secure access, and/or windshield survey;

12. an identification and evaluation of mitigation measures, including the use of alternative

technologies, regarding wildlife impacts identified pursuant to paragraph 11 above.

WETLANDS

To the extent consistent with the following paragraphs contained in this stipulation, the methodology for assessing the potential impacts to field delineated wetlands will follow the procedures and use predictive data provided in the following documents:

For identifying the appropriate vegetation, hydrology, and soils criteria which would define Federal-jurisdictional wetlands, the *U.S. Army Corps of Engineers Wetlands Delineation Manual* (1987);

For identifying the appropriate vegetation, hydrology, and soils criteria which would define State-jurisdictional wetlands, NYSDEC *Freshwater Wetlands Delineation Manual* (July 1995).

13. an identification of the extent of all Federal and State regulated wetlands within the Project site;

14. an identification of the extent of all Federal and State regulated wetlands along new roadways, if any, and off-site electric, gas, water, and wastewater interconnections or improvements required to serve the Project; wetlands will be identified from existing mapped sources and from aerial photography as appropriate;

15. a description of the characteristics of all Federal and State regulated wetlands identified on the Project site, including a description of the vegetation, soils, and hydrology data collected for each of the wetland sites identified, based on actual on-site wetland observations;

16. a description of the characteristics of Federal and State regulated wetlands identified along new roadways and off-site electric, gas, water and wastewater interconnections, based on available mapping information;

17. an on-site identification and delineation of all Federal and State regulated wetlands identified above, excluding National Wetlands Inventory ("NWI") and mapped State wetlands;

18. a survey or coordinate map of the location of all on-site Federal regulated and State regulated wetland boundaries identified above (if any);

19. an identification and evaluation of mitigation measures, including the use of alternative technologies and control of potential phosphorus and nitrogen sources from the Project, regarding wetlands impacts (if any).

CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS AUGUST 6, 2001

DRAFT STIPULATION NO. 10: TRAFFIC AND TRANSPORTATION

The application to be submitted will include a study of the traffic and transportation impacts of the construction and operation of the Project ("Transportation Study"). To the extent consistent with the following paragraphs contained in this stipulation, the methodology for assessing the potential traffic and transportation impacts from traffic generated by the construction and operation of the Project will follow the instructions provided in Transportation Research Board, National Research Council, *Highway Capacity Manual*, Special Report 209, Third Edition 1994.

1. The Transportation Study will include a description of the pre-construction characteristics of the roadways in the vicinity of the Project, to include the Interstate Route 890 (I-890), New York State Route 5S and New York State Thruway ("Thruway") interchange and bridge crossing, New York State Route 5, New York State Route 147, Vley Road, and 7th Street. The description will include:

   (a) a review of available data on vehicle traffic, use levels and accidents obtained from the New York State Department of Transportation;

   (b) a review of available data on vehicle traffic, use levels and accidents obtained from Schenectady County;

   (c) a review of available data on vehicle traffic, use levels and accidents obtained from the Town of Glenville;

   (d) a review of local school bus routes and schedules;

   (e) a review of public transportation routes;

   (f) an identification of approach and departure routes to and from the Project site for police, fire, ambulance and other emergency vehicles;

   (g) a review of available load bearing and structural rating information for expected Project traffic routes and a review of anticipated truck load and size characteristics during construction and operation of the Project;

(h) the results of peak turning movement counts for typical weekday morning, weekday afternoon, and Saturday peaks, to be conducted by GEP at the following intersections:

- I-890, Route 5, and Vley Road;
- Route 5 and 7th Street (west intersection);
- Route 5 and 7th Street (east intersection);
- Route 5 and Route 147;
- Route 147 and Burch Parkway; and
- Route 147 and Vley Road;

(i) the results of twenty-four hour traffic volume counts to be conducted or obtained from other sources by GEP, including a calculation of average daily traffic ("ADT") for each intersection listed above;

(j) for each intersection listed in Paragraph 1(h) above, documentation of the number of approach lanes, the lane widths, shoulder widths, traffic control devices by approaches, and sight distances;

(k) a calculation of the Level of Service ("LOS") for each intersection listed above, giving detail for each turning movement; and

(l) an estimate of the annual rate of traffic growth in the vicinity of the Project incorporating general growth and growth from planned land use changes, but not including projected traffic for the Project, including the source and manner of calculation of the estimate.

2. The Transportation Study will include an estimate of the trip generation characteristics of the Project during both construction and operation. The estimate will include:

(a) a description of each major phase of construction, including duration of construction, daily shift periods and project totals;

(b) for each major phase of construction, an estimate of the number and frequency of vehicle trips, including time of day and day of week arrival and departure distribution, by type of vehicle;

(c) an identification of approach and departure routes to and from the Project site for vehicles carrying dynamite, chemicals or hazardous materials for use during construction and operation of the Project, the equipment or materials to be

transported and a summary of federal, state and local regulations pertaining to transport of chemical and hazardous materials required for Project operation;

(d) for cut activity (rock and soil spoil removal from the Project site and affected interconnection areas), a separate estimate of the number and frequency of vehicle trips, including time of day and day of week arrival and departure distribution, and including a delineation of approach and departure routes, by size, weight and type of vehicle;

