

ANTHONY C. AGRESTI

EDUCATION

B.A., Meteorology, Kean College of New Jersey, 1984

CERTIFICATIONS

State of New Jersey Noise Control Officer

AREAS OF EXPERTISE

Mr. Agresti has 20 years of experience encompassing:

- Noise Analyses and Impact Assessments
- Conceptual Noise Control Design
- Design and Implementation of Ambient Noise Monitoring Programs
- Noise Compliance
- Ambient Air Quality/Meteorological Monitoring Program Design, Siting and Management

REPRESENTATIVE EXPERIENCE

Mr. Agresti has a wide range of experience in noise assessments for cogeneration/independent power, compressor station and linear projects, wind power and industrial clients. He specializes in the design and implementation of ambient noise monitoring programs, performing noise analyses, which include developing detailed noise data for a variety of sources, modeling to calculate facility noise levels and noise impact analyses. Mr. Agresti has also provided expert witness testimony on noise related issues.

Mr. Agresti also provides air quality and meteorological monitoring services to TRC clients. His experience includes the preparation of station operating and quality assurance manuals, and the design, siting and management of monitoring programs. He is also responsible for the quality assurance and reporting of collected data.

Noise Analyses and Impact Assessments

Catamount Laurel Hill – Laurel Hill, PA (Technical Manager: 2005-Current)

Mr. Agresti served as the noise scientist on this project, preparing a detailed noise study. The project, proposed in Lycoming County, Pennsylvania, will consist of 47 GE wind turbines rated at 1.5 MW each. The complex topographical features of the area required the use of the CadnaA 3-dimensional noise model. Also conducted noise level measurements of wind turbines in operation at several sites to support study conclusions and provided expert witness testimony at numerous zoning board of approval hearing. Project is proceeding on to planning board approval hearings.

Consolidated Edison Company of New York Weld Shop – Astoria, NY (Technical Manager: 2006)

Mr. Agresti conducted an analysis of noise emissions from a welding shop at ConEdison's Astoria, New York facility. The weld shop operates on an emergency basis 24 hours per day. Complaints from nearby residences prompted ConEdison to request a study to evaluate potential noise control measures. The study included computer noise modeling of the facility and specifications for several noise control measures. The study also included cost estimates and associated reductions with each measure.

EPRO Melrose and Chandler Street Substations – Melrose, MA (Technical Manager: 2005-2006)

Mr. Agresti evaluated the existing and proposed noise levels associated with the replacement of transformers at these two substations. The analyses included ambient fence line and residential noise level measurements, close-in measurements of the transformers and computer modeling to determine future noise levels. Mitigation measures, including the specification of lower noise transformers and/or noise barrier walls were also prepared as part of the analyses.

New York City Department of Environmental Protection, Shaft33B EIS – New York, NY (Technical Manager: 2005-2006)

Mr. Agresti conducted extensive computer noise modeling of construction activities at four potential water shaft locations in Manhattan. The analyses considered numerous construction equipment and noise barrier wall alternatives. Modeling results were incorporated into an EIS for the project.

Rochester Gas and Electric, Rochester Transmission Project – Rochester, NY (Technical Manager: 2005-2006)

Mr. Agresti prepared a noise assessment of the existing and future noise levels at six substation sites along the route of the transmission line. The assessment included ambient noise level measurements at residential and substation fence line locations and modeling to determine future levels at the substations where new transformers were proposed. Future levels were evaluated against the New York State Department of Environmental Conservation's Noise Policy guideline to determine if any impacts would occur.

Caithness Bellport Energy Center – Brookhaven, NY (Technical Manager: 2005-2006)

Mr. Agresti prepared the EIS noise section for this proposed 346 MW combined cycle combustion turbine project in Brookhaven, New York. The project will consist of a Siemens Westinghouse combustion turbine and a heat recovery steam generator. The project will utilize an air cooled condenser for cooling. Was responsible for all phases of the noise licensing, including ambient noise monitoring, noise modeling of project sources, and determining compliance with both local standards and the New York State Department of Environmental

Conservation's Noise Policy. Noise modeling was conducted utilizing the CadnaA noise model. This 3-dimensional model was used to develop a noise contour map of the entire area. The model allows input of topographic features and buildings, and takes into account both reflection and absorption by these features.

