

FINAL ENVIRONMENTAL IMPACT STATEMENT

MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT
New York State Electric & Gas Corporation
Milliken Generating Station
Lansing, New York

Prepared by:

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**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

I. PROJECT DESCRIPTION

New York State Electric & Gas Corporation (NYSEG) proposes to install pollution-control equipment at an existing coal-fired electric generating station in Lansing, New York. Milliken Station is a 320-megawatt power plant that accounts for 12 percent of NYSEG's generating capacity. NYSEG proposes installing a high-efficiency flue gas desulfurization (FGD) system to reduce emissions of sulfur dioxide and comply with the Clean Air Act Amendments of 1990. NYSEG also proposes combustion modifications and demonstration of selective non-catalytic reduction (SNCR) technology to reduce emissions of nitrogen oxides.

Because of the innovative nature of technologies to be used, the U. S. Department of Energy has selected this project to participate in the Clean Coal Technology Demonstration Program, a federal program promoting clean use of U. S. coal.

Project objectives can be summarized as follows:

- Achieve greater than 90% reduction in sulfur dioxide emissions;
- Achieve 30 - 60% reduction in nitrogen oxide emissions;
- Demonstrate SNCR technology in a coal-fired boiler;
- Produce marketable by-products rather than waste products that must be landfilled;
- Continue to produce marketable fly ash;
- Recycle all waste water from the new systems;
- Achieve maximum energy efficiency;
- Demonstrate a space-saving FGD system design.

Major components of the pollution-control systems to be added at Milliken are:

- A space-saving, cocurrent-countercurrent FGD system, including a new 375-foot stack that will replace two existing 250-foot stacks;
- Limestone receiving, storage and handling equipment to process limestone for use in the FGD system;

- **Facilities to manufacture marketable gypsum and calcium chloride as by-products of the FGD system;**
- **Combustion modifications and modifications to one of Milliken's two boilers to demonstrate an SNCR system;**
- **Upgrades of existing electrostatic precipitators;**
- **A new entrance road to Milliken Station.**

NYSEG proposes to begin construction during the second half of 1992 and have the new equipment in service in 1995.

The New York State Department of Environmental Conservation (NYSDEC) has been designated Lead Agency for the purpose of reviewing the project under the State Environmental Quality Review Act (SEQRA). On December 20, 1991, NYSEG submitted permit applications and a Draft Environmental Impact Statement (DEIS) for the Milliken Clean Coal Technology Demonstration Project.

Based on comments from permitting agencies and members of the public, NYSEG submitted two supplements to the DEIS in March and May 1992. The NYSDEC determined the DEIS to be complete in June 1992 and held a public hearing to collect public comments on July 20, 1992. A transcript of the hearing attached to this Final EIS.

A detailed project description is provided in Section 2.0 of the DEIS.

II. INCORPORATION OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT (DEIS)

A. SUMMARY OF DEIS

The DEIS was submitted in December 1991 and updated in March and May 1992. The NYSDEC accepted it as complete in June 1992. A public hearing on the DEIS was held July 20, 1992 at Lansing High School in Lansing, New York.

The DEIS addresses the project's environmental benefits and potential adverse impacts. Consequently, it is incorporated by reference as part of this FEIS. Copies of the FEIS and DEIS are available for public review at the following locations:

**Town of Lansing Town Hall, Lansing, NY
Tompkins County Public Library, Ithaca, NY
Cornell Law Library, Ithaca, NY
Seymour Library, Auburn, NY
Cayuga Community College Library, Auburn, NY**

Aurora Free Library, Aurora, NY
NYSEG Ithaca Division Office, Etna, NY
NYSEG Auburn Division Office, Auburn, NY
NYSDEC Division of Regulatory Affairs, Albany, NY

B. DEIS TABLE OF CONTENTS

The DEIS Table of Contents attached to this FEIS reflects the scope of analyses done by NYSEG and reviewed by the NYSDEC.

III. PUBLIC COMMENTS

A. COMMENTS ADDRESSED IN DEIS

Prior to submitting its DEIS, NYSEG held five public information meetings during the fall of 1991 in Lansing, Ithaca, Trumansburg, Auburn, and King Ferry. NYSEG's DEIS addressed items raised at those informational meetings.

Upon submitting the DEIS in December 1991, NYSEG asked for any agency or public comments by February 1992. March and May 1992 supplements to the DEIS provided copies of comments received from the following and NYSEG's responses:

- Mr. Harry Carlson, Regional Director of Transportation, New York State Department of Transportation, Syracuse, NY
- Mr. Norman L. Davidson, Lansing, NY
- Mr. George Fearon, Town Supervisor, on behalf of the Town of Springport, NY
- Mayor D. Joy Humes, on behalf of the Village of Aurora, NY
- Mr. Ward Hungerford, Highway Manager, Tompkins County Highway Department, Ithaca, NY
- Ms. Dooley Kiefer, Ithaca, NY
- Mr. William F. Lowery, Auburn, NY
- Mr. Jeffery D. Mead, Auburn, NY
- Mr. Richard Tallcot, President, NYS Route 90 Association, Union Springs, NY
- Mr. D. E. Ulmer, Sr., Chenango Bridge, NY

- The New York State Department of Environmental Conservation
- The U. S. Department of Energy
- The Tompkins County Environmental Management Council

B. PUBLIC HEARING COMMENTS

The transcript of the July 20, 1992 public hearing is attached to this FEIS. Responses are provided in FEIS Section IV. The following people made statements at the hearing:

- Mr. David Kauber
- Mr. Brad Griffin, Lansing Representative, Tompkins County Environmental Management Council
- Mr. John Dean
- Mr. George Sheldon

C. WRITTEN COMMENTS RECEIVED BY NYSDEC

Written comments received during the public comment period ending August 3, 1992 are addressed in Section IV of this FEIS. Comments were received from:

- Mr. Norman L. Davidson
- Inter-Power of New York, Inc.

IV. RESPONSES TO COMMENTS

Comment 1: Mr. Frederick J. Holman, a Landscape Architect who reviewed NYSEG's DEIS on the NYSDEC's behalf, asked for further information about local weather differences' effect on the new plume at Milliken.

Response: To determine plume characteristics, NYSEG collected weather data from a Binghamton weather station. While temperature and fog frequency around Milliken could be subject to micro-climate conditions unlike Binghamton, such variations are unlikely to affect the fog prediction modeling done for anticipated future plumes.

Low-lying areas in valley conditions are subject to ground fog formations and temperature inversions under certain meteorological conditions. However, the depth of such ground fog and temperature effects is typically limited to less than 100 feet. Expected new plumes will be approximately 400 feet high and essentially unaffected by low-lying phenomena. Meteorological data gathered at the Milliken site in the past show a lack of drainage flows at the height of meteorological instrumentation (30 meters). Evidence of drainage flows at that height would indicate susceptibility of the area to low-lying phenomena; but that was not the case.

Comment 2: Mr. Frederick J. Holman asks that a wind rose showing prevailing wind direction be included with the FEIS.

Response: A wind rose summarizing annual wind patterns at Milliken is attached.

Comment 3: Mr. Frederick J. Holman points out that Figure 4.1.5-15 in the DEIS should be revised to illustrate views from line-of-sight origin locations #23, 24, and 25. He also points out that Figures 4.1.5.1 2A, 4.1.5.1 2B, 4.1.5.1 3A, and 4.1.5.1 3B were incorrectly labeled.

Response: Corrected figures are attached.

Comment 4: Mr. Michael A. Staiano, a Noise Consultant who reviewed NYSEG's DEIS on the NYSDEC's behalf, asked that NYSEG's construction-related noise assessment be explained further.

Response: A memorandum from NYSEG attached to this FEIS provides further explanation of modeling done to assess construction-related noise.

Comment 5: Mr. Micheal A. Staiano asked NYSEG to provide an analysis of noise impacts expected due to increased truck traffic on nearby roads.

Response: A memorandum from NYSEG attached to this FEIS provides an analysis of highway traffic noise.

Comment 6:

Mr. David Kauber made a statement at the July 20, 1992 public hearing. His statement appears on pages 15 and 16 of the hearing transcript. He says that he lives in Aurora and is concerned about additional truck traffic. Consequently, he is interested in any alternative scrubber technologies that would require less truck traffic. He mentions electrostatic scrubbing he believes was recently discovered by a professor at Georgia Tech.

Response:

An analysis of alternatives to the proposed high sulfur dioxide removal scrubber system is discussed in DEIS Section 2.3 - Alternatives to the Proposed Action. That section summarizes the technology and operating alternatives NYSEG considered prior to pursuing the proposed FGD system.

The DEIS indicates that, in order for a pollution-control technology to be considered feasible for one of NYSEG's existing power plants, the technology must have been demonstrated somewhere in the world on at least a 100-megawatt electric generating plant for at least one year. The DOE Clean Coal Technology Program, which this project is participating in, seeks to demonstrate technologies that are beyond the research stage, but not yet widely commercialized in the U. S., which is the case with the proposed scrubber.

NYSEG has indicated that it is unaware of an electrostatic scrubber technology available for full-scale demonstration at this time. NYSEG has indicated that electrostatic precipitator technologies it is aware of do not achieve high levels of sulfur dioxide removal and create a solid waste that has to be landfilled. NYSEG maintains that it has considered feasible options for full-scale demonstration and selected the one that can achieve the highest sulfur dioxide removal in an environmentally acceptable manner.

Comment 7:

Mr. Brad Griffin, the Town of Lansing's member of the Tompkins County Environmental Management Council, attended the July 20, 1992 public hearing and asked that comments in his July 16, 1992 letter to NYSEG's Melanie Chapel be made part of the hearing record.

Mr. Griffin asks how the existing stacks will be taken down

if unusual noise levels or dust conditions could be expected during removal.

Response:

According to NYSEG, since the stacks are so close to the power plant, they must be demolished in a manner that will protect other structures. Scaffolds will be built at the top of the stacks and bricks will be removed from the top down. Debris will fall into the remaining stack shell and be periodically removed from a hole in the stack base.

Dust levels expected during construction and demolition are described in Appendix I of the DEIS. Analysis results indicate that fugitive dust from construction will neither cause nor contribute to a violation of any Federal or State ambient air quality standards (AAQS), with one possible exception. The analysis predicts that an AAQS violation could occur along the immediate lake shore if blasting to remove rock for new buildings is done during certain wind conditions. Site data indicates that winds blowing from the blasting area toward the lake occur less than three percent of the year. Since it is improbable that blasting activities will be done during a prolonged period with those wind conditions, it is likely that work will not violate AAQS. However, NYSEG has committed to monitoring air quality for particulates during blasting periods.

NYSEG has indicated that it is investigating ways to re-use demolition debris to minimize disposal needs and promote recycling of construction materials. If NYSEG cannot find a way to re-use stack debris, the material will be transported to a landfill.

Construction and demolition noise levels during the three-year construction period are described briefly in DEIS Section 4.4.5.5. The basis for NYSEG's estimate of noise levels is described in DEIS Section 4.1.5.5 - Impacts to Noise Environment. The noisiest phase of construction will be during excavation and steel erection for new facilities. Demolition activities would generate less noise. The DEIS presents the results of a construction noise model used to estimate noise levels from all construction equipment during the noisiest construction phases.