(e) for fill activity (rock and soil deposition at the Project site and affected interconnection areas), a separate estimate of the number and frequency of vehicle trips, including time of day and day of week arrival and departure distribution, and including a delineation of approach and departure routes, by size, weight and type of vehicle;

(f) an estimate of the number of employees per shift for each major phase of construction;

(g) an identification of the location of housing expected to be utilized by construction workers temporarily relocating to the area, as identified in the studies regarding Socioeconomics, including a delineation of approach and departure routes from such housing to the Project site;

(h) a description of the potential use of barge or rail shipments for construction and operation deliveries, and if likely, the routes or railroad recertification required in order to reach the project site, and the equipment or materials to be transported;

(i) a description of the operation of the Project, including the number of employees per shift, operating shift periods and seasonal and annual totals;

(j) an estimate of the number and frequency of vehicle trips generated during operation of the Project, including time of day and day of week arrival and departure distribution, by size and type of vehicle.

3. The Transportation Study will include a conceptual site plan, drawn at an appropriate scale, depicting all Project site driveway intersections, showing horizontal and vertical geometry, the number of approach lanes, the lane widths, shoulder widths, traffic control devices by approaches, and sight distances.

4. The Transportation Study will include an analysis of using interstate highway facilities for utility interconnection purposes in the event that such use is proposed; any such analysis will

include a description of the necessary federal and state permits, the results of discussions with New York State Department of Transportation, New York State Thruway Authority and/or New York State Canal Corporation, and references to necessary State permit applications, which will be included in the application.

5. The Transportation Study will include an analysis and evaluation of the traffic and transportation impacts of the Project, including:

   (a) a comparison of projected future traffic conditions with and without the proposed Project using the future traffic growth level estimated in ¶1(l), including a calculation and comparison of the LOS for each intersection listed above, giving detail for each turning movement, the analysis to be conducted separately for the peak construction impacts of the Project and for the typical operations of the completed Project;

   (b) an evaluation of the adequacy of the road system to accommodate the projected traffic, the analysis to be conducted separately for the peak construction impacts of the Project and for the typical operations of the completed Project; and

   (c) an identification and evaluation of reasonable mitigation measures regarding traffic and transportation impacts, including the use of time restrictions and alternative technologies, the construction of physical roadway improvements, the construction of a new access road from Route 5 to the Project and the installation of new traffic control devices, and a traffic management plan designed to, among other things, discourage use of non-approved routes to and from the Project.

DRAFT STIPULATION NO. 11: VISUAL RESOURCES AND AESTHETICS

The application to be submitted will include a visual impact assessment ("VIA") to determine the extent and assess the significance of Project visibility. The components of the VIA will include identification of visually sensitive resources, viewshed mapping, confirmatory visual assessment fieldwork, visual simulations, visual impact analysis, cumulative visual impact analysis, and proposed visual impact mitigation.

1. To the extent consistent with the following paragraphs contained in this stipulation, the methodologies, standards, and definitions for assessing visual resources will follow procedures outlined in the following documents:

   Smardon, R. C., et al., *Visual Resources Assessment Procedure for US Army Corps of Engineers*, Instruction Report EL-88-1, prepared by State University of New York, Syracuse, for US Army Engineer Waterways Experiment Station, Vicksburg, MS, 1988.

   NYSDEC, *Policy Assessing and Mitigating Visual Impacts*, DEP-00-2, July 31, 2000 ("NYSDEC Visual Impact Policy").

2. The VIA will address the following issues:

   (a) the character and visual quality of the existing landscape;

   (b) visibility of the Project, including new roadways, if any, and off-site electric, gas, water and wastewater interconnections or improvements required to serve the Project, within a study area as determined by the viewshed analysis described below;

   (c) appearance of the Project upon completion, including facade colors and texture;

   (d) appearance of the completed Project under nighttime conditions;

   (e) lighting (type and zone of visibility during nighttime conditions, including lumens, location and direction of lights for facility area and/or task use and safety, including stack requirements), and similar features;

   (f) representative views (photographic overlays) of the Project, including front, side and rear views, indicating elevations;

   (g) nature and degree of visual change resulting from construction of the Project, including new roadways, if any, and electric, gas, water, wastewater and other off-site

interconnections or improvements required to serve the Project;

(h) nature and degree of visual change resulting from operation of the Project including visible plumes from stack and cooling tower, and Project lighting;

(i) an inventory/description of all visual resources listed in the NYSDEC Visual Impact Policy that would be impacted by the Project;

(j) proposed mitigation and mitigation alternatives including:

- architectural design and facility siting;
- location of structures and equipment on the site;
- alternative cooling technologies;
- changes to the profiles or size of the facility;
- screening, landscaping and visual barriers;
- color and texture of materials;
- use of non-reflective surfaces and materials;
- disguise or camouflage of structures or equipment;
- maintenance during operation;
- a statement regarding the need for offsets or lack thereof;
- a plan for landscaping at areas impacted by the Project after it is constructed;
- a plan for decommissioning (or other maintenance) once the facility has exhausted its useful life;
- lighting options for work areas and safety requirements, and
- lighting options for stack lighting as required by the FAA.