PPL Haworth – Haworth, NJ (Technical Manager: 2005-2006)

Mr. Agresti prepared a noise study of this proposed electric generating project in Haworth, New Jersey. The project will consist of four Caterpillar G3520C reciprocating internal combustion engines housed within a building. Was responsible for developing a building design that would allow for compliance with the State of New Jersey noise standard. Worked with noise control vendors to specify the required wall and acoustical louver materials required.

Kinder Morgan Gas Compressor Projects – Various Locations (Technical Manager: 2004-2006)

Mr. Agresti prepared the Resource Report 9 sections for submittal to the Federal Energy Regulatory Commission required for licensing of three gas compressor stations located in Rio Blanco County, Colorado, Wise County, Texas, and Carter County, Oklahoma. Was responsible for both the ambient noise monitoring and the noise modeling of each station. Specified noise control measures required to achieve compliance with FERC's noise limit of 55 dBA Ldn at any noise sensitive area.

Cape Wind Project – Cape Cod, MA (Technical Manager: 2006)

Mr. Agresti is currently preparing the third party EIS noise section for this proposed and highly contested wind turbine project to be located in Cape Cod, Massachusetts.

Lighthouse Landing EIS – Sleepy Hollow, NY (Technical Manager: 2003 – Current)

Mr. Agresti prepared the noise section of the DEIS for this major residential/commercial development proposed for a former General Motors manufacturing site in Sleepy Hollow New York. Conducted the ambient noise monitoring program and prepared all noise analyses for the project, including noise associated with increased vehicular traffic, demolition, construction and railway noise. The project team is currently responding to comments in anticipation of an FEIS filing.

Third Taxing District, City of Norwalk, Distributed Generation Project – Norwalk, CT (Technical Manager: 2005)

Mr. Agresti prepared a noise study for three Caterpillar XQ2000 emergency generators at a site in Norwalk, Connecticut. Was responsible for preparing a noise model of the engines and conducting noise measurements following engine installation to confirm calculated noise levels complied with the City of Norwalk and State of Connecticut noise standards. Represented client at town planning

board and zoning board meetings.

Southern Energy Kendall Square Station – Cambridge, MA (Technical Manager: 1999-2000)

Mr. Agresti performed the noise impact assessment for the construction of a combined cycle facility at the site of a currently operating steam boiler facility. The project consists of one GE Frame 7FA turbine coupled to a heat recovery steam generator. Performed computer noise modeling of major facility sources in order to determine future noise levels at nearby sensitive receptors. The State noise standard limits noise increases to no greater than 10 dBA above background. The MADEP required that a “BACT” analysis be performed in order to determine the incremental cost involved in adding noise control features in order to reduce facility noise levels to increments of 3, 6 and 9 dBA above background. Determined noise control required for each major source and obtained cost estimates from vendors and suppliers. Also provided expert witness testimony in support of the project in front of the State Siting Council.

Peabody Power Electric Generating Station – Peabody, MA (Technical Manager: 2004-2005)

Mr. Agresti prepared the noise study for this proposed 99 MW peaking power facility. The project will include an Alstom Model GT11N2 combustion turbine generator. Conducted noise modeling of facility sources and provided oversight of the ambient noise monitoring project. Specified noise control measures required to comply with MADEP’s noise policy, limiting increases in future noise levels to no greater than 10 dBA at any locations.