For the noisiest phase, noise levels are predicted to increase over existing background noise as described below. An increase of three A-weighted decibels (dBA) is considered just noticeable; an increase of five dBA is perceived as

clearly noticeable; an increase of ten dBA corresponds to a perceived doubling in loudness. Noise levels will vary hour to hour. The following estimates are for worst-case phases:

<u>Off-site Noise Monitoring Station</u>	<u>Increase Over Baseline Noise</u>
South	4 dBA
North	5 dBA
East	6 dBA
West	1 dBA

Comment 8: Mr. Brad Griffin asks if the type of scrubber to be installed is currently being used at any other power plants.

Response: Several Saarberg-Holter Umwelttechnik GmbH scrubbers are operating in Germany and Austria. Results at those stations encouraged NYSEG to propose this demonstration of the technology in the United States.

Comment 9: Mr. Brad Griffin asks how residents can provide input for visual choices for stack color or texture.

Response: One of the permit conditions directs NYSEG to obtain NYSDEC approval of plans to mitigate visual impact, including plans to paint or otherwise color new facilities. The NYSDEC contact person is Mr. Richard Benas.

Comment 10: Mr. Brad Griffin asks the status of FAA lighting requirements.

Response: FAA lighting requirements for the new stack are provided in Appendix B of the DEIS. The requirements are to install dual, medium-intensity lighting.

Comment 11: Mr. Brad Griffin asks if the stack will be a lightning attractant.

Response: The stack is likely to be a lightning attractant, but NYSEG is designing it with that in mind. It will be properly grounded.

Comment 12: Mr. Brad Griffin asks for clarification about data on DEIS Table 2.2.2-1, which shows daily intake from Cayuga Lake.

Response: The amount of water vapor making up the plume will be about 950,000 gallons per day when Milliken is operating at full load. That vapor will come from water in combustion air, coal, and water evaporated in the FGD system. Under current operation, Milliken discharges slightly more water to Cayuga Lake than it uses as a result of rainfall runoff on site.

Comment 13: Mr. Brad Griffin asks if coal with sulfur content higher than 3.2% will be used. He asks what effect such higher sulfur coal would have on the quantity of by-products produced.

Response: Computations for DEIS analyses were based on 3.2% sulfur coal. NYSEG has indicated that it does not anticipate operating with higher sulfur coal, except during the short demonstration period discussed below. The 3.2% figure is an upper-limit sulfur content for customary operation. NYSEG has indicated that actual coal burned at Milliken is likely to have sulfur content closer to 2.9%.

As part of the three-year demonstration of the new scrubber technology, a test program will be conducted to demonstrate the scrubber's performance with coals having a wide range of sulfur contents. NYSEG plans to demonstrate the scrubber while burning coal with sulfur content near 4% during a small portion of the test period. NYSEG has indicated that test period will be a short-term demonstration that would only be done after NYSEG does appropriate air quality modeling and obtains proper approvals or variances from the NYSDEC.

NYSEG has indicated that, for a given generation output, the amount of gypsum produced increases as sulfur content increases. Since NYSEG's DEIS assumes 3.2% sulfur, the quantity of gypsum estimated is on the high side of what NYSEG expects to produce. Coal's chloride and ash contents are independent of sulfur content. Therefore, ash and salt by-products could increase, decrease, or remain the same with changes in sulfur content.

Comment 14: Mr. Brad Griffin asks the anticipated ratio of limestone to gypsum by-product. He points out that more trucks may be needed if weather or other factors delay deliveries for one or more days. He asks about the level of truck transport during the construction phase.

Response: NYSEG has indicated that the anticipated ratio by weight of limestone used to gypsum produced is 1 pound of limestone to 1.7 pounds of gypsum.

NYSEG has acknowledged that a greater number of trucks than described in the DEIS might be required if poor weather or other unforeseen factors delay shipments and require make-up traffic. NYSEG has indicated that, while that is a possible scenario, it would be an infrequent, short-term situation.

Pages 4-48 through 4-54 of the DEIS discuss traffic expected during the construction phase. To estimate worst-case impacts, NYSEG assumed that 10 construction trucks will arrive and depart from Milliken each hour. That estimate is based on the number of trucks expected during concrete placement. When concrete is being placed, a steady supply of concrete must be transported into the station. This activity will be the one requiring the most construction vehicles per day entering and exiting at the Route 34B intersection. NYSEG estimates 5 concrete trucks per hour would be required during peak concrete pouring. To be conservative in their calculations, NYSEG doubled that number to account for other deliveries during concrete placement. NYSEG has indicated that the analysis assumes construction trucks will arrive almost entirely from south of the station, and actual truck traffic during any given work hour will nearly always be less than that used in the analysis.

Comment 15: Mr. Brad Griffin asks if NYSEG's plans for a new entrance road could pre-determine modes of transport for limestone or by-products.

Response: NYSEG plans to install a new access road to provide a safer entrance to the station. Because of safety considerations, an improved entrance road is needed regardless of the future transportation mode for limestone and gypsum. Consequently, NYSEG has indicated that building the new

road will not affect future decisions related to truck or rail deliveries for limestone and by-products.

NYSEG submitted revised write-ups about access road alternatives in March and May 1992 supplements to the DEIS. Those supplements explain comments received on alternatives and NYSEG's plans to pursue one of two options that use an existing transmission-line corridor.

Comment 16: Mr. Brad Griffin suggests that this project might provide an opportunity to improve fishing access at Milliken.

Response: In DEIS Section 4.4.5.6 NYSEG outlines its plans to mitigate visual impacts. As an offset to impacts, NYSEG discusses plans to improve existing fishing access at Milliken. Permit conditions for the project direct NYSEG to pursue those plans.

Comment 17: Mr. Brad Griffin asks how lower gypsum wallboard prices could impact NYSEG's plans to market gypsum. He asks if there might be a local gypsum plant built as a result of the project.

Response: NYSEG has indicated that lower wallboard prices would tend to improve the market for Milliken's gypsum. The gypsum produced will be less expensive than mining natural gypsum. Consequently, NYSEG believes gypsum users wishing to cut costs will seek out scrubber-generated gypsum. NYSEG has indicated that the amount of gypsum to be produced at Milliken is not sufficient to support a gypsum plant.

Comment 18: Mr. Brad Griffin asks about noise levels arising from the FGD system during operation.

Response: NYSEG has indicated its intent to design new facilities so that there will be no perceptible increase in noise over what is heard now at the closest properties in each of the four compass directions from the station. Sections 3.5.5 and 4.1.5.5 of the DEIS discuss NYSEG's study of those noise receptor locations. Permit conditions will require NYSEG to ensure that it meets its design goals by monitoring seven noise receptor locations before and after scrubber operation.

Comment 19: Mr. Brad Griffin asks what are the most recent plans for a visitors' center.

Response: NYSEG has indicated it is continuing negotiations with the DOE about the level of funding from the Clean Coal Technology Program. Plans for a visitor center are contingent on available funding.

Comment 20: Mr. John Dean made a statement at the July 20, 1992 public hearing. His comments appear on pages 19 through 22 of the hearing transcript. He expressed concern about additional truck traffic in the vicinity of Milliken.

Response: The DEIS addresses transportation plans and constraints in a number of sections: Section 3.5.4 - Existing Environment, Transportation (pages 3-42 through 3-56); Section 4.1.5.4 - Environmental Consequences, Impacts to Transportation (pages 4-48 through 4-79); Section 4.3.1 - Environmental Impacts of Alternatives to the Proposed Action, Alternative Methods of Material Transport (page 4-112); Appendix H - DEIS Supplement, Public Comments on the DEIS and NYSEG's Responses (pages H-77 through H-121).

Those sections explain NYSEG's strategy to rely on truck transportation in early years since trucks are the only transportation mode that can reach any limestone supplier and any potential gypsum market. NYSEG has indicated it expects that in years ahead rail transportation will be economically competitive with truck, and it intends to explore rail transport as an option. As discussed on DEIS page 4-112, NYSEG has indicated it is unaware of any gypsum users who could receive barge deliveries, and that is the primary reason NYSEG considers a barge option infeasible.

Comment 21: Mr. George Sheldon made a statement at the July 20, 1992 public hearing. His comments appear on hearing transcript pages 22 and 23. He expresses concern about noise and trucks at Milliken Station, and mentions the back-up beepers as being an annoying source of noise. Mr. Sheldon asks why the new stack must be so much taller than the existing stacks.

Response: NYSEG has indicated it is designing new facilities to incorporate noise mitigation measures and ensure that any noise increases off Milliken property will be no more than 3 A-weighted decibels (a noise level considered just noticeable). Permit conditions require NYSEG to do pre- and post-operation noise testing at seven noise receptor locations to ensure that NYSEG's objective is met. DEIS Section 4.1.5.5 - Impacts to Noise Environment, pages 4-79 through 4-83, provides results of NYSEG's noise analysis.

The new stack will be about 375 feet tall whereas existing stacks are about 250 feet tall. The increase in height is due solely to the Good Engineering Practices required by regulations. If the existing stacks were to be built today rather than in the 1950's, they would have to be built 375 feet tall.

Comment 22: Mr. Norman L. Davidson submitted a comment letter dated July 30, 1992. His letter is attached to this FEIS. Mr. Davidson reiterates concerns about increased truck traffic that he raised in a February 1992 letter to NYSEG, which is included in DEIS Appendix H along with NYSEG's response. He asks that barge or rail transport be mandated to avoid local impacts expected as a result of increased truck traffic.

Response: Mr. Davidson refers to truck traffic data in the DEIS. The data referred to is presented in Table 4.1.5-6. He indicates that the truck count data presented for Route 34B from Lake Ridge to Auburn is not representative of truck traffic figures for the portion of Route 34B south of Fleming to King Ferry. That is true, and is reflected on the table. Table 4.1.5-6's second row provides separate truck count data for the section of Route 34B south of Fleming. In agreement with Mr. Davidson's comment, the table shows that there will be a greater incremental impact to Route 34B south of Fleming than north of Fleming.

Mr. Davidson believes DEIS estimates of total trucks per day may be understated since limestone deliveries could be compressed into 9 months. NYSEG has indicated that the DEIS estimate covers the possibility of seasonal limestone delivery. Since the volume of by-products to be transported from the station is greater than the volume of limestone needed, it is by-product quantity that dictates the number of vehicles required. By-products will be transported year

round and will require about 36 trucks per day, five days a week. If limestone is delivered five days a week year round, 17 trucks will arrive with stone and leave with by-products, and another 19 trucks will arrive empty to take the balance of by-products to market. If limestone were delivered five days a week six months of the year, during those six months 34 trucks per day would bring in limestone and two trucks would arrive empty, for a total of 36 trucks leaving with by-products. The rest of the year, 36 trucks would arrive empty and leave with by-products.