3. The viewshed analysis component of the VIA will be conducted as follows:

(a) a viewshed map of the Project study area will be prepared and presented on a 1:24,000 scale recent edition topographic base map. The viewshed study area is defined as the area within a 5-mile radius of the center of the Project site. The viewshed map(s) will provide an indication of areas of potential visibility based only on topography and the top of the structure with the highest peak elevation located on the Project site. The potential screening effects of vegetation will also be shown. The map(s) will be divided into foreground, midground and background areas based on visibility distinction as defined by the references cited above. Visually-sensitive sites (including residences and schools), cultural and historical resources, representative viewpoints, photograph locations, and public vantage points within the viewshed study area will be included on the map(s) or an overlay. An overlay indicating landscape similarity zones will be included. A colored copy of the

viewshed map will be provided to DPS Staff, NYSDEC, NYSDOH, OPRHP, Town of Glenville, Canal Recreationway Commission, and, on request, to any other party. The viewshed map will be verified during the leaf-off season by raising a helium-filled balloon to the stack height and photographically documenting visibility from the viewpoints selected pursuant to clause 3(d) below. Public notice will be given in advance of the balloon-raising to allow opportunity for public participation;

(b) the VIA will include a detailed description of the methodology used to develop the viewshed maps, including software, baseline information, and sources of data;

(c) the viewshed mapping will be used to determine the sensitive viewing areas and locations of viewer groups, in the Project vicinity. These will include recreational areas including the Mohawk-Hudson Bikeway and the Erie Canal corridor, residences, businesses, historic sites (listed or eligible, or as agreed upon between Applicant and OPRHP), and locations of travelers (interstate and other highway users);

(d) Applicant will confer with its Cultural and Historic Resources experts, the DPS Staff, NYSDEC, and OPRHP in its selection of viewpoints which will be analyzed using the Army Corps of Engineers (ACOE) methodology (Basic Procedure) and analyzed for compliance with the NYSDEC visual resources policy. Viewpoints will be selected from within the area of potential visibility. Within that area, viewpoint selection will be based upon the following considerations:

- representative or typical views from unobstructed or direct line-of-sight views;

- significance of viewpoints, especially historic sites, high public use areas, parks and scenic outlooks;

- level of viewer exposure, i.e., frequency of viewers or relative numbers, including residential areas, business centers, parks, high volume roadways or boaters traveling on the Barge Canal;

- proposed land uses;

- input from local public sources; and

- likelihood of potential visibility.

(e) Beyond the viewpoints analyzed using the ACOE Basic Procedure, the applicant has

committed to involving the public by analyzing the visibility of the proposed project from any residential point, on request, and mitigating the impact if feasible. The applicant will present in the application its proposed mitigation plans for impacts to individual residences, including how the applicant will notify nearby residences of these plans.

4. Simulations (photographic overlays) of the Project, including all roadways to be constructed, if any, and all gas, electric, water, wastewater, or other types of off-site interconnections or improvements required to serve the Project, will be prepared from the representative viewpoints established pursuant to paragraph 3(d) herein. To demonstrate the post construction appearance of the Project, leaf-off and leaf-on simulations will be provided in the application. The visual simulations of the Project from each of the viewpoints selected pursuant to paragraph 3(d) herein will be limited to the Project as it would appear under typical operating conditions. In addition, two sets of simulations will be prepared showing a visible water vapor plume that could occur from the combustion turbine generator stacks and from the cooling tower under operating conditions at average temperature and humidity and a representative worst case winter operating condition. The depiction of the water vapor plumes may be based on visible water vapor plumes from other comparable plants operating under similar conditions or applicable engineering estimates.

5. Additional revised simulations illustrating mitigation will be prepared for those observation points for which mitigation is proposed in the application.

6. An overlay of a USGS map showing the photographic view locations and the results of computer visibility potential modeling will be provided in the application.

7. A qualitative impact assessment will be provided. It will address likely viewers and their likely visual sensitivity. Where visual impacts are identified, feasible mitigation will be evaluated.

8. A summary of visual impacts, specifically describing the nature of impacts on aesthetic and historic resources, and demonstrating that the Project minimizes adverse impacts related to the interest of the state with respect to aesthetics will be provided.

9. The application will contain a plan to establish a fund for off-site plantings to screen certain views of the Project from public and private properties and to establish an application process for accessing this fund. The plan shall provide for establishment of appropriate planting and maintenance specifications, indicate use of quality stock of native species and cultivars appropriate to the site and provide for establishment of specifications for tree replacement due to construction damage or failure to survive.

DRAFT STIPULATION NO. 12: WATER RESOURCES

The application to be submitted will include a study of the water resource impacts of the construction and operation of the Project, including those that may result from Project-related impacts on the Mohawk River and Great Flats Aquifer. Regarding water resource impacts, GEP will provide:

WATER SUPPLY

1. an estimate of the hourly and daily peak and the hourly and daily average water supply needs and consumptive water losses of the Project, in gallons, for each season, broken down by power production, domestic, and fire protection uses, with daily, monthly and annual totals;

2. an estimate of the daily peak, daily average, and fire suppression peak and average flow rate needs of the Project in gallons per minute;

3. a description of the methodology used (i.e. estimate, comparison, data, calculation) to prepare the water supply needs and minimum and maximum flow rate estimates stating the factors used;

4. a description of the proposed water metering equipment, related record keeping and reporting procedure;

5. a description of the Project water supply chemistry specifications, indicating any requirements that are more stringent than New York State standards for potable water, and describing any additional water treatment that will be necessary to obtain the desired chemistry;

6. an identification of the water supply source or sources to be used by the Project, including

    (a) an analysis of the available capacity of the selected water supply sources in terms of quantity, quality, and pressure;

    (b) an analysis of the impacts of such water usage during both normal and drought periods and navigation/non-navigation periods, on other municipal and private water supplies relying on the Great Flats Aquifer and if determined to be needed, a drought emergency plan;

    (c) an identification of all infrastructure requirements necessary to serve the Project;

    (d) an analysis of the impact of the Project on infrastructure capacity, including

distribution piping, mains, pumps, storage, or additional supply and on infrastructure life, maintenance and repair.