Southern Energy Canal Facility – Sandwich, MA (Technical Manager: 1999-2000)

Mr. Agresti performed the noise impact assessment for the expansion of this facility. Expansion to consist of the addition of two GE Frame 7FA turbines and ancillary equipment to an existing power plant. Performed computer noise modeling of major facility sources in order to determine future noise levels at nearby sensitive receptors. The State noise standard limits noise increases to no greater than 10 dBA above background. The MADEP required that a “BACT” analysis be performed in order to determine the incremental cost involved in adding noise control features in order to reduce facility noise levels to increments of 3, 6 and 9 dBA above background. Determined noise control required for each major source and obtained cost estimates from vendors and suppliers.

An additional requirement of MADEP was that the impact assessment consider the increase in noise over the baseline noise levels that would exist in the absence of the existing plant. Therefore, as part of the background noise monitoring, the contribution of noise from the existing plant to the noise environment was calculated and subtracted from the measured noise levels.

El Paso Corporation, New York/New Jersey Energy Bridge Project – Staten Island, NY (Technical Manager: 2005)

Mr. Agresti prepared the noise assessment in support of preparation of an application to the U.S. Coast Guard under the Deepwater Ports Act for an offshore LNG terminal and 48-mile subsea pipeline. The proposed LNG terminal would be located offshore New Jersey with a subsea pipeline traversing Lower New York Bay to a landfall on Staten Island. Responsibilities included coordination of offshore environmental studies with the geophysical surveys and geotechnical sampling program.

Cheniere Sabine Pass, L.P. , EIS – Cameron Parish, LA (Technical Manager: 2000)

Mr. Agresti prepared the noise section for the third party EIS for this LNG import terminal to be located in Cameron Parish, Louisiana. The proposed project will import, store, and vaporize approximately 2,600 MMscfd of LNG per day.

Freeport LNG EIS – Freeport, TX (Technical Manager: 2003)

Mr. Agresti prepared the third part EIS noise assessments for this proposed LNG import terminal to be located in Freeport Texas. The facility will be designed to store and vaporize 1.5 BSCFD of natural gas. LNG will be delivered by tankers from around the world.

SES LNG – Long Beach, CA (Technical Manager: 2003)

Mr. Agresti conducted the ambient noise monitoring and prepared the draft Resource Report 9 section for this proposed LNG terminal in Long Beach, California.

Rochester Gas and Electric Rochester Transmission 115 kV Project – Rochester, NY (Technical Manager: 2003)

Mr. Agresti prepared the noise analyses for the Article VII application for 115 kV system reinforcements in Monroe and Wayne Counties, New York. The proposed facilities include: approximately 13.2 miles of new overhead 115 kV transmission lines along two alignments; a new 1.1-mile underground 115 kV cable parallel to existing underground lines; approximately 19 miles of rebuilt overhead 115 kV transmission lines; a new 115 kV substation; and various equipment upgrades and circuit relocations at several other existing substations. The Article VII application was prepared on a fast-track basis and filed on September 30, 2003, approximately 12 weeks following Notice to Proceed

Exelon Mystic Station 8&9 – Everett, MA (Technical Manager: 2003)

Mr. Agresti provided oversight for Exelon during EPC contractor compliance noise testing of the completed Mystic Station 8&9. Conducted simultaneous noise measurements with EPC contractor staff to verify measured levels.

Exelon Fore River – Weymouth, MA (Technical Manager: 2004)

Mr. Agresti was contracted by Exelon to provide oversight during EPC contractor compliance noise testing of the operational facility. Also contracted to conducted periodic compliance testing on a semi-annual basis. Prepared a noise compliance testing protocol that was submitted to regulatory officials for approval.

PG&E Brayton Point Power Generating Facility – Somerset, MA and Salem Harbor Station – Salem, MA (Technical Manager: 2002-2006)

Mr. Agresti conducted noise assessments for proposed air pollution control equipment upgrades at these two coal fired power plants in Massachusetts. Both assessments required that background noise monitoring programs be conducted in the vicinity of each project site in order to quantify existing baseline noise levels. Detailed computer noise modeling of each project was then conducted incorporating major noise generating sources, which included FD and ID fans, ash vacuums, blowers and transformers. Noise mitigation measures were incorporated during the design phase, including FD fan discharge silencers and fan casing and ductwork acoustical lagging, in order to maintain noise level increases to imperceptible levels.