The Response to Comment 20 and DEIS sections cited in that response explain why barge transport is considered infeasible and why rail transport cannot be mandated. Decisions about transport options are not solely dependent on economics. The actual location of gypsum markets is also a consideration. It may not be possible to reach some gypsum markets by rail. If by-product markets cannot be reached by rail, truck traffic impacts would not be lessened by using rail to transport limestone. Empty trucks would still have to travel to the station to remove by-products. NYSEG has indicated that it is not possible to foresee the location of gypsum markets and the availability of rail line options for the entire life of Milliken Station. Consequently, while NYSEG can and is investigating rail options for the foreseeable future, it is not possible to commit to any one transportation mode for the life of the project. For that reason, the DEIS assesses impacts of both transport options.

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- Comment 23:** On behalf of Inter-Power of New York, Inc., Mr. Ben Wiles submitted a comment letter on August 3, 1992. Mr. Wiles letter is attached to this FEIS. He raises concerns about air permit conditions for this project in comparison to conditions placed on air permits for new coal-burning power plants.
- Response:** Since Units 1 and 2 at the Milliken Station are explicitly listed as affected units in Table A of Sec. 404 (7651C) of the Clean Air Act Amendments of 1990 (CAAA), the facility must reduce sulfur dioxide emissions to specific levels before January 1, 1995. In terms of applicable requirements, the facility is currently complying with the requirements of 6 NYCRR 201, 225, and 227. In addition, as a Title IV effected

existing facility, the US Environmental Protection Agency has ruled that Title IV projects are exempt from the Prevention of Significant Deterioration (PSD) and New Source Performance Standards (NSPS) of Title I of the CAAA.

Responses to the specific issues raised are as follows:

1. Permitted SO₂ emission rates

The draft permit clearly states in permit condition I(3) that the SO₂ and NO_x permitted levels will be modified to be consistent with the yet-to-be promulgated provisions of 40 CFR 72. The levels specified in permit condition I(1) will not be the limits to which the facility will ultimately be held.

The specified emission rates are consistent with the requirements of 6 NYCRR 225. Air Guide 12 does not apply to an existing facility which is PSD and NSPS exempt. Furthermore, Air Guide 26 only applies if modeling is required. The requirement in 6 NYCRR 201.4(1) that applicable standards be maintained does not necessitate a modeled demonstration of such compliance. The modeling which is referred to was not required as historical monitoring data approved by NYDEC exists that shows no standards violations. In addition, the applicant accepted a post modification ambient monitoring requirement as noted in permit condition IV(1)k.

Monitored data which reflects the existing source impacts is preferred to modeled impacts in instances where no increase in permitted levels are anticipated by a modification to the existing source. Such would not be the case for a new source.

The impacts projected in the comments are inappropriate since these merely reflect emissions at the permit limits for SO₂ and do not account for the reduced impacts that will result due to the higher buoyancy of the stack plume without the operation of the control equipment. Although a modeled analysis has not been provided in the DEIS for the proposed permit emission limits, the determination to draft the permit at the existing emission levels is not based on requiring such modeling. The modeling performed in the DEIS was to demonstrate standards compliance with the new stack parameters and emissions associated with the operation of the control equipment.

2. Capture Efficiency

As correctly pointed out in the third footnote of the comments, as a qualifying phase I technology, a 90% continuous emission reduction is required. This will yield an SO₂ emission reduction that easily meets the emission cap requirements of Title IV. Thus, there is no validity to the characterization referencing "the absence of a capture efficiency permit condition."

The perceived serious problems noted for other sources which might site near and could contribute to possible modeled violations of the standards by Milliken is unfounded. Future "what if" scenarios are not a part of our determination in the air quality impacts and permitting of a source at hand since it need not result in any requirements for either Milliken or the future source having to obtain "impact offsets." In this particular instance, the situation is mitigated by the fact that any future source which might have to account for Milliken's impacts in a cumulative analysis need not explicitly model Milliken's emissions since its impacts can be represented by the monitoring data to be collected under draft permit condition IV.1.k. These monitors will be sited for the specific purpose of identifying Milliken's maximum impact and can be used in lieu of modeled impacts in accord with EPA and NYSDEC modeling guidance.

3. Sulfur-in-coal

Irrespective of the sulfur content of coal, Title IV targets sulfur dioxide allowances in tons per year per unit. As such, burning a higher sulfur coal is allowed if compliance with the annual emission cap can be demonstrated.

With respect to short term SO₂ impacts, there will not be a 60% increase since, again, the emission limits established in draft permit condition I.1. are what will have to be met regardless of the sulfur in coal content.

3. NO_x Control

Title IV does not address emissions of nitrous oxides (NO_x). These are addressed in Title I. However, Inter-Power is correct in noting the absence of a NO_x emission rate in

Section I of the draft Permit to Construct (PC). The provisions of 6NYCRR 227.5(a) (1) set forth a NO_x limit of 0.70 lbs. per million BTU heat input when coal is burned in units with a total heat input exceeding 250 million BTU per hour for which an application for a PC is received by NYDEC subsequent to 8/11/72. Although the original Milliken permit was exempt from a NO_x limit, we have nonetheless incorporated this limit into Section I of the present PC. With this emission limit, the modeling results provided in the DEIS can be scaled to provide a conservative annual NO_x impact of 89 μg/m³ which is still below the corresponding 100 μg/m³ standard.

The NO_x permitted levels will be modified subsequently to be consistent with the yet-to-be promulgated provisions of 40 CFR 72. Thus, there will not be any artificial marketing of NO_x offsets from Milliken since the offset credit in our proposed draft offset provisions are to be based on the difference between the identified NO_x RACT emissions and actual (not permitted) NO_x emissions. The in-stack monitoring requirement for NO_x in permit condition IV.1.a will provide the basis for calculating these actual emissions.

5. CO₂ Mitigation

CO₂ mitigation concerns are not considered for modifications to existing facilities that are operating in compliance with state regulations. Since there is no statutory reason to seek an alternative to coal burning at an existing plant, Inter-Power's arguments dealing with DEIS alternatives are without merit.

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**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

PUBLIC HEARING TRANSCRIPT

1

STATE

2

COUNT

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1 HEARING OFFICER: Good evening, Ladies
2 and Gentlemen. This Administrative Hearing is
3 being conducted pursuant to the State
4 Environmental Quality Review Act and its
5 implementing regulations concerning the
6 Milliken Clean Coal Technology Demonstration
7 Project. The Applicant is New York State
8 Electric & Gas Corporation and the lead agency
9 is the New York State Department of
10 Environmental Conservation.

11 My name is Richard Benas. I'll be
12 conducting this hearing and I will receive
13 written comments about this proposal up until
14 August 3rd, 1992. They can be sent to me to
15 the New York State Department of Environmental
16 Conservation, Division of Regulatory Affairs,
17 Room 510, 50 Wolf Road, Albany, New York, the
18 zip is 12233-1750. Oral comments will be
19 taken tonight, this is unsworn testimony and
20 it will be given equal weight with written
21 comments. If you have a lengthy set of
22 comments you'd like to make it's preferable to
23 summarize them and give me the written
24 document.

1 The Department of Environmental
2 Conservation has a tentative determination to
3 approve this proposal. We have developed
4 graph permits with special environmental
5 conditions which are intended to minimize the
6 adverse consequences of this proposal.

7 I will ask Ms. Melanie Chapel of New York
8 State Electric & Gas Corporation to give us a
9 brief description of the Milliken Clean Coal
10 Technology Demonstration Project.

11 MS. CHAPEL: Thanks. Good evening. My
12 name is Melanie Chapel and I'm NYSEG's
13 Licensing and Public Information Coordinator
14 for this project.

15 To start, it's helpful to understand that
16 the U.S. Clean Air Act was amended in 1990.
17 One of the objectives of those amendments, to
18 reduce emissions of air pollutants that are
19 believed to be precursors of acid rain, sulfur
20 dioxide and nitrogen oxides. To achieve that
21 goal, the amendments require utilities that
22 generate electricity using fossil fuels to
23 reduce emissions of those air pollutants.
24 NYSEG must meet certain reduction targets by

1 1995 and then make further reductions by the
2 year 2000.

3 We propose to meet a significant portion
4 of our obligations by reducing sulfur dioxide
5 and nitrogen oxides at Milliken Station in
6 Lansing. The technologies we've chosen to
7 make those reductions have not yet been
8 demonstrated on full-scale, coal-fired power
9 plants in the United States. Because of the
10 great potential of these technologies to help
11 the electric utility industry other industries
12 reduce their emissions, and the Department of
13 Energy has selected as NYSEG's project to
14 participate in the Clean Coal Technology
15 Program.

16 That is a program that seeks to
17 demonstrate technologies that will enable U.S.
18 businesses to use abundant U.S. coal in an
19 environmentally acceptable manner in the years
20 ahead. Because of its abundance, coal is
21 judged to offer energy security that other
22 fossil fuels may not be able to provide. Coal
23 makes up eighty-five percent of the country's
24 fossil fuel reserves.

1 By participating in the Clean Coal
2 Program, NYSEG will receive funding from the
3 Department of Energy to demonstrate promising
4 technologies. We are negotiating with the
5 Department of Energy to receive up to forty
6 percent of the project's one hundred and
7 fifty-nine million dollar cost from the Clean
8 Coal Program. What technologies are to be
9 demonstrated? One, a high-efficiency flue-gas
10 desulfurization system, also known as a
11 scrubber, and, Two, a selective non-catalytic
12 nitrogen oxide reduction system, which is
13 sometimes called by its trade name, NOxOUT.
14 Operating the systems will create twenty-five
15 new jobs at Milliken Station.

16 In a nutshell, NYSEG's goals for the
17 project are: One, demonstrate up to
18 ninety-eight percent removal of sulfur dioxide
19 while burning high sulfur coal; Two, reduce
20 nitrogen oxide emissions thirty to sixty
21 percent; Three, produce marketable gypsum and
22 salt byproducts rather than solid wastes that
23 would have to be landfilled, which would be
24 the case with conventional scrubber systems;

1 Four, continue to market fly ash which is
2 produced in the combustion process, so that it
3 also does not have to be landfilled; Five,
4 achieve the zero wastewater discharge from the
5 new processes; Six, demonstrate a space-saving
6 design for the scrubber; and, Seven, minimize
7 new systems' energy requirements.

8 The tradeoffs to achieve these goals are
9 described in NYSEG's Draft Environmental
10 Impact Statement. It's a document that's been
11 made available for public review in eight
12 areas including public libraries in the
13 Lansing area. This document is also known as
14 a DEIS. The tradeoffs to this project are
15 described in the DEIS and can be summarized in
16 three categories: One, visual impacts of new
17 buildings and a visible vapor plume, and
18 somebody can maybe help me out with the
19 slides. Thanks, Dennis. The tallest new
20 structure will be a new stack that will
21 replace two existing two hundred and fifty
22 foot stacks. The new stack will be three
23 hundred and seventy-five feet tall.

24 Gases exiting Milliken will be cooler

1 than they are now. As a result, water vapor
2 in the emissions will condense closer to the
3 stack and a white plume will be visible
4 year-round. Under current conditions a plume
5 is only visible on cold days when the hot
6 gases cool rapidly.