7. a description of the status of negotiations, and copies of executed agreements and/or contractual obligations with attendant terms and conditions (redacted as necessary to protect proprietary information) with municipalities, companies or individuals for providing water to the Project, including those to secure necessary rights-of-way;

8. an identification of any municipal or private water supply that could potentially be impacted by, or benefited from, the Project, a discussion of such impacts or benefits and a discussion of planned mitigation measures;

9. an identification and evaluation of other mitigation measures, including the use of alternative cooling technologies and potential alternative supply sources, as provided in Stipulation No. 13, paragraphs 1 and 2, including on-site water wells, water storage, and offsetting water conservation, regarding water supply impact. In the event that an on-site groundwater supply well is proposed by the Applicant, the Applicant shall assess the impacts of groundwater withdrawal upon the groundwater flow system, including an assessment of the potential for increased mobilization of TCE;

WASTEWATER

10. a water balance diagram for average and maximum water use operating conditions for the Project that identifies all water sources, plant water uses, water treatment facilities, wastewater treatment facilities, and wastewater discharges, quantifies the flows to and out of each water node at the Project and presents water quality information at each node;

11. an identification and description of any process wastewater generation from the Project, including an estimate of the daily peak and average volumes, on-site holding tanks, if any, and effluent characteristics;

12. an identification and evaluation of reasonable mitigation measures to avoid and minimize wastewater generation and disposal impacts including the use of alternative technologies and reduction in water withdrawals or water usage;

13. an identification and description of all disposal methods for all wastewater generated from the Project, including a review of all options explored for process wastewater disposal including, as applicable, an analysis of the impacts on water quality and quantity in the Mohawk River;

14. an identification and description, including conceptual plans and locations, for all wastewater

sewer mains or other improvements, structures or means of interconnection with the Project site for the purposes of wastewater disposal, including a description of available capacity and the impact of the Project on wastewater infrastructure capacity, including but not limited to, distribution piping, mains and pumps, and on infrastructure life, maintenance and repair. In addition, Schenectady's wastewater treatment plant's treatment and storage capacity shall be evaluated. In the event that Applicant proposes an alternative wastewater facility, a similar evaluation of treatment and storage capacity will be made of the alternative facility;

15. a description of the status of negotiations, and copies of executed agreements, with municipalities, companies or individuals for receiving wastewater from the Project, including those to secure necessary rights-of-way, and also including any restrictions on Project wastewater disposal;

16. an identification and description of any waste water treatment, sampling, testing or monitoring that will be required prior to discharge as well as any federal, state or local regulations and pretreatment effluent limitations that must be met;

17. an evaluation as to whether a SPDES Permit, other than a SPDES General Permit, is required for any aspect of the Project, and if required, consistent with paragraphs 34 and 35 below, a complete application for the SPDES Permit using Form NY-2C and additional information required by the supplement for electric generating facilities;

GROUNDWATER

18. a groundwater contour map of the Project site (1 foot increments or less);

19. a map based on publicly available information showing the Great Flats Aquifer and its groundwater recharge areas, and identifying on-site groundwater flow direction, on-site groundwater quality, and the location, depth, yield and use of all public and private groundwater wells or other points of extraction of groundwater within 1 mile downgradient of the Project site, and including delineation of wellhead and aquifer protection zones;

20. a materials handling and storage plan demonstrating how any chemicals, petroleum products or other potential pollutants will be handled in such a way as to prevent them from entering ground and surface waters, and a spill prevention control and countermeasure plan. The analysis will address the need for the separation of potentially interacting chemicals;

21. evaluation of all reasonably likely impacts created by the construction or operation of the Project on groundwater quality and quantity in the Project area, including potential impacts on public and private water supplies and wellhead and aquifer protection zones, and including an analysis of current aquifer capacity, amounts withdrawn by current users, amounts expected to be withdrawn by the Project, estimated amounts needed for future population and business growth in the municipalities drawing water from the Great Flats Aquifer (for day, evening and night hours), and Project impacts on groundwater recharge;

22. an identification and evaluation of mitigation measures to avoid and minimize groundwater impacts;

23. an analysis of the extent to which soils on the Project site and groundwater under the Project site are contaminated with TCE. In addition, Applicant will: describe how it will remove and dispose of any TCE contaminated soils or other materials discovered during construction; provide a discussion of why construction and operation of the Project will not exacerbate existing TCE groundwater and soil contamination; and provide a discussion of why construction and operation of the Project would not reasonably be expected to impair future possible site remediation of contaminated groundwater;

SURFACE WATERS

24. a description of the water quality, flow and other characteristics of the Mohawk River and any other surface water feature, including intermittent streams, on or adjacent to the Project site or any area to be disturbed for new roadways, if any, and off-site electric, gas, water, and wastewater interconnections or improvements required to serve the Project; provided that surface waters adjacent to a gas interconnection will be described from publicly available information and on the basis of Applicant's anticipated gas interconnection route or routes;