PPLG Peaking Units – Shoreham, NY and Edgewood, NY (Technical Manager: 2003)

Mr. Agresti prepared the noise assessments for these two proposed peaking facility consisting of two LM6000 combustion turbines each in Brookhaven, New York and Brentwood, New York. Under the SEQR filing, noise will be governed by the local noise standard and the NYSDEC noise guidelines. The assessments consisted of background noise monitoring to quantify existing noise levels and conducting noise modeling to calculate future facility levels. Worked closely with engineering staff to specify noise control measures which would be required in order to comply with both local regulations and the NYSDEC noise impact guidelines. Also conducted follow-up noise testing with facility in operation.

Keyspan Energy Spagnoli Road Energy Facility – Huntington, NY (Technical Manager: 2002-2005)

Mr. Agresti prepared the Article X noise assessment for a proposed 250 MW combined cycle facility consisting of a Frame 7F combustion turbine and air cooled condenser. Collected background noise level data in accordance with NYSDPS requirements. Acoustic design goals were developed based on ambient conditions as specified by the modified CNR method and NYSDPS stipulations. Fairly low ambient noise levels and the proximity of residential uses required extensive noise control, especially on the air cooled condenser. Mr. Agresti also provided expert witness testimony at the Article X hearings.

Keyspan Energy Peaking Units – Glenwood, NY and Port Jefferson, NY (Technical Manager: 2001-2002)

Mr. Agresti prepared the noise assessments for these two proposed peaking

facility consisting of two LM6000 combustion turbines each in Glenwood, New York and Port Jefferson, New York. Under the SEQR filing, noise will be governed by the local noise standard and the NYSDEC noise guidelines. The assessments consisted of background noise monitoring to quantify existing noise levels and conducting noise modeling to calculate future facility levels. Worked closely with engineering staff to specify noise control measures which would be required in order to comply with both local regulations and the NYSDEC noise impact guidelines.

PPL Global Kings Park Energy Facility – Smithtown, NY (Technical Manager: 2002-2003)

Mr. Agresti preparing the noise assessment in support of the Article X permitting for a proposed 300 MW peaking facility consisting of six LM6000 combustion turbines. The proximity of residential uses and low existing ambient noise levels required that extensive noise control measures be incorporated into the facility design in order to meet the stringent requirements of the New York State Department of Public Service's modified Composite Noise Rating method. Worked closely with equipment suppliers and project engineers to specify noise control measures, which include an extensively treated turbine building, significant stack silencers, and strategically locating sources on the site.

City of Stamford Urban Transitway EIS – Stamford, CT (Technical Manager: 2003)

Mr. Agresti prepared the noise assessment for the proposed transit project. The assessment included ambient noise monitoring at selected residential areas along streets and at intersections where traffic analyses were conducted. Calculated noise levels associated with traffic volume changes and calculated impacts in accordance with Federal Highway Administration noise standards.

South Norwalk Electric Works Repowering Project – Norwalk, CT (Technical Manager: 2003-2004)

Mr. Agresti provided technical oversight for all phases of the noise assessment for this 50 MW repowering project located in South Norwalk, Connecticut. The project consists of the removal of six deactivated engine generators and replacement with three Wartsilla dual fuel generator sets. Noise control was a major component of the project as residential areas were located as close as 150 feet away. In addition, particular attention was paid to low frequency noise produced by the engines, in order to prevent any noise induced vibration at the residential locations. Extensive noise mitigation measures were designed into the project, including an engine building of acoustical masonry, high efficiency silencers on all inlets, exhausts and building ventilation, and a low noise design cooling tower. Provided expert witness testimony to the Connecticut Siting Council in support of the project.