7 I'd like to just show a couple slides to
8 illustrate the expected changes. This a view
9 of Milliken Station from the middle of the
10 lake looking toward the plant, and that's what
11 it looks like today with the two, two hundred
12 and fifty foot tall stacks. Okay, this is a
13 computer enhanced photograph artist's
14 rendition using computer technology to
15 guesstimate what the new facilities might look
16 like. This is a photograph that appears in
17 our DEIS that's been available for public
18 comment. This was a design that we envisioned
19 early on in the process given what we knew
20 about the technology as it's being used in
21 Germany and Austria. This was the kind of
22 design that we thought might be the worse case
23 visual impact. Since this picture was
24 provided in the DEIS we've been working on a

1 design, and I'd like to show you some pictures
2 of the kinds of things that we're doing to try
3 to minimize visual impact. The one thing,
4 we're trying to get away from that rocket
5 launcher, milk bottle type shape of the new
6 stack and instead put the building, the
7 ancillary buildings into one building at the
8 base of the stack. We'd also been discussing
9 and consulting with the DEC about the kinds of
10 colors that can be used on new sidings to make
11 the facilities a little less obtrusive, more
12 earth tones. We're working to decrease the
13 diameter of the stack to the extent that's
14 feasible, and we're also looking at things we
15 can do to the existing plant facilities to
16 reduce impact further, to be shown on the next
17 slide, Dennis. For instance, painting some of
18 the existing facades and the conveyors that
19 sort of jump out at you because they are
20 moving at an angle across the view shed.
21 These are still preliminary changes and we are
22 discussing with the DEC what things might be
23 feasible. The next slide shows from a
24 viewpoint of Route 89 the existing plant. The

1 picture that we had in the DEIS, the revised
2 design that we're working on., and finally,
3 see how nicely from a distance it blends in
4 further if you're able to change the color on
5 some of the existing facades. Okay, thanks,
6 Dennis. So there is the visual impact which
7 we think we can do a number of things to
8 minimize.

9 A second tradeoff: Crushed limestone is
10 used in the chemical reaction in the scrubber.
11 That reaction will remove sulfur dioxide and
12 produce marketable gypsum and salt.
13 Transporting limestone to the station and
14 taking the byproducts from the station will
15 increase truck traffic near Milliken. The
16 DEIS discusses options for transporting these
17 materials. It describes NYSEG's strategy to
18 rely on truck transportation in the early
19 years of the demonstration and to explore
20 options for using rail and/or truck for
21 limestone, and byproduct markets are better
22 defined in years ahead.

23 And finally, a third tradeoff: There
24 will be impacts to small wetlands on NYSEG's

1 property and three intermittent streams that
2 cross the property. To a great extent, NYSEG
3 has adjusted its plans to avoid wetlands and
4 minimize the amount of fill placed in the
5 intermittent streams. There are numerous
6 small wetlands on the Milliken property. Most
7 are too small to be regulated by the DEC, but
8 they do meet the criteria for the U.S. Army
9 Corps regulated wetlands. While DEC
10 regulations apply to wetlands greater than
11 about twelve acres in size, the Army Corps
12 does not have a size limit for wetlands.

13 Building a new, safer entrance road to
14 the power plant will require fill in two
15 streams and three wetlands. The total area of
16 wetlands to be affected is less than one acre.
17 Also one wetland that is one-tenth of an acre
18 and three wetlands that are in the hundredths
19 of an acre size range will be impacted by work
20 near the existing station.

21 That briefly summarizes the three
22 categories and major tradeoffs to installing
23 air pollution-control equipment.

24 Last fall we held five public information

1 meetings to seek public input about our plans
2 for the project. Of course, recognizing some
3 of you from those hearings, those meetings.
4 The meetings were held in Ithaca, Lansing,
5 Trumansburg, Auburn and King Ferry. The input
6 we gained from those meetings was used to help
7 us prepare our DEIS, and that document was
8 provided to the DEC last December. Since then
9 we have augmented the DEIS with two
10 supplements that address questions from
11 agencies and members of the public, and those
12 were made public in March and May of this
13 year. Members of the public who had expressed
14 an interest in the project have been added to
15 a project mailing list that now has about
16 ninety people on it. It's been our sincere
17 wish throughout this process to have a very
18 open dialogue with people in the community
19 around the station concerning our plans.

20 We're very eager at this point to obtain
21 the necessary permits to begin some
22 construction this August. I'd like to explain
23 why that's important. It's important for
24 these promising technologies to be

1 demonstrated as soon as possible. Utilities
2 all over the country are making decisions
3 about how to comply with the Clean Air Act
4 Amendments.

5 We and the Department of Energy would
6 like to see other utilities use the most
7 efficient, effective pollution-control options
8 available. But the utilities need to see that
9 technologies are demonstrated and proven
10 before they can select them as an option for
11 meeting the Clean Air Act Amendment's
12 requirements. Without good demonstration data
13 about a technology in a timely manner, they're
14 going to have to fall back on conventional
15 methods in order to meet the regulatory
16 deadlines and that would be unfortunate. In
17 addition, the sooner we install the equipment,
18 the sooner we can reduce emissions from
19 Milliken, and that not only benefits air
20 quality in the area around the station, but
21 also the Adirondacks and Catskills where
22 Milliken's pollutants can be deposited.

23 In order for us to begin our
24 demonstration in 1995, we need to build a safe

1 entrance road into the station this year. To
2 do that, work can begin no later than August.
3 If it does not, our project will be delayed a
4 year since the asphalt for the road can't
5 really be placed in cooler weather after
6 October or early November.

7 In closing, I'd like to express
8 appreciation to members of the public who have
9 taken the time and effort to share with us
10 their support, their thoughts and their
11 concerns during the past year. The helpful,
12 thoughtful comments that we have received have
13 been expressed clearly and with sincere
14 interest. We look forward to continuing an
15 open dialogue with the people in the
16 communities around the station throughout the
17 process of constructing and operating these
18 clean coal technologies. Thank you very much
19 for your attention.

20 HEARING OFFICER: Thank you, Ms. Chapel.
21 If anybody wishes to make a statement, you
22 have to fill out one of these registration
23 cards which we have up here. If you have
24 filled them out, please bring them up and I

1 will call the names as I receive the cards.

2 UNIDENTIFIED SPEAKER: I don't want to
3 break things up, but if one has made a
4 statement in the letter in the earlier
5 environmental report and it was answered and
6 that answer is in that report, is that the
7 same weight as the statement of this hearing?

8 HEARING OFFICER: You should send that
9 statement to me at this hearing.

10 UNIDENTIFIED SPEAKER: Okay.

11 HEARING OFFICER: I accept written
12 comments until August 3rd.

13 MS. CHAPEL: If the letter's in the
14 existing DEIS he needs to do that again, I
15 think that's what you're asking?

16 UNIDENTIFIED SPEAKER: That's correct.

17 MS. CHAPEL: It's actually in the DEIS.

18 HEARING OFFICER: That would be part of
19 the record of this proceeding, but for the
20 sake of making sure that it's bound with the
21 rest of the written comments that we have to
22 respond to, please resend it to me please.

23 Well, I've received two cards. David
24 Kauber?

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MR. KAUBER: Uh huh.

HEARING OFFICER: Please step up and make a statement.

MR. KAUBER: Should I make it here?

HEARING OFFICER: That's fine, as long as it can be heard.

MR. KAUBER: I'm a little bit new to this whole thing. I was at your other hearing in King Ferry and I've just recently discovered some technology that a professor at Georgia Tech. is doing concerning electrostatic scrubbing. I'm concerned, I, as a person living in Aurora is concerned actually about these trucks and all the transportation that you're going to have to employ bringing this stuff in and out and possibly using Aurora as one of the sources for trucks, so naturally I'm concerned about alternative ways of doing the scrubbing including electrostatic technology which I understand would be involved in the necessity of bringing in a whole bunch of limestone and gypsum out of the site. So I'm concerned whether there are alternatives that have been considered such as

1 something like this, including technology
2 that's on the edge of being as effective as
3 anything that's presented here as I
4 understand.

5 HEARING OFFICER: Thank you, Mr. Kauber.
6 Mr. Brad Griffin.

7 MR. GRIFFIN: Thank you. My name is Brad
8 Griffin and I'm the Town of Lansing
9 representative member to the Tompkins County
10 Environmental Management Council. I would
11 like to say first of all I think the, I would
12 appreciate and I believe many members of the
13 community appreciate the corporation's timely
14 information in terms of the environmental
15 volume and the number of public meetings that
16 were held with citizen groups in the area. I
17 have a copy of a letter which I prepared and
18 we have sent off to Mrs. Chapel upon review of
19 the environmental volume and also arising from
20 a number of the meetings that have been held,
21 and unless I'm pressed to do so, I think I
22 will just make, I will ask the Hearing Officer
23 to make this copy of our letter to Mrs. Chapel
24 a part of the record of the hearing.

1 Basically it involves quite several pages of
2 questions, comments, concerns and suggestions
3 from the local community. And I will ask that
4 that be made a part of the record of the
5 hearing. And also I would inquire at this
6 time, is the Town of Lansing a permanent party
7 and interest in the hearing?

8 HEARING OFFICER: Yes. A Mr. Kirby?

9 MS. CHAPEL: Mrs. Kirby.

10 MR. GRIFFIN: Right, the honorable
11 Jeanine Kirby, the Supervisor of the Town of
12 Lansing.

13 HEARING OFFICER: Right. They have
14 received all the materials that are the draft
15 permits, DEIS's, all the materials have been
16 sent to her, yes.

17 MR. GRIFFIN: Could we assume that the
18 Town of Lansing will continue to be registered
19 as a party and interest?

20 HEARING OFFICER: Yes.

21 MR. GRIFFIN: Okay, thank you.

22 HEARING OFFICER: I would like to also
23 note for the record that Member of Congress
24 Sherwood Boehlert has provided a statement to

1 the Department in support of this proposal.
2 That will also be bound into the record of
3 this proceeding.

4 I'll repeat one more time, to those who
5 wish to submit a written comment to me, if you
6 don't want to make an oral comment, the
7 written comments are given equal weight, they
8 can be sent to me and I'll receive them up
9 until August 3rd, 1992. My name once again is
10 Richard Benas, B-E-N-A-S, and my address is
11 Division of Regulatory Affairs, Room 510, 50
12 Wolf Road, Albany, New York, the zip is
13 12233-1750 and that of course is the New York
14 State Department of Environmental
15 Conservation, be our lead agency for this
16 proposal.

17 MS. CHAPEL: Would you like me to see if
18 anyone in the back would like a card?

19 HEARING OFFICER: If anyone who just came
20 in would like to make a statement for the
21 record, you can do so by filling out one of
22 these cards here and we'll be glad to receive
23 your comments.

24 MS. CHAPEL: Can I bring a card back to

1 anyone.