25. an identification of the extent of surface waters, subject to regulation under Section 404 of the Clean Water Act and the State of New York, within the Project site, and along or adjacent to new roadways, if any, and electric, gas, water, wastewater and other off-site interconnections or improvements required to serve the Project;

26. an identification, based on available mapping resources, of the extent of surface waters subject to regulation under Section 404 of the Clean Water Act and the State of New York along or adjacent to new roadways, if any, and off-site electric, gas, water, wastewater and other off-site interconnections or improvements required to serve the Project;

27. a description of the characteristics of surface waters, subject to regulation under Section 404 of the Clean Water Act and the State of New York, identified above;

28. an identification of all intakes along the Mohawk River (between the discharge point for the Project's wastewater and the mouth of the Mohawk River) that are used for potable water supply and for industrial purposes, and an analysis of impacts, if any, from the Project's wastewater discharge;

29. an analysis of the impact of the construction and operation of the Project and new roadways, if any, and electric, gas, water, wastewater and other off-site interconnections or improvements required to serve the Project, on the surface waters identified above;

30. an identification and evaluation of reasonable mitigation measures, including the use of alternative technologies, to avoid and minimize impacts on the surface waters identified above;

31. a description of the spill prevention and control measures to be in place for ammonia storage (and other chemicals, including lube oil), including offloading procedures for transport vehicles while on-site, and an identification of all nearby surface water drinking supply intakes;

AQUATIC

32. a qualitative description of the aquatic resource characteristics of the lower Mohawk River, unless the Mohawk River is proposed as a direct source of cooling water in which case a quantitative description shall be provided;

33. an analysis of the impact of the construction and operation of the Project and new roadways, if any, and electric, gas, water, wastewater and other off-site interconnections or improvements required to serve the Project, on the aquatic resources identified above;

34. an identification and evaluation of reasonable mitigation measures, including alternative cooling technologies, to avoid or minimize impacts to aquatic resources;

35. if the Project uses a direct surface water withdrawal requiring construction of an intake structure, design and analysis of a cooling water intake structure will be presented. This design will show the location and design details of the structure and will incorporate a wedge-wire screen of 0.5 mm opening (maximum), and thru screen velocity of 0.5 fps velocity or less. Analysis of impacts will discuss expected entrainment of eggs and larvae, impingement, and methods to reduce impacts to the aquatic organisms from water withdrawal;

36. if the Project requires a SPDES permit for a direct surface water discharge of its wastewater flow, it shall conduct studies necessary to demonstrate compliance with Section 316(a) of the

Clean Water Act and Environmental Conservation Law Ch. 17, Title 8 (SPDES program);

CONSTRUCTION/OPERATION STORMWATER AND EROSION CONTROL

37. a preliminary Stormwater Management Plan for the collection and treatment of stormwater runoff from the site during construction and operation, including delineation of watershed boundaries and subbasins, existing flowpaths and proposed flow path relocations, the location, type, and size of all existing and proposed storm drainage facilities and structures or improvement to prevent stormwater contamination and sedimentation, stormwater outfall and/or subsurface disposal locations and conditions, design flows and outfall velocities, proposed method of stabilizing outfall channels, the location, size and type of nearest upstream and downstream bridge or culvert affected by the Project, location, size and structural details of stormwater detention facilities, preliminary hydraulic calculations for the 2, 10 and 100 year storm frequencies for both existing and proposed conditions, delineation of affected floodways and flood hazard areas, a description of techniques that will be used to prevent or control stormwater-related soil erosion, runoff and subsequent sedimentation in areas that have been cleared and graded, both during construction and operation, an analysis of stormwater impacts, and an identification and evaluation of reasonable mitigation measures regarding stormwater impacts, including the use of alternative technologies and subsurface disposal.

STUDY WORK PLAN

38. The analyses referenced in ¶ ¶ 6(a), 6(b), 8, 18, 19 and 21 shall be done in accordance with the task descriptions in Attachment 1 to this stipulation. In the event Applicant proposes to secure its water from a groundwater source other than the Schenectady well-field, a similar study of such other source will be conducted.

ATTACHMENT 1 TO STIPULATION NO. 12:
SCOPE OF WORK – WATER SUPPLY

Hydrogeologic Assessment for Glenville Energy Park (GEP) Project

The following scope of work was developed by Alpha Geoscience (Alpha) based upon discussions with Mr. Mark A. Williams (Earth Tech, Inc. Site Representative) and Mr. Paul Buzash (Schenectady Co. Intermunicipal Watershed Rules & Regulations Board) and upon a preliminary review of technical documents provided by Mr. Williams. This scope is also predicated on the assumption that water will be obtained from the City of Schenectady well field.

The primary objectives of this assessment are to determine whether the Schenectady well field can provide an adequate supply of water to GEP and to evaluate the potential impacts on the Great Flats aquifer by the proposed project. These primary objectives are further subdivided as follows:

A. Adequacy of Supply for the GEP Project

• Determine whether the Schenectady well field has sufficient capacity to meet the additional demand.

• Assess whether seasonal ranges in water quality will be within acceptable parameters for the project.