SCS Astoria Generating Station – Queens, NY (Technical Manager: 2000)

Mr. Agresti prepared the noise assessment in support of the Article X permitting

for this proposed baseload combined cycle facility. The assessment included an ambient noise monitoring program to characterize the existing noise environment. Computer noise modeling of the major facility sources was performed using the NYSDPS's NOISECALC model. The projected facility noise levels and the existing ambient noise levels were incorporated into the modified CNR analysis to determine potential noise impacts. Extensive noise control measures were required in order to meet the CNR analysis requirement and to meet the NYC noise standards, including the zoning resolution, noise code and CEQR requirements. Extensive meetings were held with NYCDEP noise staff during the licensing phase.

New York Power Authority Poletti Station 7– Queens, NY (Technical Manager: 1999-2000)

Mr. Agresti performed the noise assessment in support of the Article X permitting for two additional proposed baseload combined cycle facilities. The assessment included an ambient noise monitoring program to characterize the existing noise environment. Computer noise modeling of the major facility sources was performed using the NYSDPS's NOISECALC model. Noise control measures were incorporated as needed in order to comply with the New York City noise standards (including the CEQR requirement) and the modified CNR analysis. Extensive meetings were held with NYCDEP noise staff during the licensing phase.

Entergy, Indian Point Peaking Facility – Buchanan, NY (Technical Manager: 2001)

Mr. Agresti prepared the Article X noise assessment for a proposed 500 MW simple cycle facility consisting of eight LM6000 combustion turbines. Assessment consisted of background noise monitoring during leaf on and leaf off conditions, in accordance with NYSDPS requirements. Acoustic design goals were developed based on ambient conditions as specified by the modified CNR method and NYSDPS stipulations. Fairly low ambient noise levels and the proximity of residential uses will require fairly extensive noise control measures.

Exelon Corporation Calumet Facility – Chicago II (Technical Manager: 2001)

Mr. Agresti performed a noise modeling study of a proposed eight unit peaking facility consisting of eight Frame 6B units and ancillary equipment. Noise from the facility is regulated under the State of Illinois and City of Chicago noise standards. Because of the proximity of residential uses, noise control measures were required. Worked closely with equipment suppliers and the client to ensure cost-effective control measures would be designed into the project. Also conducted detailed noise modeling to determine the minimum effective noise barrier wall height required to meet applicable regulation.

Islander East Pipeline Company – Cheshire, CT (Technical Manager: 2001)

Mr. Agresti performed the noise assessment for a proposed gas compressor station that will consist of a Taurus 70 combustion turbine and ancillary equipment. The project is subject to the local noise standard and FERC noise standards. Noise modeling revealed that noise control measures, including stack and inlet silencers and a turbine enclosure, would be required in order to achieve these standards. Designed the ambient noise monitoring program required to establish baseline noise conditions.

CRRA Windsor Landfill – Windsor, CT (Technical Manager: 2001)

Mr., Agresti assisted CRRA in evaluating potential measures available to reduce noise impacts to nearby residential uses at an existing landfill operation. Impacts are currently experienced due to backup beepers on construction equipment and other sources at the landfill.

Independent Power Coal Fired Project Crown Energy Limited Partnership and Vista Energy Limited Partnership – West Deptford, NJ (Technical Manager: 1992)

Performed a detailed noise assessment study of all major sources associated with the proposed Crown Vista Energy coal fired power project in West Deptford, New Jersey. Developed noise data for many sources from the literature and conducted detailed analysis of coal car shaker noise. Many noise control features were specified for the facility as part of the modeling analysis in order to meet both the state of New Jersey noise control code and a stipulated noise impact criteria using the modified CNR analysis. The study also required an analysis of truck noise on local roads associated with ash disposal. Also designed and conducted an ambient noise monitoring program to characterize the existing noise environment and collect data for use in the noise impact analysis.

BMW of North America – White Plains, NY (Technical Manager: 2000)

Mr. Agresti conducted a noise study in support of a local special use permit for a proposed motorcycle sales and service center in White Plains. The study consisted of conducting a simulation of scenarios with various types and numbers of motorcycles and concurrently conducting noise level measurements. The study results were evaluated against the town noise standard and existing ambient noise levels. Provided expert witness testimony to the town zoning board. The application was subsequently approved.