2 HEARING OFFICER: Mr. John Dean, you can
3 make a statement.

4 MR. DEAN: Yeah, have other people been
5 -- when did the meeting start is my first
6 question?

7 HEARING OFFICER: It started at 7:00.

8 MR. DEAN: Oh, at 7:00, oh brother, okay.
9 Didn't the paper say 7:30?

10 UNIDENTIFIED SPEAKER: The paper said
11 7:30.

12 MS. CHAPEL: A newspaper article or a
13 legal notice may I ask?

14 MR. DEAN: Excuse me?

15 MS. CHAPEL: Was it a newspaper article?

16 MR. DEAN: It was in the Ithaca Journal
17 three days ago it said 7:30. What I was going
18 to say, I was concerned, I think it's a good
19 idea to clean up the environment and I think
20 it's a good idea to put in this high stack and
21 this scrubber. My problem that I have with it
22 is there's going to be so much truck traffic
23 on I guess Route 34 here and my question is
24 has it been researched whether or not the

1 materials they need for the scrubber to keep
2 it running, could that be done on a railroad
3 or could it be done in the New York State
4 barge canal system rather than on the roads,
5 rather than I believe it's thirty trucks a
6 day, I don't know if I have that right or
7 wrong.

8 UNIDENTIFIED SPEAKER: It would be
9 thirty-four.

10 MS. COUSE: Round trip makes it sixty
11 back and forth.

12 UNIDENTIFIED SPEAKER: We can't hear bac.
13 here. Do you have a microphone?

14 HEARING OFFICER: No, we don't. We
15 haven't said anything.

16 UNIDENTIFIED SPEAKER: I thought somebody
17 was saying something.

18 UNIDENTIFIED SPEAKER: I said it was
19 thirty-four.

20 MR. DEAN: It's thirty-four trucks?

21 MS. CHAPEL: Round trips.

22 MS. COUSE: So that makes it sixty some
23 passes per day in front of the homes or
24 businesses. It's also on a nine month period.

1 It's an average for twelve months. So the
2 truck traffic will be less than twelve months.

3 MS. CHAPEL: Actually that will be
4 year-round.

5 MS. COUSE: Year-round. That's average
6 year-round, but in fact will they be running
7 year-round or will they not be traveling?

8 MS. CHAPEL: They will be having to take
9 gypsum out year-round, yes.

10 MR. DEAN: I don't know whether it's time
11 for -- who's responding to the questions?

12 HEARING OFFICER: We will not be
13 responding to these comments tonight. This is
14 to accept comments from the public about any
15 concerns that you have on the Draft
16 Environmental Impact Statement or on the draft
17 permits. If there's a matter of clarification
18 the Applicant is directed to clarify it but we
19 are not going to be responding to comments.

20 MS. CHAPEL: I'm sorry. We did have a
21 presentation earlier at 7:00 and unfortunately
22 since you thought it started at 7:30 you
23 missed it, but I think if you have
24 questions --

1 MR. DEAN: Okay.

2 HEARING OFFICER: All right, I'll call on
3 Mr. George Sheldon.

4 MR. SHELDON: There doesn't seem to be
5 much point in making a statement except to
6 address the other people in the room and
7 you're not taking any account of what's being
8 said I gather.

9 HEARING OFFICER: Yes, we are. This is a
10 stenographic record. This record will be
11 used. All oral or written comments, if you
12 came in late, will be accepted up until August
13 3rd. They'll be given equal weight in the
14 decision making, but the Department will look
15 at all of these comments and will be effected
16 accordingly.

17 MR. SHELDON: I've lived at my present
18 address for more than twenty years and
19 Milliken Station has been a non-relief
20 disaster for me, constant noise and trucks and
21 pollution up until the time the scrubbers were
22 put in. Since that time with the construction
23 of the silo and spreading fly ash around I get
24 the back up ^{beepers} ~~heaps~~ for eight or ten hours at

1 a stretch so I'm not at all confident that the
2 new installation won't make matters even worse
3 visually, I'm sure it will, and I would like
4 to know why it's necessary to build a tower of
5 that extreme height, why it can't be done with
6 some kind of shorter arrangement or other
7 technology, and the present towers are about
8 equal to the level of the roads so they're not
9 extremely visible, but with a three hundred
10 and eighty odd foot tower it seems like a
11 terrible height to me to put on this lake.

12 UNIDENTIFIED SPEAKER: Excuse me, are you
13 not going to answer questions such as which
14 road will the trucks be going on? I want to
15 know if they're going to go on 34B.

16 HEARING OFFICER: The Applicant has
17 prepared a Draft Environmental Impact
18 Statement which details what it proposes and
19 that information is in the Draft Impact
20 Statement which was made available to the
21 public in a number of locations, and if you
22 have not had the opportunity to read it you
23 may still do so, and those locations where the
24 draft EIS is available are at the Aurora Free

1 Library in the Village of Aurora; at the
2 Cornell Law Library at Nyron Taylor Hall at
3 Cornell University, at the Tompkins County
4 Public Library, North Cayuga Street in Ithaca;
5 at the Seymour Library, Genesee Street in
6 Auburn; at the Cayuga Community College
7 Library at Franklin Street in Auburn; at the
8 Lansing Town Hall at Auburn Road in Lansing;
9 and at the NYSEG Ithaca Office on Dryden Road
10 in Ithaca; and also at the NYSEG Auburn Office
11 on Wright Avenue in Auburn. It's also
12 available at 50 Wolf Road, Albany.

13 Could I have your name please? If you
14 wish to make a statement for the record, you
15 could fill out a card and I could have your
16 name and that will be part of the permanent
17 record, any concern that you have.

18 MR. DEAN: I don't think she heard you.
19 Are you talking to her?

20 HEARING OFFICER: Yes.

21 MR. DEAN: They need your name.

22 HEARING OFFICER: Once again, for those
23 who may have come in late, I will accept
24 written comments until August 3rd, 1992. You

1 can send them to me at the New York State
2 Department Environmental Conservation. My
3 name is Richard Benas. That's spelled
4 B-E-N-A-S. I'm in the Division of Regulatory
5 Affairs, Room 510, 50 Wolf Road, Albany, the
6 zip is 12233-1750. Written comments submitted
7 to me will be given equal weight with the oral
8 comments tonight. They will all be part of
9 the record.

10 Did I understand that some newspaper
11 notices went out at 7:30 was the hearing time?

12 MS. CHAPEL: I believe the legal notices
13 said seven o'clock. We did have a tour for
14 the media at Milliken Station last Thursday
15 and we said the meeting time was seven o'clock
16 but apparently it was reported as 7:30 in the
17 newspaper article.

18 HEARING OFFICER: Oh, in an article.

19 UNIDENTIFIED SPEAKER: It was in last
20 Friday's Ithaca Journal. It was in the sports
21 section.

22 HEARING OFFICER: All right, the official
23 notice indicates 7:00 P.M. Unless there is
24 further comments, we'll close the record. Any

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further comments? Thank you, Ladies and
Gentlemen.

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C E R T I F I C A T I O N

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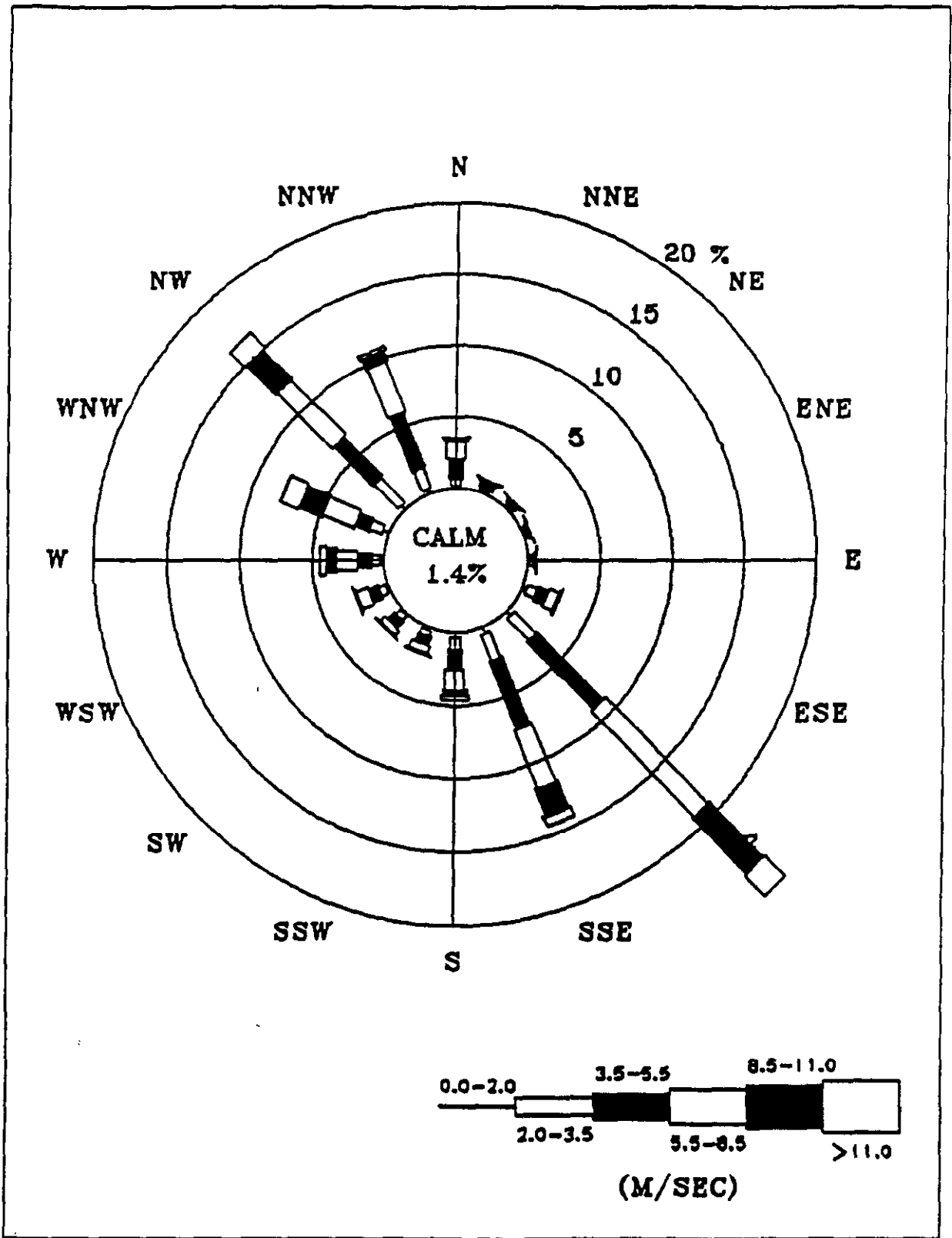
I hereby certify that the proceedings and evidence are contained fully and accurately in the notes taken by me on the above cause and that this is a correct transcript of the same to the best of my ability.