B. Potential Aquifer Impacts by the GEP Project

• Evaluate extent and changes to the cone of drawdown and zone of recharge of the Schenectady well field as the result of the project. This evaluation should include navigation and non-navigation periods for the Mohawk Canal System.

• Assess whether the increased demand at the City of Schenectady well field will impact availability of water to other municipal and private water supplies relying on the aquifer.

• Characterize general groundwater flow directions in the Great Flats aquifer in the area encompassing the site; the well fields for Schenectady, Rotterdam, Glenville and Scotia; and private water wells such as those along New York State Route 5 and at Adirondack Beverage. The secondary objective of the groundwater flow characterization will be to evaluate whether groundwater flow in this site area will be altered by the project.

• Assess the impact of potential changes of groundwater flow direction on the movement of existing contaminants, such as the TCE plume currently passing beneath the site and contaminants from other sites that include, but are not limited to, the Town of Glenville Landfill and the Schenectady International site.

• Assess the potential impact on the aquifer by a release of pollutants at the project site.

A great deal of hydrogeologic information already exists for the Great Flats aquifer and the site area. This information includes published reports, consulting reports to the municipalities that rely on the aquifer, well field data collected by the municipalities and subsurface data collected at/or adjacent to the GEP site (NYSDEC, Earth Tech, Inc., Parsons, etc.). This data may be sufficient to answer most, if not all, of the foregoing objectives without conducting any additional investigations or testing. An attempt will be made to address all the issues with existing data before planning any additional aquifer testing, subsurface investigation or monitoring. The following are the primary tasks in the hydrogeologic assessment.

Task 1 Review Existing Reports and Data

The purpose of the task will be to develop a working knowledge of the Great Flats aquifer to select data necessary to address the assessment objectives and to identify data gaps. A working bibliography has already been established by Earth Tech, Inc. This bibliography will be supplemented as new reports/data are acquired.

Task 2 Obtain and Assemble Data

The following data will be needed:

1. Monthly well field production data for the past ten years from
    - Schenectady
    - Rotterdam
    - Glenville
    - Scotia
    - any cooperating industrial well operators in the study area

2. Well records for production and monitoring wells in the vicinity of the GEP site and within the zone of influence of the Schenectady, Rotterdam, Glenville, and Scotia well fields. An attempt will be made to obtain well records from private wells, such as those along State Route 5 and at Adirondack Beverage. These well records should include:
    - Location

- geologic and well installation logs
- historical water level data
- historical water quality data

3. Pumping test data, analyses and interpretive results for the Schenectady, Rotterdam, Glenville and Scotia well fields.

Additional data needs will likely be identified as the work progresses.

Task 3 Construct Geologic Cross Sections

A minimum of four geologic cross sections will be constructed. These sections will be oriented so that they connect the site, the industrial park, and the well fields of Schenectady, Rotterdam, Glenville and Scotia. The cross sections will be used to illustrate the significant aquifer units and identify the important groundwater flow paths and other significant aquifer features such as recharge areas, groundwater barriers and groundwater divides. Most of this information already exists and has been illustrated as cross sections in existing reports. The new cross sections need to be developed to relate the site to the important well fields and to incorporate any recently collected subsurface data. Task 3 will require the establishment of a topographic base map on a CAD or similar format. The base map will also be used to illustrate information developed in Tasks 4 and 5.

Task 4 Identify/Interpret Significant Hydrogeologic Features.

The hydrogeologic features that will be identified/interpreted will include, but may not be limited to, aquifer units, aquitards, aquifer boundaries, and groundwater divides. The results from this task are an important precursor to the interpretation of groundwater flow directions and identifying potential impact areas. Most of this information is available from previous investigations. The existing information may be modified to reflect new data and new illustrations will be developed to focus on the site area and the neighboring well fields.

Task 5 Evaluate Historical Well Field Information

Evaluate historical well field production rates, drawdown cones, zones of contribution and zones of influence for the Schenectady, Rotterdam, Glenville, and Scotia well fields. This task will also include an assessment of the historical peak demands from the City of Schenectady well field and a determination as to whether that well field has sufficient capacity to support the additional GEP site demand. Seasonal variations in water quality will also be evaluated for the City of Schenectady well field. This task will also include a projection of the cone of the drawdown, zone of recharge and zone of influence for the City of Schenectady well field based on the additional demand both during the non-navigation and

navigation season. No pumping test or analytical model is currently planned to address the influences of the additional pumping at the City of Schenectady well field by the added GEP project demand. The need for an analytical simulation, and/or pumping test will be determined during this task.

Task 6 Assessment of Potential Contaminant Impacts on the Aquifer

The Great Flats aquifer evaluation will include an assessment of the impact of increased withdrawal on the movement of contaminants from existing pollutant sources. This evaluation will be focused on contaminant releases that have been identified by the NYSDEC, Intermunicipal Watershed Board and by the local communities as significant concerns for the public health and the integrity of the aquifer. Our evaluation will entail defining the known extent of the released contaminant (i.e., TCE) within the GEP study area and evaluating the general effects of increased groundwater withdrawal by the GEP project on the rate and direction of movement of known groundwater contamination. The results of this assessment will be used to evaluate whether there is an increased potential for exposure of the public to the respective contaminants as a result of the project.

Alpha will provide support to Earth Tech, Inc. on the assessment of project impacts on existing contaminants within the aquifer and addressing the potential impacts to the aquifer by accidental releases at the GEP site.