New York State Electric and Gas Corporation – Auburn and Walden, NY (Technical Manager: 2000)

Mr. Agresti conducted noise assessments in support of local township approvals for the installation of a portable Taurus 70 combustion turbine generator. The studies consisted of noise modeling to determine future noise levels, ambient noise monitoring to determine existing noise levels, and post-operational monitoring to evaluate the effectiveness of noise control measures. A turbine

was installed at NYSEG's Auburn facility and is currently operating.

AES, Ironwood Facility – South Lebanon, PA (Technical Manager: 1997-1998)

Mr. Agresti performed the noise impact assessment for the AES Ironwood facility. The facility consists of two Westinghouse 501G combustion turbines operating in combined cycle mode. The noise assessment consisted of several noise monitoring programs to quantify existing noise levels, detailed computer noise modeling of the major noise generating sources at the plant, and incorporation of noise control measures. The calculated noise levels were evaluated against existing ambient levels and, in lieu of applicable state and local standards, the noise standards from neighboring states.

Wallingford Energy, LLC – Wallingford, CT (Technical Manager: 2001)

Mr. Agresti performed the noise assessment for a 300 MW peaking facility consisting of six LM6000 combustion turbines. Facility noise levels are governed by the State of Connecticut noise standard. Noise control measures for the project included enclosures on ancillary skids, intake and exhaust silencers, and a 50 foot tall noise barrier wall on three sides of the facility. Supported the client at State Siting Board hearings and provided expert witness testimony. The project was approved and constructed.

Duke Energy Facilities – Morro Bay and Moss Landing, CA (Technical Manager: 1999-2000)

Mr. Agresti performed the noise impact assessment for the expansion of these two facilities. Expansion to consist of the addition of two GE Frame 7FA turbines and ancillary equipment to the Moss Landing plant and four turbines and ancillary equipment at the Morro Bay plants. Performed computer noise modeling of major facility sources in order to determine future noise levels at nearby sensitive receptors. The California Energy Commission required that late night noise levels could not increase more than 5 dBA over ambient levels. In addition, each town has adopted Noise Elements, which further regulate allowable noise levels. Varying levels of noise control were required at each plant in order to meet the requirements.

Trump Seven Springs Golf Course – Westchester County, NY (Technical Manager: 1998)

Mr. Agresti performed the EIS noise assessment for the construction and operation of a proposed country club and associated residential housing development in Westchester County, New York. The assessment consisted of performing noise monitoring in order to determine the existing noise environment. Traffic data for each of the build and no-build scenarios were then incorporated into a computer noise model in order to determine future noise levels at sensitive receptors. Modeling was also performed in order to determine site average noise levels from construction activities and facility maintenance. An impact analysis was then performed. Practical noise abatement measures were recommended

as appropriate.

Bermuda Ministry of the Environment – Bermuda (Technical Manager: 1998)

Mr. Agresti performed a noise assessment for the Bermuda Ministry of the Environment for a quarry operation in Bermuda. The quarry is located in a residential area and noise from facility operations, including a rock crusher, screening machines, concrete block making plant and truck movements are resulting in significant impacts to area residents. Collected background noise level data and developed sound level data for each of the facility sources in order to perform computer noise modeling. The quarry was proposing to relocate equipment and the Ministry requested that various modeling scenarios be run in order to determine the scenario which results in the least impact. Noise mitigation measures were also incorporated.

Pace University GEIS – Westchester County, NY (Technical Manager: 1999)

Mr. Agresti performed the noise assessment for future expansion scenarios at Pace University. The assessment consisted of performing noise monitoring in order to determine the existing noise environment. Traffic data for each of the build and no-build scenarios were then incorporated into a computer noise model in order to determine future noise levels at sensitive receptors. An impact analysis was then performed. Practical noise abatement measures were recommended as appropriate.

SPECIALIZED TRAINING

- Community Noise Control Course, Rutgers University, July 1989 and September 1993