SUSAN C. NICHOLAS

**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

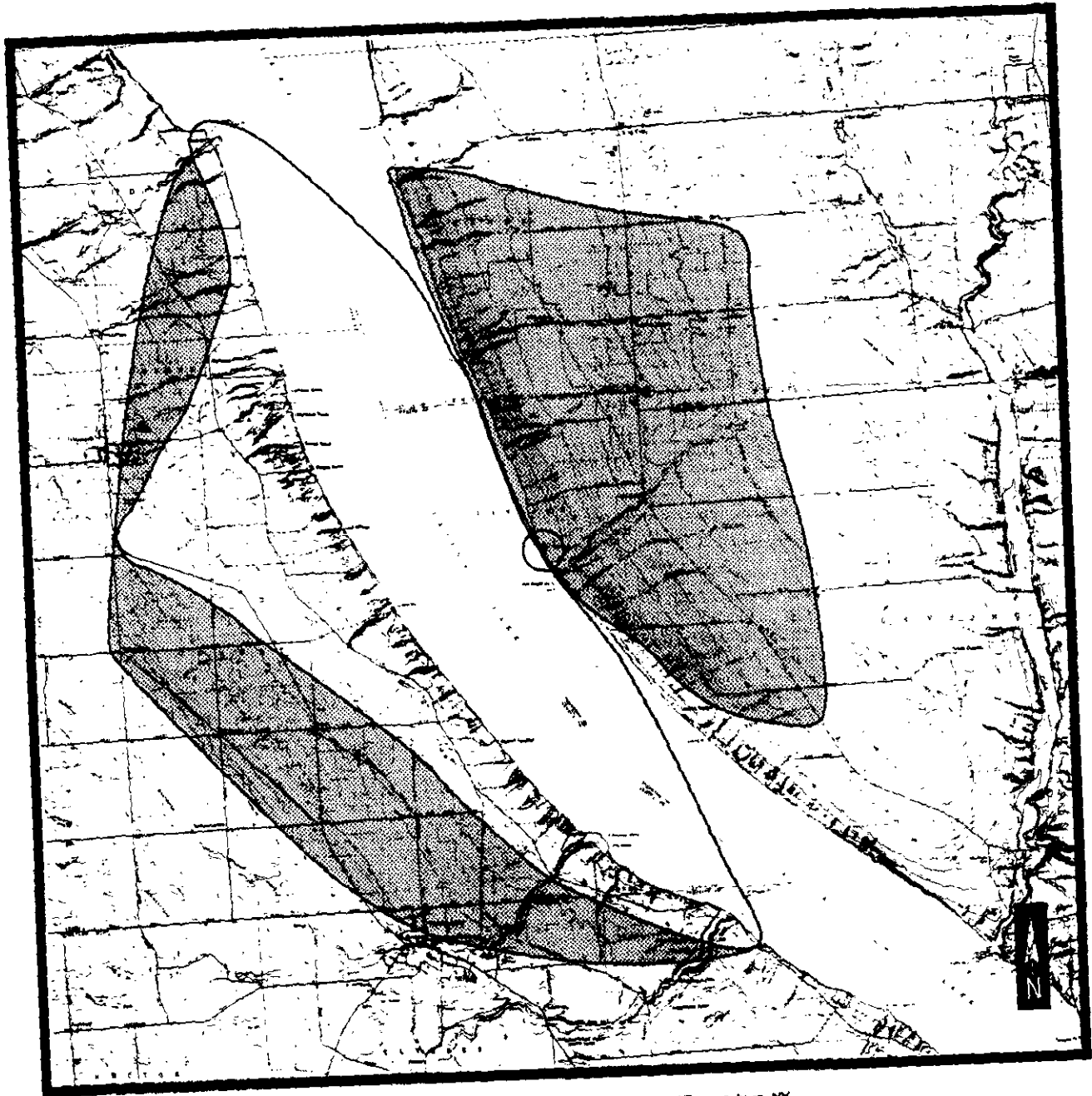
ANNUAL WIND ROSE FOR MILLIKEN



Wind Rose - Cayuga, New York 1975-1976.

**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

CORRECTED FIGURE 4.15-15



SOURCE: USGS 1970, 1971. 7.5 Minute Series (Topographic) Maps of Genoa, Ludlowville, Sheldrake and Trumansburg, NY

0 .5 1 Mile

0 .5 1 Kilometer

- Primary visual receptor area - existing conditions
- Estimated area of increase in visual receptor locations

FIGURE 4.1.5-15
Project Visual Impact Area

**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

CORRECTED FIGURE 4.1.5.1 2A, 2B, 3A, AND 3B



FIGURE 4.1.5-13A

Existing View from Viewshed Receptor 3



FIGURE 4.1.5-13B
Computer Rendering of View from Viewshed Receptor 3



FIGURE 4.1.5-12A
Existing View from Viewshed Receptor 2

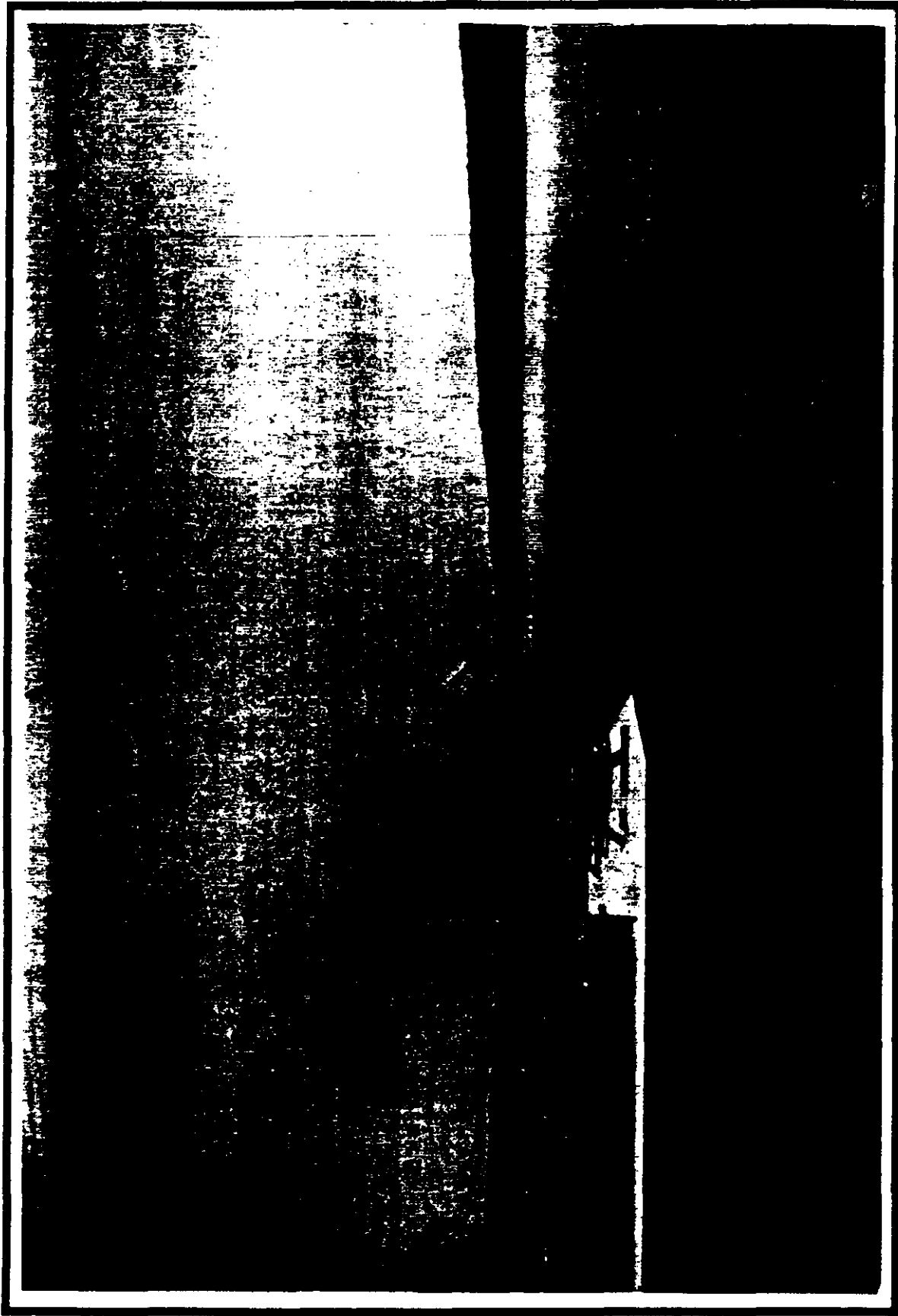


FIGURE 4.1.5-12B

Computer Rendering of View from Viewshed Receptor 2

**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

**MEMORANDUM FROM NYSEG'S CONSULTANT, ENSR, ADDRESSING
HIGHWAY TRAFFIC NOISE AND CONSTRUCTION-RELATED NOISE**

MEMORANDUM

TO: Melanie Chapel/NYSEG
FROM: Fred Sellars/Elizabeth Wiseman
RE: Milliken Station CCT Demonstration
Project - Response to Comments from
Staiano Engineering, Inc. - Noise Impacts

DATE: June 10, 1992
FILE: 4964-002-370
CC: M. Garvin/ENSR
B. Earsy/Earsy Consulting

The following provides additional information as requested by Michael A. Staiano in his letter dated June 9, 1992.

Highway Traffic Noise

To assess traffic noise impacts, year 1995 peak hour noise levels for the eight roadway segments identified in Table 4.1.5-6 were computed. Noise levels with and without the proposed project were compared to determine the potential increase in noise levels. Noise levels with project traffic were also compared with the Federal Highway Administration's (FHWA) noise abatement criteria level. For land uses such as residential, the FHWA's abatement criteria level is 67 dBA (L_{eq}).

Field observations conducted along the roadway segments indicate that the residences are located approximately 100 feet from the center line of traffic. For a conservative (maximum noise) analysis, all projections were based upon this distance. Vehicle speeds depend upon the particular alignment, surface width, weather and other local conditions. To address this range of possible speed conditions, noise levels were predicted for the anticipated highest (55 mph) and lowest (30 mph) speeds on the roadway segments. As part of the transportation impact analysis, 24-hour traffic counts were taken along the aforementioned eight roadway segments; peak hour traffic volumes were conservatively assigned ten percent of the average daily traffic (ADT) volumes. The project truck traffic contribution (nine vehicles per hour, bi-directional) was based upon assuming a uniform distribution over an eight-hour work day. All predictions were computed using the FHWA's approved traffic noise model (FHWA 1978).

The results of the traffic noise level predictions are presented in Table 1. Roadside noise levels under all conditions evaluated meet the FHWA noise criteria and result in increases of no more than three to four dBA at the closest residences. The majority of the segments will experience imperceptible (0 - 2 dBA) increases in noise levels. As noted elsewhere, an increase of three dBA is considered a just noticeable change in environmental noise. For these reasons, the

increase in noise from project truck traffic is not expected to create a significant noise impact.

Construction Noise

The model used in the construction noise impact analysis (Teplitzky 1978) incorporates a typical construction equipment profile, as listed in Table 4.1.5-9 of the DEIS. The model implicitly assumes a mix of construction equipment and use factors (empirically determined values representing the percent of time during the typical work day that a particular piece of equipment is operated at maximum effort) usually associated with projects of similar size and scale to the proposed project. The default mix for power plant construction projects equates to a total sound power level of 121.7 dBA. Although pile driving activities are not anticipated for project construction, pile driver sound pressure levels were included in the analysis, with the appropriate use factor. Page 4-80 of the DEIS has been edited accordingly. To remain conservative, the final construction sound power level was not modified, even though it considered construction noise from pile drivers. Therefore the sound power level of 121.7 dBA is a conservative estimate of the likely construction noise level without pile drivers.