Task 7 Reporting and Attending of Project Meetings and Public Meetings

A report that provides the results of the assessment and addresses the project objectives will be prepared. It is anticipated that Alpha personnel will also be called upon to attend at least five internal project meetings and five public forums.

DRAFT STIPULATION NO. 13: ALTERNATIVES

1. The application will include an explanation of the environmental impacts and incremental costs of the preferred and reasonable alternatives for the cooling system. The cooling systems to be evaluated are once-through cooling, wet cooling tower, plume abated cooling tower, and air-cooled condenser. The plume abated cooling tower design alternative will include one design based on plume abatement down to 20ºF, at a relative humidity of 85%, as well as a second hybrid design based on plume abatement down to 7ºF, at a relative humidity of 85%.

2. The application will include an assessment of alternative sources of cooling water for the Project, including new on-site wells, new off-site municipal wells, new off-site private wells, existing municipal supplies, reclaimed water and withdrawal from the Mohawk River. The analysis will address environmental and economic considerations.

3. The application will include an explanation of the basis for the chosen air emission control systems (see Stipulation No. 1, Section 2(e)), including the LAER (Lowest Achievable Emission Rate) and BACT (Best Available Control Technology) analysis, as required by applicable regulations and air permit application guidelines.

4. The application will include an assessment, including incremental costs, of the use of pelletized urea as an alternative to aqueous ammonia (ammonium hydroxide) as the source of ammonia for the SCR system.

5. The application will include a presentation and analysis of options for stack plume mitigation. Included will be the reduction in the frequency and extent of stack plume visibility achieved by each option under worst case and average temperature and climate conditions for when stack plume would be visible. Each alternative will include the cost and performance effect on generation reliability, plant electric output (gross and net), and thermal efficiency, relative to the base case. Incremental costs for capital and operation and maintenance based on the life cycle cost also are to be included in the application as a tabular summary together with the underlying assumptions.

6. In the event that the Applicant proposes alternative intake designs for cooling water withdrawals from the Mohawk River it shall present such alternatives in accordance with Section 316(b) of the Clean Water Act and 6 NYCRR 704.5. Such alternative intake designs shall minimize environmental impacts and provide a level of protection to aquatic organisms which is equivalent to that provided by air-cooled condensers. Sufficient information on habitat and organisms will be included such that the NYSDEC and the DPS can render a determination which technology alternative constitutes best technology available (BTA) as that term is used under Section 316(b) of the Clean Water Act and 6 NYCRR 704.5.

Information on other environmental impacts associated with these technologies will also be included in the application.

DRAFT STIPULATION NO. 14: SYSTEM PRODUCTION MODELING

1. The Application will include the following analysis, which will be developed using MAPS, PROMOD or a similar modeling tool:

   (a) Estimated statewide levels of SO_2, NO_x and CO_2, both with and without the Project;
   (b) Estimated minimum, maximum and average spot prices representative of Areas "A", "F", and "J" of the New York Control area, both with and without the Project;
   (c) Estimated capacity factor.

2. The analysis will assume that, subject to publicly announced in-service and retirement dates, the following plants are in service: all existing electric generating facilities, NYPA's proposed in-City gas turbines, and those electric generating facilities that (a) have been proposed in Article X applications and (b) have received a notification 30-days prior to the filing of the GEP application that their application is in compliance with Article X.

3. The applicant will consult with DPS Staff with the goal of agreeing to a mutually acceptable input data set, including modeling for the applicant's proposed facility, to be used in the above-discussed analysis.

DRAFT STIPULATION NO. 15: HEALTH AND SAFETY

The Application to be submitted will include a stand-alone discussion of the health and safety matters described below. Applicant will:

a. identify and provide the amounts of potentially hazardous chemicals to be delivered to, stored and/or used at the Project site during the construction and operation of the power plant, and will identify related transportation routes;

b. describe the location and type of container/containment facilities to be installed/ constructed on the Project site to store such potentially hazardous chemicals;

c. describe how such chemicals and compounds are to be handled and utilized at the facility, and how spent materials will be handled and disposed of;

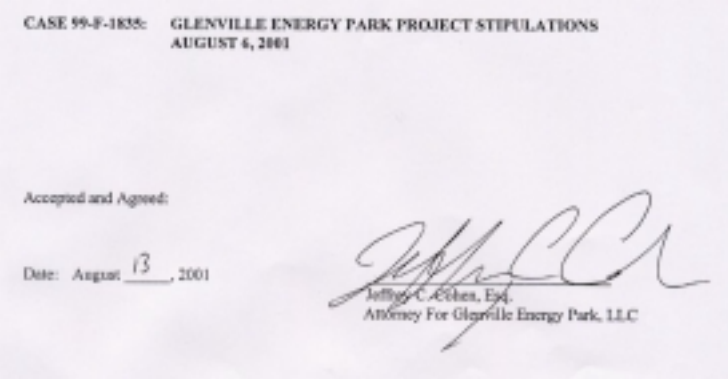
d. describe the potential impact(s) over time resulting from a significant accidental release of the potentially hazardous chemicals that will be present on the site during construction and operation of the facility;

e. provide a description of the proposed incident response plan and procedures to be utilized by facility personnel in the event of an accidental release of hazardous chemicals at the site, including off site emergency notification plans and procedures;

f. describe the manner in which Applicant will identify and fund the necessary training of on-site personnel, and the procurement of on-site equipment, vehicles, etc. necessary to respond to an incident that may occur at the facility;

g. describe the manner in which Applicant will consult with Town of Glenville and Village of Scotia officials and other emergency service providers, prior to commencement of Project construction, for the purpose of identifying any additional emergency and fire fighting equipment and training that will be required of local fire departments and emergency services providers in order to address potential emergencies and fires at the plant and for the purpose of identifying the means to pay therefor.

CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS AUGUST 6, 2001



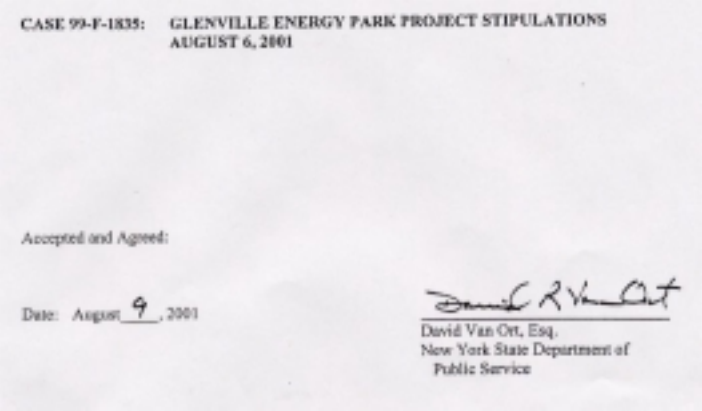
CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS
AUGUST 6, 2001

Accepted and Agreed:

Date: August 13, 2001

Jeffrey C. Cohen, Esq.
Attorney For Glenville Energy Park, LLC

CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS AUGUST 6, 2001



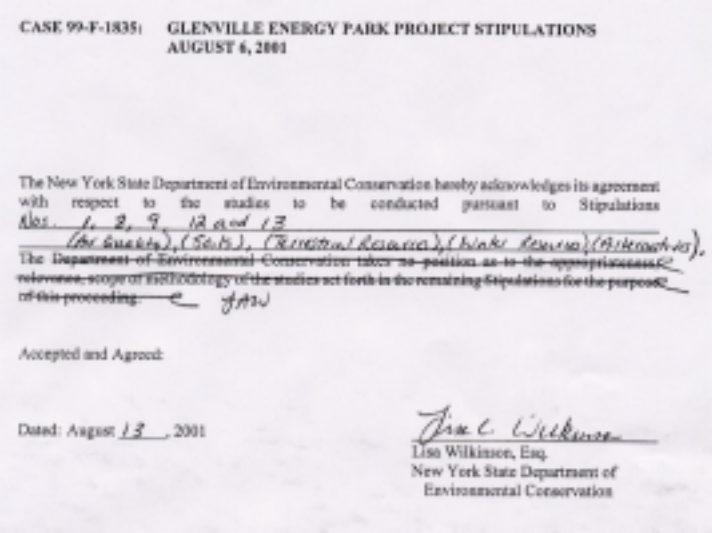
CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS
AUGUST 6, 2001

Accepted and Agreed:

Date: August 9, 2001

David Van Ort, Esq.
New York State Department of
Public Service

CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS AUGUST 6, 2001



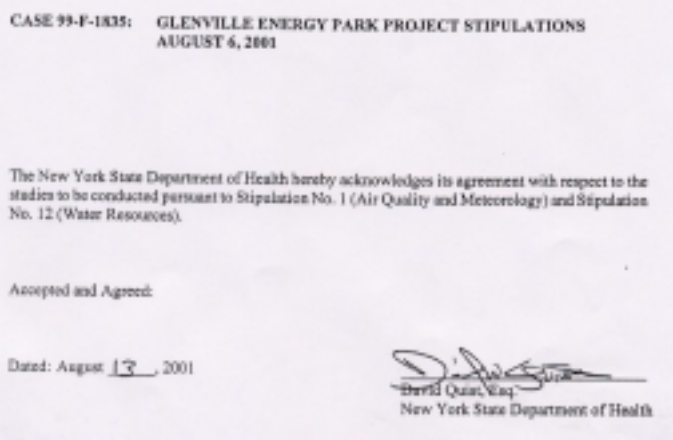
CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS
AUGUST 6, 2001

The New York State Department of Environmental Conservation hereby acknowledges its agreement with respect to the studies to be conducted pursuant to Stipulations Nos. 1, 2, 9, 12 and 13 (Air Quality), (Soils), (Terrestrial Resources), (Visual Resources) (Archeology). The ~~Department of Environmental Conservation takes no position as to the appropriateness, relevance, scope or methodology of the studies set forth in the remaining Stipulations for the purposes of this proceeding.~~ JAW

Accepted and Agreed:

Dated: August 13, 2001

Lisa Wilkinson, Esq.
New York State Department of
Environmental Conservation



CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS
AUGUST 6, 2001

The New York State Department of Health hereby acknowledges its agreement with respect to the studies to be conducted pursuant to Stipulation No. 1 (Air Quality and Meteorology) and Stipulation No. 12 (Water Resources).

Accepted and Agreed:

Dated: August 13, 2001

David Quist, Esq.
New York State Department of Health

CASE 99-F-1835: GLENVILLE ENERGY PARK PROJECT STIPULATIONS AUGUST 6, 2001