Rock drills, not explicitly included in the Teplitzky construction noise model, will be used during portions of the construction schedule. According to the Handbook of Noise Control (C.M. Harris (ed.) 1979), pile drivers produce a sound pressure level of 101 dBA at 50 feet, while rock drills produce a sound pressure level of 98 dBA at the same distance. Furthermore, the total ^ weighted sound energy emitted per day for a pile driver is 62 kWh/day, while the sound ene... per day for a rock drill is 53 kWh/day. This indicates that even with consideration of use factors, pile drivers would produce more noise over a typical day than rock drills. Therefore, the construction noise model remains conservative in its final estimation of a sound power level.

Reference:

FHWA 1978. "Highway Noise". FHWA Highway Traffic Noise Prediction Model, US Department of Transportation. FHWA-RD-77-108. December 1978.

Harris, C. M. (ed.) 1979. Handbook of Noise Control. 2nd edition. McGraw-Hill Book Company, New York, NY.

Teplitzky, A. M. 1978. Power plant noise emission. In: A. M. Teplitzky, and E. W. Wood (eds.), *Inter-Noise-78*.

TABLE 1

Peak Hour Noise Levels (dBA)*

	Rte 90 south of Aurora	Route 34B	Rte 34 north of Rte 34/34B Intersection	Rte 34/34B overlap	Rte 34B west of Rte 34/34B intersection	Rte 34 south of Rte 34/34B Intersection	Rte 38 north of Rte 38/79 Intersection	Rte 79 east of Rte 38/79 Intersection
Speed equal to 55 mph								
Without project trucks	58	57	63	66	67	65	62	61
With project trucks	61	60	64	67	67	66	63	63
Increase	2	3	1	1	0	1	1	1
FHWA abatement level	67	67	67	67	67	67	67	67
FHWA margin, with project	6	7	3	0	0	1	4	4
Speed equal to 30 mph								
Without project trucks	53	51	58	61	62	60	57	56
With project trucks	56	56	60	62	63	61	59	58
Increase	3	4	1	1	1	1	2	2
FHWA abatement level	67	67	67	67	67	67	67	67
FHWA margin, with project	11	11	7	5	4	6	8	9

* Evaluated at a distance of 100 feet from the centerline of traffic, representing the closest receptors.

The approximate speed of a train travelling through Ithaca is 15 miles per hour. Assuming an average length of 50 feet per rail car, the speed of the train can be converted to:

$$(15 \text{ mi/hr})(5,280 \text{ ft/mi})(1 \text{ rail car}/50 \text{ ft})(1 \text{ hr}/60 \text{ min})(1 \text{ min}/60 \text{ sec}) = 0.44 \text{ rail car/sec.}$$

The amount of additional delay experienced by drivers waiting at the West State Street at-grade crossing would be:

$$\begin{aligned} \text{additional delay} &= (\text{total length of additional cars})/(\text{assumed speed of train}) \\ &= (17 \text{ additional rail cars})/(0.44 \text{ rail car/sec}) \\ &= 38.6 \text{ seconds.} \end{aligned}$$

Therefore, addition of 17 rail cars to each existing train delivery for the purpose of delivering limestone and hauling by-products will increase the delay experienced at the critical at-grade crossing by approximately 39 seconds. Typical delays at this intersection are estimated at approximately six minutes per 100-car train; the additional cars will represent an approximate 11 percent increase in delay. This increase will only occur an average of six times per week (three deliveries, northbound and southbound directions). No significant impacts to traffic operations are expected to occur.

Since the number of trains travelling to Milliken each week is not expected to increase (only the length of each train will increase), the FRA accident rate presented in Section 3.5.4.1 will not change. The length of a train is less likely to affect the train/car accident rate as frequency of train arrivals. The predicted number of yearly accidents at the State Street at-grade crossing will remain at 0.031346 (one accident predicted every 31.9 years). The additional rail cars will not appreciably affect safety at this crossing.

4.1.5.5 Impacts to Noise Environment

In this section, noise impacts are evaluated according to two criteria:

- 1) compliance with specific governmental laws, regulations, or guidelines; and,
- 2) the estimated extent to which people will be adversely affected.

Noise is defined as unwanted sound. The extent of noise impact on human receptors from a proposed project is proportional to a number of interrelated factors, including: the presence of existing, non-project noise resources; people's attitudes concerning the project (Stevens et al. 1955); the number of people exposed, and the type of activity affected (sleep, recreation, or conversation).

Standards and Guidelines

There are no Federal or State regulations that apply to noise resulting from this project. The Town of Lansing does not have a quantitative noise criteria applicable to this project. Noise requirements are often related to limiting the increase in the background (L_{90}) noise level. An increase of three A-weighted decibels (dBA) is considered just noticeable, while an increase of five dBA is perceived as clearly noticeable. A ten dBA increase corresponds to a perceived doubling in loudness. Noise impacts for new major projects are considered by the NYSDEC under SEQRA.

Construction-Related Impacts

Construction of the facility is projected to occur from mid-1992 to the end of 1994. Construction noise levels will vary depending on the particular construction phase. During light construction phases, a lower level of noise is expected to be generated than during maximum construction periods. In addition, within each phase of construction, noise levels will vary on an hour-to-hour basis. The project construction schedule will consist of four phases: excavation, concrete pouring, steel erection and mechanical work. The noisiest of these phases occur during excavation and steel erection.

The maximum sound levels of representative construction equipment (at a reference distance of 50 feet) are presented in Table 4.1.5-9. During the initial phase which will consist of site excavation, blasting and rough grading, typical equipment used will be cranes, backhoes, front-end loaders and trucks. Placement of foundations and the erection of structural steel will require on-site equipment such as cranes, loaders, pumps, trucks and welders. These two phases are considered the noisiest periods of construction work. Construction equipment seldom operates at its noisiest condition, and average levels for engine powered equipment are typically six to 13 decibels less than the maximum level (Teplitzky 1978).

A construction noise model (Teplitzky 1978) was used to estimate the predicted noise level from all construction equipment during the noisiest construction phases. Equipment noise profiles used to estimate construction impacts are based on an extensive field measurement program conducted for projects of a similar type and scale to the proposed action. Noise contributions of typical mixes of on-site construction equipment are included in this model for each construction phase, along with corresponding average equipment use factors. Use factors are empirically determined values that represent the percent of time during a typical workday that a particular piece of equipment is operated at maximum effort. The resulting sound power level for the proposed project (L_w , a measure of acoustic power radiated by the source) during heavy construction was determined to be 121.7 dBA.

**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

JULY 30, 1992 LETTER TO NYSDEC FROM MR. NORMAN L. DAVIDSON

RE: NYSEG MILIKIN STATION CLEAN COAL PROJECT

1812 Ridge Rd.
Lansing, N.Y. 14882
7/30/1992

Richard Benas
Division of Regulatory Affairs D.O.E
50 Wolf Rd
Albany, N.Y. 12205-1750

Dear Mr. Benas,

Please see the enclosed letter I sent to Ms. Chapel at NYSEG in February. The increase in truck traffic on the "preferred route" (N.Y. 34B from Lake Ridge to Auburn) will approach half again the current traffic on this route according to the EIV study. I believe the traffic will greatly exceed that figure as most of the trucks passing through their northern 34B checkpoint are not through traffic to Lake Ridge. The homes and farms bordering this route for 17 miles are not likely to have a truck pass every 15 minutes. The traffic for stone will be compressed into 9 months, five days a week and will coincide with the arrival of barges at the port of Buffalo. If past experience is any guide 8-10 trailers as group will roll down 34B at 65 mph hitting their "jake" brakes and downshifting with enthusiasm shortly before they turn into the plant. I'm all for progress but NYSEG as the contractor could do much to soften this most significant impact to our communities. Their response to me left the DOT and the police to handle complaints. Modern, well maintained, and conservatively driven trucks are key to this short term solution.

Long term, rail or barge should be mandated to move this heavy non perishable freight. At a slightly higher cost to rate payers (maybe less), environmentally sound methods can move commodities to and from this "green" clean coal project. I find it most amusing we import this gypsum technology from Europe but fail to utilize their modes of transportation. The state is going to spend plenty for road repair while Conrail pays taxes for its tracks.

Your help in creating an agreement to get NYSEG and Conrail to work together for all of us is most appreciated. Much ado has been made of the "visual impact" of the expanded plant to the lake. I guarantee the audio and pressure wave impact from a high speed group of trailers hurtling past historic houses at 7:00 A.M. will surpass any view out the window. You wake up on the ceiling.

NYSEG is most aggressive in its plea to let market forces determine their course of action. "Market forces" should cede to "responsible action" when 70 million of our tax dollars are being used to help them comply with the Clean Air Act. Some years ago another chunk of cash went to keep Conrail in the railroad business. Lets use it.

Thank You for your attention.

Norman L. Davidson
Norman L. Davidson

**FINAL ENVIRONMENTAL IMPACT STATEMENT
MILLIKEN CLEAN COAL TECHNOLOGY DEMONSTRATION PROJECT**

**AUGUST 3, 1992 LETTER TO NYSDEC FROM MR. BEN WILES
ON BEHALF OF INTER-POWER OF NEW YORK, INC.**

Cohen, Dax, Koenig & Wiles, P.C.

Attorneys

126 State Street

Albany, New York 12207

Telephone: (518) 432-1002

Facsimile: (518) 432-1028

Jeffrey C. Cohen
John W. Dax
Joshua Noah Koenig
Ben Wiles
Richard B. Miller

August 3, 1992

Mr. Richard Benas
New York State Department of
Environmental Conservation
50 Wolf Road
Albany, New York 12233-1750

Re: Milliken Clean Coal TDP

Dear Mr. Benas:

This letter is provided on behalf of Inter-Power of New York, Inc. in response to the public notice and request for comments concerning the Draft Environmental Impact Statement (DEIS) and related draft permits for the "Milliken Clean Coal Technology Demonstration Project" (Milliken Project). Inter-Power has been able to review briefly the proposed permit conditions and the DEIS. We recognize that the final draft permit conditions may reflect judgments and information which could not be addressed specifically or extensively in these materials. Nevertheless, based upon the documents which we were able to review, we provide the following comments:

1. Permitted SO₂ emission rates.

The maximum permitted SO₂ emission factor for the existing Milliken power plant is currently 5.0 lb SO₂/MMBtu. This results in an uncontrolled emission rate based on New York State's Part 255-1 sulfur-in-fuel regulations which prescribe the maximum sulfur content for the coal which may be burned at facilities such as the Milliken station. If the draft Part 201 permit to construct is issued as currently drafted, this emission rate will be unchanged, even though the primary objective of the Milliken Project is to apply flue gas desulfurization (FGD) equipment to the

Mr. Richard Benas
August 3, 1992
Page 2

otherwise uncontrolled Milliken emissions so as to reduce emissions far below the uncontrolled level. In Comment 2, we discuss why such a dramatic divergence between permitted and anticipated actual emissions ought not to be approved. In this comment, based on the air quality modeling provided with the DEIS, we explain why it appears that the Milliken Project can not be permitted at the 5.0 lb SO₂/MMBtu emission factor.

The Milliken Project cannot go forward without a Part 201 Permit to Construct. Part 201 plainly provides that such a permit cannot be granted unless the proposed source demonstrates that "the operation of the source will not prevent the attainment or maintenance of any applicable ambient air quality standard". Air Guide 12 makes clear that such a demonstration depends on an appropriate air quality impact analysis. Air Guide 16 clearly sets forth the contents of such analysis. Logic, as well as applicable guidance, suggests that such an analysis would require air quality impact modeling of the Milliken Station using the 5.0 lb SO₂/MMBtu emission factor applicable to the project under the draft permit. However, no such modeling has been provided; accordingly, the basis for this Part 201 demonstration, which is an explicit prerequisite to the Part 201 permit, is questionable at best.

Some air quality impact modeling is provided in the DEIS. The modeling is based on a much lower emission rate for the project, i.e., 85 grams SO₂/second or approximately 674 lb SO₂/hr.¹ The results of this modeling provide modeled values for the maximum 3-hour, 24-hour and annual impacts from the Milliken Station based on the emission rate of 674 lb SO₂/hr. If these impacts are multiplied by the ratio of the to-be-permitted Milliken emission rate (15,005 lb SO₂/hr) to the modeled emission rate (674 lb SO₂/hr), an estimate of impacts of the to-be-permitted emission rate can be obtained.

1. The DEIS indicates that the heat input for the Milliken Station should be assumed to be 3001 MMBtu/hr (1484 and 1517 MMBtu/hr, respectively, for Unit 1 and Unit 2). An emission factor of 5.0 lb/MMBtu for the Milliken plant produces an emission rate of 15,005 lb SO₂/hr.

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The following chart compares this estimate to the ambient air quality standards for SO₂:

	Modeled Impact (ug/m3)	Impact at Permitted Emission Rates Based on the proposed emission factors ² (ug/m3)	Ambient Air Quality Standard SO ₂ (ug/m3)
3-hour SO ₂	727	16,183	1,300
24-hour SO ₂	224	4,986	365
Annual SO ₂	20.8	315	80

Accordingly, not only is there no explicit air quality impact modeling to support the proposed permitted emission rate, but the only air quality impact modeling which is available strongly suggests that stack modeling could not demonstrate standards compliance for the project at the to-be-permitted emission rate. Indeed, the modeled impacts are likely to be several times the applicable standard for both the short-term and the annual averaging periods.

2. Capture efficiency.

The Milliken Project will install an FGD system to reduce SO₂ emissions from both Unit 1 and Unit 2 at the facility. The FGD system should reduce SO₂ emissions by 90%. However, the effect of the FGD system is reflected nowhere in the proposed permit. In effect, the plant's emission rates, from a permitting perspective, are unchanged by this \$160 million pollution control project. Rather than draft permit conditions whose effect would be to support efforts by the plant operator to improve on the 90% capture efficiency, the permit functions as if the pollution control equipment were not even there. Far from "technology forcing", the draft permit is not even "technology

2. This comparison does not include an estimate of background air concentrations. If background is included, the extent of the modeled exceedence is increased. The applicable short-term emission factor proposed in the draft permit is 5.0 SO₂/MMBtu. The proposed annual emission factor is 3.4 lbSO₂/MMBtu.

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cognizant".³ In the absence of a permit condition recognizing and requiring the intended capture efficiency for the FGD system, the proposed Part 201 permit serves no useful regulatory purpose.

The absence of a capture efficiency permit condition and associated emission rates also creates serious permitting problems for other potential sources which could locate in the vicinity of the Milliken Station. Such a new source, if considered a major source, would be required to obtain a Part 201 permit and, to do so, would be required to demonstrate its own compliance with ambient air quality standards. Modeling for this demonstration would likely include the Milliken Station if the proposed new source was within 50 to 100 kilometers of Milliken. For this modeling, the proposed new source would be required to model the Milliken Station at its permitted 5.0 lb SO₂/MMBtu; no matter that the actual emissions should be 90% or more below this, i.e., 0.5 lb SO₂/MMBtu or less.

Since the modeling of Milliken at 5.0 lb SO₂/MMBtu produces modeled violations, the new source could not be built until Milliken reduced its permitted emissions to resolve the violations or provided an "impact offset" to the new source or until the new source reduced its own impacts below the significant impact level. Such a result would occur even though actual emissions from Milliken were intended to be and were far lower than those permitted.

In other areas in the State, a much less extensive divergence between permitted and actual emission rates has already caused extensive, unnecessary permitting delays. Moreover, in this instance, the divergence between permitted and actual emission rates would also make the source owner at Milliken a key player in permitting or, alternatively, precluding the permitability of the new source. A new source owner unable to obtain the cooperation of the operators of Milliken would face a substantial, albeit purely artificial, barrier to further development of the new source.

3. The draft permit does acknowledge that the FGD should be a "qualifying phase I technology" as defined at 42 U.S.C. § 7651(a). This federal definition requires such a technology to achieve a 90% capture efficiency. However, the statutory definition does not require a higher value, if achievable, from the equipment. More importantly, the draft Part 201 permit does not require the FGD system to be such a technology.

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3. Sulfur-in-coal.

The DEIS indicates the intent of the Milliken project to burn 3.2% sulfur coal. The station currently burns approximately 2.0% sulfur coal. Assuming the capture efficiency of the FGD system is the same with the higher sulfur fuel as it would be with the 2.0% sulfur fuel, the increase in emissions from the higher sulfur fuel will increase impacts by approximately 60%.

The DEIS suggests that the choice of the proposed technology and coal for the Milliken Project is based on a least cost solution for required SO₂ emission reductions mandated by the Clean Air Act Amendment of 1990. The DEIS provides, however, little more than a conclusory analysis to demonstrate that the FGD using the higher, 3.2% sulfur coal is preferable to the FGD system using the 2.0% Sulfur coal which is currently in use at Milliken. For example, this analysis reviews the high sulfur fuel option only as part of the overall response by the applicant on a system wide basis to the need for an SO₂ implementation strategy. The application here, however, is for Milliken alone. Even if lower system costs are created through implementation of the entire plan (a result not represented as certain by the DEIS and clearly not guaranteed by a permit condition), existing permitting regulations do not suggest that system savings are an appropriate justification for local short-term SO₂ impacts based on the use of higher sulfur coal at the specific project which is the subject of the proposed permit.

Moreover, recent permitting experience with other coal fired generation does not suggest that projects using high efficiency SO₂ capture technologies can justify the use of high sulfur fuels. Accordingly, a supplemental permit condition should limit the sulfur-in-fuel for the Milliken Project to levels currently in use at Milliken pending a more detailed and convincing analysis to justify the choice of higher sulfur fuels.

4. NO_x control.

In contrast to the modeling provided in the DEIS for SO₂, the DEIS' NO_x modeling assumes an NO_x emission rate which was not reduced by the application of an NO_x control technology. This modeling shows no NO_x concentrations above standards. However, the draft permit conditions are weaker with respect to NO_x than they are with respect to SO₂. While the proposed permit provides at least a maximum emission rate (albeit an uncontrolled rate) for SO₂, no maximum emission rate is provided for NO_x. The effect,

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therefore, is the same as with SO₂: i.e., a major control technology is unidentified in the permit, although in fact it will limit emissions from the Milliken Station. This has the same type of effect, although to a lesser extent, as was described for SO₂ when other new sources are proposed for permitting in the vicinity of this project.

Moreover, since the Milliken Station is located in the Northeast Ozone Transport Region, the absence of a reflection of the NO_x controls in the proposed permit could have a greater impact than the failure to fully reflect the proposed SO₂ controls. Because of the Ozone Transport Region, further NO_x emission controls or permitting conditions will be required for new sources throughout this region. An important aspect of these controls could be a requirement for new or some existing NO_x sources to obtain NO_x offsets from emission reductions at other existing sources.

Milliken will be a prime source for such offsets for the purely artificial reason that its NO_x emissions will be controlled even though its permit does not reflect it. It can reduce its permitted NO_x emissions without making any significant plant change. In effect, the unrestricted NO_x emissions at Milliken are a windfall of marketable NO_x offsets. In light of this possibility, the permit should be amended to specify an NO_x emission rate now. It should indicate that this rate would be adjusted based on stack testing of the boiler improvements, that a further adjustment would be made based on stack testing of the selective non-catalytic reduction ("SNCR") system, and that neither of these reductions may be used to provide NO_x emission offsets for any other source, including other sources owned by the Milliken Project developer.

5. CO₂ mitigation

The DEIS provides little analysis of the CO₂ impacts of the Milliken Project other than to calculate the reduced CO₂ emissions which result from efficiency improvements occurring at about the same time as the emission control aspects of the project. Similarly, and perhaps as a result, there is no special permit condition proposed for purposes of CO₂ mitigation. This is plainly inconsistent with state policy which suggests that costs of CO₂ impacts from an emission source should be incorporated in energy decision making through State administrative and regulatory actions to the extent practicable. In its most recent implementation, this policy will be addressed through a special permit condition for the Inter-Power coal-fired cogeneration project; a project which will be a more

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efficient (less CO₂ intensive) energy producer than Milliken. Based on the size of the Milliken station, the CO₂ condition for the Milliken Project could result in expenditures for CO₂ mitigation by the Milliken project developer of up to \$750,000 per year.

The Milliken Project sponsors may seek to distinguish this project from the recently reviewed coal-fired cogenerator in that Milliken is an existing generation station being brought into compliance by the proposed project, while the cogenerator represented new generation. In fact, this theory is plainly refuted by the DEIS itself. The DEIS clearly establishes that the Milliken Project was developed and chosen against a backdrop of many alternatives, several of which did not involve coal-firing. In effect, the continued coal-firing at Milliken was not a given for the development of this project, but an alternative chosen after analysis. As such, it stands on no different footing, with respect to the imposition of a CO₂ mitigation requirement, than the coal-fired cogenerator.

* * * *

In conclusion, we recognize that the Milliken Project is a significant and substantial step forward in the development of an electric generation infra-structure consistent with the public's interest in clean air and a diverse fuel mix. Accordingly, for this reason, as well as for the economic development benefits which construction such as this will engender, we believe the project should move towards successful permitting as quickly and efficiently as possible. In this regard, we have not attempted to review the underlying air quality modeling protocols or results but assumed them to be consistent with the appropriate guidance and to be accurate. Neither have we analyzed the alternatives analysis and the underlying calculations of present value or dollars per ton of pollutant avoided.

The above comments reflect a few limited areas where improvements in the resulting permit conditions are required. These requirements stem from our understanding of the intent of such conditions to assure ambient air quality standards compliance for this project and to serve as appropriate inputs for the modeling of and for the development of controls for sources other than Milliken which may seek permits in the future.

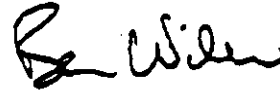
Our comments are also based on our assumption that all projects are measured against and meet the same regulatory standards. In our view, the fundamental importance of equal

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and fair treatment for sources posing the same or comparable potential impact for the breathing public can not be overstated.

We would be happy to provide a more extensive analysis or discussion on any of the above points, if it will assist you in your decision-making process.

Very truly yours,



Ben Wiles